



Initial Study & Mitigated Negative Declaration CEQA Report

Buena Vista Water Storage District

Daley Ranch Groundwater Recharge Pond Project

Prepared for:

Buena Vista Water Storage District

March 2021

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Abbreviations and Acronyms

AFY	acre-feet per year
BMP	best management practices
BPS	Best Performance Standards
BSA	Buttonwillow Service Area
CALFIRE	California Department of Forestry and Fire Department
Caltrans	California Department of Transportation
C.A.R.B.	California Air Resource Boards
C.A.A.Q.S.	California Ambient Air Quality Standards
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
C.O.	carbon monoxide
County	Kern County
CRHR	California Register of Historical Resources
dBA	A-weighted decibels
District	Buena Vista Water Storage District
D.O.C.	Department of Conservation
DMW 7	District Monitoring Well 7
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FMMP	Farmland Mapping and Monitoring Program
GEI	GEI Consultants, Inc.
GHG	greenhouse gas
Guidance	<i>Guidance for Valley Land-use Agencies Addressing GHG Emissions Impacts for New Projects under CEQA</i>
IS/MND	Initial Study/Mitigated Negative Declaration
K	conductivity
Leq	equivalent continuous sound level in decibels
MCL	Maximum Contaminant Level
MLD	Most Likely Descendant
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
N.O. ₂	nitrogen dioxide
N.O. ₃	Nitrate
N.O. _x	Oxides of nitrogen
N.P.D.E.S.	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	Ozone
PG&E	Pacific Gas and Electric
PM	particulate matter

PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PRC	Public Resources Code
proposed Project Reclamation	Daley Ranch Groundwater Recharge Pond Project Bureau of Reclamation
RPA	registered professional archaeologist
S.S.J.V.I.C.	Southern San Joaquin Valley Information Center
S.J.V.A.B	San Joaquin Valley Air Basin
S.J.V.A.P.C.D.	San Joaquin Valley Air Pollution Control District
S.O. ₂	sulfur dioxide
S.M.A.R.A.	Surface Mining and Reclamation Act of 1975
SPAL	Small Project Analysis Level
SR	State Route
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Program
SWRCB	State Water Resource Control Board
TDS	Total Dissolved Solids
U.S.F.W.S.	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

The Buena Vista Water Storage District (District) has prepared this Initial Study/proposed Mitigated Negative Declaration (IS/MND) in compliance with the California Environmental Quality Act (CEQA) and Guidelines to address the potentially significant environmental impacts of the proposed Daley Ranch Groundwater Recharge Pond Project (proposed Project) in Kern County, California (County). The District is the lead agency under CEQA.

After the required public review of this document is complete, the District's Board of Directors will consider all IS/MND comments received, the entirety of the administrative record for the Project, whether to adopt the proposed MND and a Mitigation Monitoring and Reporting Program and approve the proposed Project.

1.1 Summary of Findings

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed Project. Based on the issues evaluated in that chapter, it was determined that:

The proposed Project would result in no impacts on the following issue areas:

- Hazards and Hazardous Waste
- Land Use and Planning
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Wildfire

The proposed Project would result in less-than-significant impacts on the following issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Energy
- Greenhouse Gas Emissions
- Mineral Resources
- Noise
- Utilities and Service System

The proposed Project would result in less-than-significant impacts *after* mitigation implementation on the following issue areas:

- Air Quality
- Biological Resources

- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality

1.2 Other Key Public Agencies Relying on this IS/MND

CEQA requires that state and local governmental agencies consider the environmental effects of projects over which they have discretionary authority before taking action on those projects (Public Resources Code [PRC] Section 21000 et seq.). CEQA also requires that each lead agency avoid or mitigate to less-than-significant levels, wherever feasible, the significant environmental effects of projects it approves or implements. There are no other key public agencies relying on this IS/MND.

1.3 Document Organization

This document contains the information required under CEQA:

Proposed Mitigated Negative Declaration. The MND, which precedes the presentation of the IS analysis in this document, briefly summarizes the proposed Project, summarizes the environmental conclusions, and identifies that mitigation measures would be implemented in conjunction with the proposed Project.

Initial Study. The IS constitutes the remaining portion of this document and provides an introduction, Project description, environmental checklist, references cited, report preparers, and distribution list, as briefly summarized below:

Chapter 1, Introduction. This chapter describes the purpose of the IS/MND, summarizes findings, and describes the organization of this IS/MND.

Chapter 2, Project Description. This chapter describes the Project location and background, Project need and objectives, Project characteristics, construction activities, Project operations, and discretionary actions and approvals that may be required.

Chapter 3, Environmental Checklist. This chapter presents an analysis of environmental issues identified in the CEQA environmental checklist and determines whether Project implementation would result in a beneficial impact, no impact, less-than-significant impact, less-than-significant impact with mitigation incorporated, potentially significant impact, or significant impact on the physical environment in each topic area. Should any impacts be determined to be potentially significant or significant, an Environmental Impact Report (EIR) would be required. For this proposed Project, however, mitigation measures have been incorporated as needed to reduce all potentially significant and significant impacts to a less-than-significant level.

Chapter 4, References. This chapter lists the references used to prepare this IS/MND.

Chapter 5, Report Preparers. This chapter identifies report preparers who contributed to the preparation of this document.

2.0 Project Description

2.1 Project Background

The Buena Vista Water Storage District (District) service area includes approximately 50,000 acres in two distinct areas – Buttonwillow Service Area (BSA) and Maples Service Area – in the lower Kern River watershed of western Kern County. All water used in the District is delivered to agricultural and environmental users. The District also delivers water through the District to the Kern Natural Wildlife Refuge, approximately 7 miles north of the District’s northern boundary. Approximately 35,000 acres of the District’s service area are annually farmed, the primary crops being pistachios, cotton, alfalfa, and grains. The District receives an average of 150,000 acre-feet per year (AFY) of surface water from the Kern River and 10,000 AFY from the State Water Project (SWP). The District has a delivery system with more than 125 miles of earthen canals and 50 miles of pipelines. The District currently has access to five turnouts from the California Aqueduct that can provide its system with approximately 850 cubic feet per second (cfs) of gravity inflow capacity directly into the distribution system. Annual surface water supply exceeds the District’s average annual crop demands; although the supply is highly irregular and often requires growers to recover recharged groundwater by pumping groundwater from privately-owned wells.

2.2 Proposed Project

The District proposes to construct a groundwater recharge pond in the southern portion of the BSA, approximately 1.4 miles south of the unincorporated community of Buttonwillow, in the northeast quarter of Section 25, Range 23E, and Township 29S of the Buttonwillow U.S. Geological Survey (USGS) 7.5-minute quadrangle (**Figure 1-1**). The proposed Project is bound by Buerkle Road to the north, Wasco Way to the east, and the Main Drain Canal to the south and west (**Figure 1-2**). The proposed Project would be situated on three parcels (Assessor Parcel Numbers 102-080-18, 102-080-19, and 102-080-20) totaling approximately 92 acres. The District owns the parcels, which are collectively known as Daley Ranch. Historically, the parcels were used as farmland for row crops for over 100 years. In 2014, the land was converted to a pistachio orchard; however, the trees were taken out prior to the beginning of production of nuts.

The approximately 40-acre groundwater recharge pond would expose sand for percolation at various depths from 6 to 14 feet deep. Approximately 650,000 cubic yards of soil would be excavated and retained onsite. Maximum recharge estimates, based on a full-year operation schedule, would average 12,000 AFY. Water from existing District sources (e.g., Kern River, SWP) would be delivered to the recharge pond via the existing Main Drain Canal. The District may apply to the U.S. Bureau of Reclamation (Reclamation) for authorization to bank Central Valley Project water at Daley Ranch. The proposed Project does not include onsite recovery.

The District would use several excavators, loaders, dozers, service trucks, scrapers, a bell truck with box scraper, and a water truck for fugitive dust control. Construction would begin in

spring/summer 2021 and take approximately 60 workdays to complete. The District would utilize a construction crew consisting of 10 people. Storage and staging of equipment and material would be located entirely within the Daley Ranch.

Operation and maintenance activities consist of sediment removal and regrading the pond which are expected to occur every 48 months. These activities would be completed in the same manner as the original construction, but in a quantity of 10,000 cubic yards. Quarterly mowing of weeds would also occur.

2.3 Project Objectives

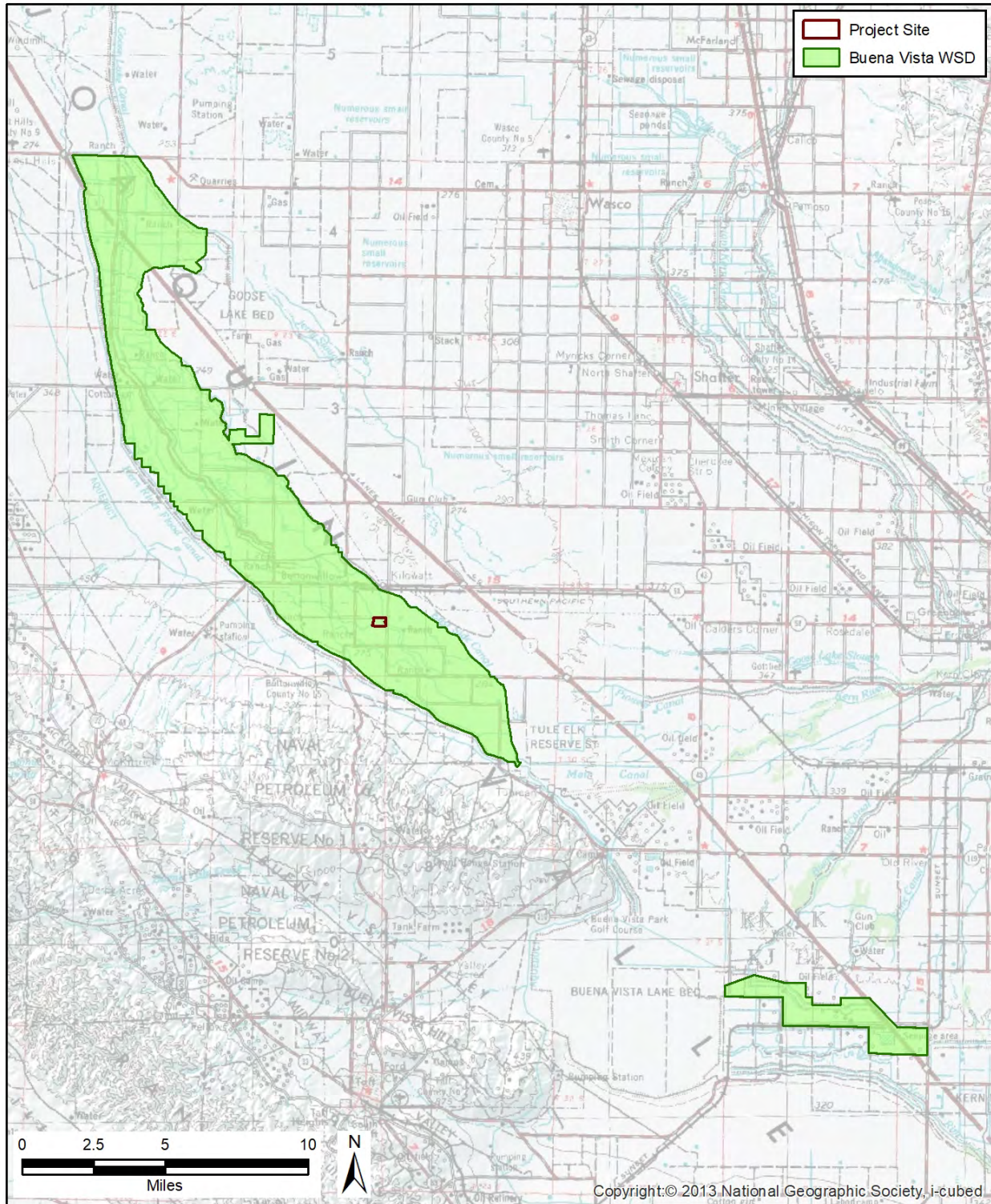
The proposed Project has two primary objectives:

- Increase conjunctive management on the west side of Kern County by expanding the area's ability to accept surface water for groundwater recharge during periods when surface water is available; and
- Reduce agricultural demand by replacing approximately 75 acres of irrigated farmland with spreading grounds.

The proposed Project would benefit groundwater users by improving groundwater management and quality. Water supply and energy savings would result from a general increase in groundwater elevations in the Project area. The proposed Project would be operated to provide a long-term benefit to the basin and aid in regional compliance with the Sustainable Groundwater Management Act (*also known as* SGMA).

Daley Ranch has an established history of irrigated crop production. Retiring these lands from irrigated agriculture will enable water to be delivered to the area based on availability of water for recharge, rather than in response to the pattern of crop demand. Therefore, the timing of the deliveries will differ in a way that benefits the Buttonwillow Sub-basin. The District anticipates that retiring this irrigated land from production and converting it to recharge facilities will reduce irrigation demand by approximately 275 AFY and reduce nitrates now conveyed to groundwater from deep percolation of irrigation applications by eliminating the application of nitrogen and other fertilizers.

Figure 2-1: Regional Location



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09Dec2020 RS

Figure 2-2: Project Location



2.4 Regulatory Requirements, Permits, and Approval

As the lead agency under CEQA, the District has the principal responsibility for approving and carrying out the proposed Project and for ensuring that CEQA requirements and all other applicable regulations are met. Other agencies that may have permitting approval or review authority over portions of the proposed Project are listed below:

- **Central Valley Regional Water Quality Control Board, Construction Activities General Permit.** Required for any project that disturbs more than 1 acre of soil. The proposed Project would disturb approximately 50 acres of soil in Kern County. Under this permit, the County would need to develop a Stormwater Pollution Prevention Plan (SWPPP).
- **San Joaquin Valley Air Pollution Control Board (S.J.V.A.P.C.D.), Fugitive Dust Control Plan.** Required for any project that disturbs more than 1 acre of soil.

3.0 Environmental Checklist

Project Information

#1. Project title:	Daley Ranch Groundwater Recharge Pond Project
#2. Lead agency name and address:	Buena Vista Water Storage District
#3. Contact person and phone number:	Mr. Tim Ashlock (661) 979-6182
#4. Project location:	525 North Main Street, Buttonwillow, CA 93206
#5. Project sponsor's name and address:	Same as lead agency
#6. General plan designation:	Exclusive Agriculture
#7. Zoning:	Exclusive Agriculture
#8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)	The District proposes to construct an approximate 40-acre groundwater recharge pond.
#9. Surrounding land uses and setting: Briefly describe the project's surroundings:	The proposed Project is located in southern Kern County, approximately 1.4 miles south of the unincorporated community of Buttonwillow. The surrounding area is dominated by agricultural fields and water conveyances.
#10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)	Central Valley Regional Water Quality Control Board and San Joaquin Valley Air Pollution Control District
#11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	Yes. Consultation is described in more detail in Chapters 3.5, Cultural Resources, and 3.17, Tribal Cultural Resources.

Note: Conducting consultation early in the California Environmental Quality Act (CEQA) process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. **Please also note** that PRC Section 21082.3(c) contains provisions specific to confidentiality.

Environmental Factors Potentially Affected

No environmental resources were found to have “potentially significant impacts”. The environmental factors listed as “Yes” in **Table 3-1** would be potentially affected by this Project, involving at least one impact that has “Less-than-Significant Impacts with Mitigation Incorporated” as indicated by the checklist on the following pages.

Table 3-1. Environmental Resources with Potentially Significant Impacts Prior to Mitigation.¹

Environmental Resources	Yes or No?
Aesthetics	No
Agriculture and Forestry Resources	No
Air Quality	Yes
Biological Resources	Yes
Cultural Resources	Yes
Energy	No
Geology/Soils	Yes
Greenhouse Gas Emissions	No
Hazards and Hazardous Materials	No
Hydrology/Water Quality	Yes
Land Use/Planning	No
Mineral Resources	No
Noise	No
Population/Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	No
Utilities/Service Systems	No
Wildfire	No
Mandatory Findings of Significance	Yes

¹ Impacts to all resources are reduced to less-than-significant with the incorporation of mitigation measures.

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:	Yes or No?
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	No
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	Yes
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	No
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	No
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier Environmental Impact Report (EIR) or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	No



 Signature

3-11-2021

 Date

Tim Ashlock

 Print Name

Engineer/Manager

 Title

Buena Vista Water Storage District

 Agency

3.1 Aesthetics

#1. AESTHETICS. Except as provided in PRC Section 21099, **would the project:**

#1 -a. Have a substantial adverse effect on a scenic vista?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#1 -b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#1 -c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#1 -d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.

3.1.1 Environmental Setting

The proposed Project is located west of Interstate 5 (I-5), in Kern County. The Daley Ranch is zoned as letter “A” (signifying exclusive agriculture) (Kern County 1988). The Project area is flat and is comprised of paved and unpaved roads, open water canals, and various agricultural crops (see **Appendix A** for photos of Daley Ranch). There are no designated scenic vistas within the vicinity of Daley Ranch (California Department of Transportation [Caltrans] 2019).

3.1.2 Discussion

#1 -a, and b. Have a substantial adverse effect on a scenic vista? Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

There are no significant view-sheds, scenic vistas, or scenic highways located in the vicinity of the proposed Project (Caltrans 2019). There would be **no impact**.

#1 -c and d. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed Project involves the construction of a groundwater recharge pond. During construction, several vehicles and equipment would be onsite which is not substantially different than normal agricultural operations. Following the completion of construction activities all construction-related equipment would be removed. The visual character will not be degraded by the recharge pond. Therefore, this impact would be **less-than-significant**.

3.2 Agriculture and Forestry Resources

#2. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**

#2 -a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#2 -b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#2 -c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#2 -d. Result in the loss of forest land or conversion of forest land to non-forest use?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#2 -e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.

3.2.1 Environmental Setting

Daley Ranch is designated as exclusive agriculture (Kern County 1988). Daley Ranch is also designated as prime farmland per the Farmland Mapping and Monitoring Program (FMMP) (Department of Conservation [D.O.C.] 2018). Daley Ranch is currently under a Williamson Act contract (Kern County 2010).

3.2.2 Discussion

#2 -a and b. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Daley Ranch is situated on agricultural land designated as prime farmland (D.O.C. 2018). Daley Ranch is also situated on agricultural land under a Williamson Act contract (Kern County 2010). The District would construct and operate a groundwater recharge pond on the parcel, which would not be farmed during Project implementation. The purpose of the proposed Project is to improve water supply for agricultural water users, which is a benefit to agriculture. During Project implementation, the parcel would continue to be mapped as prime farmland and the Williamson Act contract would continue to be valid. Finally, constructing and operating a groundwater recharge pond is a compatible use as defined by the Williamson Act. Therefore, this impact would be **less-than-significant**.

#2 -c and d. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? Result in the loss of forest land or conversion of forest land to non-forest use?

Daley Ranch is not zoned as forest land, timberland, or timberland zoned as timberland production, therefore, no loss or conversion of forest land to non-forest land would be necessary. There would be **no impact**.

#2 -e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Kern County, like the rest of California, is subject to hydrological changes as a result of climate change, including short- and long-term droughts. The groundwater recharge pond would be supplied with water from existing District sources (e.g., Kern River, SWP) but only during “wet” years when surface water supplies are adequate. The District anticipates years in which water would not be delivered to the groundwater recharge pond because of inadequate water supplies; however, these instances would not result in a conversion of farmland to non-agricultural uses. Daley Ranch is not zoned as forest land. Therefore, this impact would be **less-than-significant**.

3.3 Air Quality

#3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations. **Would the project:**

#3 -a. Conflict with or obstruct implementation of the applicable air quality plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? <u>Yes.</u>	Have Less-than-Significant Impact? No.	Have No Impact? No.
#3 -b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? <u>Yes.</u>	Have Less-than-Significant Impact? No.	Have No Impact? No.
#3 -c. Expose sensitive receptors to substantial pollutant concentrations?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#3 -d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.

3.3.1 Environmental Setting

The proposed Project is located in the San Joaquin Valley Air Basin (S.J.V.A.B.) within Kern County. The S.J.V.A.P.C.D. is responsible for regulating air quality in Kern County.

The Federal Clean Air Act and California Clean Air Act required the U.S. Environmental Protection Agency (EPA) and California Air Resource Boards (C.A.R.B.) to establish health-based air quality standards at the federal and state levels. National Ambient Air Quality Standards (N.A.A.Q.S.) and California Ambient Air Quality Standards (C.A.A.Q.S.) were established for the following seven criteria pollutants: carbon monoxide (C.O.), ozone (O₃), sulfur dioxide (S.O. ₂), nitrogen dioxide (N.O. ₂), particulate matter less than 10 microns in diameter (PM₁₀), particulate matter less than 2.5 microns in diameter (PM_{2.5}), and lead. Areas of the state are designated as attainment, nonattainment, maintenance, or unclassified for the various pollutant standards according to the Federal Clean Air Act and California Clean Air Act.

An “attainment” designation for an area signifies that pollutant concentrations did not violate the N.A.A.Q.S. or C.A.A.Q.S. for that pollutant in that area. A “nonattainment” designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when

a violation was caused by an exceptional event, as identified in the criteria. A “maintenance” designation indicated that the area previously categorized as nonattainment is currently categorized as attainment for the applicable pollutant; though the area must demonstrate continued attainment for a specific number of years before it can be re-designated as an attainment area. An “unclassified” designation signifies that data does not support either an attainment or a nonattainment status. The EPA established N.A.A.Q.S. in 1971 for six air pollution constituents. States have the option to add other pollutants, to require more stringent compliance, or to include different exposure periods. C.A.A.Q.S. and N.A.A.Q.S. are listed in **Table 3-2**.

Table 3-2. Federal and California Ambient Air Quality Standards and Attainment Status.

Pollutant	Averaging Time	California Standards Concentration	Federal Primary Standards Concentration
Ozone (O ₃)	8-hour	0.070 parts per million. (137 micrograms per cubic meter).	0.070 parts per million (137 micrograms per cubic meter.) (See table note #1.)
	1-hour	0.09 parts per million. (180 micrograms per cubic meter).	(None; see table note #2.)
Respirable Particulate Matter (PM ₁₀)	24-hour	50 micrograms per cubic meter.	150 micrograms per cubic meter.
	Annual Arithmetic Mean	20 micrograms per cubic meter.	(None.)
Fine Particulate Matter (PM _{2.5})	24-hour	(None.)	35 micrograms per cubic meter.
	Annual Average	12 micrograms per cubic meter.	12 micrograms per cubic meter.
Carbon Monoxide	8-hour	9 parts per million. (10 milligrams per cubic meter.)	9 parts per million. (10 milligrams per cubic meter.)
	1-hour	20 parts per million. (23 milligrams per cubic meter).	35 parts per million. (40 micrograms per cubic meter).
Nitrogen Dioxide	Annual Average	0.03 parts per million. (57 micrograms per cubic meter.)	0.053 parts per million. (100 micrograms per cubic meter.)
	1-hour	0.18 parts per million. (339 micrograms per cubic meter.)	0.100 parts per million. (188 micrograms per cubic meter.)
Lead	30-day Average	1.5 micrograms per cubic meter.	(None.)
	Rolling 3-Month Average	(None.)	0.15 micrograms per cubic meter.
	Quarterly Average	(None.)	1.5 micrograms per cubic meter.

Pollutant	Averaging Time	California Standards Concentration	Federal Primary Standards Concentration
Sulfur Dioxide	24-hour	0.04 parts per million. (105 micrograms per cubic meter.)	0.14 parts per million (for certain areas)
	3-hour	(None.)	(None.)
	1-hour	0.25 parts per million. (655 micrograms per cubic meter.)	0.075 parts per million. (196 micrograms per cubic meter.)
Sulfates	24-hour	25 micrograms per cubic meter.	No Federal Standard.
Hydrogen Sulfide	1-hour	0.03 parts per million. (42 micrograms per cubic meter.)	No Federal Standard.
Vinyl Chloride	24-hour	0.01 parts per million. (26 micrograms per cubic meter.)	No Federal Standard.

Notes:

#1. On October 1, 2015, the national 8-hour ozone (O₃) primary and secondary standards were lowered from 0.075 to 0.070 ppm.

#2. 1-Hour ozone standard revoked effective June 15, 2005, although some areas have continuing obligations under that standard.

Source: C.A.R.B. 2019, EPA 2016

Under the N.A.A.Q.S., the County is designated as nonattainment for 8-hour ozone, and PM_{2.5}, and attainment/unclassified for PM₁₀, C.O., N.O. 2, S.O. 2., lead, and sulfates (C.A.R.B. 2018). Under C.A.A.Q.S., the County is designated unclassified for all criteria pollutants (C.A.R.B. 2018).

The area's air quality monitoring network provides information on ambient concentrations of air pollutants in the S.J.V.A.B. Monitoring stations in Kern County are operated by S.J.V.A.P.C.D.; air quality data was obtained from the Bakersfield-California Avenue station. **Table 3-3** compares a 5-year summary of the highest annual criteria air pollutant emissions collected at this station with applicable C.A.A.Q.S., which are more stringent than the corresponding N.A.A.Q.S. Due to the regional nature of these pollutants, O₃, PM_{2.5}, and PM₁₀ are expected to be fairly representative of the Project site. As indicated in Table 3-3, O₃, PM_{2.5}, and PM₁₀ standards have been exceeded over the past 5 years.

Table 3-3. Ambient Air Quality Monitoring Data Measured at the Bakersfield-California Avenue Monitoring Station.

Pollutant Standards, 1-Hour Ozone	2014	2015	2016	2017	2018
Maximum 1-hour concentration (ppm)	0.102*	0.104*	0.092*	0.122*	0.107*
Days Exceeding C.A.A.Q.S. 1-hour. (>0.09 parts per million.) (See table note #1.)	3	6	0	11	8
Pollutant Standards, 8-Hour Ozone	2014	2015	2016	2017	2018
National maximum 8-hour concentration. (parts per million).	0.092*	0.096*	0.085*	0.104*	0.098*
State max. 8-hour concentration (parts per million).	0.093*	0.097*	0.086*	0.104*	0.098*
Days Exceeding N.A.A.Q.S. 8-hour. (>0.075 parts per million.) (See table note #1.)	20	28	30	47	34
Days Exceeding C.A.A.Q.S. 8-hour. (>0.070 parts per million.) (See table note #1.)	39	54	63	87	64
Pollutant Standards, Particulate Matter (PM10)	2014	2015	2016	2017	2018
National maximum 24-hour concentration (micrograms per cubic meter).	430.1*	104.7	90.9	138.0	136.1
State maximum. 24-hour concentration (micrograms per cubic meter).	419.5*	103.6*	92.2*	143.6*	142.0*
State max. 3-year average concentration (micrograms per cubic meter).	41	44	44	44	43
State annual average concentration (micrograms per cubic meter).	N/A	44.1	40.9	42.6	N/A
Days Exceeding N.A.A.Q.S. 24-hour (>150 micrograms per cubic meter). (See table note #1.)	N/A	0	0	0	0
Days Exceeding C.A.A.Q.S. 24-hour (>50 micrograms per cubic meter). (See table note #1.)	N/A	121.4	121.4	98.7	N/A
Pollutant Standards, Particulate Matter (PM2.5)	2014	2015	2016	2017	2018
National max. 24-hour concentration (micrograms per cubic meter).	101.9*	107.9*	66.4*	101.8*	98.5*
State max. 24-hour concentration (micrograms per cubic meter).	101.9	111.9	66.4	101.8	98.5
State annual average concentration (micrograms per cubic meter).	18.6*	16.6*	15.9*	15.9*	15.6*
Days Exceeding N.A.A.Q.S. 24-hour (>35 micrograms per cubic meter). (See table note #1.)	39.3	32.3	25.5	30.2	40.3

Notes:

* = Values in excess of applicable standard. N/A = There was insufficient (or no) data available to determine the value.

2018 is the latest year of data available as of preparation of this Chapter.

#1. An exceedance is not necessarily a violation. Source: C.A.R.B. 2020.

3.3.2 Discussion

#3 -a and b. Conflict with or obstruct implementation of the applicable air quality plan? Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

The proposed Project would generate criteria pollutants from the use of diesel-powered vehicles and equipment, and earthmoving activities. Construction of the proposed Project would require approximately 10 truck trips to drop off all required material and equipment to Daley Ranch. The excavated soil from the groundwater recharge pond would remain onsite. An additional 600 vehicle trips would be required for workers commuting to the Project site during the 60-day construction period. A total of 610 truck/vehicle trips would be required to construct the Project.

The District assumes that one vehicle trip per week (2,600 total trips) would be required for operation of the groundwater storage pond during a 50-year period.

To streamline the process of assessing significance of criteria pollutant emissions from common construction projects, S.J.V.A.P.C.D has developed a screening tool, the Small Project Analysis Level (SPAL) to assist in determining if constructing a project in the County would exceed the construction significance threshold for criteria pollutants. The tool uses project type and size, and S.J.V.A.P.C.D. pre-quantified emissions to determine a size below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants (S.J.V.A.P.C.D., 2017). Construction of a project that does not exceed the screening level are considered to have a less-than-significant impact on air quality (**Table 3-4**). The proposed Project would result in a *total* of 3,210 trips (construction and operation) and is significantly lower than the SPAL threshold, which is measured by *trips per day*.

Table 3-4. Small Project Analysis Level by Vehicle Trips.

Land Use Category	Project Size
Residential Housing	1,453 trips per day
Commercial	1,673 trips per day
Office	1,628 trips per day
Institutional	1,707 trips per day
Industrial	1,506 trips per day

Source: S.J.A.P.C.D. 2017

However, since the proposed Project would disturb more than 1 acre, the District would need to with the National Pollutant Discharge Elimination System (N.P.D.E.S.) Construction General Permit (Order 2009-0009 DWQ as amended by Order 2012-0006-DWQ) and prepare and implement a Fugitive Dust Control Plan as reviewed by the S.J.V.A.P.C.D. The District will implement Best Management Practices (BMPs) outline in the N.P.D.E.S. Construction General Permit and Fugitive Dust Control Plan. The proposed Project would also comply with

additional S.J.V.A.P.C.D. rules and regulations. S.J.V.A.P.C.D. Regulation VIII implements measures to reduce ambient concentrations of PM₁₀ and oxides of nitrogen.

Therefore, this impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure AQ-1: District Regulation VIII Fugitive PM₁₀ Prohibitions Best Management Practices

All projects are subject to S.J.V.A.P.C.D. rules and regulations in effect at the time of construction. Control of fugitive dust is required by S.J.V.A.P.C.D. Regulation VIII. The District shall implement or require its contractor to implement all of the following measures as identified by S.J.V.A.P.C.D.:

- Apply water to unpaved surfaces and areas
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas
- Limit or reduce vehicle speed on unpaved roads and traffic areas
- Maintain areas in a stabilized condition by restricting vehicle access
- Install wind barriers
- During high winds, cease outdoor activities that disturb the soil
- Keep bulk materials sufficiently wet when handling
- Store and hand material in a three-sided structure
- When storing bulk material, apply water to the surface or cover the stage pile with a tarp
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving the site
- Prevent track-out by installing a track-out control device
- Clean up track-out at least once a day. If along a busy road or highway, clean up track-out immediately
- Monitor dust-generating activities and implement appropriate measures for maximum dust control

With preparation and implementation of Mitigation Measure AQ-1, N.P.D.E.S. Construction General Permit and Fugitive Dust Control Plan, this impact would be **less-than-significant after mitigation**

#3 -c. Expose sensitive receptors to substantial pollutant concentrations?

Some members of the population are especially sensitive to emissions of air pollutants and should be given special consideration during the evaluation of the Project air quality impacts. These people include children, senior citizens, and persons with pre-existing respiratory or cardiovascular illnesses, and athletes and other who engage in frequent exercise, especially outdoors. Sensitive receptors include schools, residences, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Daley

Ranch is located in a predominately agricultural area. The closest sensitive receptors are three residences located along Buerkle Road, adjacent to Daley Ranch.

During construction, most of the particulate matter (PM) emissions are released in the form of fugitive dust during ground disturbance activities. PM emissions are also generated in the form of equipment exhaust and re-entrained road dust from vehicle travel. Construction impacts from PM emissions would be temporary. Operation of the groundwater recharge pond would suppress PM emissions. Given the short-term emissions, distance from sensitive receptors, and incorporation of Mitigation Measure AQ-1, impacts would be **less-than-significant**.

#3 -d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Human response to odors is subjective, and sensitivity to odor varies from person to person. Typically, odors are considered an annoyance rather than a health hazard; however, a person's response to odor can range from psychological (e.g., irritation, anger, anxiety) to physiological (e.g., circulatory and respiration reaction, nausea, headaches). During construction, the proposed Project would generate odor from the use of diesel fuels, though this would be short-term. During operations, the proposed Project would not produce odors. Potential odor effects would be **less-than-significant**.

3.4 Biological Resources

#4. BIOLOGICAL RESOURCES. Would the project:

#4 -a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (U.S.F.W.S.)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? <u>Yes.</u>	Have Less-than-Significant Impact? No.	Have No Impact? No.
#4 -b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S.F.W.S.?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#4 -c. Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Have Potentially Significant Impact? No..	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#4 -d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#4 -e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#4 -f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes or No.	Have No Impact? <u>Yes.</u>

3.4.1 Environmental Setting

The following analysis of potential for biological resources to be impacted by the proposed Project is based on information provided in the Biological Technical Report provided as **Appendix B**.

Background Review

GEI Consultants, Inc. (GEI) reviewed the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2020) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS

2020). These reviews were centered on the Buttonwillow USGS 7.5- minute quadrangle and included the eight surrounding quadrangles. A list of resources under jurisdiction of the U.S.F.W.S. that could occur on or near Daley Ranch was obtained from the Information for Planning and Conservation (IPaC) website (U.S.F.W.S. 2020).

A field survey of Daley Ranch and adjacent areas was conducted by two biologists from McCormick Biological, Inc. on October 26, 2020, to assess the potential for special-status species to occur on or adjacent to Daley Ranch and be affected by Project construction, operations, and maintenance.

Existing Conditions

Daley Ranch is currently inactive agricultural land and is completely surrounded by intensively managed agricultural land. The site was most recently orchard, but the trees were recently removed. Topography is generally flat, with an average elevation of approximately 275 feet above mean sea level. Representative photographs of Daley Ranch are provided in **Appendix A**.

Daley Ranch does not support any native vegetation assemblages and is primarily barren. Scattered ruderal vegetation, dominated by nonnative species, occurs along the Main Drain Canal and in the southern portion of Daley Ranch. The area along the southern boundary of Daley Ranch was not planted in orchard but was cultivated in row crops the past; borrow material was removed from a portion of this area in recent years. Daley Ranch does not support any trees; the only nearby trees are adjacent to the northwest corner of Daley Ranch and immediately south of the canal at the southern border of the property. Agricultural and other disturbed habitats on Daley Ranch support a very low diversity of wildlife species that are adapted to this intensely managed environment. Only the most mobile species (e.g., birds and mammals with large home ranges) and other animals that can survive in agricultural and developed habitats are likely to occur on Daley Ranch.

3.4.2 Discussion

#4 -a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

The CNDDDB search results, CNPS species list, and IPaC resource list included 19 special-status plants and 25 special-status animals, 16 of which have been documented within 3 miles of the proposed Project site. However, most of these occurrences are from grassland, saltbush scrub, and other natural shrub habitats south and west of the proposed Project site or are at least 25 years old. Based on review of existing documentation, current species distributions, and evaluations made during field surveys, it was determined that habitat for special-status plants, invertebrates, fish, amphibians, and reptiles is absent from Daley Ranch. Two special-status birds – burrowing owl (*Athene cunicularia*) and Swainson’s hawk (*Buteo swainsoni*) – and one special-status mammal – San Joaquin kit fox (*Vulpes macrotis mutica*) – were determined to have at least low potential to occur on Daley Ranch and are addressed below.

Special-Status Birds

Burrowing owl and Swainson's hawk were determined to have low and moderate potential to occur on Daley Ranch, respectively, based on current habitat conditions. Potential on-site foraging habitat for these species is currently limited to the approximately 20 acres in the southern portion of Daley Ranch. Because the groundwater recharge pond would occupy less than half of the 92-acre Project site, Daley Ranch is anticipated to provide at least as much potential foraging habitat after construction of the groundwater recharge pond, and the habitat would be of at least a comparable quality. Therefore, permanent loss of potential foraging habitat is not anticipated to occur. No suitable burrows for burrowing owl are currently present on or immediately adjacent to Daley Ranch, but burrows could become established before Project implementation. If occupied burrows are present onsite, they could be destroyed, and burrowing owls could be injured or killed. In addition, if nest burrows or Swainson's hawk nests are present near Daley Ranch during Project construction, Project-related disturbance could result nest abandonment, reduced care, or premature fledging. This impact would be **potentially significant**. The following mitigation measures have been identified to address this impact and to avoid violation of Section 3503 of the California Fish and Game Code, which prohibits take of bird nests and eggs:

Mitigation Measure BIO-1a: Conduct Focused Surveys for Burrowing Owls, Minimize Disturbance and Loss of Occupied Burrows, and Compensate for Destruction of Occupied Burrows.

To minimize potential effects of Project construction on burrowing owl, the District will ensure that the following measures are implemented, consistent with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012).

- A qualified biologist will assess burrowing owl habitat suitability in the area subject to direct impact and adjacent areas within 500 feet.
- If suitable habitat or sign of burrowing owl presence is observed, a take avoidance survey will be conducted within 10 days before Project activities begin near areas of suitable habitat.
- If any occupied burrows are observed, protective buffers will be established and implemented. A qualified biologist will monitor the occupied burrows during Project activities to confirm effectiveness of the buffers. The size of the buffer will depend on whether the burrow supports an active nest, the type and intensity of Project disturbance, the presence of visual buffers, and other variables that could affect susceptibility of the owls to disturbance.
- If destruction of an occupied burrow cannot be avoided and it is determined, in consultation with CDFW, that passive exclusion of owls from the construction footprint is an appropriate means of minimizing direct impacts, an exclusion and relocation plan will be developed and implemented in coordination with CDFW. Passive exclusion will not be conducted during the breeding season (February 1–August 31), unless a qualified biologist verifies through noninvasive means that either (1) the birds have not begun egg laying or (2)

juveniles from the occupied burrows are foraging independently and are capable of independent survival.

- If passive exclusion is conducted, each occupied burrow that is destroyed will be replaced with at least one artificial burrow on a suitable portion of the Project site that would not be subject to inundation or Project-related ground disturbance.

Mitigation Measure BIO-1b: Conduct Focused Surveys for Nesting Swainson's Hawks and Other Native Birds and Implement Buffers Around Active Nests.

To minimize potential effects of Project construction on nesting Swainson's hawk and other native birds, the District will ensure that the following measures are implemented:

- If Project construction would occur during the Swainson hawk nesting season (April-August), a qualified biologist will conduct surveys of potential Swainson's hawk nesting trees within 0.5 mile of the Project site. To the extent practicable, depending on timing of Project initiation, surveys will be conducted in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). At a minimum, at least one survey will be conducted within 10 days before Project activities begin during the nesting season.
- If Project construction would occur during the bird nesting season (February-August), a qualified biologist will conduct surveys of suitable nesting habitat that would be directly disturbed by Project activities, suitable nesting habitat for common birds within 250 feet of Project activities and common raptors within 500 feet of Project activities. Surveys will be conducted within 10 days before Project activities begin during the nesting season.
- If any active nests of Swainson's hawk or other native birds are observed, protective buffers will be established and implemented until the nests are no longer active. A qualified biologist will monitor the nest during Project activities to confirm effectiveness of the buffer. The size of the buffer will depend on type and intensity of Project disturbance, presence of visual buffers, and other variables that could affect susceptibility of the nest to disturbance.

Implementing Mitigation Measures BIO-1a and BIO-1b would reduce the potential impact related to special-status birds to a less-than-significant level because destruction of active nests and occupied burrowing owl burrows would be avoided, disturbance of nearby active nests and occupied burrows would be minimized, and artificial burrows would be provided if occupied burrows are destroyed. Therefore, the proposed Project would have a **less-than-significant impact with mitigation**.

San Joaquin Kit Fox

Based on current habitat conditions and observations made during the field survey, potential for San Joaquin kit fox to den on or adjacent to Daley Ranch is very low. However, if a den becomes established or transient individuals are present during Project construction, the den could be abandoned, or kit foxes could be injured or killed if they come in contact with Project equipment or become trapped in pipes or trenches. This impact would be **potentially significant**. The following mitigation measures have been identified to address this impact:

Mitigation Measure BIO-2: Conduct Pre-Construction Surveys and Implement Measures during Construction to Minimize Potential Impacts on San Joaquin Kit Fox.

To minimize potential effects of Project construction on San Joaquin kit fox, the District will ensure that the following measures are implemented:

- Before Project activities begin, an Environmental Awareness Program will be presented to all Project personnel working on the Project site. The program will be conducted by a qualified biologist with knowledge of San Joaquin kit fox. The program will address the following: biology and habitat needs; regulatory status and protection; measures required to reduce potential impacts during Project construction; penalties for non-compliance; and benefits of compliance.
- No more than 30 days before Project activities begin in a given area, a qualified biologist will conduct a pre-construction survey to determine the potential for San Joaquin kit fox to occur in the area. If potential or known dens for San Joaquin kit fox are found, exclusion zones will be established and maintained, in accordance with the *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox* (U.S.F.W.S. 2011).
- If Project activity would occur within 50 feet of a potential den (i.e., a den that is not known to be occupied), monitoring will be conducted at the potential den for 4 consecutive days. If no San Joaquin kit fox activity is documented, Project activities can proceed. If San Joaquin kit fox activity is documented, the appropriate exclusion zone will be established and maintained, in accordance with the *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox* (U.S.F.W.S. 2011). If it is infeasible to implement the prescribed exclusion zone, U.S.F.W.S. will be consulted and alternative measures will be implemented to ensure impacts are adequately minimized.
- To prevent kit fox entrapment during construction, all excavated, steep-walled holes or trenches more than 2 feet deep will be covered with plywood or similar material at the end of each workday. If the trenches cannot be closed, one or more escape ramps of no more than a 45-degree slope will be constructed of earthen fill or created with wooden planks. All covered or uncovered excavations will be inspected at the beginning, middle, and end of each day. Before trenches are filled, they will be inspected for

trapped animals. If a trapped kit fox is discovered, Project activities will stop, and escape ramps or structures will be installed immediately to allow the animal to escape.

- All construction pipes or similar structures with a diameter of 4 inches or greater that are stored on the ground at a construction site for one or more overnight periods will be thoroughly inspected for wildlife before the pipe is buried, capped, or otherwise used or moved in any way. Pipes laid in trenches overnight will be capped. If a potential San Joaquin kit fox is discovered inside a pipe, all Project activities that could result in take will stop, a qualified biologist will be summoned to identify the species, and U.S.F.W.S. will be notified. If a San Joaquin kit fox is unable to escape voluntarily, U.S.F.W.S. will be contacted immediately to determine what actions should be taken to adequately minimize potential impacts.
- All food-related trash items such as wrappers, cans, bottles or food scraps generated during Project activities will be disposed of in closed containers and removed daily from the Project site. No deliberate feeding of wildlife will be allowed, and no pets associated with Project personnel will be permitted on the Project site.

Implementing Mitigation Measure BIO-2 would reduce the potential impact related to San Joaquin kit fox to a less-than-significant level because destruction or disturbance of occupied dens and injury or death of individuals would be avoided. Therefore, the proposed Project would have a **less-than-significant impact with mitigation**.

#4 -b and c. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? Have a substantial adverse effect on state- or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Daley Ranch does not support any riparian habitat or other sensitive natural community, identified in local or regional plans, policies, or regulations. The site also does not support designated critical habitat or state or federally protected wetlands. Therefore, there would be **no impact** on such resources.

#4 -d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Daley Ranch is part of a large regional extent of agricultural lands and does not serve as a corridor or other primary route for wildlife movement or as a nursery site for any wildlife species. Because the Main Drain Canal is dry for much of the year and does not connect to natural waterways, it does not provide a migratory corridor. Therefore, implementing the proposed Project would not interfere with movement of native resident or migratory fish or wildlife species or with native

resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. This impact would be **less-than-significant**.

#4 -e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The 2004 Kern County General Plan, which is currently being updated, includes several policies and implementation measures designed to protect and conserve threatened and endangered species and oak trees (Kern County 2004a). No oak trees are present on Daley Ranch, and the proposed Project has no potential to conflict with Kern County's General Plans oak retention policy. The Plan requires discretionary projects to consider effects to biological resources and wildlife agency comments during the CEQA process; this is consistent with the CEQA process being implemented by the District for the proposed Project. Therefore, implementing the proposed Project would not conflict with any local policies or ordinances protecting biological resources and there would be **no impact**.

#4 -f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Daley Ranch is within the area proposed to be covered by the Kern County Valley Floor Habitat Conservation Plan. A draft of the plan was issued many years ago (Kern County Planning Department 2006), but a final plan has not been released. Daley Ranch is within an extensive area of "White Zone," which is of lower conservation concern and not identified for acquisition of preserve areas. Therefore, implementing the proposed Project would not conflict with any provisions, guidelines, goals, or objectives related to biological resources anticipated to be included in a potential final and adopted version of this plan. Therefore, no conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved conservation plan would occur, and there would be **no impact**.

3.5 Cultural Resources

#5. CULTURAL RESOURCES. Would the project:

#5 -a. Cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations (CCR) Section 15064.5?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? Yes.	Have Less-than-Significant Impact? No.	Have No Impact? No.
#5 -b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? Yes.	Have Less-than-Significant Impact? No.	Have No Impact? No.
#5 -c. Disturb any human remains, including remains interred outside of dedicated cemeteries?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? Yes.	Have Less-than-Significant Impact? No.	Have No Impact? No.

3.5.1 Environmental Setting

Cultural resources are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance.

Record Search

In December 2020, GEI senior archaeologist Jesse Martinez, Registered Professional Archaeologist (RPA), requested an in-house records search of Daley Ranch and a surrounding 0.25-mile radius from the Southern San Joaquin Valley Information Center (S.S.J.V.I.C.); the results of the record search were received on December 7, 2020. The records search included a review of the Buttonwillow Quadrangle of the USGS 7.5-minute series topographic cultural resource base map held at the S.S.J.V.I.C. The S.S.J.V.I.C. resource map review indicates that three previously recorded resources are within the Project area (P-15-013726, P-15-017682, and P-15-017683), with no other known resources recorded in, or within 0.25 mile of, the proposed Project area (S.S.J.V.I.C. File Number: 20-428). All three previously recorded resources are large earth or concrete banked irrigation ditches that are recorded both within Daley Ranch and beyond. Within Daley Ranch, each of the ditches is recorded as having earthen banks. P-15-013726 is the Main Drain Canal, P-15-017682 is the Arizona Ditch, and P-15-17683 is the Deep Wells Ditch. The Main Drain Canal is recorded as being on the western boundary of Daley Ranch, as well as crossing the southern quarter of Daley Ranch, following a roughly parallel alignment to the Arizona Ditch. The Arizona Ditch is recorded as on the southern boundary of the Daley Ranch, as well as diagonally crossing the southwestern corner of Daley Ranch into the adjacent parcel to the west. The Deep Wells Ditch is recorded as crossing the northeastern quadrant of Daley Ranch; this ditch runs north-south from the northern border of the Project area at Buerkle Road and then turns

90 degrees near the center of Daley Ranch to head towards the eastern boarder of Daley Ranch at Wasco Way (GEI 2021).

Native American Consultation and Coordination

A Tribal Sacred Lands search request was filed with the Native American Heritage Commission (NAHC) on December 9, 2020. The search was completed on January 12, 2021, with the conclusion that no tribal cultural resources are located on or in the vicinity of Daley Ranch (NAHC 2021).

On January 18, 2021, the District submitted a notification letter to the Torres Martinez Desert Cahuilla Indians pursuant to Assembly Bill 52; to date, the District has not received a response.

Field Survey

Daley Ranch consists of recently cleared agricultural land, with irrigation ditches and dirt roads. Vegetation at the time of the survey was relatively sparse allowing for good visibility. GEI archaeologist Ben Curry, PhD., RPA, conducted a reconnaissance-level pedestrian survey on December 16 and 17, 2020. The reconnaissance pedestrian survey covered the entire 92 acres of Daley Ranch, with survey transects spaced approximately 50 meters apart and set in alignment with soil test trenches to examine subsurface sediments. The spoil pile soils from these 61 test trenches were examined for cultural materials and soil qualities were noted to determine the generally level of archaeological sensitivity in Daley Ranch. In addition, the historic-era irrigation ditches, or their previously recorded alignments, were subjected to more intensive survey coverage, and the existing location of the ditches were recorded in ArcCollector. Surface visibility was excellent due to the absence of surface vegetation and other ground coverage within the Project area, with surface visibility being near 100 percent across the parcels.

Sections of the Arizona Ditch (P-15-017682) and the Main Drain Canal (P-15-013726), were relocated, but the Deep Wells Ditch (P-15-017683) has been filled-in within Daley Ranch (and adjacent parcels) and is thus no longer present. No parts of the Deep Wells Ditch remain within Daley Ranch, and the ditch is not visible in adjacent parcels from Daley Ranch. The recorded alignment of the Deep Wells Ditch was surveyed, and no evidence of the ditch remains. Review of recent satellite and aerial photographs indicate that most of the Deep Wells Ditch was filled-in sometime in 2014 or 2015, with remnant sections of the ditch filled-in by 2018. Also, portions of both the Arizona Ditch and Main Drain Canal have been filled-in or otherwise modified. The western section of the Arizona Ditch (just west of the Project area) and the southern section of the Main Drain Canal within Daley Ranch have been filled-in, and the two ditches are now connected via an underground pipe in the southwest corner of Daley Ranch. An overflow or holding pond with an eastward extending ditch connected to the Arizona Ditch has also been added to Daley Ranch. Review of satellite and aerial photographs indicates that the filling-in of sections of the Arizona Ditch and Main Drain Canal, the connection between the two ditches, and the first excavation of the holding pond north of the Arizona Ditch occurred in late 2017 to early 2018. Further expansion of the holding pond occurred sometime in 2019 or 2020.

Archaeological Resources

No archaeological resources, additional historic resources, or other cultural materials were identified during the pedestrian survey. Similarly, examination of the soil test trenches spoil piles did not reveal any evidence of buried archaeological sites or materials. Based on the soil test spoil piles the subsurface soils are a combination of river/stream bottom sands and flood plain alluvium. Prehistoric and historic sites are often located near surface water, but not necessarily within active riparian corridors and their immediately surrounding floodplains, which is the kind of previous environment these soils indicate. The lack of previously known archaeological resources in or near the Project area, the lack of archaeological resources encountered during the pedestrian survey or evidenced in the soil test spoil piles, and the indication that this area was an active riparian area prior to European contact collectively indicates that Daley Ranch is unlikely to contain significant and intact buried archaeological sites, though there is a very small possibility of non-significant isolated cultural materials or naturally redeposited or disturbed archaeological site materials being encountered during Project activities (GEI 2021).

Built Environment Resources

Two historic era (more than 45 years old) built environment resources are located in the Daley Ranch: Main Drain Canal and the Arizona Ditch. Both water features appear in historic maps as early as the 1930s and were constructed as part of local irrigation efforts (USGS 1932).

3.5.2 Discussion

#5 -a and b. Cause a substantial adverse change in the significance of a historical resource pursuant to in CCR Section 15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?

Under CEQA, public agencies must consider the effects of their actions on “historical resources.” CEQA defines an “historical resource” as any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP), as well as some California Historical Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (California PRC Section 5024.1, 14 CCR Section 4850). The eligibility criteria for listing in the CRHR are similar to those for NRHP listing but focus on importance of the resources to California history and heritage.

A cultural resource may be eligible for listing in the CRHR if it:

1. is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage

2. is associated with the lives of persons important in our past
3. embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values
4. or has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting one or more of the above criteria, resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (Office of Historic Preservation 1997).

Impacts would be deemed significant if there is substantial adverse change by means of physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Per Section 15064.5 (b)(2) of the CEQA Guidelines the significance of a historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the Project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for the purposes of CEQA.

The Main Drain Canal and Arizona Ditch are located in Daley Ranch. Portions of the two linear features have been filled in and modified and they do not appear to meet CRHR criteria due to a lack of integrity. They are therefore not considered historical resources for the purposes of CEQA. In regard to archaeological resources, neither the records search nor the pedestrian survey located any archaeological resources within Daley Ranch. In addition, the examination of subsurface soils in the soil testing spoils piles during the pedestrian survey indicates that the Project area likely has a very low archaeological sensitivity—that is, a low likelihood to contain previously unknown buried and intact archaeological resources. Therefore there are no presently known unique archaeological resources within Daley Ranch, and there is a very low, though not non-existent, possibility of encountering buried archaeological resources during Project activities. Therefore, the impact would be **less-than-significant**.

Though very unlikely, the possibility remains that a resource that meets CRHR-significance criteria for a historical resource may be discovered during Project-related ground-disturbing activities. If this were to occur, then it would be a **potentially significant impact**. The following mitigation measure has been identified to address this impact:

Mitigation Measure CR-1: Address Previously Undiscovered Historic Properties, Archaeological Resources, and Tribal Cultural Resources.

The District shall implement measures to reduce or avoid impacts on undiscovered historic properties, archaeological resources, and tribal cultural resources. If buried or previously unidentified historic properties or archaeological resources are discovered during Project construction, all work within a 100-foot-radius of the find shall cease. The District shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Interested Native American Tribes will also be contacted. Any necessary treatment/investigation shall be developed in coordination with interested Native American Tribes providing recommendations and with the District and shall be completed before Project activities continue in the vicinity of the find.

Implementing Mitigation Measure CR-1 would reduce the potential impact related to discovery of unknown historical and/or archaeological resources to a less-than-significant level because the find would be assessed by an archaeologist and the treatment or investigation would be conducted in accordance with CEQA and its implements guidelines. Therefore, the proposed Project would have a **less-than-significant impact with mitigation**.

#5 -c. Disturb any human remains, including remains interred outside of dedicated cemeteries?

No human remains have been discovered on or in the vicinity of Daley Ranch and it is not anticipated that human remains, including those interred outside of dedicated cemeteries, would be discovered during ground-disturbance activities for the proposed Project. There is no indication from the records searches or pedestrian survey that human remains are present within Daley Ranch. However, in the event that human remains, including those interred outside of formal cemeteries and including associated items and materials, are discovered during subsurface activities, the human remains, and associated items and materials could be inadvertently damaged. Therefore, a **potentially significant impact** would occur. The following mitigation measure has been identified to address this impact:

Mitigation Measure CR-2: Avoid Potential Effects on Undiscovered Burials.

If human remains are found, Reclamation and the District should be immediately notified. The California Health and Safety Code requires that excavation be halted in the immediate area and that the county coroner be notified to determine the nature of the remains. The coroner is required to examine all discoveries of human

remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code, Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, the coroner must contact the Native American Heritage Commission (NAHC) by telephone within 24 hours of making that determination (Health and Safety Code, Section 7050.5[c]).

Once notified by the coroner, the NAHC shall identify the person determined to be the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This visit should be conducted within 24 hours of the MLD's notification by the NAHC (Public Resources Code [PRC], Section 5097.98[a]). If a satisfactory agreement for treatment of the remains cannot be reached, any of the parties may request mediation by the NAHC (PRC, Section 5097.94[k]). Should mediation fail, the landowner or the landowner's representative must reinter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (PRC, Section 5097.98[b]).

Implementing Mitigation Measure CR-2 would reduce the potentially significant impact related to discovery of human remains to a less-than-significant level because the find would be assessed by an archaeologist and treated or investigated in accordance with state and federal laws. Therefore, the proposed Project would have a **less-than-significant impact with mitigation**.

3.6 Energy

#6. ENERGY. Would the project:

#6 -a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#6 -b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? Yes.

3.6.1 Environmental Setting

Electricity and natural gas are supplied to Kern County by Pacific Gas and Electric (PG&E), Southern California Edison, and Southern California Gas (Kern County 2004a). In 2018, the total electricity consumption for Kern County was approximately 15,942 million kilowatts per hour (California Energy Commission 2018).

3.6.2 Discussion

#6 -a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The proposed Project would not result in significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources. The proposed Project would involve the use of diesel-fueled vehicles during construction-related activities; however, use of these vehicles would be temporary and not wasteful. Water would be delivered to the site via the existing Main Drain Canal which would not result in an increase in energy consumption. The proposed Project will raise groundwater levels, thus reducing energy use for pumping from groundwater wells in the Project area. The proposed Project does not include onsite recovery. Therefore, impacts would be **less-than-significant**.

#6 -b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Kern County does not have a local plan for renewable energy or energy efficiency. The proposed Project would comply with the state’s Climate Commitment to reduce the reliance on non-renewable energy sources by half by 2030 (California Energy Commission 2015). There would be **no impact**.

3.7 Geology and Soils

#7. GEOLOGY AND SOILS. Would the project:

#7 -a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
#7 -a. i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#7 -a. ii. Strong seismic ground shaking?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#7 -a. iii. Seismic-related ground failure, including liquefaction?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#7 -a. iv. Landslides?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#7 -b. Result in substantial soil erosion or the loss of topsoil?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.

#7. GEOLOGY AND SOILS. Would the project:

#7 -c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#7 -d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated),), creating substantial direct or indirect risks to life or property?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#7 -e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste-water disposal systems where sewers are not available for the disposal of wastewater?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#7 -f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? <u>Yes.</u>	Have Less-than-Significant Impact? No.	Have No Impact? No.

3.7.1 Environmental Setting

The northeastern corner, approximately one-third of Daley Ranch, consists of Buttonwillow clay, drained soil; the remainder, approximately two-thirds of Daley Ranch, consists of Lokern clay, drained soil (Natural Resources Conservation Service [NRCS] 2021). Daley Ranch is located approximately 4 miles northeast of an unnamed quaternary fault (age undifferentiated) in the Elk Hills (California Geological Survey [CGS] 2010a). A quaternary fault is an active fault that has been recognized at the surface and which has evidence of movement in the past 1.6 million years. The proposed Project is not located in or near a fault zone, landslide zone, or liquefaction zone (CGS 2021). Daley Ranch is located on “marine and non-marine (continental) sedimentary rock” (CGS 2010b).

3.7.2 Discussion

#7 -a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

#7 -a. i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

The proposed Project will not expose people or structures to direct or indirect adverse effects as a result of an earthquake because the Project site will not be occupied by people other than during construction, or periodic maintenance. In addition, this site is not within an earthquake zone, therefore this impact would be **less-than-significant**.

#7 -a. ii. Strong seismic ground shaking?

The groundwater recharge pond would not pose a direct risk to people during seismic activity. A seismic event is unlikely to cause damage to the adjacent pond slopes. Even if the adjacent pond slopes were damaged, water would not be dispersed into nearby canals and agricultural fields because the groundwater recharge pond would be constructed below existing ground level. Therefore, there would be no significant impact to people or structures from any seismic-related activity as a result of implementation of the proposed Project. This impact would be **less-than-significant**.

#7 -a. iii. Seismic-related ground failure, including liquefaction?

Daley Ranch is not located within a known liquefaction zone (CGS 2021). There would be **no impact**.

#7 -a. iv. Landsides?

Daley Ranch is not located in a landslide zone (CGS 2021). Because the Project site is located in a topographically flat area, there is no risk of landslides. There would be **no impact**.

#7 -b, c, and d. Result in substantial soil erosion or the loss of topsoil? Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Because all excavated soil will be retained onsite, the proposed Project will not result in the loss of topsoil. Operating the groundwater recharge pond will increase groundwater in the subbasin and prevent subsidence. The pond will be constructed in such a manner as to prevent landslides and collapse. Soils present at Daley Ranch consists of Buttonwillow clay, drained soil and Lokern clay, drained soil both of which are considered to be expansive soils (NRCS 2021); however, the proposed Project would not create a direct or indirect risk to life or property because of the limited size and scope of the Project and rural/agricultural nature of the area.

Because construction activities would disturb an area larger than 1 acre, the District is required to obtain coverage under the N.P.D.E.S. Construction General Permit, which includes preparation and implementation of a SWPPP. The SWPPP shall describe the construction activities to be conducted, BMPs that would be implemented to prevent soil erosion and contaminated stormwater discharges into waterways, and inspection and monitoring activities that would be conducted.

Additionally, the District would prepare and implement a Fugitive Dust Control Plan, which would minimize the loss of topsoil during construction. Operation of the groundwater recharge pond would further reduce the potential for loss of topsoil and wind-borne erosion. Therefore, there would be **less-than-significant** impacts.

#7 -e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed Project would not require the use of septic tanks or alternative wastewater disposal systems. Temporary portable restrooms would likely be provided for construction workers. There would be **no impact**.

#7 -f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Daley Ranch is located on marine and non-marine (continental) sedimentary rock that consist of alluvium, lake, playa, and terrace deposits, and is from the Pleistocene-Holocene ages (CGS 2010b). Since paleontological resources are found almost exclusively in sedimentary rock, there is a chance of discovering unknown paleontological resources within Daley Ranch. Therefore, a **potentially significant impact** would occur. The following mitigation measure has been identified to address this impact:

Mitigation Measure GEO-1: Avoid Potential Effects on Paleontological Resources.

In the event that a paleontological resource is uncovered during Project implementation, all ground-disturbing work within 165 feet (50 meters) of the discovery shall be halted. A qualified paleontologist shall inspect the discovery and determine whether further investigation is required. If the discovery can be avoided and no further impacts will occur, no further effort shall be required. If the resource cannot be avoided and may be subject to further impact, a qualified paleontologist shall evaluate the resource and determine whether it is “unique” under CEQA, Appendix G, part VII. The determination and associated plan for protection of the resource shall be provided to the District for review and approval. If the resource is determined not to be unique, work may commence in the area. If the resource is determined to be a unique paleontological resource, work shall remain halted, and the paleontologist shall consult with the District staff regarding methods to ensure that no substantial adverse change would occur to the significance of the resource pursuant to CEQA. Preservation in place (i.e., avoidance) is the preferred method of mitigation for impacts to paleontological resources and shall be required unless there are other equally effective methods. Other methods may be used but must ensure that the fossils are recovered, prepared, identified, catalogued, and analyzed according to current professional standards under the direction of a qualified paleontologist. All recovered fossils shall be curated at an accredited and permanent scientific institution according to Society of Vertebrate Paleontology standard

guidelines; typically, the Natural History Museum of Los Angeles County and University of California, Berkeley accept paleontological collections at no cost to the donor. Work may commence upon completion of treatment, as approved by the District.

Implementing Mitigation Measure GEO-1 would reduce the potential impact related to discovery of unknown paleontological resources to a less-than-significant level because the fossil would be preserved. Therefore, the proposed Project would have a **less-than-significant impact with mitigation**.

3.8 Greenhouse Gas Emissions

#8. GREENHOUSE GAS EMISSIONS. Would the project:

#8 -a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#8 -b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.

3.8.1 Environmental Setting

Kern County has not adopted a local plan for reducing greenhouse gas (GHG) emissions. The S.J.V.A.P.C.D. has adopted the *Guidance for Valley Land-use Agencies Addressing GHG Emissions Impacts for New Projects under CEQA* (Guidance) (S.J.V.A.P.C.D. 2009). Although the Guidance addresses stationary source and development projects, the District has adopted it for construction-related projects.

3.8.2 Discussion

#8 -a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG emissions would be generated during the construction phase of the proposed Project from the use of diesel-powered vehicles. Project operations will not result in GHG emissions. During operations, vehicle usage, and therefore GHG emissions, would be minimal. Therefore, GHG emissions related to vehicle engine exhaust would be **less-than-significant**.

#8 -b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

California has issued numerous Executive Orders directing state agencies to implement programs to reduce GHG emissions to meet 2030 target of 40 percent below 1990 levels (California 2018). C.A.R.B. is the primary state agency responsible implementing GHG reduction programs. Kern County does not have an adopted local greenhouse gas reduction plan. The S.J.V.A.P.C.D. provides guidance for addressing GHG emissions from land use development projects. The S.J.V.A.P.C.D. considers development projects to be less than significant if the Project achieves 29 percent GHG emission reductions target by using approved Best Performance Standards (BPS), which includes Project design elements and technologies, such as the use of energy efficient equipment, that reduce GHG emissions (S.J.V.A.P.C.D. 2009). The Guidance does not require quantification of Project specific GHG emissions for projects that implement BPS. Consistent with CEQA Guidelines, such projects would be determined to have a less-than-significant individual and cumulative impact for GHG emissions (S.J.V.A.P.C.D. 2009). Because the District would comply with the Guidance, the impact would be **less-than-significant**.

3.9 Hazards and Hazardous Materials

#9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

#9 -a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#9 -b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#9 -c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#9 -d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#9 -e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#9 -f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#9 -g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>

3.9.1 Environmental Setting

Queries of the State Water Resource Control Board (SWRCB) Geotracker and California Department of Toxic Substances Control Envirostor hazardous materials are not located on Daley Ranch (SWRCB 2021; Department of Toxic Substance Control 2020). Daley Ranch is also not located in a high-severity fire hazard zone (California Department of Forestry and Fire Department [CALFIRE] 2007a and 2007b). GEI prepared a Phase 1 Environmental Site Assessment (*see Appendix C*).

3.9.2 Discussion

#9 -a, b, c, d, f, and g. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The proposed Project would be implemented adjacent to active agriculture, farm roads, and canals. The proposed Project is located away from population centers; involving hazardous materials; and would not rely on liquid fuels. The proposed Project would not expose people to increased risks from wildland fire as Daley Ranch is comprised entirely of farmland and is not located within a high-severity fire zone. The proposed Project would not affect emergency response plans as the groundwater recharge pond would not interfere with traffic routes or response vehicle transport. There would be **no impact**.

#9 -e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Kern County has established an Airport Land Use Compatibility Plan which has been incorporated into the General Plan (Kern County 2012). The purpose of the Airport Land Use Compatibility Plan is to establish procedures and criteria by which the County of Kern and affected incorporated cities can address compatibility issues when making planning decisions. Daley Ranch is located approximately 2.3 miles northeast of the Elk Hills-Buttonwillow Airport. Because Daley Ranch is

not within an Airport Influence Area, the proposed Project would not need to be reviewed to insure compatibility with the Airport Land Use Compatibility Plan. There would be **no impact**.

3.10 Hydrology and Water Quality

#10. HYDROLOGY AND WATER QUALITY. Would the project:

#10 -a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? Yes.	Have Less-than-Significant Impact? No.	Have No Impact? No.
#10 -b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#10 -c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
#10 -c. i. result in substantial erosion or siltation on- or off-site;	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#10 -c. ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#10 -c. iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#10 -c. iv. impede or redirect flood flows?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#10 -d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? Yes.

#10. HYDROLOGY AND WATER QUALITY. Would the project:

#10 -e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
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3.10.1 Environmental Setting

The District lies entirely in Kern County and covers about 78.3 square miles in two distinct service areas: BSA and the smaller Maples Service Area (MSA) which lies about 10 miles south of the BSA. Daley Ranch is sited in the BSA and bound by Buerkle Road to the north, Wasco Way to the east, and the Main Drain Canal to the south.

The San Joaquin Valley, forming the southern two-thirds of the Central Valley, is a broad structural trough bordered on the east by the Sierra Nevada Mountains and on the west by the Diablo and the Temblor ranges. The Valley extends 220 miles southeastward from the confluence of the San Joaquin and the Sacramento rivers to the Tehachapi and the San Emigdio mountains. The width of the Valley ranges from 25 miles in the northern portion to 55 miles in the south (Croft 1972). The southern portion of the Valley is internally drained by the Kings, Kaweah, Tule, and Kern rivers that flow into the Tulare drainage basin, which includes the beds of the former Tulare, Buena Vista, and Kern lakes.

BVWSD is located near the western edge of the Kern County Groundwater Subbasin about 16 miles west of Bakersfield along the western edge of the southern San Joaquin Valley (DWR 2003). The Subbasin is bounded on the north by the Kern County line and the Pleasant Valley, Tulare Lake, and Tule groundwater subbasins, on the east and southeast by the Sierra Nevada foothills and Tehachapi Mountains, and on the west and southwest by the San Emigdio Mountains and the Temblor Range. The Kern River is an important source of water for the District with the BSA located north of the river.

3.10.2 Discussion

#10 -a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Potential impacts to groundwater quality were determined by comparing water quality data near the proposed Project to the surface water sources (i.e., California Aqueduct and Kern River). **Table 3-5** summarizes groundwater quality observations recorded at District Monitoring Well 7 (DMW 7). This data shows concentrations of Total Dissolved Solids (TDS) above the Secondary Maximum Contaminant Level (MCL) on one occasion. Arsenic occurs naturally in soils in this area, and concentrations observed at DMW 7 are uniformly at or very close to the Primary MCL.

Table 3-5. Summary of Water Quality Data from DMW 7.

Constituent	Sample Date	MCL	Test Result	Units
Chloride. (See table note # 1)	7/24/2008	250	46	mg/L
	8/9/2012	250	35	mg/L
	7/25/2013	250	37	mg/L
	7/30/2014	250	37	mg/L
	7/8/2015	250	41	mg/L
	9/12/2017	250	40	mg/L
Sodium. (See table note # 2)	7/24/2008		119	mg/L
	10/20/2010		83	mg/L
	8/9/2012		91	mg/L
	7/24/2013		94	mg/L
	7/30/2014		110	mg/L
	7/8/2015		110	mg/L
	9/12/2017		110	mg/L
TDS. (See table note # 1)	7/24/2008	500	539	mg/L
	8/9/2012	500	330	mg/L
	7/24/2013	500	340	mg/L
	7/30/2014	500	380	mg/L
	9/12/2017	500	370	mg/L
Arsenic	7/24/2013	10	10	ug/L
	7/30/2014	10	10	ug/L
	7/8/2015	10	9.4	ug/L
	9/12/2017	10	11	ug/L

Constituent	Sample Date	MCL	Test Result	Units
Nitrate (as NO ₃)	8/5/2008	45	0.4	mg/L
	6/19/2013	45	0	mg/L
	7/15/2014	45	0	mg/L
	4/10/2015	45	0	mg/L

Notes:

#1. Secondary MCL

#2. No MCL – not toxic in drinking water

Table 3-6 summarizes water quality for the potential surface water sources waters to be used for groundwater recharge. Water quality in the source water is generally better quality than in groundwater, with concentrations for all constituents below their MCLs.

Table 3-6. Summary of Water Quality Data from Surface Water Sources (mg/L)¹

California Aqueduct		
Constituent	MCL	Average
Chloride	250	43.2
Sodium	- ²	31.3
TDS	500	191
Arsenic	10	ND
Nitrate (as NO ₃)	45	0.24
Kern River		
Constituent	MCL	Average
Chloride	250	3.81
Sodium	- ²	9.28
TDS	500	95
Arsenic	0.01	0.003
Nitrate (as NO ₃)	45	ND

¹ Source: KCWA Improvement District No. 4. (ID2 2020)

² No MCL - not toxic in drinking water

The recharge of surface water with groundwater through recharge operations will result in blended water quality. The actual aquifer water quality resulting from the mixing of surface and groundwater will depend on the volume of water recharged, the duration of recharge and the distance away from the proposed Project. No adverse geochemical reactions are predicted based on the mixing of surface and groundwater quality for the proposed Project. Due to the fact that both surface water sources have levels of dissolved solids, trace minerals and major ions lower than those found in groundwater, the blended mix that results from recharge will lead to lower levels of TDS, major ions and trace minerals in the mixing zone within the aquifer.

Based on a Phase 1 Environmental Site Assessment, use of hazardous materials has not been recorded on-site; however, undiscovered pollutants (if present), such as nitrogen and other fertilizers during farming production, may migrate from the soil into the groundwater system during recharge. Therefore, a **potentially significant impact** could occur. The following mitigation measure has been identified to address this impact:

Mitigation Measure HYDRO-1: Monitor Groundwater Quality.

To minimize potential effects of Project construction and operation on groundwater quality, the District will ensure that the following measures are implemented:

- The District will drill one or two shallow monitoring wells within the Daley Ranch site to monitor groundwater quality during and after recharge operations. The purpose of this monitoring is to verify groundwater recharge is not detrimentally affecting groundwater quality in the Project area.
- During construction of the recharge basins, approximately 6 to 14 feet of fine ground soils (silts and clays) will be excavated from each recharge basin to expose the underlying fine to medium grained sand in the base of each recharge basin. During soil excavation and removal, the contractor and inspecting engineer will monitor for evidence of soil contamination (color, odor, buried tanks, pipelines). If contaminated soils are encountered during excavation, these soils will be analyzed to identify the type and extent (vertically and horizontally) of contamination present. Contaminated soils will either be treated on site or disposed of at a hazardous waste landfill.
- If contaminated soils are encountered during construction, additional groundwater monitoring wells may be installed to verify that groundwater has not been impacted. As an added measure of protection, the District will cease the construction of the pond in and adjacent to contaminated soils. During the operational phase of the proposed Project, the District will conduct annual monitoring to verify that groundwater quality is not being adversely impacted by the recharge operation.

Implementing Mitigation Measure HYDRO-1 would reduce the potential effects related to groundwater resources to a less-than-significant level because monitoring and corrective action. Therefore, the proposed Project would have a **less-than-significant impact with mitigation**.

#10 -b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Changes to groundwater levels are expected to be beneficial to existing and potential users of the groundwater resource. GEI has completed a mounding analysis which is provided in the *Assessment of Potential Groundwater Impacts* (see **Appendix D**). The results of the mounding analysis indicate that the proposed Project will have the beneficial impact of raising groundwater

levels in the vicinity of Daley Ranch, resulting in lower energy costs to lift water from nearby wells. The longer the recharge period, the greater the mounding, which is provided in **Table 3-7**.

Table 3-7. Height of Groundwater Mound for Recharge Periods of 60, 120, and 200 Days (ft).

Recharge Period	Distance from Project Center (miles)	K (feet/day)		
		50 feet/day	100 feet/day	180 feet/day
60 days	0	137.2	91.9	63.4
	1	2.1	5.3	7.3
	2	0.2	0.2	0.5
120 days	0	161.2	106.4	72.6
	1	10.7	15.1	15.3
	2	0.5	1.2	2.4
200 days	0	177.8	116.6	79.2
	1	24.2	25.7	22.6
	2	1.4	3.8	5.9
300 days	0	190.4	124.4	84.3
	1	39.0	35.3	28.8
	2	4.0	8.1	10.1

Due to the fact that a constant infiltration rate is being used under all conditions, the rate at which water infiltrates into the ground is the same regardless of the horizontal conductivity (K). However, the height and extent of the groundwater mound produced by recharge is influenced by the K value. Low horizontal conductivities retard migration of water away from the recharge site resulting in a steep, narrow mound geometry, while higher K values result in lower, broader mounds because of the relative ease with which water can move from the point of recharge to the periphery of the mound.

Figures 3-1, 3-2, 3-3, and 3-4 show the changes in anticipated groundwater levels at increasing distances from the Project's center for the operational saturated zone thickness of 129 feet for recharge periods of 60, 120, 200, and 300 days, respectively. These figures indicate that for a 120-day recharge period, the Project could raise groundwater levels from 73 to 161 feet in the center of the recharge basin and that levels could rise by 11 to 15 feet at a distance of 1 mile. For a continuous recharge duration of 60 days, groundwater elevations at the Project site could be expected to increase by 63 to 137 feet, while 200 days of continual recharge could be expected to increase groundwater elevations at the proposed Project site by 79 to 178 feet. For a continuous recharge duration of 300 days, groundwater elevations at the Project site could be expected to increase by 84 to 190 feet. The height and extent of the groundwater mound will be monitored once the Project comes into operation.

Figure 3-1: Predicted Recharge Mound Height: 60-day Recharge Period.

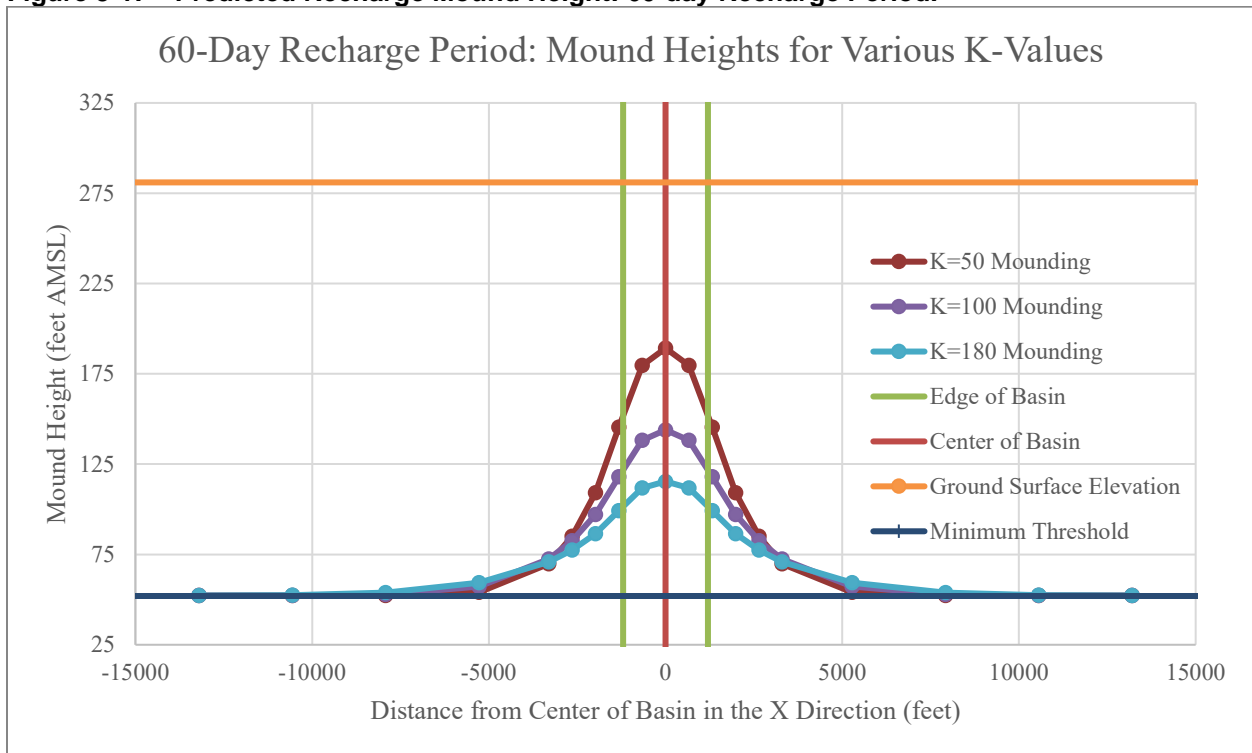


Figure 3-2: Predicted Recharge Mound Height: 120-day Recharge Period.

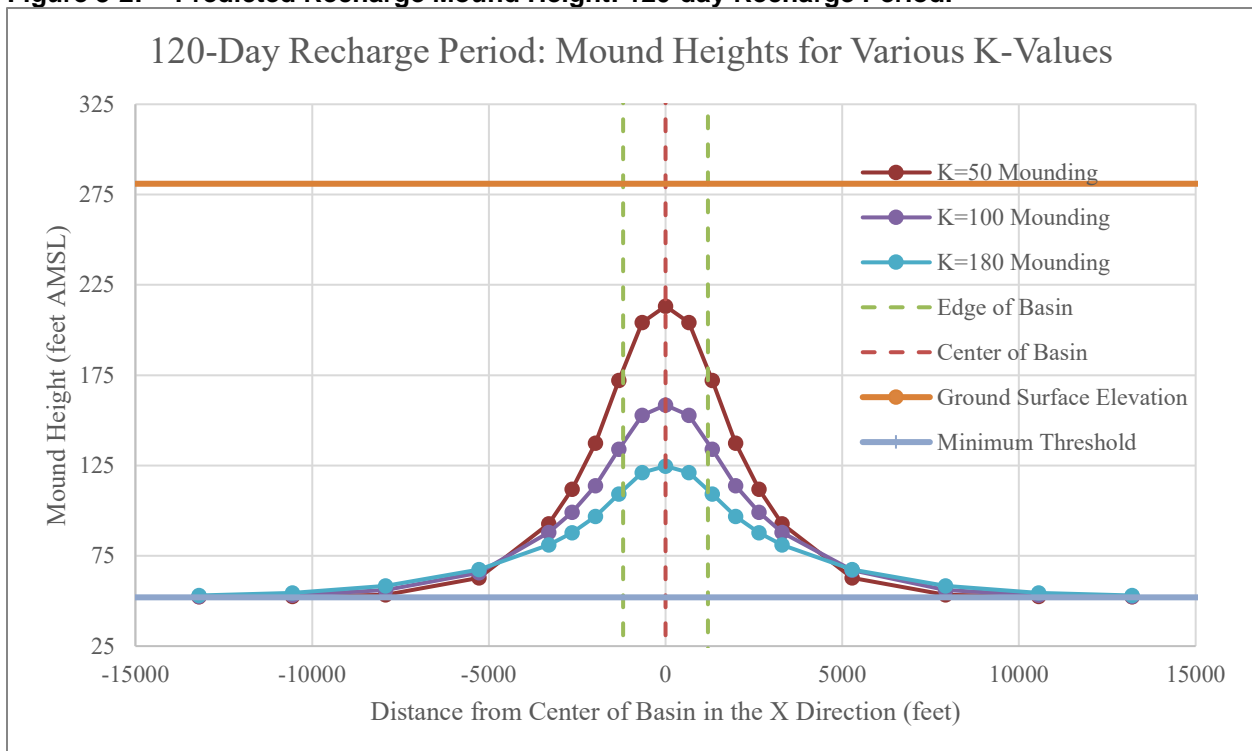


Figure 3-3: Predicted Recharge Mound Height: 200-day Recharge Period.

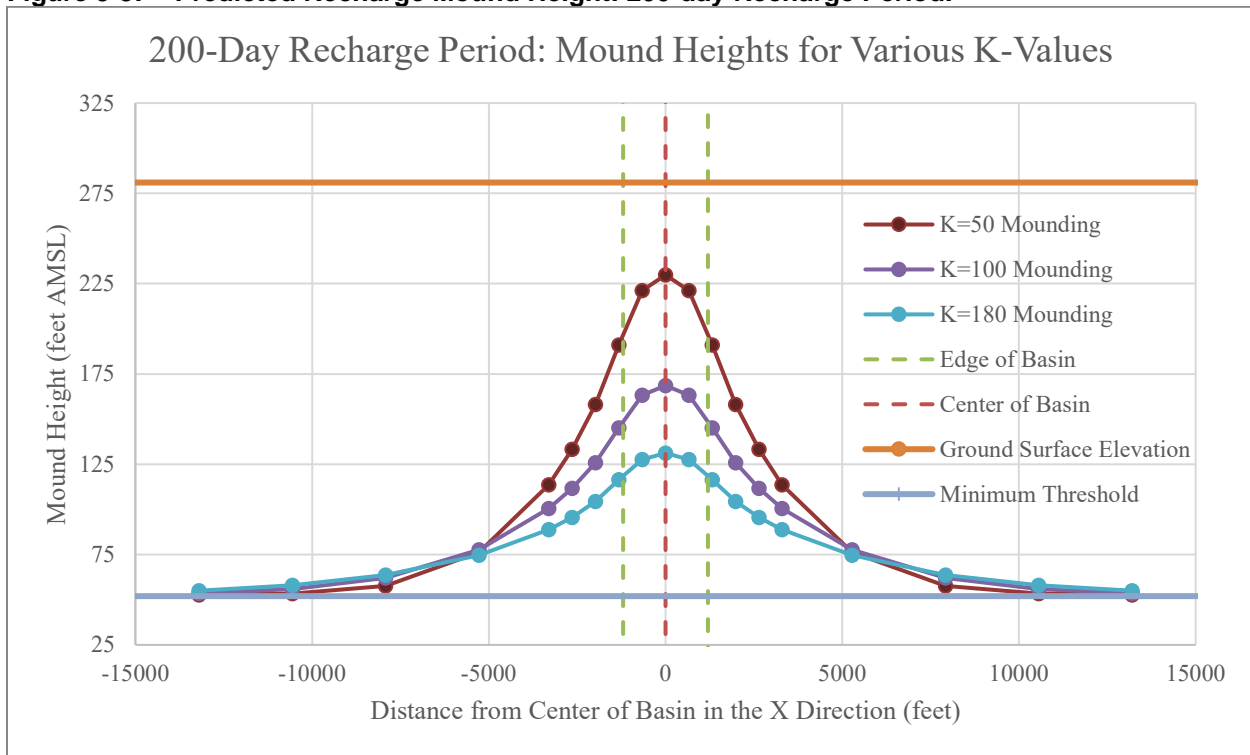
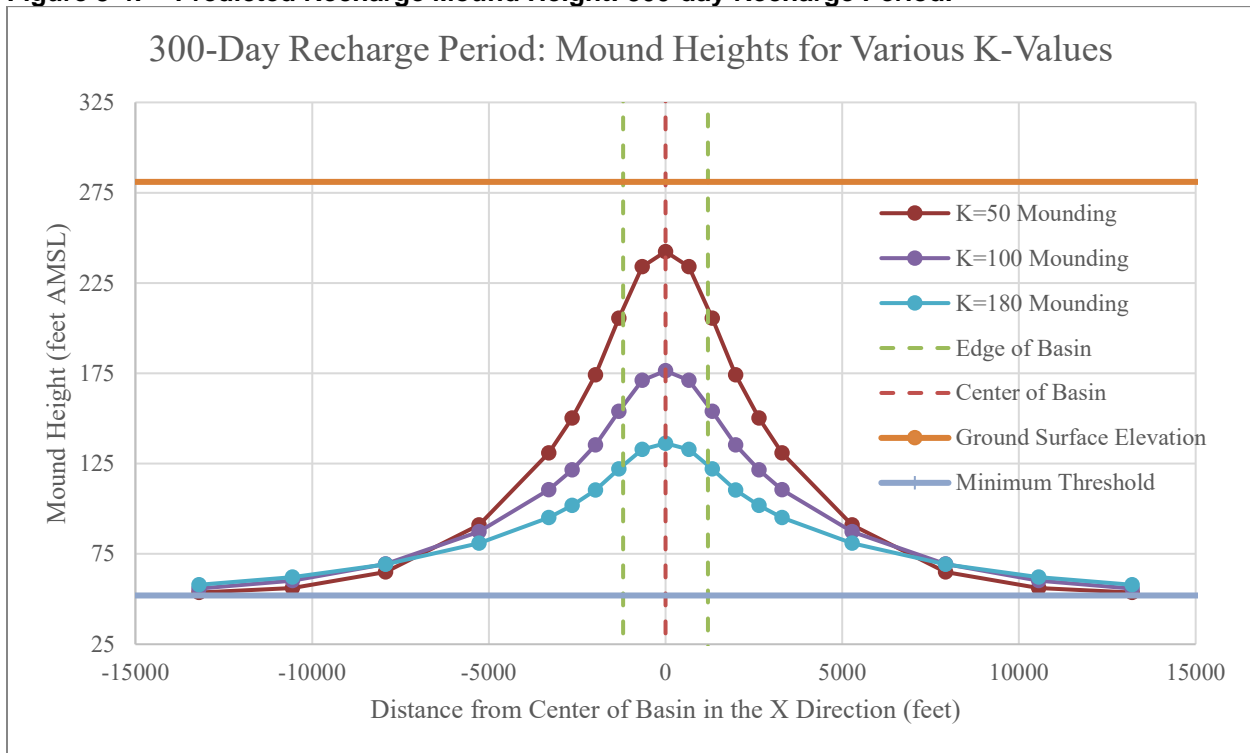


Figure 3-4: Predicted Recharge Mound Height: 300-day Recharge Period.



The proposed Project will raise groundwater levels in the vicinity of Daley Ranch. Therefore, impacts are **less-than-significant**.

#10 -c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

#10 -i, ii, iii, and iv) Result in substantial erosion or siltation on- or off-site; Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or Impede or redirect flood flows?

The District would create a 40-acre groundwater recharge pond which would alter the existing drainage pattern of Daley Ranch; however, the purpose of the proposed Project is to retain water. The District would prepare and implement a SWPPP, which will describe the construction activities to be conducted, BMPs that would be implemented to prevent soil erosion and contaminated stormwater discharges into waterways, and inspection and monitoring activities that would be conducted. As part of ongoing maintenance, the District would maintain the groundwater recharge pond so that substantial erosion and siltation do not occur. Because surface water would be held within the pond, the groundwater recharge pond would not result in off-site runoff or redirection any flood flows. The proposed Project is located in an agricultural area that does not contain a stormwater drainage system. Therefore, impacts are **less-than-significant**.

#10 -d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Daley Ranch is not located in a flood hazard, tsunami, or seiche zone, there will be **no impact**.

#10 -e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The Project Purpose is to enhance groundwater management by increasing the District's ability to recharge groundwater in wet years. Therefore, the impact is **less-than-significant**.

3.11 Land Use and Planning

#11. LAND USE AND PLANNING. Would the project:

#11 -a. Physically divide an established community?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#11 -b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>

3.11.1 Environmental Setting

Daley Ranch is zoned as exclusive agriculture (Kern County 1988). Daley Ranch is located in a rural area and surrounded by various agricultural crops and water conveyance canals, including the Main Drain Canal. Daley Ranch is located 1.4 miles south of the unincorporated community of Buttonwillow.

3.11.2 Discussion

#11 -a and b. Physically divide an established the community, and cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Construction of the groundwater recharge pond will not physically divide any communities. The proposed Project does not conflict with the Kern County General Plan or any other land use plan. There would be **no impact**.

3.12 Mineral Resources

#12. MINERAL RESOURCES. Would the project:

#12 -a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#12 -b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? Yes.

3.12.1 Environmental Setting

Daley Ranch is located within a Surface Mining and Reclamation Act of 1975 (S.M.A.R.A.) study area for aggregate materials in the Bakersfield Production-Consumption Region. Daley Ranch is designated as mineral resource zone-3 (Areas containing mineral deposits, the significance of which cannot be evaluated from available data) (DOC 2009).

3.12.2 Discussion

#12 -a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Daley Ranch is located in a S.M.A.R.A. study area but there are no known significant mineral deposits. The proposed Project involves construction of a groundwater recharge pond which would be constructed on a historically active agricultural field and would disturb 40 acres in total. There would be no loss of mineral resources (if any are present) because all excavated soil would be retained onsite. Therefore, this impact would be **less-than-significant**.

#12 -b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Daley Ranch is not located within the vicinity of a locally important mineral resource recovery site. There would be **no impact**.

3.13 Noise

#13. NOISE. Would the project:

#13 -a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#13 -b. Generation of excessive ground-borne vibration or ground-borne noise levels?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? Yes.	Have No Impact? No.
#13 -c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? Yes.

3.13.1 Environmental Setting

Daley Ranch is located in a predominately agricultural area. The closest sensitive receptors are three residences located along Buerkle Road, adjacent to Daley Ranch. The Kern County Code of Ordinances states that construction related noise is limited to the hours of 6:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 9:00 p.m. on weekends (Kern County 2020).

3.13.2 Discussion

#13 -a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies?

Construction of the groundwater recharge pond would temporarily increase the ambient noise levels within the vicinity of the proposed Project due to the use of heavy machinery during construction activities. Increased ambient noise would occur intermittently during the construction. All work would be limited to the hours identified in Kern County’s Noise Ordinance. Typical composite noise levels for construction activities, and distances of various noise contours from construction sites are presented in **Table 3-8**.

Table 3-8. Typical Noise Levels During Construction.

Construction Activity	Noise Level at 50 feet (dBA), L.e.q. (See table note #2)	Approximate Distance (feet) to Reduce Noise to Given dBA, L.e.q. (See table note #1)		
		60	65	70
Ground Clearing	84	790	450	250
Excavation	89	1,400	800	450
Well drilling (driver)	80	430	235	150
Foundation	78	400	220	130
Erection	85	890	500	280
Finishing (exterior)	89	1,400	800	450

Notes:

#1. EPA, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, December 1971; U.S. Department of Transportation, Federal Highway Administration, Office of Planning, Environment, and Realty, Roadway Construction Noise Model, June 28, 2017.

#2. Calculations assume a 6 dBA reduction for each doubling of distance from the noise source.

dBA = A-weighted decibels

Leq = equivalent continuous sound level in decibels

During operation, the proposed Project will not generate loud noises. Therefore, noise would be **less-than-significant**.

#13 -b. Generation of excessive ground-borne vibration or ground-borne noise levels?

Ground vibration would be caused during construction activities, primarily during soil excavation and compaction. Ground vibration may occur during operation; however, any impact would be restricted to maintenance activities. Vibrations would be detectable by nearby sensitive receptors. No adverse levels of vibration would be generated during operational activities. Therefore, impacts would be **less-than-significant**.

#13 -c) For a project located within-the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Kern County has established an Airport Land Use Compatibility Plan which has been incorporated into the General Plan (Kern County 2012). Daley Ranch is located approximately 2.3 miles northeast of the Elk Hills-Buttonwillow Airport. The proposed Project is not located within an Airport Influence Area. The proposed Project would not expose people residing or working in the area to excessive noise levels. There would be **no impact**.

3.14 Population and Housing

#14. POPULATION AND HOUSING. Would the project:

#14 -a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#14 -b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>

3.14.1 Environmental Setting

Daley Ranch is located in the unincorporated area of Kern County. In 2020, the population of Kern County was estimated to be 917,553 (Department of Finance 2020).

3.14.2 Discussion

#14 -a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed Project would not be growth inducing and as such would not result in the development of new housing. Construction and operation of the proposed Project would not require additional employees. There would be **no impact**.

#14 -b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed Project would not displace people or housing. Daley Ranch is located in a predominately agricultural area with little to no residential properties in the vicinity. There would be **no impact**.

3.15 Public Services

#15. PUBLIC SERVICES. Would the project:

<p>#15 -a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>
<p>Fire protection?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>
<p>Police protection?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>
<p>Schools?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>
<p>Parks?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>
<p>Other public facilities?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>

3.15.1 Environmental Setting

The Kern County Sheriff and California Highway Patrol provide law enforcement services for unincorporated Kern County. The Kern County Fire Department provides fire protection to residents of the unincorporated areas of the County, and the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Tehachapi and Wasco (Kern County 2004b). A mutual agreement between the County and the cities of Bakersfield, Taft, and California City allows for protection and assistance in the jurisdiction of each as needed. The County also has a mutual aid contract with U.S.F.W.S. and a service agreement with the Bureau of Land Management.

3.15.2 Discussion

#15 -a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

The proposed Project would not require new or altered government facilities, as it would not increase the need for public services from existing conditions. There would be **no impact**.

3.16 Recreation

#16. RECREATION. Would the project:

<p>#16 -a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>
<p>#16 -b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? <u>Yes.</u></p>

3.16.1 Environmental Setting

The Buttonwillow Parks and Recreation Department operates recreational facilities within the unincorporated community of Buttonwillow which is approximately 1.4 miles north of Daley Ranch.

3.16.2 Discussion

#16-a and b. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The proposed Project is not growth inducing and would not increase the use of existing parks or recreational facilities or require the construction or expansion of recreational facilities. There would be **no impact**.

3.17 Transportation

#17. TRANSPORTATION. Would the project:

#17 -a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#17 -b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#17 -c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#17 -d. Result in inadequate emergency access?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>

3.17.1 Environmental Setting

The proposed Project is located approximately 1 mile south of State Route (SR) 58 in a rural area of Kern County. SR 58 provides access to I-5 and SR 99. There are no transit or on-street bicycle/pedestrian facilities near Daley Ranch.

3.17.2 Discussion

#17 -a, b, c, and d). Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Result in inadequate emergency access?

The proposed Project would not conflict with any program plan, ordinance, or policies. Construction traffic would utilize existing public roads to deliver equipment, supplies, and workers to and from Daley Ranch. Construction of the proposed Project would involve up to 10 workers. The groundwater recharge pond would be constructed on a historically active agricultural field. Therefore, the proposed Project would not require any road closures or result in inadequate

emergency access. Since no new roads are being developed, the proposed Project would not increase hazards due to a geometric design feature or incompatible uses. There would be **no impact**.

3.18 Tribal Cultural Resources

#18. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

#18 -a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#18 -b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>

3.18.1 Environmental Setting

A Tribal Sacred Lands search request was filed with the NAHC. The search was completed on January 12, 2021, with the conclusion that no tribal cultural resources are located on or in the vicinity of Daley Ranch (NAHC 2021).

On January 18, 2021, the District submitted a notification letter to the Torres Martinez Desert Cahuilla Indians pursuant to Assembly Bill 52; to date, the District has not received a response.

3.18.2 Discussion

#18 -a and b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)? A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

There are no known tribal cultural resources located on or in the vicinity of Daley Ranch. There are no known Indian Sacred Sites on or in the vicinity of Daley Ranch. Since no known Indian Sacred Sites have been identified within Daley Ranch, there would be no direct, indirect, or

cumulative impacts to Indian Sacred Sites from the proposed Project. The proposed Project would not have the potential to affect or prohibit access to any ceremonial use of Indian Sacred Sites. There would be **no impact**.

3.19 Utilities and Service Systems

#19. UTILITIES AND SERVICE SYSTEMS. Would the project:

#19 -a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#19 -b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#19 -c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#19 -d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.
#19 -e. Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? <u>Yes.</u>	Have No Impact? No.

3.19.1 Environmental Setting

Daley Ranch and its vicinity are served by PG&E, Southern California Edison, and Southern California Gas (Kern County 2004). Sewage disposal is handled by both public and private agencies, and by private individual systems. Several incorporated and unincorporated communities are served by wastewater treatment plants managed by community service districts. The closest wastewater treatment plant is the Buttonwillow Community Wastewater Treatment Plant, approximately 1.8 miles northeast of Daley Ranch. Domestic water is serviced to the public by various water purveyors consisting of public and private water systems. The closest landfill is the Shafter-Wasco Recycling and Sanitary Landfill, approximately 13 miles northeast of Daley Ranch.

3.19.2 Discussion

#19 -a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No utility services would need to be constructed or expanded as a result of the proposed Project. Water would be delivered to Daley Ranch via the existing Main Drain Canal. Implementation of the proposed Project would result in **no impacts**.

#19 -b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The proposed Project consists of constructing a groundwater recharge pond with water obtained from existing District sources (e.g., Kern River, SWP) and delivered via the existing Main Drain Canal. The District would only deliver water during “wet” years when surface water supplies are adequate. The proposed Project does not include onsite recovery. There is no reasonably foreseeable future development related to the construction and operation of the proposed Project. There would be **no impact**.

#19 -c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?

Wastewater would not be produced as a result of the proposed Project. There would be **no impact**.

#19 -d and e) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?

The proposed Project would not create substantial amounts of solid waste, and as such would not exceed the capacity of local infrastructure. Minimal waste would be generated during construction and no increase in waste production would occur during the operation of the proposed Project. The proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. There would be **less-than-significant** impacts.

3.20 Wildfire

#20. WILDFIRE. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, **would the project:**

#20 -a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#20 -b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#20 -c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>
#20 -d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Have Potentially Significant Impact? No.	Have Less-than-Significant Impact with Mitigation Incorporated? No.	Have Less-than-Significant Impact? No.	Have No Impact? <u>Yes.</u>

3.20.1 Environmental Setting

Daley Ranch is not located in a high-severity fire zone. Daley Ranch is located in an unincorporated Local Responsible Area classified as un-zoned (CALFIRE 2007). The Kern County Fire Department provides fire protection for residents of the unincorporated areas of the County and the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Tehachapi, and Wasco (Kern County 2004b).

3.20.2 Discussion

#20 -a, b, c, and d) Substantially impair an adopted emergency response plan or emergency evacuation plan? Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? Expose people or structures to significant risks, including

downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Daly Ranch is not located in a high-severity fire zone. The short-term, temporary nature of construction would not pose a risk to emergency response or evacuation during an emergency. The proposed Project would not create any infrastructure that would exacerbate fire risk or the risk of flooding, slope instability, or drainage changes. There would be **no impact**.

3.21 Mandatory Findings of Significance

#21. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:

<p>#21 -a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? <u>Yes.</u></p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? No.</p>
<p>#21 -b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? <u>Yes.</u></p>	<p>Have Less-than-Significant Impact? No.</p>	<p>Have No Impact? No.</p>
<p>#21 -c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<p>Have Potentially Significant Impact? No.</p>	<p>Have Less-than-Significant Impact with Mitigation Incorporated? No.</p>	<p>Have Less-than-Significant Impact? <u>Yes.</u></p>	<p>Have No Impact? No.</p>

3.21.1 Discussion

#21 -a. Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

The analysis conducted in this IS concludes that implementation of the proposed Project would not have a significant impact on the environment. As evaluated in Chapter 3.4, Biological Resources, impacts on biological resources would have no impact, less-than-significant impact, or less-than-significant impact with mitigation incorporated. The proposed Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of an endangered, rare, or threatened species. As discussed in Chapter 3.5, Cultural Resources, the proposed Project would not eliminate important examples of the major periods of California history or prehistory. This impact would be **less-than-significant with mitigation incorporated.**

#21 -b. Would the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The proposed Project will enable the District to better sustain groundwater levels and improve groundwater quality, two objectives of California’s Groundwater Sustainability Management Act. Past projects include the Northern Area Pipeline Project, 7th Standard Pipeline Project, and the Palms Groundwater Banking Project – Recharge Phase. Projects that are currently being constructed include the Corn Camp Groundwater Recharge Pond Project and Buena Vista Pipeline and Brite Pump Station Project. The District is considering the Palms Groundwater Banking Project – Recovery Phase.

The District prepared IS/MNDs for the Northern Area Project, 7th Standard Pipeline Project, and Buena Vista Pipeline and Brite Pump Station Project which entailed the installation of buried pipeline to convey water and reduce seepage from open earthen canals. The District also prepared IS/MNDs for the Palms Groundwater Banking Project – Recharge Phase and Corn Camp Groundwater Recharge Pond Project, which involves groundwater replenishment and water banking. Mitigation measures similar to measures listed for the aforementioned projects have been established for the proposed Project. Construction of the proposed Project would not have significant cumulative impacts to resources in Daley Ranch because of the incorporation of mitigation measures.

The District is considering the Palms Groundwater Banking Project – Recovery Phase, which would recover groundwater banked at the Palms. The District has prepared a draft EIR, which includes groundwater modeling the incorporation of mitigation measures for hydrology and water quality.

The proposed Project would result in less than significant impacts with mitigation incorporated, less-than-significant impacts, or no impacts on aesthetics, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. The temporary nature of the proposed Project’s construction impacts, and the minor, negligible changes to long-term operations and maintenance at the Project site would result in no impacts or less-than-significant environmental impacts on the physical environment. None of the proposed Project’s impacts make cumulatively considerable, incremental contributions to significant cumulative impacts with incorporation of mitigation presented in this IS. This impact would be **less-than-significant with mitigation incorporated**.

#21 -c. Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed Project would result in less-than-significant impacts and would not cause substantial adverse effects on human beings, either directly or indirectly. This impact would be **less-than-significant**.

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No citations.

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Transportation, Utilities and Service Systems, Wildfire, and
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Appendix A – Project Site Photos



Photograph 1: Facing west across northern portion of the Project site (December 16, 2020).



Photograph 2: Facing west across southern portion of the Project site formerly used as borrow site (December 16, 2020).



Photograph 3: Facing south from northwest corner of the Project site (December 16, 2020).



Photograph 4: Facing north along western boundary of the Project site (December 16, 2020).

Appendix B – Biological Technical Report

Biological Technical Report

Daley Ranch Groundwater Recharge Pond Project

Prepared for:

Buena Vista
Water Storage District

March 2021

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Biological Technical Report

Daley Ranch Groundwater Recharge Pond Project

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Project No. 2004962

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Abbreviations and Acronyms

AFY	acre feet per year
BMPs	Best Management Practices
CDFW	California Department of Fish and Wildlife
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
District	Buena Vista Water Storage District
FGC	California Fish and Game Code
IPaC	Information for Planning and Conservation
Porter-Cologne Act project	Porter-Cologne Water Quality Control Act Daley Ranch Groundwater Recharge Pond Project
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1. Introduction

This biological technical report addresses sensitive biological resources that could be affected by implementing the Buena Vista Water Storage District (District) Daley Ranch Groundwater Recharge Pond Project (project). Potential for special-status species to occur on the project site and be affected by project implementation is evaluated. In addition, measures are recommended to avoid or minimize potential for impacts on sensitive biological resources during project activities.

1.1 Project Location

The District's service area includes approximately 50,000 acres in two distinct areas – Buttonwillow Service Area and Maples Service Area – in the lower Kern River watershed of western Kern County. The project site is in the southern portion of the Buttonwillow Service Area, 1.4 miles south of the unincorporated community of Buttonwillow. The site is located on the Buttonwillow U.S. Geological Survey (USGS) 7.5-minute quadrangle (**Figure 1**).

1.2 Project Description

The District proposes to construct a recharge pond on the project site, which is bordered by Buerkle Road to the north, Wasco Way to the east, and the Main Drain Canal to the south and west (**Figure 2**). The proposed project would be situated on three parcels totaling approximately 92 acres. The District owns the parcels, which are collectively known as Daley Ranch.

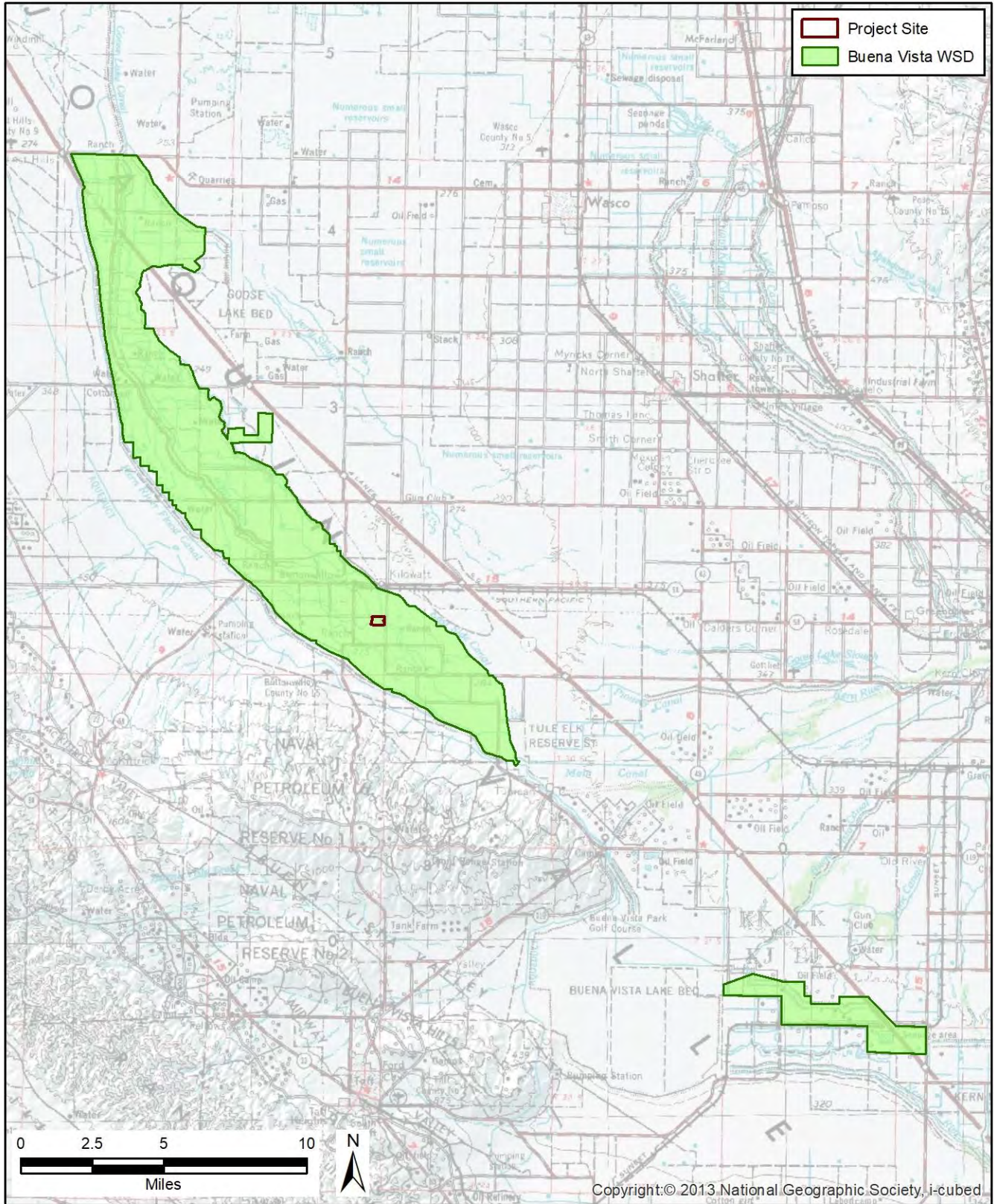
The project has two primary objectives:

- Increase conjunctive management on the west side of Kern County by expanding the area's ability to accept surface water for groundwater recharge during periods when surface water is available; and
- Reduce agricultural demand by replacing approximately 68 acres of irrigated farmland with spreading grounds.

The project would benefit groundwater users by improving groundwater management and quality. Water supply and energy savings would result from a general increase in groundwater elevations in the project area. The project would be operated to provide a long-term benefit to the basin and aid in regional compliance with the Sustainable Groundwater Management Act.

The project site has an established history of irrigated crop production. Retiring these lands from irrigated agriculture will enable water to be delivered to the area based on availability of water for recharge, rather than in response to the pattern of crop demand. Therefore, the timing of the deliveries will differ in a way that benefits the Buttonwillow Sub-basin. The District anticipates that retiring this irrigated land from production and converting it to recharge facilities will reduce irrigation demand by approximately 275 acre feet per year (AFY) and reduce nitrates now conveyed to groundwater from deep percolation of irrigation applications by eliminating the application of nitrogen and other fertilizers.

Figure 1. Daley Ranch Groundwater Recharge Pond Project Location



Source: Buena Vista Water Storage District 2020, adapted by GEI Consultants, Inc. in 2020

Figure 2. Daley Ranch Groundwater Recharge Pond Project Site



Source: Buena Vista Water Storage District 2020, adapted by GEI Consultants, Inc. in 2020

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The approximately 40-acre recharge pond would expose sand for percolation at depths from 6 to 14 feet. Approximately 650,000 cubic yards of soil would be excavated and retained onsite. Maximum recharge estimates, based on a full-year operation schedule, would average 12,000 AFY. Water from existing District sources (e.g., Kern River, State Water Project) would be delivered to the recharge pond via the existing Main Drain Canal. The District may apply to the U.S. Bureau of Reclamation for authorization to bank Central Valley Project water at Daley Ranch. The proposed project does not include on-site recovery.

The District would use several excavators, loaders, dozers, service trucks, scrapers, a bell truck with box scraper, and a water truck. Construction would begin in spring 2021 and take approximately 60 workdays to complete. The District would use a construction crew of 10 people. Storage and staging of equipment and material would be located entirely within Daley Ranch.

Operation and maintenance activities would include sediment removal and regrading the pond approximately every 48 months. These activities would be completed in the same manner as the original construction, but much less material would be moved (approximately 10,000 CY). Quarterly mowing of weeds would also occur.

2. Biological Resources Assessment Methods

2.1 Desktop Research

GEI, Consultants, Inc. reviewed the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2020) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2020). These reviews were centered on the Buttonwillow USGS 7.5- minute quadrangle and included the eight surrounding quadrangles. A list of resources under jurisdiction of the U.S. Fish and Wildlife Service (USFWS) that could occur on or near the project site was obtained from the Information for Planning and Conservation (IPaC) website (USFWS 2020a).

2.2 Field Survey

A field survey of the project site and adjacent areas was conducted by two biologists from McCormick Biological, Inc. on October 26, 2020. The survey focused on evaluating potential for special-status species to occur on or adjacent to the project site and be affected by project activities.

3. Environmental Setting

The project site is located along the southwestern edge of the San Joaquin Valley. Topography on the site is flat, and the average elevation is approximately 275 feet above mean sea level. Representative photographs of the project site are provided in **Appendix A**.

3.1 Vegetation and Wildlife

The project site is currently inactive agricultural land and is completely surrounded by intensively managed agricultural land. Historically, the parcels were cultivated in row crops. In 2014, a pistachio orchard was planted, but the trees were recently removed. The site is bordered by the Main Drain Canal on two sides and paved roads on the other two sides. An irrigation sump is located along the eastern boundary of the project site, between the site and Wasco Way. The canal and sump were dry at the time of the October 2020 field survey.

The project site does not support any native vegetation assemblages and is primarily barren. Scattered ruderal vegetation, dominated by nonnative species, occurs along the Main Drain Canal and in the southern portion of the site. The area along the southern boundary of the site was not planted in orchard but was cultivated in the past; borrow material was removed from a portion of this area in recent years. The project site does not support any trees, and the only nearby trees are adjacent to the northwest corner of the site. Agricultural and other disturbed habitats on the project site support a very low diversity of wildlife species that are adapted to this intensely managed environment. Only the most mobile species (e.g., birds and mammals with large home ranges) and other animals that can survive in agricultural and developed habitats are likely to occur on the project site.

3.2 Special-status Species

Special-status species are plants and animals that fall into any of the following categories:

- taxa (i.e., taxonomic categories or groups) officially listed, candidates for listing, or proposed for listing by the Federal government or the State of California as endangered, threatened, or rare;
- taxa that meet the criteria for listing;
- wildlife identified by CDFW as species of special concern
- plants considered by CDFW to be “rare, threatened, or endangered in California;”
- species listed as Fully Protected under the California Fish and Game Code;
- taxa afforded protection under local or regional planning documents.

Plant taxa are assigned by CDFW to one of the following six California Rare Plant Ranks (CRPRs):

- CRPR 1A—Plants presumed to be extinct in California;
- CRPR 1B—Plants that are rare, threatened, or endangered in California and elsewhere;
- CRPR 2A—Plants that are presumed extirpated in California, but are more common elsewhere;
- CRPR 2B—Plants that are rare, threatened, or endangered in California but are more common elsewhere;
- CRPR 3—Plants about which more information is needed (a review list); or
- CRPR 4—Plants of limited distribution (a watch list).

All plants with a CRPR are considered “special plants” by CDFW. The term “special plants” is a broad term used by CDFW to refer to all plant taxa inventoried in the CNDDDB, regardless of their legal or protection status. Plant taxa identified by CDFW as “rare, threatened, or endangered in California” (i.e., CRPR 1B and 2B plants) are considered to have special status for purposes of this analysis.

Results of the CNDDDB and CNPS Inventory queries and the IPaC list are provided in **Appendix B**. The CNDDDB USGS 9-quadrangle search yielded occurrences of 44 special-status plants and animals. Sixteen of these have been documented within 3 miles of the project site, as shown in **Figure 3**. However, most of these occurrences are from grassland, saltbush scrub, and other natural shrub habitats south and west of the project site or are at least 25 years old. (Note: Not all species tracked in the CNDDDB and included in the search results meet the special-status definition described above.)

Table 1 provides information on special-status plant taxa that were included in the CNDDDB or CNPS search results or on the IPaC resource list. Based on observations made during the field survey, special-status plant habitat is absent from the project site and immediately adjacent areas. Therefore, none of the plants listed in Table 1 have potential to occur on or adjacent to the project site.

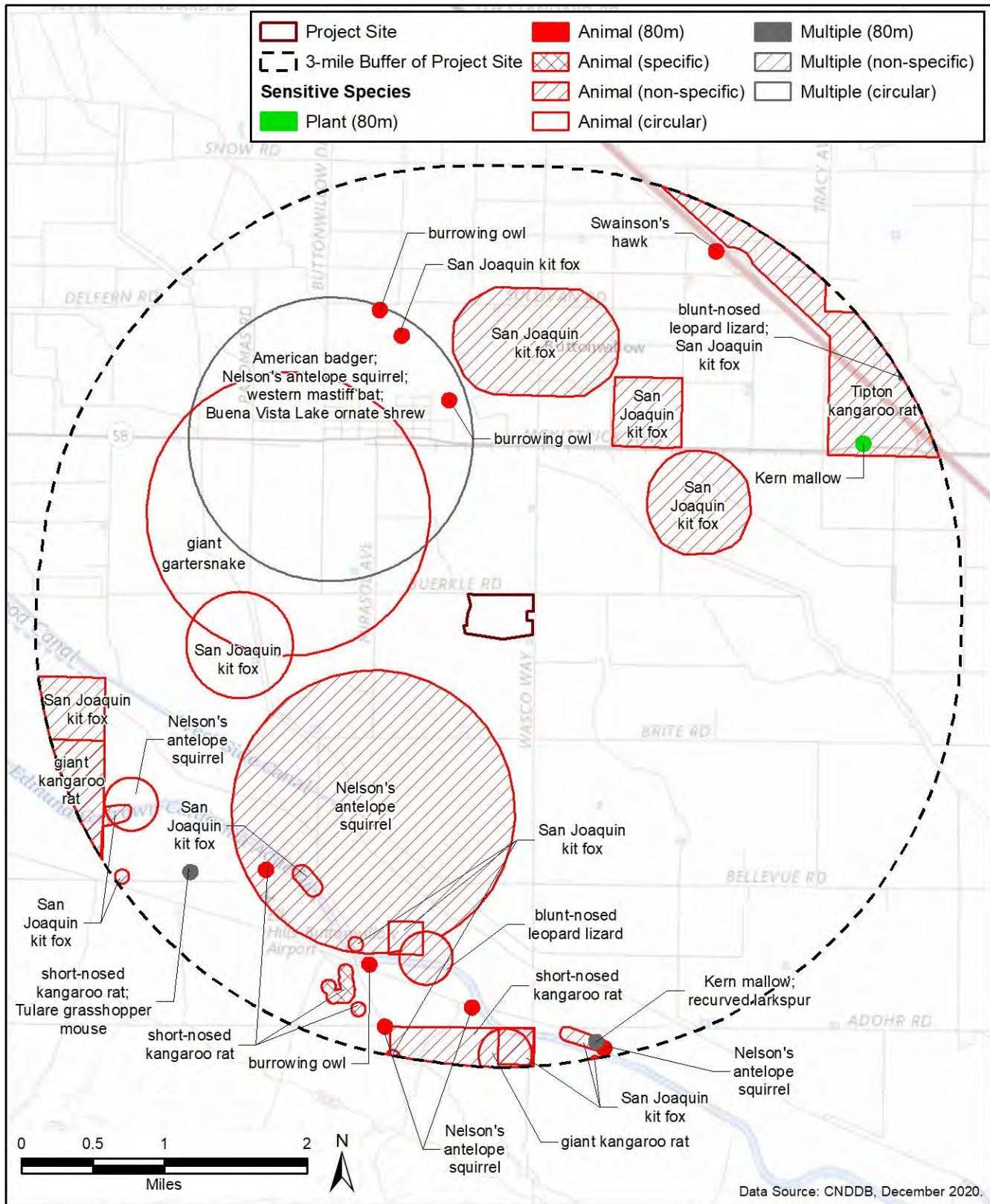
Table 2 provides information on special-status animals that were included in the CNDDDB search results or on the IPaC resource list. Based on review of existing documentation and observations made during the field survey, only three of these taxa were determined to have at least low potential to occur on and/or adjacent to the project site and are discussed in detail in this document: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), and San Joaquin kit fox (*Vulpes macrotis mutica*).

Burrowing owl is a California species of special concern that prefers open, dry habitats. It occurs primarily in grassland but can thrive in some landscapes that are highly altered by human activity, including agricultural lands, if suitable burrows for roosting and nesting and short vegetation are present. Burrowing owls typically use burrow systems created by medium-sized mammals or in artificial features (e.g., drainpipes and culverts) (Gervais et al. 2008). Burrowing owl was documented in the early 1990s at two locations within 2 miles north of the project site, along the East Side Canal and in open non-agricultural habitat adjacent to the canal. No burrowing owls or suitable burrows were observed on or immediately adjacent to the project site during the field survey, but there is limited potential for burrowing owl to occur on the project site, if suitable natural or artificial burrows are present.

Swainson's hawk is state listed as threatened. This species requires grassland or other open habitat with adequate prey and nearby suitable nest trees. Suitable foraging habitats include grasslands and lightly grazed pastures, alfalfa and other hay crops, and certain grain and row crops. Kern County is at the south end of the Central Valley breeding range, and Swainson's hawk nests sparsely in this region (CDFG 2007). The CNDDDB includes only 24 presumed extant active Swainson's hawk nests or nesting pairs documented since 1990 in the Central Valley portion of Kern County (CDFW 2020). The nearest of these nest sites, approximately 3 miles northeast of the project site and 5 miles west-northwest of the project site, have supported active nests in recent years. Very few potential nest sites for Swainson's hawk occur in the immediate project vicinity, but large trees adjacent to the northwest corner of the project site provide marginally suitable nest sites. Agricultural fields adjacent to the east and west sides of the project site may provide suitable foraging habitat, depending on crop types.

San Joaquin kit fox is federally listed as endangered and state listed as threatened. This kit fox is primarily found in arid scrub and grassland communities. Individuals also can occur in human-altered habitats, such as grazed grasslands, petroleum fields, and urban areas, and they can survive adjacent to tilled or fallow fields (USFWS 2020b). Most nearby occurrences of San Joaquin kit fox documented in the CNDDDB during the past 25 years are from natural habitats west and south of the Kern River Flood Canal (CDFW 2020). Though not recorded in the CNDDDB, kit fox is also regularly documented in the eastern portion of the nearby Kern Water Bank (SVB 2020), southeast of the project site. No evidence of kit fox presence was observed on or immediately adjacent to the project site during the field survey.

Figure 3. California Natural Diversity Database Occurrences of Special-status Plants and Animals within 3 Miles of the Project Site



Source: CDFW 2020, adapted by GEI Consultants, Inc. 2020

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22Dec2020 RS

Table 1. Special-status Plants Evaluated for Potential to Occur on the Project Site

Species	Blooming Period	Status ¹		Habitat Associations	Potential to Occur on Project Site
		Federal	State		
Horn's milkvetch <i>Astragalus hornii</i> var. <i>hornii</i>	May–October	–	1B.1	Alkaline soils along lake margins and in meadows, seeps, and playas	None; no suitable habitat is present on or adjacent to the project site.
Heartscale <i>Atriplex cordulata</i> var. <i>cordulata</i>	April–October	–	1B.2	Sandy saline or alkaline soils in chenopod scrub and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Earlimart orache <i>Atriplex cordulata</i> var. <i>erecticaulis</i>	August–November	–	1B.2	Valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Lost Hills crownscale <i>Atriplex cordulata</i> var. <i>vallicola</i>	April–September	–	1B.2	Sandy saline or alkaline soils in chenopod scrub, valley and foothill grassland, and vernal pools	None; no suitable habitat is present on or adjacent to the project site.
Lesser saltscale <i>Atriplex minuscula</i>	May–October	–	1B.1	Alkaline sandy soils in chenopod scrub, valley and foothill grassland, playas	None; no suitable habitat is present on or adjacent to the project site.
Subtle orache <i>Atriplex subtilis</i>	June–September	–	1B.1	Alkaline soils in valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
California jewelflower <i>Caulanthus californicus</i>	February–May	E	E/1B.1	Sandy soil in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Slough thistle <i>Cirsium crassicaule</i>	February–May	–	1B.1	Chenopod scrub, riparian scrub, marshes, swamps, and sloughs	None; no suitable habitat is present on or adjacent to the project site.
Recurved larkspur <i>Delphinium recurvatum</i>	March–June	–	1B.2	Alkaline soils in chenopod scrub, cismontaine woodland, and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Kern mallow <i>Eremalche parryi</i> ssp. <i>kernensis</i>	January–May	E	1B.2	Open sandy and clay soils, often at edge of clearings in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Temblor buckwheat <i>Eriogonum temblorense</i>	May–September	–	1B.2	Valley and foothill grassland on clay or sandstone substrate	None; no suitable habitat is present on or adjacent to the project site.
Tejon poppy <i>Eschscholzia lemmonii</i> ssp. <i>kernensis</i>	February–April	–	1B.1	Chenopod scrub and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Alkali-sink goldfields <i>Lasthenia chrysantha</i>	February–June	–	1B.1	Alkaline vernal pools	None; no suitable habitat is present on or adjacent to the project site.
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	February–June	–	1B.1	Marshes and swamps, playas, and vernal pools	None; no suitable habitat is present on or adjacent to the project site.
Munz's tidy-tips <i>Layia munzii</i>	March–April	–	1B.2	Alkaline clay soils in chenopod scrub and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.

Table 1. Special-status Plants Evaluated for Potential to Occur on the Project Site

Species	Blooming Period	Status ¹		Habitat Associations	Potential to Occur on Project Site
		Federal	State		
Showy golden madia <i>Madia radiata</i>	March–May	–	1B.1	Cismontane woodland and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
San Joaquin woollythreads <i>Monolopia congdonii</i>	February–May	E	1B.2	Sandy soils in chenopod scrub and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
California alkali grass <i>Puccinellia simplex</i>	March–May	–	1B.2	Alkaline soils in wet areas, lake margins, meadows and seeps, vernal pools, chenopod scrub, and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.
Oil neststraw <i>Stylocline citroleum</i>	March–April	–	1B.1	Clay soils in chenopod scrub, coastal scrub, and valley and foothill grassland	None; no suitable habitat is present on or adjacent to the project site.

¹ Status Definitions

Legal Status

E = Listed as Endangered under the Federal or State Endangered Species Act

California Rare Plant Ranks

1B = Plant species considered rare or endangered in California and elsewhere (but not legally protected under the Federal or California Endangered Species Acts).

California Rare Plant Rank Extensions

.1 = Seriously endangered in California (greater than 80 percent of occurrences are threatened and/or have a high degree and immediacy of threat).

.2 = Fairly endangered in California (20 to 80 percent of occurrences are threatened and/or have a moderate degree and immediacy of threat).

– = no status

Sources: CDFW 2020; CNPS 2020; McCormick Biological, Inc. data collected in 2020; USFWS 2020

Table 2. Special-status Animals Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status ¹		Habitat Associations	Potential to Occur on or Adjacent to The Project Site
	Federal	State		
Fish				
Delta smelt <i>Hypomesus transpacificus</i>	T	E	Semi-anadromous; typically restricted to the Sacramento-San Joaquin River Delta and the lower Sacramento River	None; no suitable habitat is present on or adjacent to the project site, which is outside the range of this species.
Invertebrates				
Vernal Pool fairy shrimp <i>Branchinecta lynchi</i>	T	–	Vernal pools and seasonal wetlands	None; no suitable habitat is present on or adjacent to the project site.
Crotch bumble bee <i>Bombus crotchii</i>	–	C	Open grasslands and scrublands	None; no suitable habitat is present on or adjacent to the project site.
Amphibians				
California red-legged frog <i>Rana draytonii</i>	T	SSC	Lowlands and foothill areas, in or near permanent deep water with dense, shrubby or emergent riparian vegetation	None; no suitable habitat is present on or adjacent to the project site, which is outside the range of this species.

Table 2. Special-status Animals Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status ¹		Habitat Associations	Potential to Occur on or Adjacent to The Project Site
	Federal	State		
Western spadefoot <i>Spea hammondi</i>	–	SSC	Vernal pools and seasonal wetlands in grasslands and open woodlands	None; no suitable habitat is present on or adjacent to the project site.
Reptiles				
Temblor legless lizard <i>Anniella alexanderae</i>	–	SSC	Poorly known; likely occurs in sparsely vegetated areas with moist, sandy soils	None; no suitable habitat is present on or adjacent to the project site.
Blunt-nosed leopard lizard <i>Gambelia silus</i>	E	E, FP	Sparsely vegetated and relatively flat grasslands and alkali and desert scrub	None; no suitable habitat is present on or adjacent to the project site.
Coast horned lizard <i>Phrynosoma blainvillii</i>	–	SSC	Most commonly along sandy washes with scattered low bushes	None; no suitable habitat is present on or adjacent to the project site.
California glossy snake <i>Arizona elegans occidentalis</i>	–	SSC	Wide variety of habitats, including grassland and scrub, often with loose or sandy soils	None; no suitable habitat is present on or adjacent to the project site.
San Joaquin coachwhip <i>Masticophis flagellum ruddocki</i>	–	SSC	Open, dry habitats with little or no tree cover, including grasslands and saltbrush scrub	None; no suitable habitat is present on or adjacent to the project site.
Giant gartersnake <i>Thamnophis gigas</i>	T	T	Open water and emergent vegetation in marshes, sloughs, and other aquatic habitats; also requires open upland habitat	None; no suitable habitat is present on or adjacent to the project site, which is outside the range of this species.
Western pond turtle <i>Actinemys marmorata</i>	–	SSC	Permanent or nearly permanent water bodies; nests in sunny uplands near suitable aquatic habitat	None; on-site irrigation canals do not provide suitable aquatic habitat.
Birds				
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	T	–	Sandy beaches, salt pond levees, and shores of alkali lakes	None; no suitable habitat is present on or adjacent to the project site.
Mountain plover <i>Charadrius montanus</i>	–	SSC	Flat areas with short vegetation and bare ground, including short grasslands, freshly plowed and sprouting fields	Very low; potentially suitable habitat occurs in uncultivated or recently planted fields, but occurrences in the vicinity are almost 30 years old.
Burrowing owl <i>Athene cunicularia</i>	–	SSC	Nests and forages in grasslands, agricultural lands, and other open habitats with natural or artificial burrows or friable soils	Low; project site and adjacent canal and agricultural fields provide marginal habitat; no suitable burrows were present on or immediately adjacent to the site during the field survey.
Swainson's hawk <i>Buteo swainsoni</i>	–	T	Nests in riparian forest and scattered trees; forages in grasslands and agricultural fields	Moderate; agricultural fields adjacent to the east and west sides of the project site may provide suitable foraging habitat; potential nearby nest trees are limited to residences and storage areas adjacent to the northwest corner of the site.
Loggerhead shrike <i>Lanius ludovicianus</i>	–	SSC	Savannah, shrublands, and open woodlands with shrubs and small trees for nesting	Very low; project site and adjacent agricultural fields provide low-quality foraging habitat, and no suitable nesting habitat occurs on or adjacent to the site.

Table 2. Special-status Animals Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status ¹		Habitat Associations	Potential to Occur on or Adjacent to The Project Site
	Federal	State		
Le Conte's thrasher <i>Toxostoma lecontei</i>	–	SSC	Dry, open scrub habitats with dense spiny vegetation	None; no suitable habitat is present on or adjacent to the project site.
Least Bell's vireo <i>Vireo bellii pusillus</i>	E	E	Structurally diverse riparian habitat with dense shrub layer	None; no suitable habitat is present on or adjacent to the project site.
Tricolored blackbird <i>Agelaius tricolor</i>	–	T	Nests in dense cattails and tules, riparian scrub, grain crops, and other low dense vegetation; forages in grasslands and agricultural fields	None; no suitable habitat is present on or adjacent to the project site.
Mammals				
Buena Vista Lake ornate shrew <i>Sorex ornatus relictus</i>	E	SSC	Moist soils in marsh and riparian habitat, with stumps, logs and litter for cover	None; no suitable habitat is present on or adjacent to the project site.
Tulare grasshopper mouse <i>Onychomys torridus tularensis</i>	–	SSC	Dry, open scrublands	None; no suitable habitat is present on or adjacent to the project site.
Giant kangaroo rat <i>Dipodomys ingens</i>	E	E	Dry grasslands and alkali scrub with sandy loam soils	None; no suitable habitat is present on or adjacent to the project site.
Tipton kangaroo rat <i>Dipodomys nitratoides nitratoides</i>	E	E	Saltbrush and sink scrub with soft, friable soils	None; no suitable habitat is present on or adjacent to the project site.
Short-nosed kangaroo rat <i>Dipodomys nitratoides brevinasus</i>	–	SSC	Grassland and shrub habitats with friable alkali soils	None; no suitable habitat is present on or adjacent to the project site.
Nelson's antelope squirrel <i>Ammospermophilus nelsoni</i>	–	T	Grasslands and open shrubland with gullies and washes	None; no suitable habitat is present on or adjacent to the project site.
American badger <i>Taxidea taxus</i>	–	SSC	Dry, open areas in various habitats with friable soils and uncultivated ground	Very low; habitat on and adjacent to the project site is of low quality.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	E	T	Primarily grasslands and sparsely vegetated shrublands with loose-textured soils; can also use open agricultural habitats	Low; habitat on and adjacent to the project site is of low quality, but individuals could occasionally travel through the site in transit to more suitable habitat elsewhere.
Western mastiff bat <i>Eumops perotis californicus</i>	–	SSC	Various open, semi-arid to arid habitats; roosts in cliff crevices, high buildings, tunnels, and trees	Very low; no suitable roost sites are present on or adjacent to the project site; unlikely to forage onsite due to distance to suitable roosting habitat.

¹ Status Definitions

- E = Listed as Endangered under the Federal or State Endangered Species Act
- T = Listed as Threatened under the Federal or State Endangered Species Act
- C = Candidate for listing as Threatened or Endangered under the State Endangered Species Act
- FP = Fully Protected under the California Fish and Game Code
- SSC = California Species of Special Concern

Sources: CDFW 2020; GEI Consultants, Inc. data collected in 2020; USFWS 2020

The nearest known occurrence of San Joaquin kit fox within the past 30 years was in non-agricultural habitat adjacent to the East Side Canal, approximately 2 miles north of the project site. Based on current habitat conditions and lack of suitable dens on the project site, potential for kit fox to occur on or near the site is low, and kit fox dens are very unlikely to be present. However, because canals along the project site boundary connect to areas of suitable habitat to the southeast, and suitable habitat occurs within 2 miles to the north and southwest, there is potential for foraging or transient individuals to occasionally wander onto the project site.

3.3 Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through the California Environmental Quality Act, the Federal Endangered Species Act, Section 1602 of the California Fish and Game Code (FGC), Section 404 of the Federal Clean Water Act (CWA), and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). Sensitive habitats may be of special concern for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat for special-status species.

3.3.1 Critical Habitat

Critical habitat is a geographic area containing features determined to be essential to the conservation of federally listed species. No designated or proposed critical habitat is present on or within approximately 7 miles of the project site (USFWS 2020c).

3.3.2 Other Habitats Protected under Federal or State Regulations

Under CWA Section 404, the U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into aquatic features that qualify as waters of the United States. Under CWA Section 401, the Central Valley Regional Water Quality Control Board (RWQCB) regulates discharge of dredged or fill material into waters of the United States that drain to the Central Valley. The Central Valley RWQCB also regulates waters of the State, in compliance with the Porter-Cologne Act; waters of the State include all surface waters and groundwater within State boundaries. Diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to CDFW regulation pursuant to FGC Section 1602.

No areas potentially subject to CWA Section 404 or 401, Porter-Cologne Act, or FGC Section 1602 regulation occur on the project site. The Main Drain Canal, adjacent to the site, does not qualify as a water of the United States because it does not meet the definition of a tributary under the Navigable Waters Protection Rule. Additionally, because this canal was excavated in uplands, does not coincide with historic rivers or streams, and provides no or very poor habitat for fish and wildlife, it is not anticipated to qualify for jurisdiction under FGC Section 1602. However, CDFW sometimes claims jurisdiction over artificial waterways, despite limited habitat value. The Main Drain Canal is a water of the State, which routinely include surface waters in artificial channels. However, this canal is entirely outside the project site boundary and would not be affected by project implementation.

3.3.3 Sensitive Natural Communities

CDFW maintains a list of terrestrial natural communities that are native to California, the List of Vegetation Alliances and Associations (CDFG 2010). Within that list, CDFW identifies and ranks sensitive natural communities of special concern considered to be highly imperiled. No sensitive natural communities occur on or adjacent to the project site.

4. Potential Impacts

No natural habitat would be affected by creation or operation of the proposed groundwater recharge pond. Vegetation removal would be limited to scattered areas of sparse, primarily nonnative, ruderal vegetation in the southern portion of the project site. The impact discussions below focus on resources determined to have potential to be affected by implementing the project. Therefore, special-status species that do not have potential to occur on or near the project site (i.e., because suitable habitat is absent or the project site is outside the species' current range) are not addressed in these discussions. Sensitive habitats also are not discussed because none occur on the project site, and the Main Drain Canal would not be affected by project implementation.

4.1 Special-status Species

Burrowing owl and Swainson's hawk have low and moderate potential to occur on the project site, respectively. Potential on-site foraging habitat for these species is currently limited to the approximately 20 acres in the southern portion of the project site. Because the recharge pond would occupy less than half of the 92-acre project site, the site is anticipated to provide at least as much potential foraging habitat after recharge pond construction, and the habitat would be of at least a comparable quality. Therefore, permanent loss of potential foraging habitat is unlikely to occur. No suitable burrows for burrowing owl are currently present on or immediately adjacent to the site, but burrows could become established before project implementation. If occupied burrows are present on the project site, they could be destroyed, and burrowing owls could be injured or killed. In addition, if nest burrows or Swainson's hawk nests are present near the project site during project construction, project-related disturbance could result nest abandonment, reduced care, or premature fledging. Implementing impact avoidance and minimization measures described below would avoid destruction of occupied burrowing owl burrows and project-related failure of burrowing owl and Swainson's hawk nests.

Based on current habitat conditions and observations made during the field surveys, potential for San Joaquin kit fox to den on or adjacent to the project site is very low. However, if a den becomes established or transient individuals are present during project implementation, the den could be abandoned, or kit foxes could be injured or killed if they come in contact with project equipment or become trapped in pipes or trenches. Implementing impact avoidance and minimization measures described below would avoid project-related death or injury of San Joaquin kit fox.

4.2 Other Potential Impacts on Biological Resources

The project site is part of a large regional extent of agricultural lands and does not serve as a corridor or other primary route for wildlife movement or as a nursery site for any wildlife species. Because the Main Drain Canal is dry for much of the year and does not connect to natural waterways, it does not provide a migratory corridor. Therefore, implementing the proposed project would not interfere with movement of native resident or migratory fish or wildlife species or with native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

The project site is within the area proposed to be covered by the Kern County Valley Floor Habitat Conservation Plan. A draft of the plan was issued many years ago (Kern County Planning Department 2006), but a final plan has not been released. The project site is within an extensive area of "White Zone," which is of lower conservation concern and not identified for acquisition of preserve areas.

Therefore, implementing the proposed project would not conflict with any provisions, guidelines, goals, or objectives related to biological resources anticipated to be included in a potential final and adopted version of this plan.

A low diversity of common birds that use agricultural habitats could nest on or adjacent to the project site. Because project activities would primarily occur in barren areas, there is minimal potential for direct destruction of active nests. In addition, the project area is subject to regular disturbance from agricultural activities, and project activities are anticipated to cause somewhat similar disturbance levels. However, if active nests are present on or very near the project site, recharge pond construction could result in nest destruction, nest abandonment, reduced care of eggs or young, or premature fledging. Project-related loss of active nests of common species could violate FGC Section 3503. Implementing impact avoidance and minimization measures described below would reduce potential for loss of active bird nests and avoid FGC violation.

5. Impact Avoidance and Minimization Measures

The best management practices (BMPs) and species-specific measures described below would minimize project-related impacts on special-status wildlife and other biological resources that are protected under state and federal laws and regulations.

- **BMP-1:** An Environmental Awareness Program will be presented to all project personnel working in the field before project activities begin. The program will be presented by a qualified biologist with knowledge of special-status wildlife that could occur on the project site. The program will address each species biology and habitat needs; status of each species and their regulatory protections; and measures required to reduce impacts to the species during project construction and penalties for non-compliance.
- **BMP-2:** Project activities will only occur during the day (from 30 minutes prior to sunrise and 30 minutes following sunset).
- **BMP-4:** All food-related trash items such as wrappers, cans, bottles or food scraps generated during project activities will be disposed of in closed containers and removed daily from the project site. No deliberate feeding of wildlife will be allowed.
- **BMP-5:** No domestic pets associated with project personnel will be permitted on the project site.

Implementing the following measures, consistent with the *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (USFWS 2011), would minimize potential for project-related death or injury San Joaquin kit fox.

- **SJKF-1:** No more than 30 days before project activities begin in a given area, a qualified biologist will conduct a pre-construction survey to determine the potential for San Joaquin kit fox to occur in the area. If potential or known dens for San Joaquin kit fox are found, exclusion zones will be established and maintained, in accordance with the *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox* (USFWS 2011).

- **SJKF-2:** To prevent kit fox entrapment during construction, all excavated, steep-walled holes or trenches more than 2 feet deep will be covered with plywood or similar material at the end of each workday. If the trenches cannot be closed, one or more escape ramps of no more than a 45-degree slope will be constructed of earthen fill or created with wooden planks. All covered or uncovered excavations will be inspected at the beginning, middle, and end of each day. Before trenches are filled, they will be inspected for trapped animals. If a trapped kit fox is discovered, project activities will stop, and escape ramps or structures will be installed immediately to allow the animal to escape.
- **SJKF-3:** All construction pipes or similar structures with a diameter of 4 inches or greater that are stored on the ground at a construction site for one or more overnight periods will be thoroughly inspected for wildlife before the pipe is buried, capped, or otherwise used or moved in any way. Pipes laid in trenches overnight will be capped. If a potential San Joaquin kit fox is discovered inside a pipe, all project activities that could result in take will stop, a qualified biologist will be summoned to identify the species, and CDFW and USFWS will be notified. If a San Joaquin kit fox is unable to escape voluntarily, CDFW and USFWS will be contacted immediately to determine what actions should be taken to adequately minimize potential impacts.
- **SJKF-4:** All sightings of San Joaquin kit fox will be reported immediately to CDFW and USFWS and a record of the sightings will be submitted to the CNDDDB.

Implementing the following measures, consistent with the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012), would avoid project-related abandonment and destruction of occupied burrows.

- **BUOW-1:** A qualified biologist will assess burrowing owl habitat suitability in the area subject to direct impact and adjacent areas within 500 feet.
- **BUOW-2:** If suitable habitat or sign of burrowing owl presence is observed, a take avoidance survey will be conducted within 10 days before project activities begin near areas of suitable habitat.
- **BUOW-3:** If any occupied burrows are observed, protective buffers will be established and implemented. A qualified biologist will monitor the occupied burrows during project activities to confirm effectiveness of the buffers. The size of the buffer will depend on whether the burrow supports an active nest, the type and intensity of project disturbance, the presence of visual buffers, and other variables that could affect susceptibility of the owls to disturbance.
- **BUOW-4:** If destruction of an occupied burrow cannot be avoided and it is determined, in consultation with CDFW, that passive exclusion of owls from the construction footprint is an appropriate means of minimizing direct impacts, an exclusion and relocation plan will be developed and implemented in coordination with CDFW. Passive exclusion will not be conducted during the breeding season (February 1–August 31), unless a qualified biologist verifies through noninvasive means that either (1) the birds have not begun egg laying or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- **BUOW-5:** If passive exclusion is conducted, each occupied burrow that is destroyed will be replaced with at least one artificial burrow on a suitable portion of the project site that would not be subject to inundation or project-related ground disturbance.

Implementing the following measures would avoid project-related failure of Swainson’s Hawk nests:

- **SWHA-1:** If project construction would occur during the Swainson hawk nesting season (April–August), a qualified biologist will conduct surveys of potential Swainson’s hawk nesting trees within

0.5 mile of the project site. To the extent practicable, depending on timing of project initiation, surveys will be conducted in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). At a minimum, at least one survey will be conducted within 10 days before project activities begin during the nesting season.

- **SWHA-2:** If an active nest is observed, a protective buffer will be established and implemented until the nest is no longer active. A qualified biologist will monitor the nest during project activities to confirm effectiveness of the buffer. The size of the buffer will depend on type and intensity of project disturbance, presence of visual buffers, and other variables that could affect susceptibility of the nest to disturbance.

Implementing the following measures would minimize potential for project-related failure of active nests of other birds:

- **NEST-1:** If project construction would occur during the bird nesting season (February–August), a qualified biologist will conduct surveys of suitable nesting habitat that would be directly disturbed by project activities, suitable nesting habitat for common birds within 250 feet of project activities and common raptors within 500 feet of project activities. Surveys will be conducted within 10 days before project activities begin during the nesting season.
- **NEST-2:** If any active nests are observed, protective buffers will be established and implemented until the nests are no longer active. A qualified biologist will monitor the nest during project activities to confirm effectiveness of the buffer. The size of the buffer will depend on type and intensity of project disturbance, presence of visual buffers, and other variables that could affect susceptibility of the nest to disturbance.

6. References

CDFG (California Department of Fish and Game). 2007. *California Swainson's Hawk Inventory: 2005–2006. Resource Assessment Program, Final Report*. P0485902. Sacramento, CA. Prepared by UC Davis Wildlife Health Center, Davis, CA.

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CDFW (California Department of Fish and Wildlife). 2020. Results of electronic database search for sensitive species occurrences. Version 5. Biogeographic Data Branch. Available at <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed December 19, 2020.

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Kern County Planning Department. 2006. *First Public Draft, Kern County Valley Floor Habitat Conservation Plan*. Prepared by Garcia and Associates, Lompoc, CA.

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_____. 2020c. Critical Habitat for Threatened and Endangered Species. Available at: <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>. Accessed December 22, 2020.

**Appendix A. Representative Photographs of the
Project Site**



Facing west across northern portion of the project site (December 16, 2020).



Facing west across southern portion of the project site formerly used as borrow site (December 16, 2020).



Facing south from northwest corner of the project site (December 16, 2020).



Facing north along western boundary of the project site (December 16, 2020).

Appendix B. Special-status Species Query Results



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria:

Quad



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Astragalus hornii</i> var. <i>hornii</i> Horn's milk-vetch	PDFAB0F421	None	None	GUT1	S1	1B.1
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
<i>Atriplex cordulata</i> var. <i>erecticaulis</i> Earlimart orache	PDCHE042V0	None	None	G3T1	S1	1B.2
<i>Atriplex coronata</i> var. <i>vallicola</i> Lost Hills crownscale	PDCHE04371	None	None	G4T3	S3	1B.2
<i>Atriplex minuscula</i> lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
<i>Atriplex subtilis</i> subtle orache	PDCHE042T0	None	None	G1	S1	1B.2
<i>Caulanthus californicus</i> California jewelflower	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
<i>Cirsium crassicaule</i> slough thistle	PDAST2E0U0	None	None	G1	S1	1B.1
<i>Delphinium recurvatum</i> recurved larkspur	PDRAN0B1J0	None	None	G2?	S2?	1B.2
<i>Eremalche parryi</i> ssp. <i>kernensis</i> Kern mallow	PDMAL0C031	Endangered	None	G3G4T3	S3	1B.2
<i>Eriastrum hooveri</i> Hoover's eriastrum	PDPLM03070	Delisted	None	G3	S3	4.2
<i>Eriogonum temblorense</i> Temblor buckwheat	PDPGN085P0	None	None	G2	S2	1B.2
<i>Eschscholzia lemmonii</i> ssp. <i>kernensis</i> Tejon poppy	PDPAP0A071	None	None	G5T2	S2	1B.1
<i>Lasthenia chrysantha</i> alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Madia radiata</i> showy golden madia	PDAST650E0	None	None	G3	S3	1B.1
<i>Monolopia congdonii</i> San Joaquin woollythreads	PDASTA8010	Endangered	None	G2	S2	1B.2
<i>Puccinellia simplex</i> California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
<i>Stylocline citroleum</i> oil neststraw	PDAST8Y070	None	None	G3	S3	1B.1

Record Count: 19

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

23 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3511955, 3511954, 3511953, 3511945, 3511944, 3511943, 3511935 3511934 and 3511933;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	1B.1	S1	G4G5T1T2
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex cordulata var. erecticaulis	Earlimart orache	Chenopodiaceae	annual herb	Aug-Sep(Nov)	1B.2	S1	G3T1
Atriplex coronata var. coronata	crownscale	Chenopodiaceae	annual herb	Mar-Oct	4.2	S3	G4T3
Atriplex coronata var. vallicola	Lost Hills crownscale	Chenopodiaceae	annual herb	Apr-Sep	1B.2	S2	G4T2
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	1B.1	S2	G2
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	Jun, Aug, Sep (Oct)	1B.2	S1	G1
Azolla microphylla	Mexican mosquito fern	Azollaceae	annual / perennial herb	Aug	4.2	S4	G5
Caulanthus californicus	California jewelflower	Brassicaceae	annual herb	Feb-May	1B.1	S1	G1
Cirsium crassicaule	slough thistle	Asteraceae	annual / perennial herb	May-Aug	1B.1	S1	G1
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
Eremalche parryi ssp. kernensis	Kern mallow	Malvaceae	annual herb	Jan, Mar, Apr, May (Feb)	1B.2	S3	G3G4T3
Eriastrum hooveri	Hoover's eriastrum	Polemoniaceae	annual herb	(Feb) Mar-Jul	4.2	S3	G3
Eriogonum gossypinum	cottony buckwheat	Polygonaceae	annual herb	Mar-Sep	4.2	S3S4	G3G4
Eriogonum temblorense	Temblor buckwheat	Polygonaceae	annual herb	(Apr) May-Sep	1B.2	S2	G2

Eschscholzia lemmonii ssp. kernensis	Tejon poppy	Papaveraceae	annual herb	(Feb)Mar-May	1B.1	S2	G5T2
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Layia munzii	Munz's tidy-tips	Asteraceae	annual herb	Mar-Apr	1B.2	S2	G2
Madia radiata	showy golden madia	Asteraceae	annual herb	Mar-May	1B.1	S3	G3
Monolopia congdonii	San Joaquin woollythreads	Asteraceae	annual herb	(Jan)Feb-May	1B.2	S2	G2
Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
Stylocline citroleum	oil neststraw	Asteraceae	annual herb	Mar-Apr	1B.1	S3	G3
Trichostema ovatum	San Joaquin bluecurls	Lamiaceae	annual herb	Jul-Oct	4.2	S3	G3

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 19 December 2020].

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[The Jepson Flora Project](#)

[The Consortium of California Herbaria](#)

[CalPhotos](#)

Questions and Comments

rareplants@cnps.org



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Semitropic (3511955) OR Wasco (3511953) OR Wasco SW (3511954) OR Lokern (3511945) OR Buttonwillow (3511944) OR Rio Bravo (3511943) OR West Elk Hills (3511935) OR East Elk Hills (3511934) OR Tupman (3511933)) AND Taxonomic Group (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
<i>Ammospermophilus nelsoni</i> Nelson's antelope squirrel	AMAFB04040	None	Threatened	G2	S2S3	
<i>Anniella alexanderae</i> Temblor legless lizard	ARACC01030	None	None	G1	S1	SSC
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
<i>Charadrius montanus</i> mountain plover	ABNNB03100	None	None	G3	S2S3	SSC
<i>Dipodomys ingens</i> giant kangaroo rat	AMAFD03080	Endangered	Endangered	G1G2	S1S2	
<i>Dipodomys nitratoides brevinasus</i> short-nosed kangaroo rat	AMAFD03153	None	None	G3T1T2	S1S2	SSC
<i>Dipodomys nitratoides nitratoides</i> Tipton kangaroo rat	AMAFD03152	Endangered	Endangered	G3T1T2	S1S2	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
<i>Falco mexicanus</i> prairie falcon	ABNKD06090	None	None	G5	S4	WL
<i>Gambelia sila</i> blunt-nosed leopard lizard	ARACF07010	Endangered	Endangered	G1	S1	FP
<i>Lanius ludovicianus</i> loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
<i>Masticophis flagellum ruddocki</i> San Joaquin coachwhip	ARADB21021	None	None	G5T2T3	S2?	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Onychomys torridus tularensis</i> Tulare grasshopper mouse	AMAFF06021	None	None	G5T1T2	S1S2	SSC
<i>Perognathus inornatus</i> San Joaquin pocket mouse	AMAFD01060	None	None	G2G3	S2S3	
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<i>Protodufourea zavortinki</i> Zavortink's protodufourea bee	IIHYM77020	None	None	G1	S1	
<i>Sorex ornatus relictus</i> Buena Vista Lake ornate shrew	AMABA01102	Endangered	None	G5T1	S1	SSC
<i>Spea hammondi</i> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Toxostoma lecontei</i> Le Conte's thrasher	ABPBK06100	None	None	G4	S3	SSC
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	AMAJA03041	Endangered	Threatened	G4T2	S2	

Record Count: 29

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Kern County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [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.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Buena Vista Lake Ornate Shrew *Sorex ornatus relictus* Endangered
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/1610>

Giant Kangaroo Rat *Dipodomys ingens* Endangered
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/6051>

San Joaquin Kit Fox *Vulpes macrotis mutica* Endangered
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/2873>

Tipton Kangaroo Rat *Dipodomys nitratooides nitratooides* Endangered
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/7247>

Reptiles

NAME

STATUS

Blunt-nosed Leopard Lizard *Gambelia silus* Endangered
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/625>

Giant Garter Snake *Thamnophis gigas* Threatened
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/4482>

Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii* Threatened
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/2891>

Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus* Threatened
 There is **final** critical habitat for this species. Your location is outside the critical habitat.
<https://ecos.fws.gov/ecp/species/321>

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
San Joaquin Woolly-threads <i>Monolopia (=Lembertia) congdonii</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3746	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

THERE ARE NO MIGRATORY BIRDS OF CONSERVATION CONCERN EXPECTED TO OCCUR AT THIS LOCATION.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R4SBCx](#)

[R5UBFx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix C – Phase 1 Environmental Site Assessment



Consulting
Engineers and
Scientists

Phase 1 Environmental Site Assessment Daley Ranch Groundwater Recharge Pond Project

Buttonwillow, California

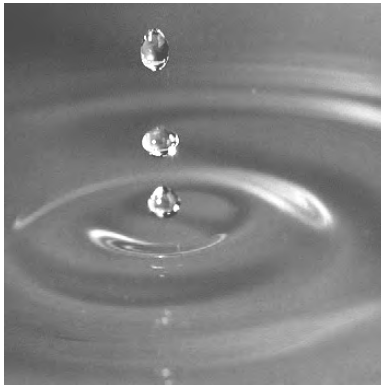
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February 17, 2021



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Figure 2: Project Area Map

Appendices

Appendix A: Environmental Database Resources (EDR) Report

Appendix B: Site Reconnaissance Checklist and Photos

Appendix C: Site Questionnaire

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Executive Summary

GEI Consultants, Inc. (GEI) was retained by Buena Vista Water Storage District (BVWSD) to conduct a Phase 1 Environmental Site Assessment (ESA) for the subject property, which is the proposed location of the Daley Ranch Groundwater Recharge Pond Project (the Project Area). The purpose of this ESA was to evaluate the potential for encountering environmental liabilities in the Project Area.

The Project Area consists of the Assessor's Parcel Numbers (APNs) 102-080-18-00, 102-080-19-00, and 102-080-20-05) that are located is located about 1.5 miles southeast of the unincorporated community of Buttonwillow, California.

GEI conducted this ESA between November and December 2020. GEI performed a review of federal, state, and local records pertaining to environmental activities and databases, conducted a site inspection with documentation of areas of interest, and solicited the current landowner with staff knowledgeable of the Project Area to provide any details regarding any potential environmental areas of interest. In addition, an EDR report is provided herein which lists the results of federal, state, and local database searches.

Summary of Findings

- Based on field observations and information gathered through records searches, trace *de minimis* findings were noted with no identified Recognized Environmental Conditions (RECs) or Areas of Potential Environmental Concern (APECs) present at the project site.
- A records search from EDR and Kern County identifies parcels to the north of the Project Area, and under different ownership, with violations of containment for 55-gallon drums and/or a leaking underground storage tank (LUST). These parcels are cross gradient to downgradient of the proposed project site. The cases found in EDR and Kern County records were closed in 1991. Based on the locations and nature of these violations, it is GEI's opinion that there is likely no potential for future environmental concern for the Project Area from these sites. A review of the State Water Resources Control Board (SWRCB) Groundwater Ambient Monitoring and Assessment (GAMA) and the Department of Toxic Substance Control (DTSC) Envirostor website found an additional eight cleanup sites, associated with LUSTs, which have all been closed. Based on the locations and nature of these violations, it is GEI's opinion that there is likely no potential for future environmental concern for the Project Area from these sites.
- A portion of the existing Southern California Gas Company (SoCal Gas) line on the adjacent property has been exposed by bank erosion. While this will not interfere with

the activities at the project site, it can potentially cause mechanical failure of the line if not addressed by SoCal Gas and/or the adjacent property owner. Mechanical failure, such as cracking or a rupture in the buried or exposed portions of the line from the strain of the unsupported section could result in:

- Soil contamination in the Project Area from a buried line failure leaking gas into the soil.
 - Potential combustion if leaked gas is introduced to an ignition source.
 - Disruption in service to SoCal Gas's customers.
- Based on the findings of this report, the Project Area has been used for irrigated agriculture since at least 1937. As such, there may be agricultural practices in the past which have applied amendment or synthetics to the soil. An investigation of local agricultural practices with respect to applied amendment or synthetics is beyond the scope of this investigation and is not addressed in this ESA.

This report is limited to an analysis of data and information that could be obtained by a field site walk and/or records evaluation. Any analysis of soil or groundwater would require additional testing, sampling, laboratory testing, and analysis in a separate report.

1. Introduction and Site Description

GEI Consultants, Inc. (GEI) was retained by Buena Vista Water Storage District (BVWSD) to conduct a Phase 1 Environmental Site Assessment (ESA) for the subject property, which is the proposed location of the Daley Ranch Groundwater Recharge Pond Project (the Project Area; Figure 1). The Project Area is located within T29S R24E Section 25, in the southern portion of the Buttonwillow Service Area, at the intersection of Wasco Way and Buerkle Road.

1.1 Project Description and Location

The Daley Ranch Groundwater Recharge Pond Project is a groundwater replenishment project that would be constructed within an approximately 92-acre project site, consisting of three parcels (APN 102-080-20-05 was purchased in 2017; APNs 102-080-18-00 and 102-080-19-00), to the southwest of the intersection of Wasco Way and Buerkle Road (Figure 2). BVWSD purchased the following parcels of land to implement the Daley Ranch Project:

- APN 102-080-20-05 was purchased in 2017;
- APNs 102-080-18-00 and 102-080-19-00 were purchased in 2020.

This Phase I ESA was performed to be included with the overall planning and parcel evaluation for project implementation.

The Project Area is bounded to the north by Buerkle Road, to the west by Main Drain Canal, to the south by Arizona Ditch, and to the west by Wasco Way (Figure 2). The city of Buttonwillow is about 1.5 miles northwest of the site. Eastside Canal is less than 1 mile east of the northeast corner of the site, and the California Aqueduct is a little more than 2 miles southwest of the site.

1.2 Scope of Work

The Phase 1 ESA involved a review of current and historical documents, a site reconnaissance visit, and a questionnaire via email correspondence with current owners or tenants. This ESA aided in gaining an understanding of the current conditions and historical operations on the proposed project site. Sources of information included:

- A records search via the California Geologic Energy Management (CalGEM) Division's database;
- A search of the State Water Resources Control Board (SWRCB) Groundwater Ambient Monitoring and Assessment (GAMA) Program and GeoTracker

websites for groundwater well information, waste discharge waivers, permitted facilities, and clean-up site data;

- Kern County Planning and Department of Environmental Health and Public Health; and
- An Environmental Database Resources (EDR) report with radius map of database findings, Sanborn search, historical land use and city directories search, aerial photographs, topographic maps, property tax map, and title search for Environmental Liens and Activity and Use Limitations (AUL).

1.3 Land Title Information and Historical Land Use

The Project Area is located on the parcels identified as APNs 102-080-18-00, 102-080-19-00, and 102-080-20-05 within Kern County, California. These three parcels registered as irrigated land use with an agricultural preserve designation (Kern Co Assessor, 2020).

Property titles for the APNs in the Project Area were conveyed to BVWSD as follows:

- In 2020, Paul G and Mary E Nugent conveyed title to the BVWSD for APNs 102-080-18-00 and 102-080-19-00 (EDR, 2020).
- In 2017, the George Hay Corporation Ltd conveyed title to BVWSD for APN 102-080-20-05 in 2017.

Based on historical aerial photographs beginning in 1937 to present, the parcel has been used for irrigated crops/agriculture (EDR, 2020).

1.4 Topography, Surficial Geology, Soils, and Groundwater Flow Conditions

A brief summary of topography, surficial geology, soil type and distribution, and groundwater flow directions are provided herein to provide context for this environmental site assessment. Data and additional descriptions of the site setting are available in the project assessment and the Buena Vista Water Storage District Groundwater Sustainability Agency (BVGSA) Groundwater Sustainability Plan (GSP) (BVGSA, 2019).

The elevation of the Project Area is approximately 273 to 278 feet mean sea level (msl), gently sloping toward the northwest according to the United States Geological Survey National Elevation Dataset Digital Elevation Model (USGS NED DEM). The soil type mapped at a regional level as an Entisol, type C slow infiltrating moderately fine to fine soil (NRCS 2018a, 2018b).

Geology is mapped as Quaternary Alluvium and Tulare Formation (Bartow, 1991 and CGS, 2010) with the axis of the San Joaquin Valley syncline less than 0.25 mile to the northeast. The axis trends northwestward-southeastward. Page (1986), further defined the alluvium as Holocene flood-basin deposits of clay, silt, and sand. These deposits are likely associated with the historical drainage of the Kern River and Buena Vista Creek Slough roughly parallel to and between the Westside Canal and California Aqueduct. The river and slough flowed northward out of the county during flood events and very wet years for centuries prior to the construction of Lake Isabella Reservoir.

Groundwater flow and ground water elevations are described in BVGSA's GSP. In general, there are various irrigation water wells present in the local area. Based on mapped

groundwater elevations from the GSP, groundwater flow in the main aquifer is likely to the southeast.

1.5 Aerial Photographs and Historical Maps

Historical aerial photographs and topographic maps were reviewed to gain knowledge of the site history for this assessment. This review was to document historical activities on-site and identify land uses and any operations or areas of interest for this ESA.

1.5.1 Aerial Photographs

Aerial photographs from 1937 to 2016 are provided with the EDR reports (EDR, 2020). Further historic aerial photography was obtained through Google Earth for more recent years. These aerial images were reviewed and show agricultural activities throughout the entire period.

Historical Aerial Photographs Reviewed			
1937	1968	1994	2012
1942	1973	2006	2016
1952	1984	2009	--

The following are observations from the review of the images:

- In 1937, Arizona Ditch (originally named “Poplar Grove Ditch”; the southern boundary), Main Drain Canal (the western boundary), Buerkle Road (the northern boundary) and Wasco Way (the eastern boundary) are present. Farming practices laid out the fields in rectangular portions with ditches between them. Several ditches or drains cut these rows. An unnamed ditch runs along the southern boundaries of APNs 102-080-18-00 and 102-080-19-00. Adjacent neighboring farms and structures are present.
- In 1942, farming practices continue laid out the fields in rectangular portions. Rather than several ditches or drains cutting through the fields, Deep Wells Ditch roughly bisects APN 102-080-19-00 from the northwest to southeast. Adjacent neighboring farms and structures are present.
- By 1952, the land is cultivated in concentric rows/furrows following the historical contours/elevation of the land. Deep Wells Ditch has been realigned to the western boundary of the parcel. The headworks of an irrigation ditch, nearly parallel to Arizona Ditch is located just south of the present-day reservoir and pumping station on APN 102-080-19-00. Adjacent neighboring farm structures have expanded.
- By 1956, there are no changes to Main Drain Canal or Arizona Ditch. Cultivation practices are now in longer, wider rows with irrigation ditches between them. The

rows on APN 102-080-18-00 run north and south; the rows on APN 102-080-19-00 run west and east. A dirt road has also been added to APN 102-080-20-05 approximately 800 feet to the east of the western boundary of the parcel.

- By 1968, the land is cultivated for flood irrigation with the land graded from east to west on APN 102-080-18-00 and from south to north on APN 102-080-19-00. The land is graded from east to west on APN 102-080-20-05. Adjacent neighboring farm structures have expanded.
- By 1973, the dirt road located on APN 102-080-20-05 has been removed.
- By 1984, the dirt road on APN 102-080-20-05 has been regraded.
- By 1994, the dirt road on APN 102-080-20-05 has been removed.
- By 2006, a dirt road on APN 102-080-20-05 has been graded approximately 800 feet east of the western boundary of the parcel. The land is cultivated in rows, oriented north-south on APN 102-080-19-00 and west-east on APNs 102-080-18-00 and 102-080-20-05. There is erosion on the parcels, indicating high and low spots throughout the site where the soil washed away from the rows to follow the natural contours.
- There are no significant changes in 2009.
- By 2012, the portion of Deep Wells Ditch north of the site (on the north side of Buerkle Road) appears to be filled in. The portion of the ditch on the western boundary of APN 102-080-19-00 is not filled in but appears to be dry.
- By 2016, the present-day reservoir and pumping station have been installed, north of Main Drain Canal. That portion of Deep Wells Ditch on the site has been filled in. Further comparison to Google Earth satellite imagery narrows the year of installation for the reservoir and pump station to 2015. Cultivation has changed from annual crops to permanent tree crops for APNs 102-080-18-00 and 102-080-19-00.
- A review of Google Earth imagery also shows that the portion of Main Drain Canal in the Project Area is completely abandoned by early 2018. Google Earth imagery also shows that by 2017 a portion of APN 102-080-20-05 has been converted to a borrow site for material to fill in that portion of Main Drain Canal which was aligned with the northern boundary of APN 102-080-20-05.

1.5.2 Topographic Maps

Topographic maps were reviewed from 1912 to 2012. They are provided with the EDR reports in the attachments (EDR, 2020).

Topographical Maps Reviewed		
1910	1942	2012
1912	1954	-

1932	1973	-
------	------	---

The following are observations from the review of the maps:

- 1910 and 1912 mapping include Poplar Grove Ditch (later to be named Arizona Ditch) and the unnamed drainage canal along the southern boundaries of APNs 102-080-18-00 and 102-080-19-00, with Southern Pacific Railroad and the Westside Canal. Poplar Grove Ditch's alignment is shown further north than the earliest aerial photography.
- 1932 includes the same features but in more detail. Poplar Grove Ditch and the Drainage Canal are confirmed along the western and southern boundaries of the Project Area. County roads, the Eastside Canal, the town of Buttonwillow, and McKittrick Highway (CA Highway 58) are also mapped.
- By 1942, the neighboring ranches, structures, major wells, and the power plant east of Buttonwillow are added to the map, as are more details for the ditches and county roads.
- By 1954, Poplar Grove Ditch has been renamed to Arizona Ditch. Major contours, PLSS sections, additional ditches, and power lines are mapped.
- There are no major updates to the mapping in 1973.
- 2012 mapping focuses on maintained roads and major ditches and canals. It also does not show building structures and improvements in the dataset.

2. Regulatory Information and Records Review

Records obtained from regulatory agencies and EDR's environmental databases search (EDR, 2020), were reviewed to assess possible areas of concern or the likelihood of contaminants from past or current activities in the Project Area. The records reviewed for this report came from the following sources:

- The California Geologic Energy Management (CalGEM) Division;
- The State Water Resources Control Board (SWRCB) Geotracker Database and California Department of Toxic Substances Control Envirostor database;
- Kern County Planning and Environmental and Public Health Records Request; and
- Environmental Data Resources, Inc (EDR) environmental database search (2020).

The following sections describe the documentation available and the conclusions drawn from the evaluation of these records.

2.1 CalGEM Records Review

The CalGEM Well Records Search tool (<https://www.conservation.ca.gov/calgem/Pages/WellFinder.aspx>) was used to obtain information on oil and gas wells, facilities, and fields within the vicinity of the Project Area. There is one plugged and abandoned dry hole approximately one mile west of the Project Area. No other oil and gas data were identified within two miles of the Project Area.

2.2 SWRCB and DTSC Database Review

The SWRCB maintains a publicly accessible database of groundwater quality data and potential sources of contamination with its Groundwater Ambient Monitoring and Assessment (GAMA) Program. The SWRCB's GAMA Geotracker website includes cleanup sites for the Central Valley Regional Water Quality Control Board (RWQCB) and the Department of Toxic Substance Control (DTSC) Envirostor database with cleanup sites and permitted facilities.

The following sites, all downgradient of the Project Area, were identified within a 2-mile radius:

2.2.1 *Snow Property (Case No. SLT5FS494467):*

In 1989, Snow Property was cited for improper storage of chemical containers. These containers were used for the storage of oils, lubricants, greases, paint, fertilizers, and herbicides. To address the citation, the property owners hired a consultant to perform a soil

and water contamination assessment. The study concluded that two of the 12 parcels required further cleanup. In 1991, a Phase II assessment was performed as a follow up to the 1989 study and subsequent cleanup. The Phase II assessment concluded that the site did not have any detectable contamination related to the storage containers. This site was closed out. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.2 *Buttonwillow Dusters (Case No. T0602900547):*

A leaking underground gasoline storage tank was discovered in May of 1993. The leaked was reported the next day. The site was subsequently cleaned up and the case was closed in 1995. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.3 *Farmer's Coop Gin (Case No. T0602900459):*

A leaking underground gasoline storage tank was discovered in November of 1991. The leaked was reported in December of 1991. The site was subsequently cleaned up and the case was closed in 1992. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.4 *Buttonwillow School District (Case No. T0602900017)*

A leaking underground gasoline storage tank was discovered in March of 1987. The leaked was reported in October of 1987. The site was subsequently cleaned up and the case was closed in 1991. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.5 *Murray Petroleum (Case No. T0602900123):*

A leaking underground gasoline storage tank was discovered in May of 1988. The leaked was reported in May of 1988. The site was subsequently cleaned up and the case was closed in 1989. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.6 *Kern Mosquito Abatement (Case No. T0602900142):*

A leaking underground gasoline storage tank was discovered in October of 1985. The leaked was reported in November of 1985. The site was subsequently cleaned up and the case was closed in 1986. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.7 Jasmin Development (Case No. T0602900413):

A leaking underground gasoline storage tank was discovered and reported in April of 1991. The site was subsequently cleaned up and the case was closed in 1992. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.8 Alvidres Unocal (Case No. T0602900735):

A leaking underground gasoline storage tank was reported in November 1997 and again in August 1998. Subsequent to these leaks being reported, the property owner had to perform quarterly groundwater monitoring. In June 2013, the owner submitted a work plan for shallow soil and soil gas sampling. In addition to soil and gas sampling, the owner was required to destroy the monitoring wells associated with the monitoring. This case was closed in 2015. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.9 Buttonwillow Fire Station (Case No. T0602900257):

A leaking underground gasoline storage tank was discovered and stopped in December of 1989. The leak was reported in January 1990. Subsequent to the leak being reported, the fire department prepared and submitted a workplan for subsurface soil and groundwater assessment and reporting. In July 2014, the fire department began to remove the tank and close out the site. This case was closed in 2015. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.2.10 Buttonwillow Ginning Co. #2 (Case No. T0602900478):

A leaking underground gasoline storage tank was discovered in March 1992 and reported in April of that year. The site was subsequently cleaned up and the case was closed in 1993. It is GEI's opinion that historical releases associated with this property are unlikely to impact the Project Area.

2.3 Kern County Planning and Environmental and Public Health Review

Records from the Kern County Planning and Kern County Environmental and Public Health Divisions were reviewed for the Project Area.

- **APN: 102-080-18-00.** There are no county buildings permits, solid waste, or hazardous materials records. There were no other county planning and permitting records provided for the Project Area.

- **APN: 102-080-19-00.** There are no county buildings permits, solid waste, or hazardous materials records. There were no other county planning and permitting records provided for the Project Area.
- **APN: 102-080-20-05.** There are no county buildings permits, solid waste, or hazardous materials records. There were no other county planning and permitting records provided for the Project Area.

2.4 EDR Report Review

The EDR report included searches of historical aerial photographs and topographic maps, Sanborn maps (if available); historical city directories; land title records for environmental liens and AULs; federal, state, and local databases including cleanup project sites, and other permitted facilities. A complete list of records searched is included in the Radius Map package of the EDR report in Appendix A. The EDR report is intended to assist in searching available public records.

The following is a summary of findings from the EDR report review:

- Aerial photographs and topographic maps are described in Section 1 of this report;
- No Sanborn Maps or results of city directories are available for the search area;
- No environmental liens or AULs were identified for the Project Area;
- No environmental records in federal, state, and local databases were identified for the 1-mile search area, except for environmental records for the Snow Property
- EDR provided the following findings from Kern County Environmental Health Services Department (KCEH) over different periods between November 1987 and January 1991 regarding two separate properties to the north:
 - Snow Property, which was cited for lack of secondary containment and improper storage of chemical containers and 55-gallon drums. The site was cleaned up and the case closed in 1991.
 - Buttonwillow Dusters were cited for failing to properly dispose of chemical containers. These violations were addressed, and the case closed in 1987.

Although incidents of noncompliance have been reported and resolved, no spills or incidents of releases have been reported in the environmental databases. KCEH reported as of 2020 that the secondary containment and top containment violations have not been resolved with the county (KCEH, 2020). It is GEI's opinion that these violations are unlikely to impact the Project Area.

3. Site Reconnaissance

GEI staff conducted a site inspection of the Project Area for this ESA on December 11, 2020. A field site reconnaissance checklist was completed that documents GEI's observations and is included in Appendix B. Site photographs were taken and are included in Appendix B. A summary of observations from the site reconnaissance are provided below (refer to accompanying photographs in Appendix B):

- The Project Area is currently being cleared and is an unplanted agricultural field with some native vegetation and piles of mulched trees and green waste throughout.
- There is a 150-foot by 150-foot irrigation reservoir and pump station with media filters, located in the southeast corner of APN 102-080-19-00. At the time of the site reconnaissance, the reservoir was drained. The estimated depth of the reservoir is 20 feet, with interior side slopes of 2:1.
- There are overhead power lines located along the eastern boundary of the Project Area, along Wasco Way.
- The Main Drain Canal borrow site on APN 102-080-20-05 is dry and full of native vegetation.
- At the southwest corner of the Project Area, an 18-inch diameter culvert with a concrete inlet and a concrete outlet ties Main Drain Canal to Arizona Ditch.
- A natural gas line is located along the western bank of Main Drain Canal, on the property immediately west of APN 102-080-18-00. A portion of the canal bank has washed out and exposed approximately 40 ft of the gas line. This exposed line is located approximately 650 feet south of Buerkle Road.
- A portion of this gas line crosses Main Drain Canal. The crossing is clearly marked and is approximately 50 feet long. From that point, the gas line is buried in the eastern bank of Main Drain Canal up to Buerkle Road.

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4. Site Questionnaire

A questionnaire developed for this ESA was provided to BVWSD to complete as the landowner. The intent of the questionnaire was to solicit information from someone knowledgeable and familiar with the Project Area to provide any details to supplement the findings of the site visit and records search. The responses to this questionnaire are provided in Appendix C. BVWSD indicated that they were not aware of any historical releases of oil and hazardous materials (OHM) or the presence of or contaminated materials in the Project Area.

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5. Site Evaluation and Conclusions

GEI conducted this ESA between November and December 2020 for the Project Area (APNs 102-080-18-00, 102-080-19-00, and 102-080-20-05). GEI performed a review of federal, state, and local records pertaining to environmental activities and databases, conducted a site inspection with documentation of areas of interest, and solicited the current landowner with staff knowledgeable of the Project Area to provide any details regarding any potential environmental areas of interest. In addition, an EDR report is included herein which lists the results of federal, state, and local database searches.

The site reconnaissance conducted on December 12, 2020 found that the Project Area was already being prepared for the construction of a groundwater recharge facility. The existing reservoir and agricultural supply well are to remain in the Project Area.

Based on field observations and information gathered through records searches, trace *de minimis* findings were noted with no identified Recognized Environmental Conditions or Areas of Potential Environmental Concern (APECs) present in the Project Area. However, a records search from EDR and Kern County identifies several parcels north of the Project Area, and under different ownership, has previous violations of containment for 55-gallon drums and/or leaking underground storage tanks (LUSTs). These parcels are cross gradient to downgradient of the Project Area. The cases found in EDR and Kern County records were closed in 1991. Based on the locations and nature of these violations, it is GEI's opinion that there is likely no potential for future environmental concern for the Project Area from these sites.

A review of the State Water Resources Control Board (SWRCB) Groundwater Ambient Monitoring and Assessment (GAMA) and the Department of Toxic Substance Control (DTSC) Envirostor website found an additional eight cleanup sites, associated with LUSTs, which have all been closed. Based on the locations and nature of these violations, it is GEI's opinion that there is likely no potential for future environmental concern for the Project Area from these sites.

An existing SoCal Gas line is located on the western boundary of the Project Area, with the gas line crossing onto an adjacent parcel. A portion of the buried gas line on the adjacent parcel has been exposed due to erosion of the western bank of Main Drain Canal. While this will not interfere with the activities at the Project Area, it can potentially cause mechanical failure of the line if not addressed by SoCal Gas and/or the adjacent property owner. Mechanical failure, such as cracking or a rupture in the buried portion of the line from the strain of the unsupported section could result in soil contamination. Mechanical failure in either the buried or the exposed portions of the line has the potential to result in combustion

if leaked gas is introduced to an ignition source. Failure in the gas line could also cause a disruption in service to SoCal Gas's customers.

Based on the findings of this report, the Project Area has been used for irrigated agriculture since at least 1937. As such, there may be agricultural practices in the past which have applied amendment or synthetics to the soil. An investigation of local agricultural practices with respect to applied amendment or synthetics is beyond the scope of this investigation and is not addressed in this ESA.

This report is limited to an analysis of data and information that could be obtained by a field site walk and/or records evaluation. Any analysis of soil or groundwater would require additional testing, sampling, laboratory testing, and analysis in a separate report.

6. Limitations

The findings of this report are based on the information reviewed and described in this report. Future investigations or information that was not available to GEI may result in modification of the findings of this report. In preparing this report, GEI relied on file information provided by state and local officials and information and representations made available to GEI at the time of the report. If such information is incomplete or inaccurate, GEI is not responsible. GEI's professional services for this project have been performed in a manner consistent with that degree of skill and care ordinarily exercised by members of our profession currently practicing in the same locality, performing similar services under similar conditions. GEI makes no other representations and no warranties, express or implied.

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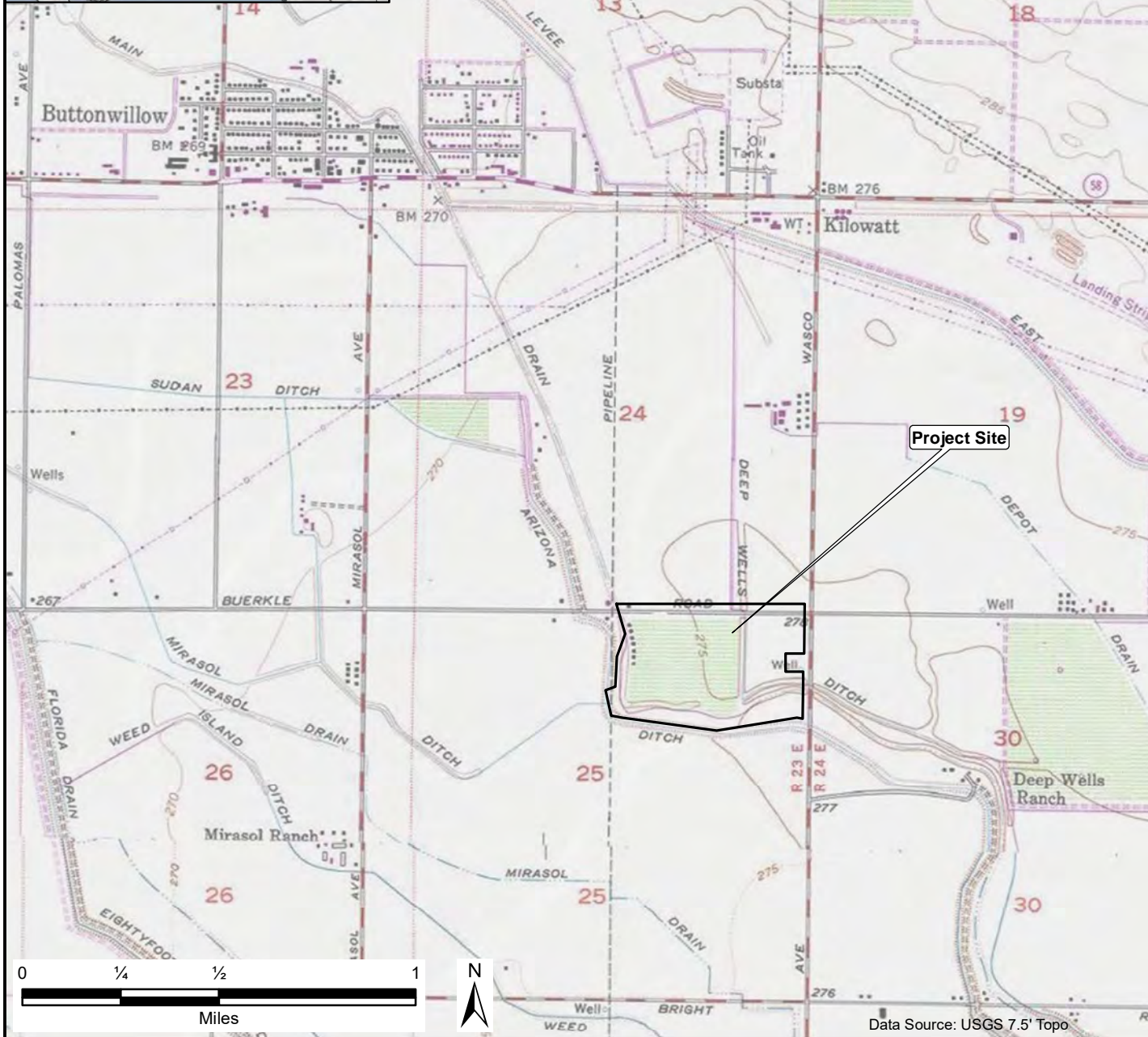
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Figures

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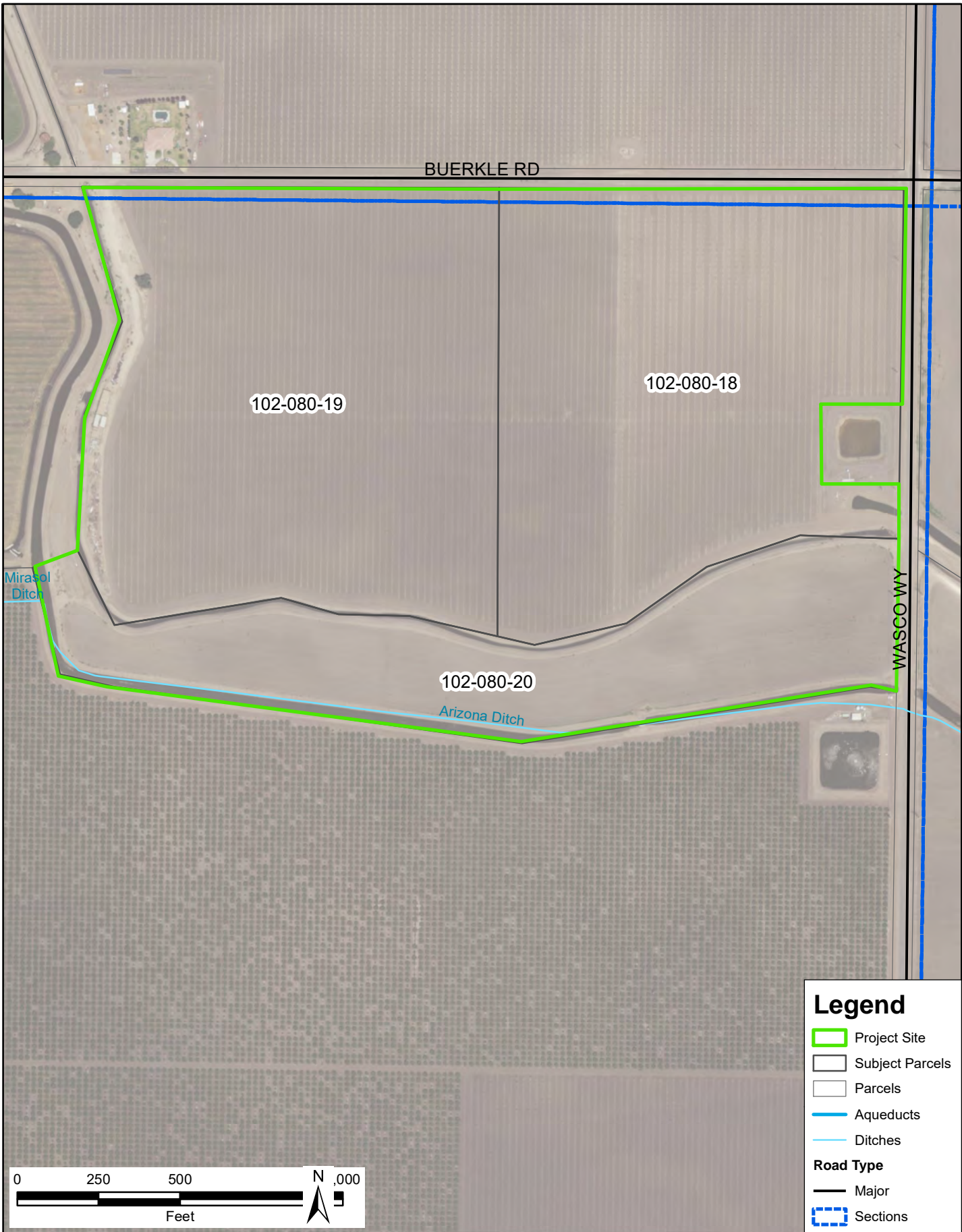
2/17/2021 \\sac1s-rs01\GIS\Projects\2004962_BVWSD_DaleyRanch_Recharge\G001_Location.mxd MIR/CT

Buena Vista Water Storage District
Kern County, California



FIGURE 1: PROJECT LOCATION & VICINITY
JANUARY 2021

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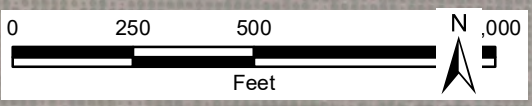


Legend

- Project Site
- Subject Parcels
- Parcels
- Aqueducts
- Ditches

Road Type

- Major
- Sections



Buena Vista Water Storage District
 Kern County, California



FIGURE 2: PROJECT AREA
 JANUARY 2021

Appendix A: Environmental Database Resources (EDR) Report Excerpts



Daley Ranch Recharge Pond Site

Not Reported

Buttonwillow, CA 93206

Inquiry Number: 6283947.11

November 30, 2020

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

11/30/20

Site Name:

Daley Ranch Recharge Pond S
Not Reported
Buttonwillow, CA 93206
EDR Inquiry # 6283947.11

Client Name:

GEI Consultants
5001 California Ave Suite 120
BAKERSFIELD, CA 93309
Contact: Michelle Ricker



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1994	1"=500'	Acquisition Date: May 10, 1994	USGS/DOQQ
1984	1"=500'	Flight Date: June 09, 1984	USDA
1973	1"=500'	Flight Date: May 01, 1973	USDA
1968	1"=500'	Flight Date: December 27, 1968	USGS
1956	1"=500'	Flight Date: August 24, 1956	USDA
1952	1"=500'	Flight Date: August 13, 1952	USGS
1942	1"=500'	Flight Date: May 03, 1942	USDA
1937	1"=500'	Flight Date: August 16, 1937	USDA

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INQUIRY #: 6283947.11

YEAR: 2016

— = 500'





INQUIRY #: 6283947.11

YEAR: 2012

— = 500'





INQUIRY #: 6283947.11

YEAR: 2009

— = 500'





INQUIRY #: 6283947.11

YEAR: 2006

— = 500'





INQUIRY #: 6283947.11

YEAR: 1994

— = 500'





INQUIRY #: 6283947.11
YEAR: 1984
= 500'





INQUIRY #: 6283947.11

YEAR: 1973

— = 500'





INQUIRY #: 6283947.11

YEAR: 1968

— = 500'





INQUIRY # 6283947.11

YEAR: 1952

— = 500'





INQUIRY #: 6283947.11

YEAR: 1942

— = 500'







INQUIRY #: 6283947.11

YEAR: 1956

— = 500'



Daley Ranch Recharge Pond Site

Not Reported
Buttongwillow, CA 93206

Inquiry Number: 6283947.8
November 30, 2020

EDR Building Permit Report

Target Property and Adjoining Properties

EDR Building Permit Report: Search Documentation

11/30/20

Site Name:

Daley Ranch
Not Reported
Buttonwillow, CA 93206

Client Name:

GEI Consultants
5001 California Ave Suite 120
BAKERSFIELD, CA 93309

EDR Inquiry # 6283947.8

Contact: Michelle Ricker

Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 11/30/20, EDR does not have access to building permits in the city where your target property is located (Buttonwillow, CA).

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.



Daley Ranch Recharge Pond Site

Not Reported
Buttontwillow, CA 93206

Inquiry Number: 6283947.7
December 01, 2020

EDR Environmental Lien and AUL Search

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

Not Reported
Daley Ranch Recharge Pond Site
Buttonwillow, CA 93206

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found Not Found

RESEARCH SOURCE

Source 1:

Kern Recorder
Kern, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed: deed
Title is vested in: Buena Vista Water Storage Dist
Title received from: Paul G & Mary E Nugent Trustees
Deed Dated: 3/24/2020
Deed Recorded: 4/3/2020
Book: NA
Page: na
Volume: na
Instrument: na
Docket: NA
Land Record Comments:
Miscellaneous Comments:

Legal Description: See Exhibit

Legal Current Owner: Buena Vista Water Storage Dist

Parcel # / Property Identifier: 10208018000, 10208019000

Comments: See Exhibit

Deed 2:

Type of Deed: deed
Title is vested in: Buena Vista Water Storage Dist
Title received from: George Hay Corp Ltd
Deed Dated: 2/22/2017
Deed Recorded: 2/23/2017
Book: NA
Page: na
Volume: na
Instrument: na
Docket: NA
Land Record Comments:
Miscellaneous Comments:

Legal Description: See Exhibit

Legal Current Owner: Buena Vista Water Storage Dist

Parcel # / Property Identifier: 10208020005

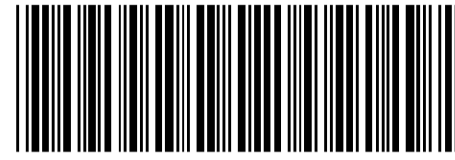
Comments: See Exhibit

Deed Exhibit 1

RECORDING REQUESTED BY:
Chicago Title Company

Recorded Electronically by:
620 Chicago Title Bakersfield

DOC #: 220043156



220043156

Stat Types: 1 **Pages:** 4

FEEES	.00
TAXES	.00
OTHER	.00
PAID	.00

**When Recorded Mail Document
and Tax Statement To:**

Tim Ashlock
Buena Vista Water Storage District, a California
Special District
P.O. Box 756
525 N. Main Street
Buttonwillow, CA 93206

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Escrow Order No.: FWKN-5502001139

APN/Parcel ID(s): 102-080-18-00
102-080-19-00

The document is executed or recorded by the state or any county, municipality, or other political subdivision of the state (GC 27388.1 (a) (2) (D)).

GRANT DEED

The undersigned grantor(s) declare(s)

- This transfer is exempt from the documentary transfer tax.
The grantee is the United States or an agency or instrumentality thereof, a state or territory, or political subdivision thereof, R & T 11922.
- The documentary transfer tax is \$ _____ and is computed on:
 - the full value of the interest or property conveyed.
 - the full value less the liens or encumbrances remaining thereon at the time of sale.

The property is located in an Unincorporated area.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Paul G. Nugent and Mary E. Nugent, Trustees of the Nugent Family Trust dated June 20, 2011

hereby GRANT(S) to Buena Vista Water Storage District, a California Special District

the following described real property in the Unincorporated Area of the County of Kern, State of California:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

MAIL TAX STATEMENTS AS DIRECTED ABOVE

GRANT DEED
(continued)

APN/Parcel ID(s): 102-080-18-00
102-080-19-00

Dated: March 24, 2020

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

Paul G. Nugent and Mary E. Nugent, Trustees of the Nugent Family Trust dated June 20, 2011

BY: Paul G. Nugent
Paul G. Nugent, Trustee

BY: Mary E. Nugent
Mary E. Nugent, Trustee

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Kern

On MARCH 25, 2020 before me, K. Trevino, Notary Public, Notary Public,
(here insert name and title of the officer)

personally appeared Paul G. Nugent and Mary E. Nugent,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

K. Trevino
Signature

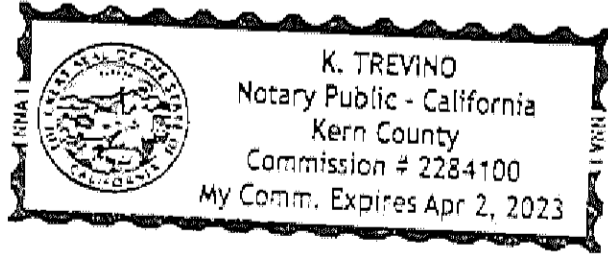


EXHIBIT "A"
Legal Description

For APN/Parcel ID(s): 102-080-18-00 and 102-080-19-00

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF KERN, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCELS 1 AND 2 OF PARCEL MAP NO. 12109, ACCORDING TO THE MAP THEREOF RECORDED MAY 20, 2014 IN BOOK 59 OF PARCEL MAPS, AT PAGES 93 AND 94, KERN COUNTY RECORDS.

EXCEPTING THEREFROM AN UNDIVIDED 2-1/2% OF ALL OIL, GAS, PETROLEUM AND OTHER HYDROCARBON SUBSTANCES OR UNDERLYING OR THAT MAY BE PRODUCED AND SAVED FROM SAID LAND AS EXCEPTED AND RESERVED IN THE DEED RECORDED FEBRUARY 10, 1954 IN BOOK 2186 PAGE 103 OF OFFICIAL RECORDS.

CERTIFICATE OF ACCEPTANCE
(Government Code Section 27281)

THIS IS TO CERTIFY that the within document is hereby accepted by the undersigned officer on behalf of the Board of Directors pursuant to authority conferred by resolution of the Board of Directors heretofore adopted, and the Grantee consents to recordation thereof by its duly authorized officer.

DATED: 3-20-2020



Tim Ashlock, Engineer-Manager
Buena Vista Water Storage District

Deed Exhibit 2

Recorded Electronically by:
608 Ticor Title Company

RECORDING REQUESTED BY AND WHEN
RECORDED MAIL TO, AND MAIL TAX
STATEMENTS TO:

Buena Vista Water Storage District
325 Main Street
Buttonwillow, California 93206

Kern County Assessor's Parcel No. 102-080-03 (Portion)

DOC #: 000217024118



000217024118

Stat Types: 1 Pages: 5

FEEs	25.00
TAXES	.00
OTHER	.00
PAID	25.00

This document is being recorded
under Government Code 6108 for the
benefit of a government
agency
Grantor (as defined below) declares:

SPACE ABOVE THIS LINE FOR RECORDER'S USE ONLY

GRANT DEED

Documentary transfer tax is: Zero Dollars and No Cents (\$0.00) pursuant to Section 11922 of the California Revenue and Taxation Code and Section 4.20.050 of the Real Property Transfer Tax Ordinance of the County of Kern.

For valuable consideration, receipt of which is acknowledged, the undersigned, GEORGE HAY CORPORATION LTD., a California corporation ("Grantor"), hereby grants to BUENA VISTA WATER STORAGE DISTRICT, a California water storage district ("Grantee"), the following real property in the unincorporated area of the County of Kern, State of California:

THE PROPERTY DESCRIBED IN EXHIBIT A AND DEPICTED IN EXHIBIT B, BOTH ATTACHED HERETO AND INCORPORATED HEREIN.

EXCEPTING THEREFROM ALL OIL, GAS, MINERALS AND OTHER HYDROCARBON SUBSTANCES WITHIN OR UNDERLYING SAID LAND, AS RESERVED IN DEEDS OF RECORD.

NOTWITHSTANDING THE FOREGOING, THIS GRANT DEED IS MADE, AND THE PROPERTY IS CONVEYED, BY GRANTOR TO GRANTEE SUBJECT TO THE FOLLOWING:

1. A LIEN TO SECURE PAYMENT OF CURRENT REAL PROPERTY TAXES NOT YET DUE AND PAYABLE; AND,
2. ALL OTHER MATTERS OF PUBLIC RECORD RECORDED AGAINST THE PROPERTY AS OF THE DATE HEREOF.

Grantor:
GEORGE HAY CORPORATION LTD., a California Corporation

Dated: February 22, 2017

By:

Name: TIMOTHY B. HAY

Title: PRESIDENT

EXHIBIT "A"

BEING A PORTION OF THE NORTH HALF OF SECTION 25, TOWNSHIP 29 SOUTH, RANGE 23 EAST, M.D.M., IN THE UNINCORPORATED AREA, COUNTY OF KERN, STATE OF CALIFORNIA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 25; THENCE NORTH 89°26'00" EAST ALONG THE NORTH LINE OF SAID SECTION, 75.60 FEET TO A POINT ON THE CENTERLINE OF THE MAIN DRAIN; THENCE ALONG SAID CENTERLINE SOUTH 17°27'00" EAST, 464.40 FEET; THENCE SOUTH 21°27'00" WEST, 305.00 FEET; THENCE SOUTH 02°05'00" WEST, 422.00 FEET TO **THE POINT OF BEGINNING**; THENCE CONTINUING ALONG SAID CENTERLINE SOUTH 27°05'00" EAST, 254.60 FEET; THENCE NORTH 79°59'00" EAST, 518.00 FEET; THENCE SOUTH 75°00'00" EAST, 182.90 FEET; THENCE SOUTH 89°18'00" EAST, 217.90 FEET; THENCE SOUTH 74°44'00" EAST, 394.80 FEET; THENCE NORTH 75°57'00" EAST, 288.90 FEET; THENCE NORTH 54°05'00" EAST, 302.00 FEET, THENCE NORTH 70°35'00" EAST, 308.10 FEET; THENCE SOUTH 88°48'00" EAST, 332.00 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 25; THENCE SOUTH 00°05'00" WEST, ALONG SAID EAST LINE, 465.20 FEET TO A POINT ON THE CENTERLINE OF THE ARIZONA DITCH; THENCE ALONG SAID CENTERLINE NORTH 73°29'00" WEST, 81.50 FEET; THENCE SOUTH 80°19'00" WEST, 1082.30 FEET; THENCE NORTH 82°54'00" WEST, 1262.30 FEET; THENCE NORTH 74°41'00" WEST, 203.10 FEET; THENCE NORTH 13°26'00" WEST, 326.54 FEET TO A POINT OF INTERSECTION WITH THE CENTERLINE OF THE MIRASOL DITCH; THENCE DEPARTING FROM THE CENTERLINE OF THE ARIZONA CANAL, NORTH 69°49'10" EAST, 129.21 FEET TO **THE POINT OF BEGINNING**.

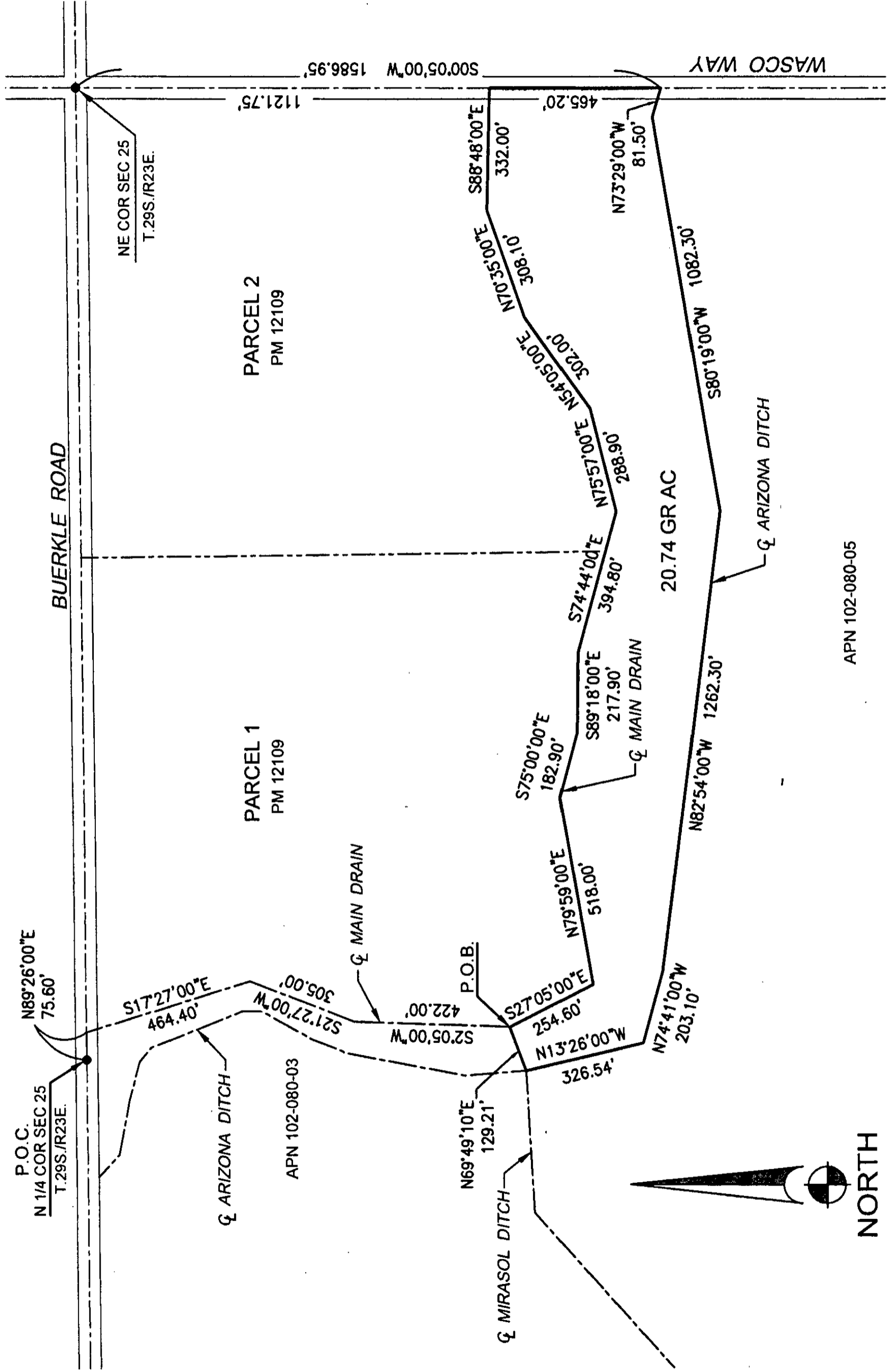
CONTAINS 20.74 ACRES MORE OR LESS





Tim McColgan Ashlock R.C.E. Date

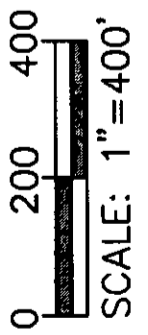
EXHIBIT "B"



APN 102-080-05



NORTH



CERTIFICATE OF ACCEPTANCE

(Government Code Section 27281)

THIS IS TO CERTIFY that the interest in real property conveyed by the deed or grant dated Feb. 22, 2016, from GEORGE HAY COMPANY to BUENA VISTA WATER STORAGE DISTRICT, a California Water Storage District formed pursuant to Division 13 of the California Water Code, is hereby accepted by the undersigned on behalf of Buena Vista Water Storage District, pursuant to authority conferred by resolution of the Board of Directors of Buena Vista Water Storage District and the Grantee consents to recordation thereof by its duly authorized agent or officer.

Dated: 15 FEB, 2017

By: Maurice Etchechury
Maurice Etchechury – Engineer Manager
Buena Vista Water Storage District

Daley Ranch Recharge Pond Site

Not Reported

Buttonwillow, CA 93206

Inquiry Number: 6283947.4

November 30, 2020

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

11/30/20

Site Name:

Daley Ranch Recharge Pond S
Not Reported
Buttonwillow, CA 93206
EDR Inquiry # 6283947.4

Client Name:

GEI Consultants
5001 California Ave Suite 120
BAKERSFIELD, CA 93309
Contact: Michelle Ricker



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by GEI Consultants were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	2004962	Latitude:	35.382103 35° 22' 56" North
Project:	Daley Ranch Recharge Pond	Longitude:	-119.45394 -119° 27' 14" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	277097.21
		UTM Y Meters:	3918183.09
		Elevation:	275.00' above sea level

Maps Provided:

2012
1973
1954
1942
1932
1912
1910

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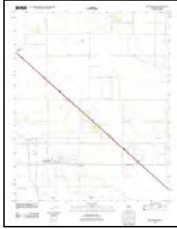
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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets

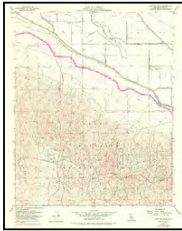


Buttonwillow
2012
7.5-minute, 24000

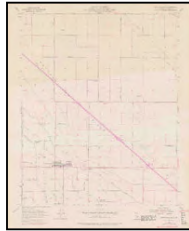


East Elk Hills
2012
7.5-minute, 24000

1973 Source Sheets

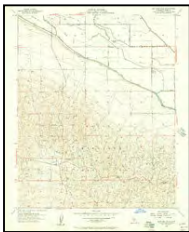


East Elk Hills
1973
7.5-minute, 24000
Aerial Photo Revised 1973

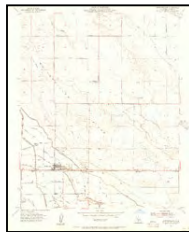


Buttonwillow
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1954 Source Sheets



East Elk Hills
1954
7.5-minute, 24000
Aerial Photo Revised 1952



Buttonwillow
1954
7.5-minute, 24000
Aerial Photo Revised 1952

1942 Source Sheets



Buttonwillow
1942
15-minute, 62500
Aerial Photo Revised 1937

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1932 Source Sheets



Buttonwillow
1932
7.5-minute, 31680



East Elk Hills
1932
7.5-minute, 31680

1912 Source Sheets

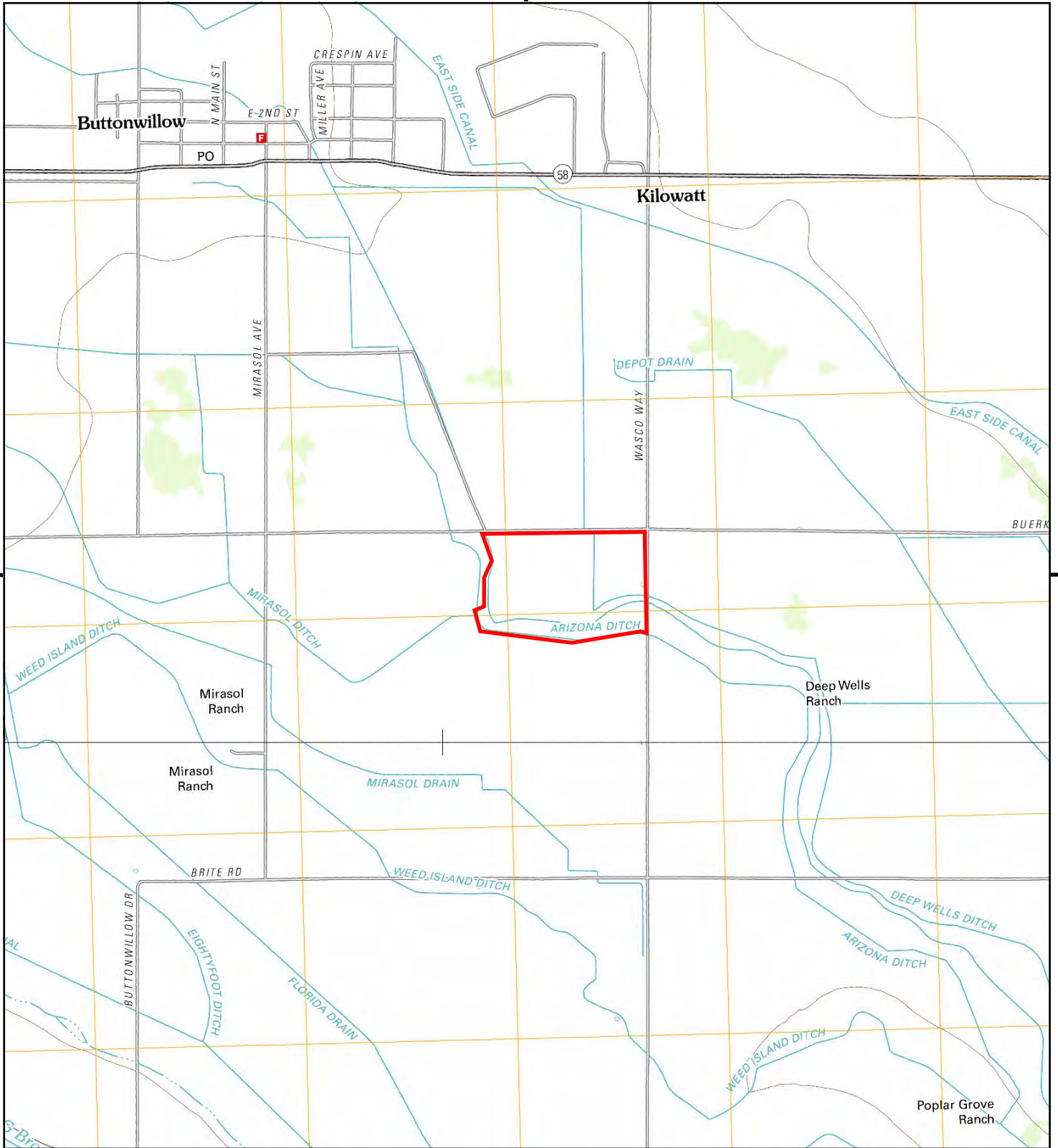


Buena Vista Lake
1912
30-minute, 125000

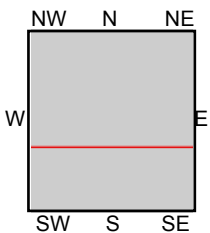
1910 Source Sheets



Buena Vista Lake
1910
30-minute, 125000



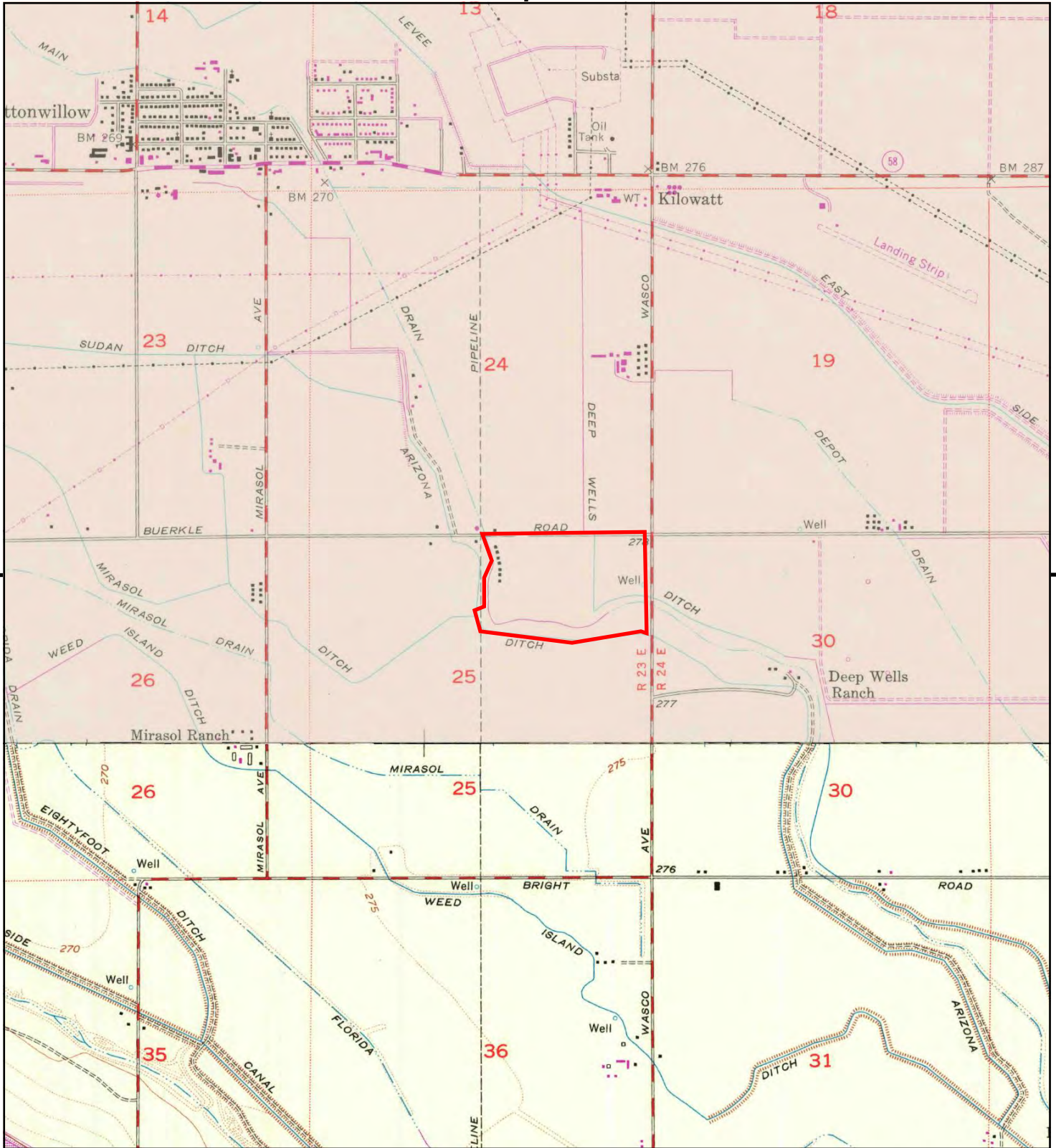
This report includes information from the following map sheet(s).



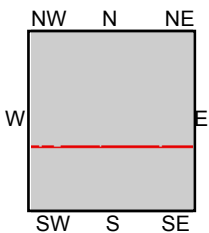
TP, Buttonwillow, 2012, 7.5-minute
S, East Elk Hills, 2012, 7.5-minute

SITE NAME: Daley Ranch Recharge Pond Site
ADDRESS: Not Reported
Buttonwillow, CA 93206
CLIENT: GEI Consultants





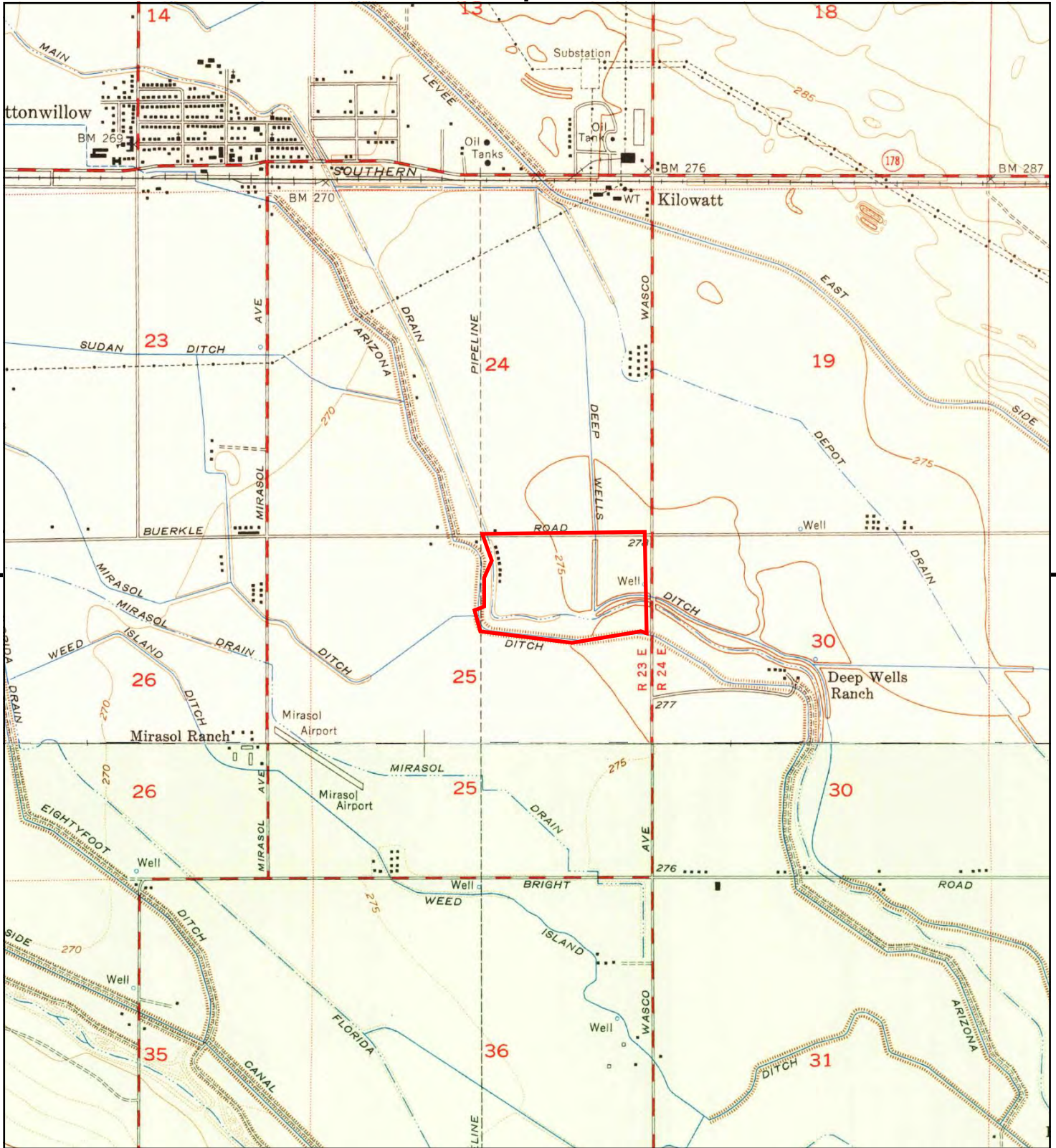
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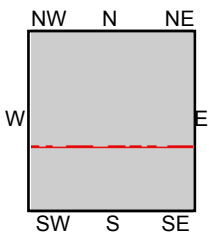
TP, Buttonwillow, 1973, 7.5-minute
S, East Elk Hills, 1973, 7.5-minute

SITE NAME: Daley Ranch Recharge Pond Site
ADDRESS: Not Reported
Buttonwillow, CA 93206
CLIENT: GEI Consultants





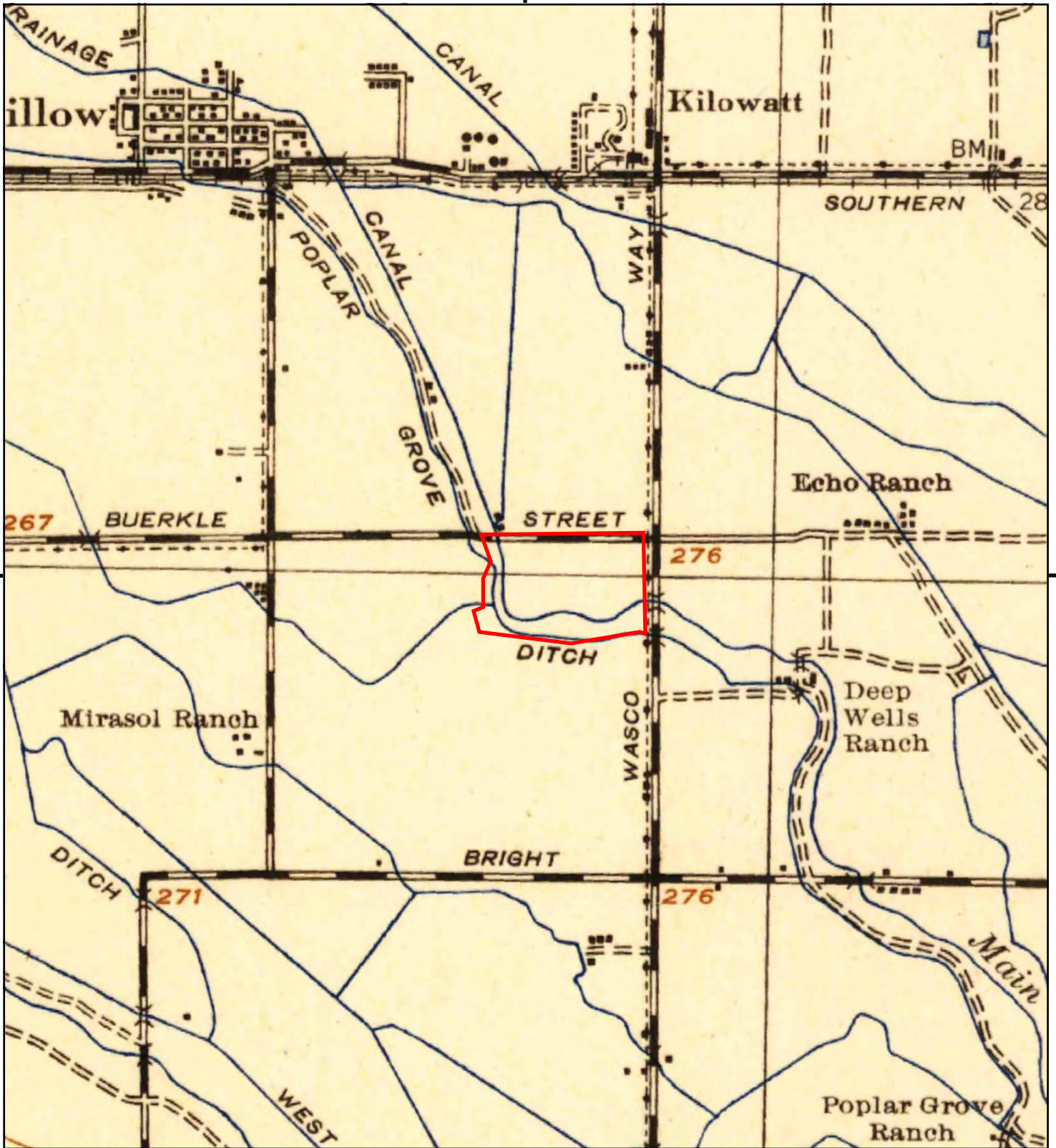
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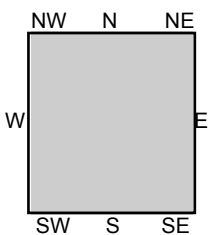
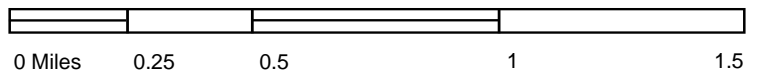
TP, Buttonwillow, 1954, 7.5-minute
S, East Elk Hills, 1954, 7.5-minute

SITE NAME: Daley Ranch Recharge Pond Site
ADDRESS: Not Reported
Buttonwillow, CA 93206
CLIENT: GEI Consultants





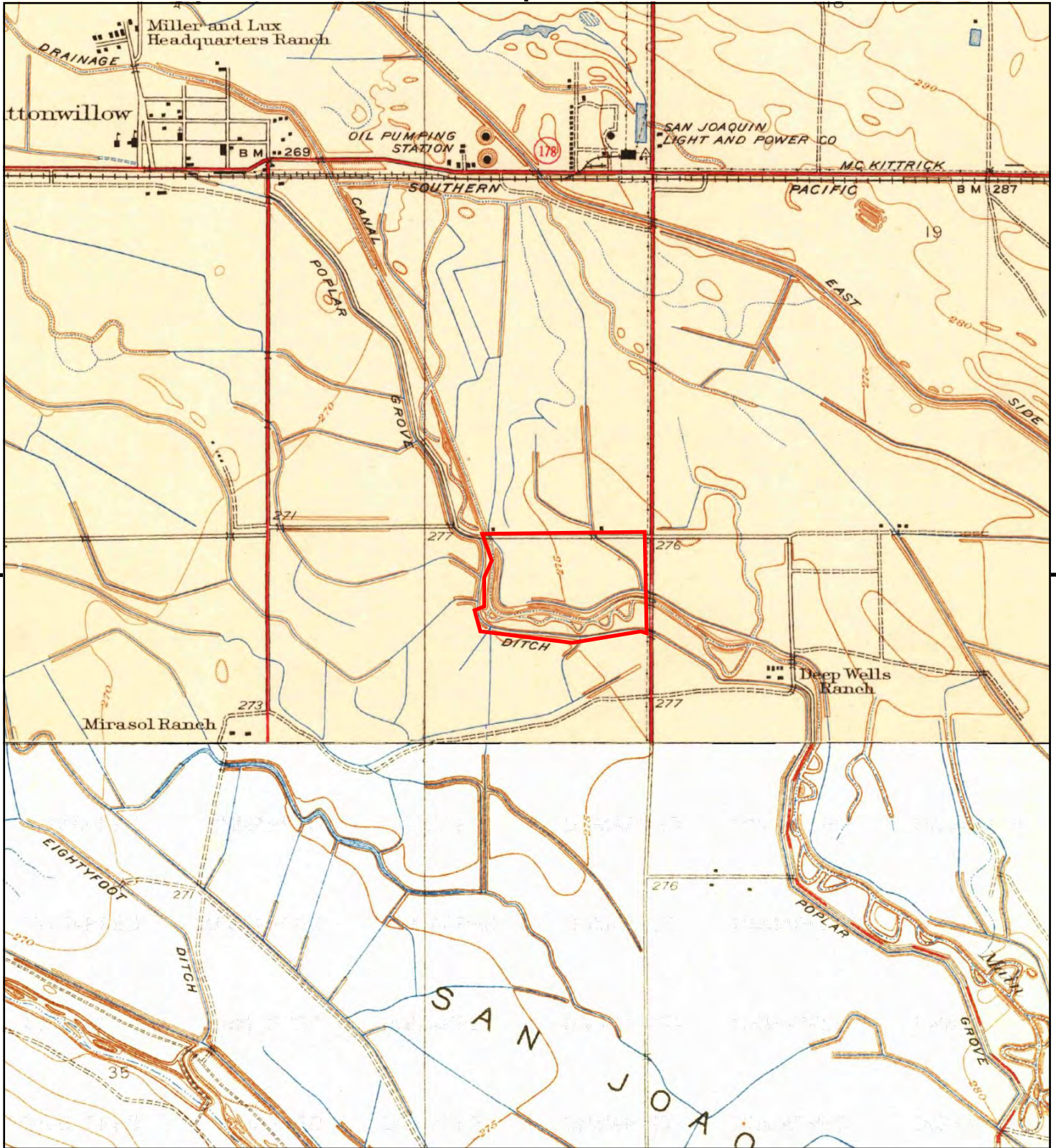
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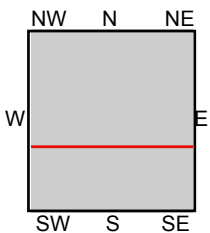
TP, Buttonwillow, 1942, 15-minute

SITE NAME: Daley Ranch Recharge Pond Site
 ADDRESS: Not Reported
 Buttonwillow, CA 93206
 CLIENT: GEI Consultants





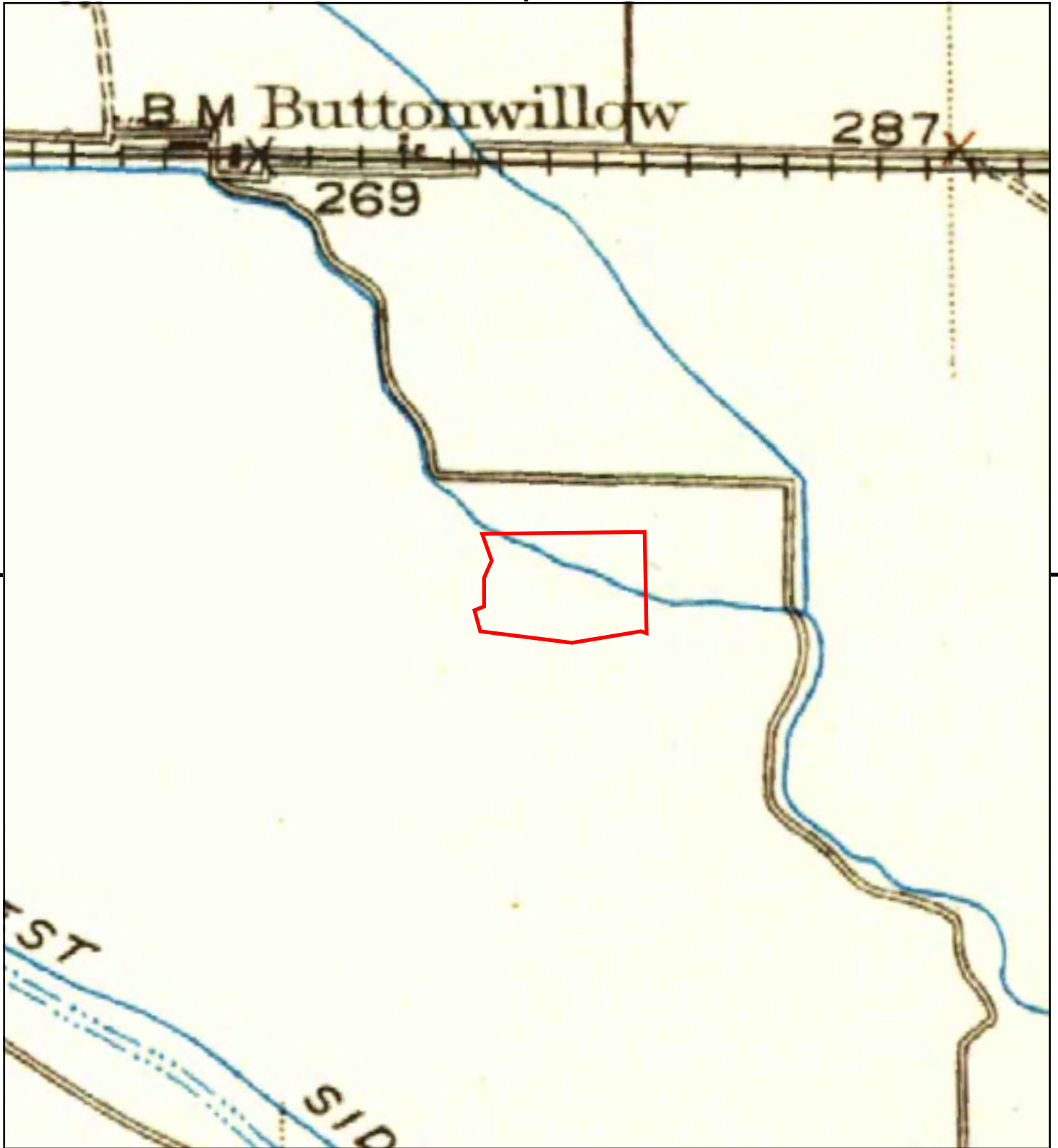
This report includes information from the following map sheet(s).



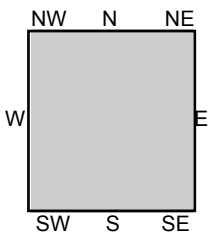
TP, Buttonwillow, 1932, 7.5-minute
S, East Elk Hills, 1932, 7.5-minute

SITE NAME: Daley Ranch Recharge Pond Site
ADDRESS: Not Reported
Buttonwillow, CA 93206
CLIENT: GEI Consultants





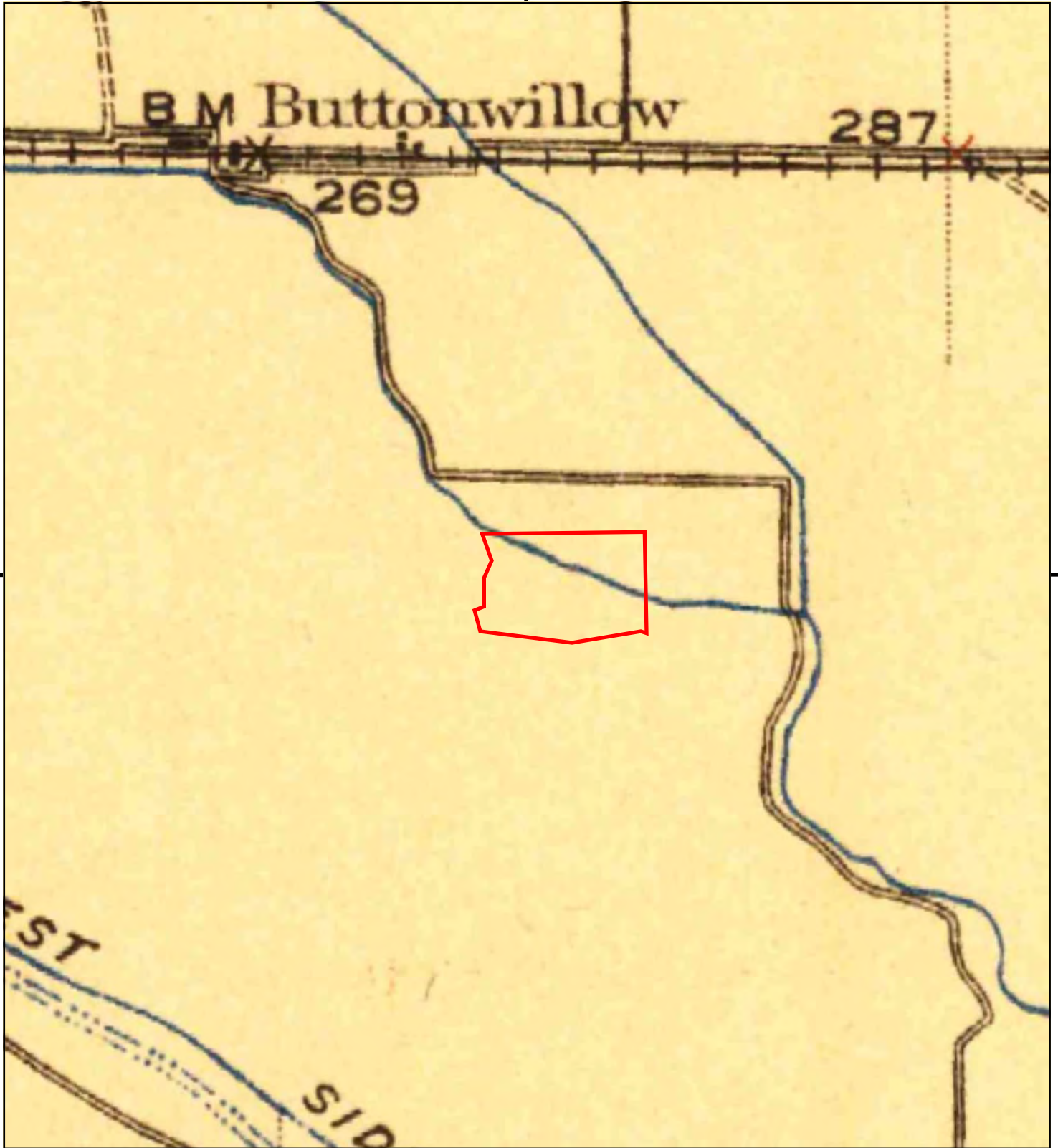
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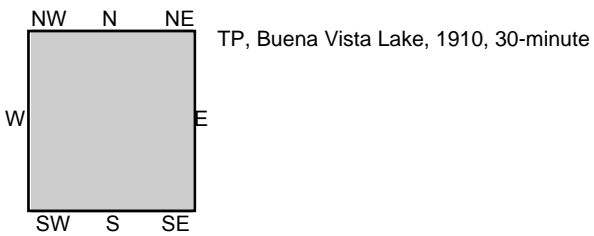
TP, Buena Vista Lake, 1912, 30-minute

SITE NAME: Daley Ranch Recharge Pond Site
 ADDRESS: Not Reported
 Buttonwillow, CA 93206
 CLIENT: GEI Consultants





This report includes information from the following map sheet(s).



SITE NAME: Daley Ranch Recharge Pond Site
ADDRESS: Not Reported
Buttonwillow, CA 93206
CLIENT: GEI Consultants



Daley Ranch Recharge Pond Site

Not Reported

Buttonwillow, CA 93206

Inquiry Number: 6283947.2s

November 30, 2020

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-8
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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NOT REPORTED
BUTTONWILLOW, CA 93206

COORDINATES

Latitude (North): 35.3821030 - 35° 22' 55.57"
Longitude (West): 119.4539400 - 119° 27' 14.18"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 277092.0
UTM Y (Meters): 3917984.5
Elevation: 275 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5639467 BUTTONWILLOW, CA
Version Date: 2012

South Map: 5639479 EAST ELK HILLS, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140618
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
NOT REPORTED
BUTTONWILLOW, CA 93206

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	SNOW PROPERTY	SECT 19,20,28,29; T2	CPS-SLIC, CERS	Higher	3801, 0.720, NNE
2	BUTTONWILLOW DUSTERS	HIGHWAY 58 & WASCO W	ENVIROSTOR, LUST, Cortese, CERS	Higher	5513, 1.044, NNE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

EXECUTIVE SUMMARY

HIST Cal-Sites.....	Historical Calsites Database
SCH.....	School Property Evaluation Program
CDL.....	Clandestine Drug Labs
CERS HAZ WASTE.....	CERS HAZ WASTE
Toxic Pits.....	Toxic Pits Cleanup Act Sites
US CDL.....	National Clandestine Laboratory Register
PFAS.....	PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST.....	SWEEPS UST Listing
HIST UST.....	Hazardous Substance Storage Container Database
CA FID UST.....	Facility Inventory Database
CERS TANKS.....	California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS.....	Environmental Liens Listing
LIENS 2.....	CERCLA Lien Information
DEED.....	Deed Restriction Listing

Records of Emergency Release Reports

HMIRS.....	Hazardous Materials Information Reporting System
CHMIRS.....	California Hazardous Material Incident Report System
LDS.....	Land Disposal Sites Listing
MCS.....	Military Cleanup Sites Listing
SPILLS 90.....	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing

EXECUTIVE SUMMARY

DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
HWTS.....	Hazardous Waste Tracking System
MINES MRDS.....	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/27/2020 has revealed that there is 1 ENVIROSTOR site within approximately 1.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>BUTTONWILLOW DUSTERS</i> Facility Id: 15070025 Status: Inactive - Needs Evaluation	<i>HIGHWAY 58 & WASCO W</i>	<i>NNE 1 - 2 (1.044 mi.)</i>	<i>2</i>	<i>9</i>

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>SNOW PROPERTY</i>	<i>SECT 19,20,28,29; T2</i>	<i>NNE 1/2 - 1 (0.720 mi.)</i>	<i>1</i>	<i>8</i>
Database: CPS-SLIC, Date of Government Version: 06/08/2020 Facility Status: Completed - Case Closed Global Id: SLT5FS494467				

EXECUTIVE SUMMARY

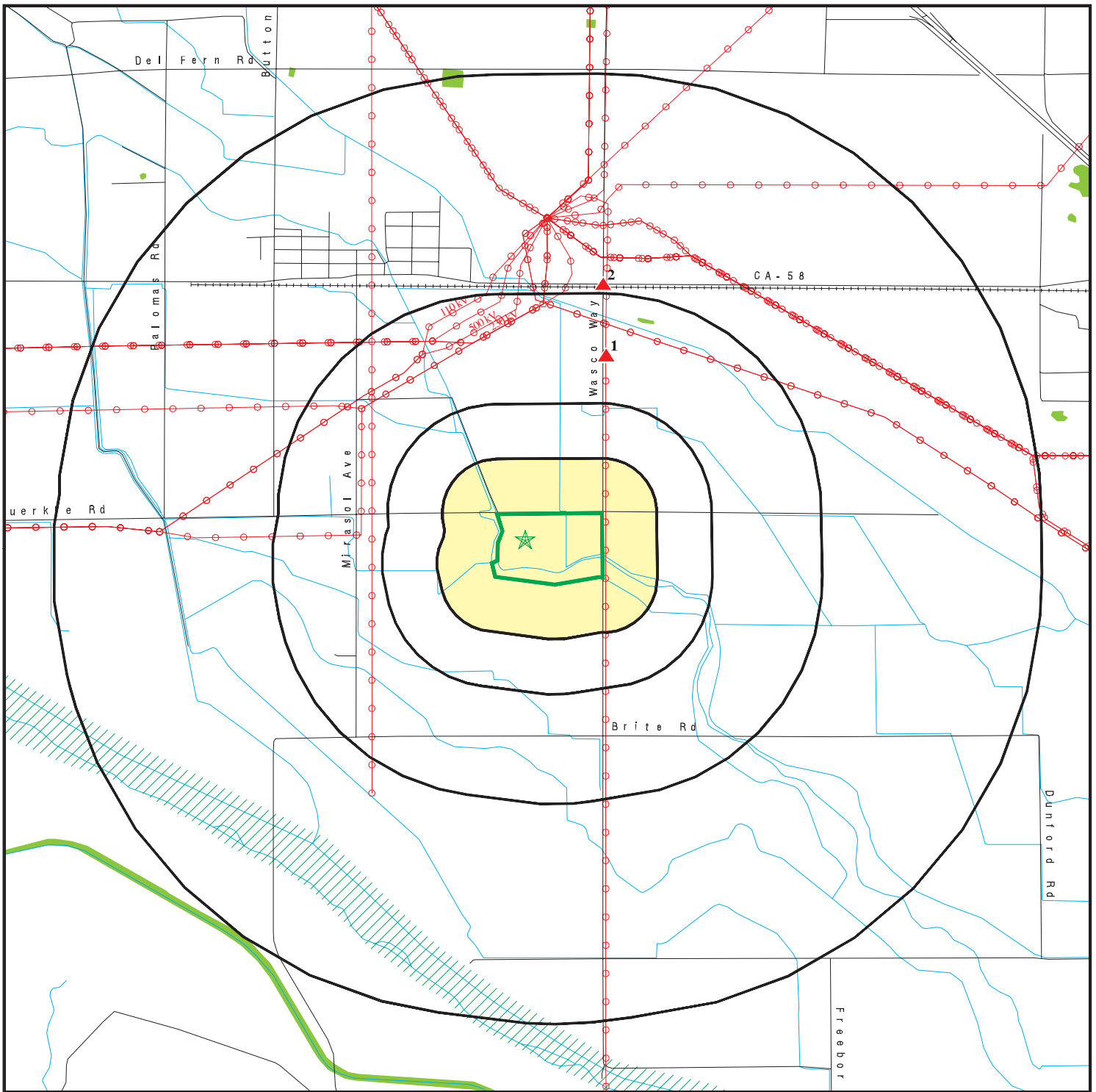
Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.


Site Name


Database(s)


CDL

OVERVIEW MAP - 6283947.2S



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 National Priority List Sites

 Dept. Defense Sites

 Indian Reservations BIA


 Power transmission lines

 Special Flood Hazard Area (1%)

 0.2% Annual Chance Flood Hazard

 National Wetland Inventory

 State Wetlands

 Areas of Concern

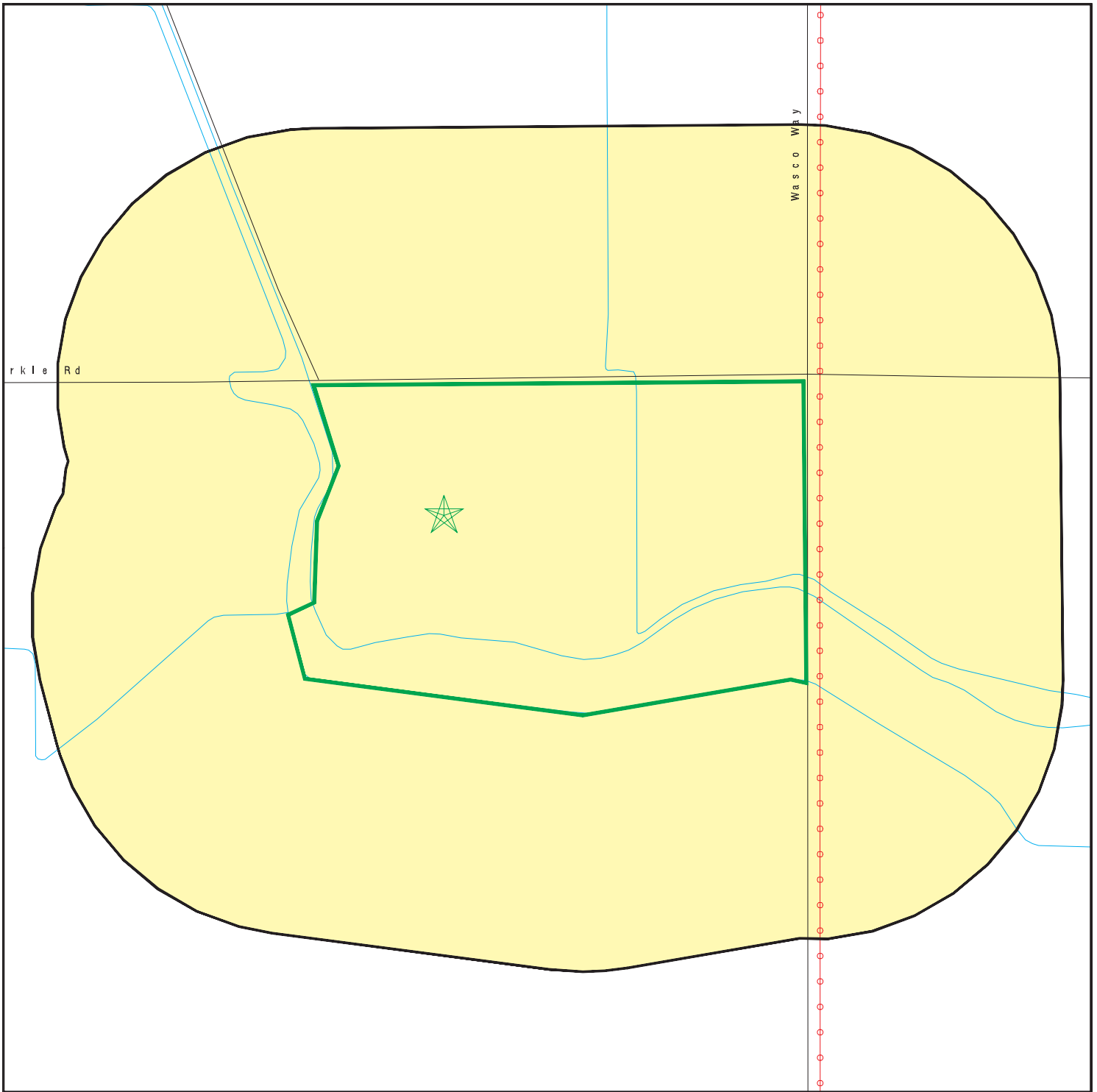









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.






SITE NAME: Daley Ranch Recharge Pond Site
 ADDRESS: Not Reported
 Buttonwillow CA 93206
 LAT/LONG: 35.382103 / 119.45394

CLIENT: GEI Consultants
 CONTACT: Michelle Ricker
 INQUIRY #: 6283947.2s
 DATE: November 30, 2020 7:38 pm

DETAIL MAP - 6283947.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Daley Ranch Recharge Pond Site
 ADDRESS: Not Reported
 Buttonwillow CA 93206
 LAT/LONG: 35.382103 / 119.45394

CLIENT: GEI Consultants
 CONTACT: Michelle Ricker
 INQUIRY #: 6283947.2s
 DATE: November 30, 2020 7:38 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.250		0	0	0	0	0	0
Proposed NPL	1.250		0	0	0	0	0	0
NPL LIENS	1.250		0	0	0	0	0	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.250		0	0	0	0	0	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.750		0	0	0	0	NR	0
SEMS	0.750		0	0	0	0	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.750		0	0	0	0	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.250		0	0	0	0	0	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.750		0	0	0	0	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.500		0	0	0	NR	NR	0
RCRA-SQG	0.500		0	0	0	NR	NR	0
RCRA-VSQG	0.500		0	0	0	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.750		0	0	0	0	NR	0
US ENG CONTROLS	0.750		0	0	0	0	NR	0
US INST CONTROLS	0.750		0	0	0	0	NR	0
<i>Federal ERNS list</i>								
ERNS	0.250		0	0	NR	NR	NR	0
<i>State- and tribal - equivalent NPL RESPONSE</i>								
RESPONSE	1.250		0	0	0	0	0	0
<i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i>								
ENVIROSTOR	1.250		0	0	0	0	1	1
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.750		0	0	0	0	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.750		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.750		0	0	0	0	NR	0
CPS-SLIC	0.750		0	0	0	1	NR	1
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.500		0	0	0	NR	NR	0
UST	0.500		0	0	0	NR	NR	0
AST	0.500		0	0	0	NR	NR	0
INDIAN UST	0.500		0	0	0	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.750		0	0	0	0	NR	0
VCP	0.750		0	0	0	0	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.750		0	0	0	0	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.750		0	0	0	0	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.750		0	0	0	0	NR	0
SWRCY	0.750		0	0	0	0	NR	0
HAULERS	0.250		0	0	NR	NR	NR	0
INDIAN ODI	0.750		0	0	0	0	NR	0
DEBRIS REGION 9	0.750		0	0	0	0	NR	0
ODI	0.750		0	0	0	0	NR	0
IHS OPEN DUMPS	0.750		0	0	0	0	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.250		0	0	NR	NR	NR	0
HIST Cal-Sites	1.250		0	0	0	0	0	0
SCH	0.500		0	0	0	NR	NR	0
CDL	0.250		0	0	NR	NR	NR	0
CERS HAZ WASTE	0.500		0	0	0	NR	NR	0
Toxic Pits	1.250		0	0	0	0	0	0
US CDL	0.250		0	0	NR	NR	NR	0
PFAS	0.750		0	0	0	0	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.500		0	0	0	NR	NR	0
HIST UST	0.500		0	0	0	NR	NR	0
CA FID UST	0.500		0	0	0	NR	NR	0
CERS TANKS	0.500		0	0	0	NR	NR	0
<i>Local Land Records</i>								
LIENS	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.250		0	0	NR	NR	NR	0
DEED	0.750		0	0	0	0	NR	0
Records of Emergency Release Reports								
HMIRS	0.250		0	0	NR	NR	NR	0
CHMIRS	0.250		0	0	NR	NR	NR	0
LDS	0.250		0	0	NR	NR	NR	0
MCS	0.250		0	0	NR	NR	NR	0
SPILLS 90	0.250		0	0	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.500		0	0	0	NR	NR	0
FUDS	1.250		0	0	0	0	0	0
DOD	1.250		0	0	0	0	0	0
SCRD DRYCLEANERS	0.750		0	0	0	0	NR	0
US FIN ASSUR	0.250		0	0	NR	NR	NR	0
EPA WATCH LIST	0.250		0	0	NR	NR	NR	0
2020 COR ACTION	0.500		0	0	0	NR	NR	0
TSCA	0.250		0	0	NR	NR	NR	0
TRIS	0.250		0	0	NR	NR	NR	0
SSTS	0.250		0	0	NR	NR	NR	0
ROD	1.250		0	0	0	0	0	0
RMP	0.250		0	0	NR	NR	NR	0
RAATS	0.250		0	0	NR	NR	NR	0
PRP	0.250		0	0	NR	NR	NR	0
PADS	0.250		0	0	NR	NR	NR	0
ICIS	0.250		0	0	NR	NR	NR	0
FTTS	0.250		0	0	NR	NR	NR	0
MLTS	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	0.250		0	0	NR	NR	NR	0
COAL ASH EPA	0.750		0	0	0	0	NR	0
PCB TRANSFORMER	0.250		0	0	NR	NR	NR	0
RADINFO	0.250		0	0	NR	NR	NR	0
HIST FTTS	0.250		0	0	NR	NR	NR	0
DOT OPS	0.250		0	0	NR	NR	NR	0
CONSENT	1.250		0	0	0	0	0	0
INDIAN RESERV	1.250		0	0	0	0	0	0
FUSRAP	1.250		0	0	0	0	0	0
UMTRA	0.750		0	0	0	0	NR	0
LEAD SMELTERS	0.250		0	0	NR	NR	NR	0
US AIRS	0.250		0	0	NR	NR	NR	0
US MINES	0.500		0	0	0	NR	NR	0
ABANDONED MINES	0.500		0	0	0	NR	NR	0
FINDS	0.250		0	0	NR	NR	NR	0
ECHO	0.250		0	0	NR	NR	NR	0
UXO	1.250		0	0	0	0	0	0
DOCKET HWC	0.250		0	0	NR	NR	NR	0
FUELS PROGRAM	0.500		0	0	0	NR	NR	0
CA BOND EXP. PLAN	1.250		0	0	0	0	0	0
Cortese	0.750		0	0	0	0	NR	0
CUPA Listings	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.500		0	0	0	NR	NR	0
EMI	0.250		0	0	NR	NR	NR	0
ENF	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.250		0	0	NR	NR	NR	0
HAZNET	0.250		0	0	NR	NR	NR	0
HIST CORTESE	0.750		0	0	0	0	NR	0
HWP	1.250		0	0	0	0	0	0
HWT	0.500		0	0	0	NR	NR	0
MINES	0.500		0	0	0	NR	NR	0
MWMP	0.500		0	0	0	NR	NR	0
NPDES	0.250		0	0	NR	NR	NR	0
PEST LIC	0.250		0	0	NR	NR	NR	0
PROC	0.750		0	0	0	0	NR	0
Notify 65	1.250		0	0	0	0	0	0
UIC	0.250		0	0	NR	NR	NR	0
UIC GEO	0.250		0	0	NR	NR	NR	0
WASTEWATER PITS	0.750		0	0	0	0	NR	0
WDS	0.250		0	0	NR	NR	NR	0
WIP	0.500		0	0	0	NR	NR	0
MILITARY PRIV SITES	0.250		0	0	NR	NR	NR	0
PROJECT	0.250		0	0	NR	NR	NR	0
WDR	0.250		0	0	NR	NR	NR	0
CIWQS	0.250		0	0	NR	NR	NR	0
CERS	0.250		0	0	NR	NR	NR	0
NON-CASE INFO	0.250		0	0	NR	NR	NR	0
OTHER OIL GAS	0.250		0	0	NR	NR	NR	0
PROD WATER PONDS	0.250		0	0	NR	NR	NR	0
SAMPLING POINT	0.250		0	0	NR	NR	NR	0
WELL STIM PROJ	0.250		0	0	NR	NR	NR	0
HWTS	0.250		0	0	NR	NR	NR	0
MINES MRDS	0.250		0	0	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.250		0	0	0	0	0	0
EDR Hist Auto	0.375		0	0	0	NR	NR	0
EDR Hist Cleaner	0.375		0	0	0	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	0.250		0	0	NR	NR	NR	0
RGA LUST	0.250		0	0	NR	NR	NR	0

- Totals -- 0 0 0 0 1 1 2

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

1
NNE
1/2-1
0.720 mi.
3801 ft.

SNOW PROPERTY
SECT 19,20,28,29; T29S/R24E
BUTTONWILLOW, CA 93206

CPS-SLIC **S106486183**
CERS **N/A**

Relative:
Higher
Actual:
276 ft.

CPS-SLIC:
Name: SNOW PROPERTY
Address: SECT 19,20,28,29; T29S/R24E
City,State,Zip: BUTTONWILLOW, CA 93206
Region: STATE
Facility Status: Completed - Case Closed
Status Date: 01/25/1991
Global Id: SLT5FS494467
Lead Agency: CENTRAL VALLEY RWQCB (REGION 5F)
Lead Agency Case Number: Not reported
Latitude: 35.3944
Longitude: -119.4474
Case Type: Cleanup Program Site
Case Worker: GJI
Local Agency: Not reported
RB Case Number: SLT5FS049
File Location: Not reported
Potential Media Affected: Soil
Potential Contaminants of Concern: Not reported
Site History: A small area with elevated arsenic in soil was excavated. Soil borings were drilled and sampled for hydrocarbons and pesticides. No constituents above cleanup levels were detected.

[Click here to access the California GeoTracker records for this facility:](#)

CERS:
Name: SNOW PROPERTY
Address: SECT 19,20,28,29; T29S/R24E
City,State,Zip: BUTTONWILLOW, CA 93206
Site ID: 231699
CERS ID: SLT5FS494467
CERS Description: Cleanup Program Site

Affiliation:
Affiliation Type Desc: Regional Board Caseworker
Entity Name: GREG ISSINGHOFF - CENTRAL VALLEY RWQCB (REGION 5F)
Entity Title: Not reported
Affiliation Address: 1685 E STREET
Affiliation City: FRESNO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: 5594884390

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

2
NNE
> 1
1.044 mi.
5513 ft.

**BUTTONWILLOW DUSTERS
HIGHWAY 58 & WASCO WAY
BUTTONWILLOW, CA 93206**

**ENVIROSTOR S101480411
LUST N/A
Cortese
CERS**

**Relative:
Higher
Actual:
279 ft.**

ENVIROSTOR:
 Name: BUTTONWILLOW DUSTERS INC
 Address: HIGHWAY 58
 City,State,Zip: BUTTONWILLOW, CA 93206
 Facility ID: 15070025
 Status: Inactive - Needs Evaluation
 Status Date: 11/24/1987
 Site Code: Not reported
 Site Type: Historical
 Site Type Detailed: * Historical
 Acres: Not reported
 NPL: NO
 Regulatory Agencies: NONE SPECIFIED
 Lead Agency: NONE SPECIFIED
 Program Manager: Not reported
 Supervisor: Not reported
 Division Branch: Cleanup Sacramento
 Assembly: 32
 Senate: 14
 Special Program: * CERC2
 Restricted Use: NO
 Site Mgmt Req: NONE SPECIFIED
 Funding: Not reported
 Latitude: 35.38861
 Longitude: -119.3791
 APN: NONE SPECIFIED
 Past Use: NONE SPECIFIED
 Potential COC: * Pesticides - Rinse Waters * Pesticides - Wastes From Production *
 EMPTY CONTAINERS, LESS THAN 30 GALLONS * OTHER PESTICIDE CONTAINERS,
 30 GALLONS OR MORE
 Confirmed COC: NONE SPECIFIED
 Potential Description: NONE SPECIFIED
 Alias Name: CAD982359358
 Alias Type: EPA Identification Number
 Alias Name: SLT5FQ084301
 Alias Type: GeoTracker Global ID
 Alias Name: 15070025
 Alias Type: Envirostor ID Number

Completed Info:
 Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Preliminary Assessment Report
 Completed Date: 11/02/1987
 Comments: Preliminary Assessment Done: Recommend medium-priority Site
 Inspection due to potential groundwater contamination.

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Site Screening
 Completed Date: 01/28/1987
 Comments: Site Screening Done: Need more information.

Completed Area Name: PROJECT WIDE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUTTONWILLOW DUSTERS (Continued)

S101480411

Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 10/01/1982
Comments: Facility identified via phonebook.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST REG 5:

Name: BUTTONWILLOW DUSTERS
Address: HIGHWAY 58 & WASCO WAY
City: BUTTONWILLOW
Region: 5
Status: Case Closed
Case Number: 5T15000564
Case Type: Soil only
Substance: GASOLINE
Staff Initials: JDW
Lead Agency: Local
Program: LUST
MTBE Code: N/A

CORTESE:

Name: BUTTONWILLOW DUSTERS
Address: HIGHWAY 58 & WASCO WAY
City,State,Zip: BUTTONWILLOW, CA 93206
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0602900547
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

BUTTONWILLOW DUSTERS (Continued)

S101480411

CERS:

Name: BUTTONWILLOW DUSTERS
Address: HIGHWAY 58 & WASCO WAY
City,State,Zip: BUTTONWILLOW, CA 93206
Site ID: 214596
CERS ID: T0602900547
CERS Description: Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc: Local Agency Caseworker
Entity Name: DOLORES GOUGH - KERN COUNTY
Entity Title: Not reported
Affiliation Address: 2700 "M" STREET SUITE 300
Affiliation City: BAKERSFIELD
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Regional Board Caseworker
Entity Name: JOHN WHITING - CENTRAL VALLEY RWQCB (REGION 5F)
Entity Title: Not reported
Affiliation Address: 1685 E STREET
Affiliation City: FRESNO
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Count: 1 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
KERN COUNTY	S107538866		HWY 46 (8-10 MI W OF WASCO)		CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: N/A
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: N/A
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: N/A
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/28/2020	Source: EPA
Date Data Arrived at EDR: 11/05/2020	Telephone: 800-424-9346
Date Made Active in Reports: 11/25/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/15/2020	Source: EPA
Date Data Arrived at EDR: 06/22/2020	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/06/2020	Source: Department of the Navy
Date Data Arrived at EDR: 08/21/2020	Telephone: 843-820-7326
Date Made Active in Reports: 11/11/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/28/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/05/2020	Telephone: 703-603-0695
Date Made Active in Reports: 11/18/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/15/2020

Date Data Arrived at EDR: 06/22/2020

Date Made Active in Reports: 09/17/2020

Number of Days to Update: 87

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 09/22/2020

Next Scheduled EDR Contact: 01/04/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/27/2020

Date Data Arrived at EDR: 07/27/2020

Date Made Active in Reports: 10/08/2020

Number of Days to Update: 73

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/26/2020

Next Scheduled EDR Contact: 02/08/2021

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/27/2020

Date Data Arrived at EDR: 07/27/2020

Date Made Active in Reports: 10/08/2020

Number of Days to Update: 73

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 10/26/2020

Next Scheduled EDR Contact: 02/08/2021

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/11/2020

Date Data Arrived at EDR: 05/12/2020

Date Made Active in Reports: 07/27/2020

Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 11/10/2020

Next Scheduled EDR Contact: 02/22/2021

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/14/2020	Source: EPA, Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-7439
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-8677
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3372
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/14/2020	Source: EPA Region 8
Date Data Arrived at EDR: 05/20/2020	Telephone: 303-312-6271
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/15/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/08/2020	Source: EPA Region 6
Date Data Arrived at EDR: 05/20/2020	Telephone: 214-665-6597
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/09/2020	Telephone: 866-480-1028
Date Made Active in Reports: 08/19/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 07/21/2020
Date Data Arrived at EDR: 09/03/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 83

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/26/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/14/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/29/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/08/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 84

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/23/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/03/2020	Source: EPA Region 7
Date Data Arrived at EDR: 05/20/2020	Telephone: 913-551-7003
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/14/2020	Source: EPA Region 4
Date Data Arrived at EDR: 05/26/2020	Telephone: 404-562-9424
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2020	Source: EPA Region 9
Date Data Arrived at EDR: 05/20/2020	Telephone: 415-972-3368
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 5
Date Data Arrived at EDR: 05/20/2020	Telephone: 312-886-6136
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/14/2020	Source: EPA Region 10
Date Data Arrived at EDR: 05/20/2020	Telephone: 206-553-2857
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 10/23/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/16/2020
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/27/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/27/2020	Telephone: 916-323-3400
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 10/26/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/08/2021
	Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/22/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/22/2020	Telephone: 916-323-7905
Date Made Active in Reports: 09/04/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/02/2020	Telephone: 202-566-2777
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 09/15/2020
Number of Days to Update: 7	Next Scheduled EDR Contact: 12/28/2020
	Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/28/2020
Date Data Arrived at EDR: 05/29/2020
Date Made Active in Reports: 08/12/2020
Number of Days to Update: 75

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 03/19/2020	Telephone: 202-307-1000
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 11/16/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/08/2021
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/27/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/27/2020	Telephone: 916-323-3400
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 10/26/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/08/2021
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 05/28/2020	Telephone: 916-255-6504
Date Made Active in Reports: 08/12/2020	Last EDR Contact: 11/11/2020
Number of Days to Update: 76	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/20/2020	Source: CalEPA
Date Data Arrived at EDR: 07/21/2020	Telephone: 916-323-2514
Date Made Active in Reports: 10/07/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 05/20/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 08/06/2020
Number of Days to Update: 78

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/26/2020
Date Data Arrived at EDR: 08/28/2020
Date Made Active in Reports: 11/17/2020
Number of Days to Update: 81

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 08/31/2020	Source: DTSC and SWRCB
Date Data Arrived at EDR: 08/31/2020	Telephone: 916-323-3400
Date Made Active in Reports: 11/20/2020	Last EDR Contact: 08/31/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/14/2020
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/22/2020	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/23/2020	Telephone: 202-366-4555
Date Made Active in Reports: 09/17/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/30/2020	Source: Office of Emergency Services
Date Data Arrived at EDR: 07/21/2020	Telephone: 916-845-8400
Date Made Active in Reports: 10/07/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020	Source: State Water Quality Control Board
Date Data Arrived at EDR: 06/09/2020	Telephone: 866-480-1028
Date Made Active in Reports: 08/19/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 06/08/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/09/2020	Telephone: 866-480-1028
Date Made Active in Reports: 08/19/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 08/05/2020	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 08/13/2020	Telephone: 202-528-4285
Date Made Active in Reports: 10/21/2020	Last EDR Contact: 11/17/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/13/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 10/08/2020
Number of Days to Update: 574	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 11/09/2020
Number of Days to Update: 63	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/15/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/22/2020	Telephone: 202-566-1917
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 09/22/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 11/02/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/15/2021
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 11/06/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/15/2021
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/17/2020	Telephone: 202-260-5521
Date Made Active in Reports: 09/10/2020	Last EDR Contact: 09/18/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 12/28/2020
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 07/24/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/21/2020
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/14/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 11/05/2020
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/15/2021
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 10/02/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 10/01/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/05/2020	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 08/10/2020	Telephone: 301-415-7169
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 10/13/2020
Number of Days to Update: 59	Next Scheduled EDR Contact: 01/31/2021
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018	Source: Department of Energy
Date Data Arrived at EDR: 12/04/2019	Telephone: 202-586-8719
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 09/04/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 12/14/2020
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 08/31/2020
Number of Days to Update: 251	Next Scheduled EDR Contact: 12/14/2020
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 11/06/2021
Number of Days to Update: 96	Next Scheduled EDR Contact: 02/15/2021
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 09/24/2020
Number of Days to Update: 84	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 10/27/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/21/2020
Number of Days to Update: 6

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 151

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/22/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 11/06/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/20/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 10/28/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 11/05/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/25/2020
Date Made Active in Reports: 11/18/2020
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/10/2020
Date Data Arrived at EDR: 09/15/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 66

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 11/24/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/22/2020
Date Data Arrived at EDR: 06/22/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 80

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 09/04/2020
Date Data Arrived at EDR: 09/15/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 66

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 11/17/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 06/27/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/02/2020	Telephone: 202-564-2280
Date Made Active in Reports: 09/28/2020	Last EDR Contact: 10/06/2020
Number of Days to Update: 88	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2018	Source: Department of Defense
Date Data Arrived at EDR: 07/02/2020	Telephone: 703-704-1564
Date Made Active in Reports: 09/17/2020	Last EDR Contact: 10/08/2020
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2020	Source: EPA
Date Data Arrived at EDR: 08/17/2020	Telephone: 800-385-6164
Date Made Active in Reports: 10/21/2020	Last EDR Contact: 11/13/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/22/2020	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 06/22/2020	Telephone: 916-323-3400
Date Made Active in Reports: 09/04/2020	Last EDR Contact: 09/23/2020
Number of Days to Update: 74	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 11/13/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/28/2020
Date Made Active in Reports: 11/17/2020
Number of Days to Update: 81

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 08/19/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 09/04/2020
Number of Days to Update: 14

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 11/13/2020
Number of Days to Update: 79

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 06/16/2020
Date Made Active in Reports: 08/28/2020
Number of Days to Update: 73

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/18/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/05/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/04/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 04/15/2020	Telephone: 916-255-1136
Date Made Active in Reports: 07/02/2020	Last EDR Contact: 10/05/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/17/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/17/2020	Telephone: 916-323-3400
Date Made Active in Reports: 11/05/2020	Last EDR Contact: 11/13/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/06/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/07/2020	Telephone: 916-440-7145
Date Made Active in Reports: 09/17/2020	Last EDR Contact: 10/06/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 01/18/2021
	Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 06/09/2020	Telephone: 916-322-1080
Date Made Active in Reports: 08/19/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/31/2020	Source: Department of Public Health
Date Data Arrived at EDR: 08/31/2020	Telephone: 916-558-1784
Date Made Active in Reports: 11/20/2020	Last EDR Contact: 08/31/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/14/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/10/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/10/2020	Telephone: 916-445-9379
Date Made Active in Reports: 10/29/2020	Last EDR Contact: 11/09/2020
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 08/31/2020	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 08/31/2020	Telephone: 916-445-4038
Date Made Active in Reports: 11/20/2020	Last EDR Contact: 08/31/2020
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/14/2020
	Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/08/2020	Source: Department of Conservation
Date Data Arrived at EDR: 06/09/2020	Telephone: 916-323-3836
Date Made Active in Reports: 08/19/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 08/21/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/21/2020	Telephone: 916-445-3846
Date Made Active in Reports: 08/27/2020	Last EDR Contact: 08/20/2020
Number of Days to Update: 6	Next Scheduled EDR Contact: 12/28/2020
	Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 06/06/2020	Source: Department of Conservation
Date Data Arrived at EDR: 06/09/2020	Telephone: 916-445-2408
Date Made Active in Reports: 08/20/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 06/08/2020	Source: State Water Resource Control Board
Date Data Arrived at EDR: 06/09/2020	Telephone: 866-480-1028
Date Made Active in Reports: 08/19/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/19/2019
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/09/2020
Number of Days to Update: 62

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/13/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/20/2020
Number of Days to Update: 72

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/20/2020
Number of Days to Update: 81

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/20/2020
Date Data Arrived at EDR: 07/21/2020
Date Made Active in Reports: 10/07/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 06/09/2020
Date Made Active in Reports: 08/19/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/08/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 10/13/2020
Date Data Arrived at EDR: 10/14/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System

Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 11/25/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 07/17/2020
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 10/19/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 06/17/2020
Date Data Arrived at EDR: 06/18/2020
Date Made Active in Reports: 09/02/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

COLUSA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 07/16/2020
Date Data Arrived at EDR: 07/22/2020
Date Made Active in Reports: 10/08/2020
Number of Days to Update: 78

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 06/08/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 70

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2020
Date Data Arrived at EDR: 07/01/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 78

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

GLENN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/14/2020
Number of Days to Update: 76

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/11/2020
Date Data Arrived at EDR: 05/12/2020
Date Made Active in Reports: 07/27/2020
Number of Days to Update: 76

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 11/20/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 08/13/2020
Date Data Arrived at EDR: 08/13/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 71

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/06/2020
Date Data Arrived at EDR: 07/10/2020
Date Made Active in Reports: 09/28/2020
Number of Days to Update: 80

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/01/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/13/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 78

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 08/17/2020
Date Made Active in Reports: 11/05/2020
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 42

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 10/12/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 09/25/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/25/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/04/2021
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/25/2020	Source: Community Health Services
Date Data Arrived at EDR: 04/14/2020	Telephone: 323-890-7806
Date Made Active in Reports: 07/01/2020	Last EDR Contact: 10/09/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/07/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/25/2021
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 10/13/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/05/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 11/11/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 03/01/2021
	Data Release Frequency: Varies

MARIN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 07/28/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 1

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 08/20/2020
Date Data Arrived at EDR: 08/24/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 77

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 11/15/2020
Next Scheduled EDR Contact: 03/08/3021
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/13/2020
Date Data Arrived at EDR: 07/15/2020
Date Made Active in Reports: 07/31/2020
Number of Days to Update: 16

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 09/23/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 07/29/2020
Date Data Arrived at EDR: 07/30/2020
Date Made Active in Reports: 10/13/2020
Number of Days to Update: 75

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 10/20/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

Date of Government Version: 06/10/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/02/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 79

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/02/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 08/03/2020
Date Made Active in Reports: 10/19/2020
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 11/24/2020
Date Data Arrived at EDR: 11/24/2020
Date Made Active in Reports: 11/25/2020
Number of Days to Update: 1

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/15/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/06/2020
Date Data Arrived at EDR: 10/07/2020
Date Made Active in Reports: 11/03/2020
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/04/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 08/31/2020
Date Data Arrived at EDR: 08/31/2020
Date Made Active in Reports: 11/23/2020
Number of Days to Update: 84

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 08/31/2020
Next Scheduled EDR Contact: 12/14/2020
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN FRANCISCO CO: CUPA Facility Listing Cupa facilities

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/22/2020
Number of Days to Update: 78

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/03/2020
Date Data Arrived at EDR: 08/05/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 82

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/10/2020
Next Scheduled EDR Contact: 12/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 07/27/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/11/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/01/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 08/20/2020
Date Data Arrived at EDR: 08/20/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 81

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 11/16/2020
Next Scheduled EDR Contact: 03/08/2021
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 07/30/2020
Date Data Arrived at EDR: 07/31/2020
Date Made Active in Reports: 10/16/2020
Number of Days to Update: 77

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 09/16/2020
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 07/07/2020
Date Data Arrived at EDR: 07/08/2020
Date Made Active in Reports: 09/25/2020
Number of Days to Update: 79

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2020
Date Data Arrived at EDR: 07/02/2020
Date Made Active in Reports: 09/17/2020
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 09/16/2020
Next Scheduled EDR Contact: 01/04/2021
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 10/02/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks Underground storage tank sites located in Sutter county.

Date of Government Version: 08/25/2020
Date Data Arrived at EDR: 08/26/2020
Date Made Active in Reports: 11/17/2020
Number of Days to Update: 83

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 11/23/2020
Next Scheduled EDR Contact: 03/15/2021
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 08/11/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 75

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

Date of Government Version: 07/14/2020
Date Data Arrived at EDR: 07/16/2020
Date Made Active in Reports: 09/29/2020
Number of Days to Update: 75

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 10/13/2020
Next Scheduled EDR Contact: 02/01/2021
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/06/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 81

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 10/28/2020
Next Scheduled EDR Contact: 02/15/2021
Data Release Frequency: Varies

TUOLUMNE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018	Source: Divison of Environmental Health
Date Data Arrived at EDR: 04/25/2018	Telephone: 209-533-5633
Date Made Active in Reports: 06/25/2018	Last EDR Contact: 10/13/2020
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/10/2020	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 07/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 10/08/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 78	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 09/23/2020
Number of Days to Update: 49	Next Scheduled EDR Contact: 01/11/2021
	Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 11/05/2020
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/22/2021
	Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/10/2020	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 07/22/2020	Telephone: 805-654-2813
Date Made Active in Reports: 10/07/2020	Last EDR Contact: 10/19/2020
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/01/2021
	Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2020	Source: Environmental Health Division
Date Data Arrived at EDR: 06/09/2020	Telephone: 805-654-2813
Date Made Active in Reports: 08/20/2020	Last EDR Contact: 09/08/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 12/21/2020
	Data Release Frequency: Quarterly

YOLO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 06/23/2020
Date Data Arrived at EDR: 06/29/2020
Date Made Active in Reports: 09/15/2020
Number of Days to Update: 78

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/11/2021
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/06/2020
Date Data Arrived at EDR: 08/07/2020
Date Made Active in Reports: 10/26/2020
Number of Days to Update: 80

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 11/03/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 10/20/2020
Date Made Active in Reports: 11/02/2020
Number of Days to Update: 13

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/09/2020
Next Scheduled EDR Contact: 02/22/2021
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/09/2020
Next Scheduled EDR Contact: 01/18/2021
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 04/29/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 10/30/2020
Next Scheduled EDR Contact: 02/08/2021
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/07/2020
Next Scheduled EDR Contact: 01/25/2021
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/11/2020
Next Scheduled EDR Contact: 03/01/2021
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/02/2020
Next Scheduled EDR Contact: 12/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

DALEY RANCH RECHARGE POND SITE
NOT REPORTED
BUTTONWILLOW, CA 93206

TARGET PROPERTY COORDINATES

Latitude (North): 35.382103 - 35° 22' 55.57"
Longitude (West): 119.45394 - 119° 27' 14.18"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 277092.0
UTM Y (Meters): 3917984.5
Elevation: 275 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5639467 BUTTONWILLOW, CA
Version Date: 2012

South Map: 5639479 EAST ELK HILLS, CA
Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

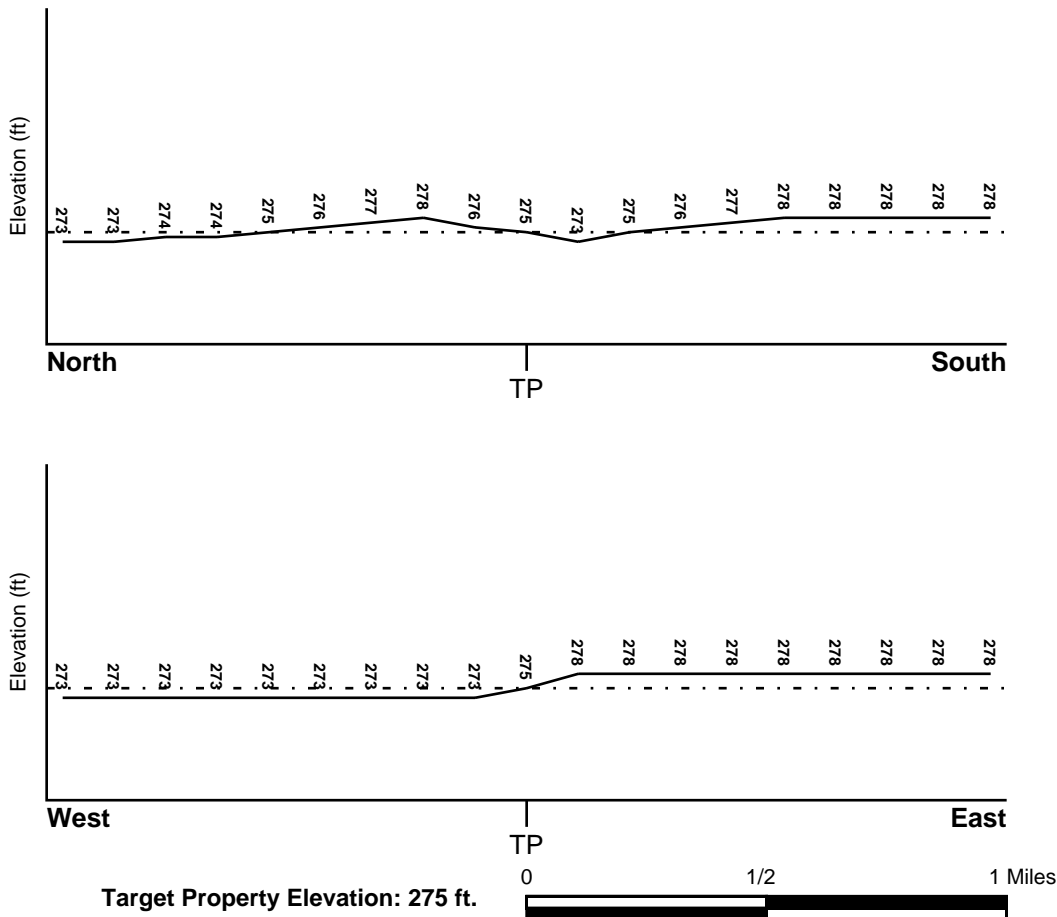
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06029C1750E	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06029C2225E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
BUTTONWILLOW	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

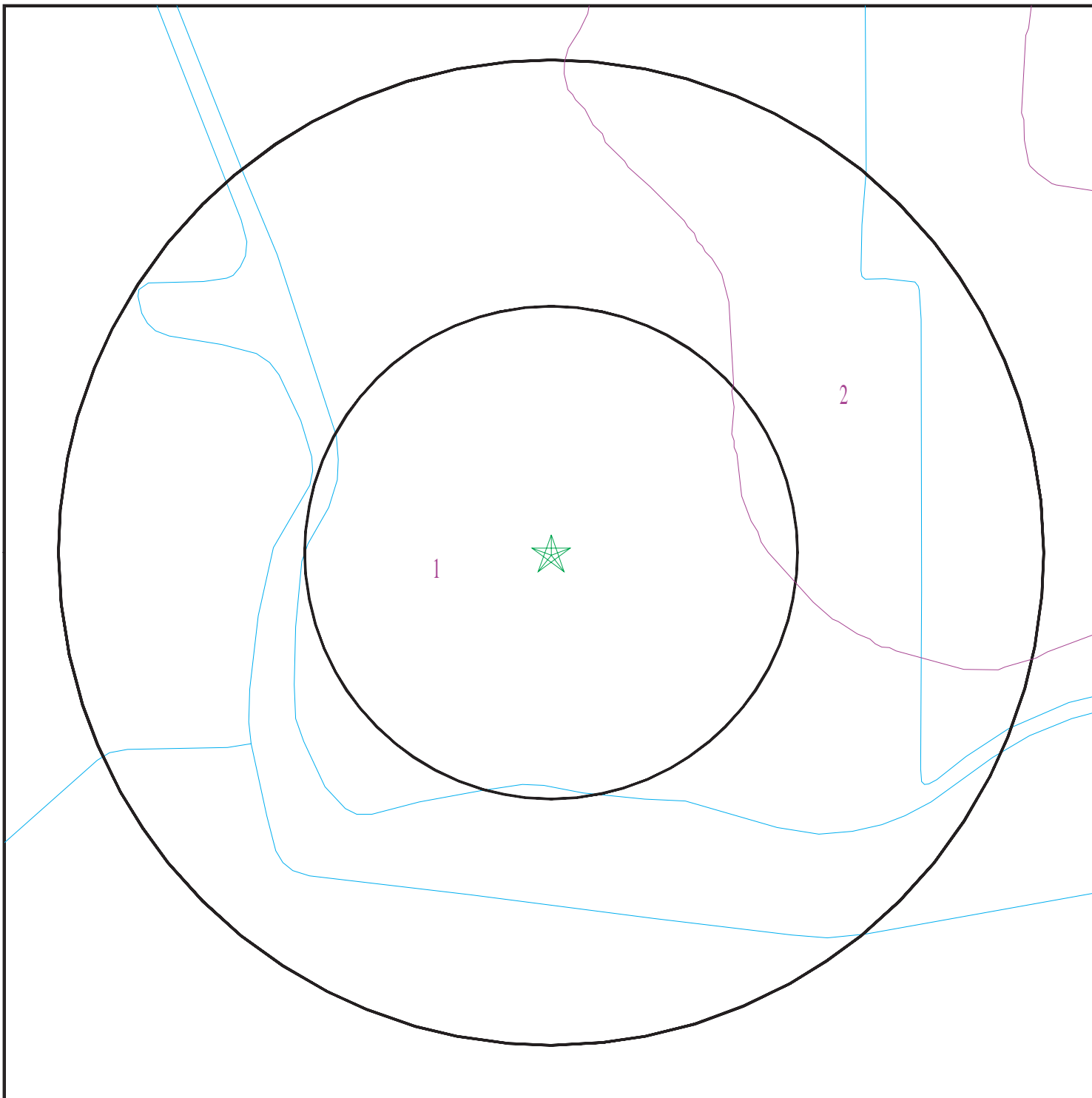
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (<i>decoded above as Era, System & Series</i>)

GEOLOGIC AGE IDENTIFICATION

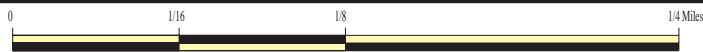
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6283947.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Daley Ranch Recharge Pond Site
ADDRESS: Not Reported
Buttonwillow CA 93206
LAT/LONG: 35.382103 / 119.45394

CLIENT: GEI Consultants
CONTACT: Michelle Ricker
INQUIRY #: 6283947.2s
DATE: November 30, 2020 7:39 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: LOKERN

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	7 inches	48 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9
3	48 inches	66 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Map ID: 2

Soil Component Name: BUTTONWILLOW

Soil Surface Texture:
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	27 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
2	27 inches	55 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9
3	55 inches	64 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
2	USGS40000163528	1/8 - 1/4 Mile WNW
3	USGS40000163497	1/4 - 1/2 Mile SW
6	USGS40000163486	1/4 - 1/2 Mile SE
7	USGS40000163556	1/4 - 1/2 Mile ENE
12	USGS40000163533	1/2 - 1 Mile East
C16	USGS40000163590	1/2 - 1 Mile NW
D20	USGS40000163480	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

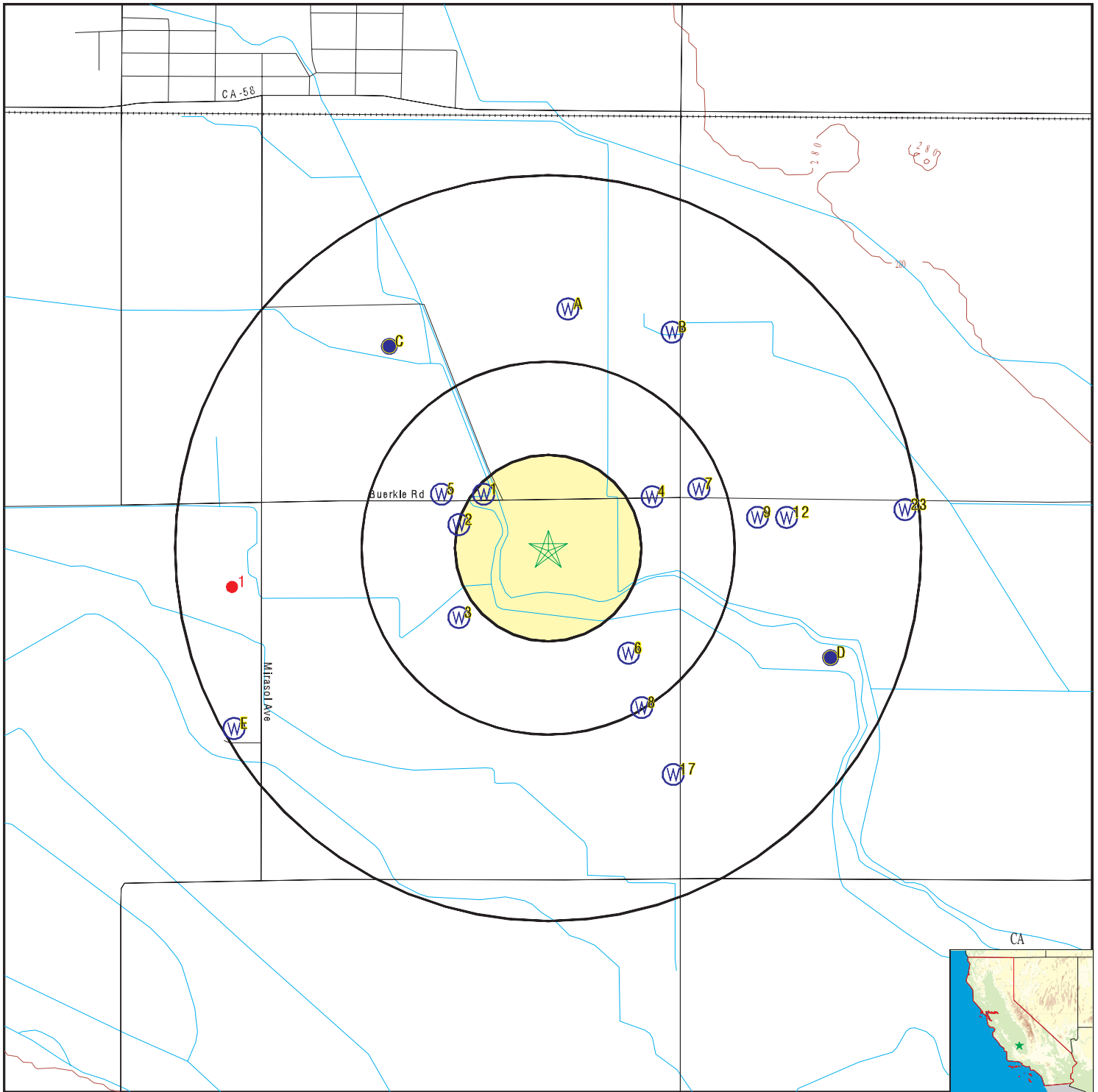
MAP ID	WELL ID	LOCATION FROM TP
1	CADWR0000011256	1/8 - 1/4 Mile NW
4	CADWR8000018151	1/4 - 1/2 Mile ENE
5	CADWR8000018154	1/4 - 1/2 Mile WNW
8	CADPR0000002488	1/4 - 1/2 Mile SSE
9	CADWR8000018142	1/2 - 1 Mile East
A10	CADWR0000000455	1/2 - 1 Mile North
A11	CADWR0000027385	1/2 - 1 Mile North
B13	CAEDF0000030441	1/2 - 1 Mile NNE
B14	CADWR8000018178	1/2 - 1 Mile NNE
C15	CAUSGSN00001225	1/2 - 1 Mile NW
17	CADWR8000018098	1/2 - 1 Mile SSE
C18	CADWR0000023287	1/2 - 1 Mile NW
D19	CAEDF0000029192	1/2 - 1 Mile ESE
D21	CAUSGSN00014330	1/2 - 1 Mile ESE
E22	CADDW0000015773	1/2 - 1 Mile WSW
23	CADWR8000018145	1/2 - 1 Mile East
E24	CADDW0000002407	1/2 - 1 Mile WSW
E25	17136	1/2 - 1 Mile WSW

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG13000003261	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 6283947.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Daley Ranch Recharge Pond Site
 ADDRESS: Not Reported
 Buttonwillow CA 93206
 LAT/LONG: 35.382103 / 119.45394

CLIENT: GEI Consultants
 CONTACT: Michelle Ricker
 INQUIRY #: 6283947.2s
 DATE: November 30, 2020 7:38 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
NW **CA WELLS** **CADWR0000011256**
1/8 - 1/4 Mile
Lower

Well ID:	29S23E24Q002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	29S23E24Q002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=29S23E24Q002M&store_num=		
GeoTracker Data:	Not Reported		

2
WNW **FED USGS** **USGS40000163528**
1/8 - 1/4 Mile
Lower

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	029S023E24Q001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1934	Well Depth:	822
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1960-10-12
Feet below surface:	64.00	Feet to sea level:	Not Reported
Note:	Not Reported		

3
SW **FED USGS** **USGS40000163497**
1/4 - 1/2 Mile
Higher

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	029S023E25B001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1959	Well Depth:	378
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-02-19
Feet below surface:	79.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

4
ENE
1/4 - 1/2 Mile
Higher **CA WELLS** **CADWR8000018151**

State Well #:	29S24E19N061M	Station ID:	38126
Well Name:	Not Reported	Well Use:	Not Reported
Well Type:	Unknown	Well Depth:	0
Basin Name:	Kern County	Well Completion Rpt #:	Not Reported

5
WNW
1/4 - 1/2 Mile
Lower **CA WELLS** **CADWR8000018154**

State Well #:	29S23E24P001M	Station ID:	36927
Well Name:	Hair	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Kern County	Well Completion Rpt #:	Not Reported

6
SE
1/4 - 1/2 Mile
Higher **FED USGS** **USGS40000163486**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	029S023E25H001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	255
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-02-16
Feet below surface:	83.00	Feet to sea level:	Not Reported
Note:	Not Reported		

7
ENE
1/4 - 1/2 Mile
Higher **FED USGS** **USGS40000163556**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	029S024E19N001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Date:	198206	Well Depth:	19.4
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels, Number of Measurements:	1	Level reading date:	1989-04-05
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The site was dry (no water level recorded).		

8
SSE
1/4 - 1/2 Mile
Higher

CA WELLS CADPR0000002488

Well ID:	84369	Well Type:	UNK
Source:	Department of Pesticide Regulation		
Other Name:	84369	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DPR&samp_date=&global_id=&assigned_name=84369&store_num=		
GeoTracker Data:	Not Reported		

9
East
1/2 - 1 Mile
Higher

CA WELLS CADWR8000018142

State Well #:	29S24E19P001M	Station ID:	38622
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Kern County	Well Completion Rpt #:	Not Reported

A10
North
1/2 - 1 Mile
Higher

CA WELLS CADWR0000000455

Well ID:	29S23E24H002M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	29S23E24H002M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=29S23E24H002M&store_num=		
GeoTracker Data:	Not Reported		

A11
North
1/2 - 1 Mile
Higher

CA WELLS CADWR00000027385

Well ID:	29S23E24H001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	29S23E24H001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=29S23E24H001M&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

12
East
1/2 - 1 Mile
Higher

FED USGS USGS40000163533

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18030012
Monitor Location:	029S024E19P001M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	247
Aquifer:	Central Valley aquifer system	Well Hole Depth:	Not Reported
Formation Type:	Not Reported		
Construction Date:	Not Reported		
Well Depth Units:	ft		
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1961-02-17
Feet below surface:	64.00	Feet to sea level:	Not Reported
Note:	Not Reported		

B13
NNE
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000030441

Well ID:	AGC100012323-BVCWD00006	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	BVCWD00006
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&sample_date=&global_id=AGC100012323&assigned_name=BVCWD00006&store_num=		
GeoTracker Data:	Not Reported		

B14
NNE
1/2 - 1 Mile
Higher

CA WELLS CADWR8000018178

State Well #:	29S23E24H001M	Station ID:	46706
Well Name:	dmw08	Well Use:	Observation
Well Type:	Single Well	Well Depth:	404
Basin Name:	Kern County	Well Completion Rpt #:	Not Reported

C15
NW
1/2 - 1 Mile
Lower

CA WELLS CAUSGSN00001225

Well ID:	USGS-352320119274501	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-352320119274501	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&sample_date=&global_id=&assigned_name=USGS-352320119274501&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C16
NW
1/2 - 1 Mile
Lower

FED USGS USGS40000163590

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	029S023E24M001M	Type:	Well
Description:	Not Reported	HUC:	18030012
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Central Valley aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	1934	Well Depth:	831
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1960-10-12
Feet below surface:	67.00	Feet to sea level:	Not Reported
Note:	Not Reported		

17
SSE
1/2 - 1 Mile
Higher

CA WELLS CADWR8000018098

State Well #:	29S23E25J001M	Station ID:	22195
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Kern County	Well Completion Rpt #:	Not Reported

C18
NW
1/2 - 1 Mile
Lower

CA WELLS CADWR0000023287

Well ID:	29S23E24M001M	Well Type:	UNK
Source:	Department of Water Resources		
Other Name:	29S23E24M001M	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=29S23E24M001M&store_num=		
GeoTracker Data:	Not Reported		

D19
ESE
1/2 - 1 Mile
Higher

CA WELLS CAEDF0000029192

Well ID:	AGC100012323-BVCWD00005	Well Type:	MONITORING
Source:	Agricultural Lands	Other Name:	BVCWD00005
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=AGLAND&samp_date=&global_id=AGC100012323&assigned_name=BVCWD00005&store_num=		
GeoTracker Data:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D20
ESE
1/2 - 1 Mile
Higher

FED USGS USGS40000163480

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18030012
Monitor Location:	029S024E30F003M	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Aquifer Type:	Not Reported
Contrib Drainage Area:	Not Reported	Well Depth:	362
Aquifer:	Central Valley aquifer system	Well Hole Depth:	370
Formation Type:	Not Reported		
Construction Date:	19800612		
Well Depth Units:	ft		
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1986-05-07
Feet below surface:	15.63	Feet to sea level:	Not Reported
Note:	Not Reported		

D21
ESE
1/2 - 1 Mile
Higher

CA WELLS CAUSGSN00014330

Well ID:	USGS-352240119262201	Well Type:	UNK
Source:	United States Geological Survey		
Other Name:	USGS-352240119262201	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-352240119262201&store_num=		
GeoTracker Data:	Not Reported		

E22
WSW
1/2 - 1 Mile
Higher

CA WELLS CADDW0000015773

Well ID:	1500152-001	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 01 - ABANDONED	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=1500152-001&store_num=		
GeoTracker Data:	Not Reported		

23
East
1/2 - 1 Mile
Higher

CA WELLS CADWR8000018145

State Well #:	29S24E19R001M	Station ID:	24214
Well Name:	Not Reported	Well Use:	Unknown
Well Type:	Unknown	Well Depth:	0
Basin Name:	Kern County	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

E24
WSW
1/2 - 1 Mile
Higher

CA WELLS CADDW0000002407

Well ID:	1500152-002	Well Type:	MUNICIPAL
Source:	Department of Health Services		
Other Name:	WELL 02	GAMA PFAS Testing:	Not Reported
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DHS&samp_date=&global_id=&assigned_name=1500152-002&store_num=		
GeoTracker Data:	Not Reported		

E25
WSW
1/2 - 1 Mile
Lower

CA WELLS 17136

Seq:	17136	Prim sta c:	29S/23E-26J03 M
Frds no:	1500152001	County:	15
District:	12	User id:	CYA
System no:	1500152	Water type:	G
Source nam:	WELL 01	Station ty:	WELL/AMBNT/MUN/INTAKE
Latitude:	352230.0	Longitude:	1192805.0
Precision:	4	Status:	AU
Comment 1:	0.6 MILES SOUTH OF		
Comment 2:	1.7 MILES SOUTH OF HIGHWAY 58 BUTTONWILLOW CALIFORNIA		
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	1500152	System nam:	Mirasol Company Water System
Hqname:	Not Reported	Address:	16500 MILLUX RD.
City:	BAKERSFIELD	State:	CA
Zip:	93311	Zip ext:	Not Reported
Pop serv:	35	Connection:	15
Area serve:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1
West
1/2 - 1 Mile

OIL_GAS CAOG13000003261

API #:	0402936528	Well #:	1
Well Status:	Plugged	Well Type:	DH
Operator Name:	Ed McAdams, Trustee	Lease Name:	G & Y
Field Name:	Any Field	Area Name:	Any Area
GIS Source:	hud	Confidential Well:	N
Directionally Drilled:	N	SPUD Date:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93206	1	0

Federal EPA Radon Zone for KERN County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level \geq 2 pCi/L and \leq 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93206

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.900 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

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Daley Ranch Recharge Pond Site

Not Reported

Buttonwillow, CA 93206

Inquiry Number: 6283947.3

November 30, 2020

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

11/30/20

Site Name:

Daley Ranch Recharge Pond S
Not Reported
Buttonwillow, CA 93206
EDR Inquiry # 6283947.3

Client Name:

GEI Consultants
5001 California Ave Suite 120
BAKERSFIELD, CA 93309
Contact: Michelle Ricker



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C6BD-42C4-B2EC
PO # 2004962
Project Daley Ranch Recharge Pond

UNMAPPED PROPERTY

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Sanborn® Library search results

Certification #: C6BD-42C4-B2EC

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- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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Appendix B: Site Reconnaissance Checklist and Site Photos

Phase I ESA/Preliminary Assessment Site Visit Checklist

Site Name Project No.	BVWSD - Daley Ranch Recharge		Date	12/22/2020
Address	Wasco Way & Buerkle Rd, Buttonwillow CA	Block Lot		
GEI Personnel	Michelle Ricker	Weather	Partly cloudy, cool	
Site Representative/ Accompanied By	Name: None (Waived by client/property owner) Phone #: Company: Title/years at property:			
Property Size (acres)	92	Number of Buildings	None	
Property Usage	Agriculture	Building Size (sq ft)	N/A	
Building Construction	Construction Date: N/A Access to roof: N/A Foundation: N/A Exterior/Interior Walls: N/A Basement/Crawl Space/Slab on Grade: N/A Basement Usage: N/A			
Inaccessible Areas	None	Surface Cover		
Water Bodies On-site?	Drained Irrigation Reservoir, Arizona Ditch, Main Drain Canal	Location	Near southeast corner (reservoir), south boundary (Arizona Ditch), west boundary (Main Drain Canal)	
Site Topography	Approx. 0.1% slope from SE to NW	Stormwater Runoff		
Current Owner: Buena Vista Water Storage District Operations: Idle		Prior Owners: Operations:		
Current Tenants	Name: None Operations: To be used for groundwater recharge	Name: None Operations:		
Description of Prior Operations	Prior Tenants: None Prior Operations:		Prior Tenants: None Prior Operations:	
Utilities				
Electric Supplier	PG&E			
Transformers (y/n)				
Water Supplier/Potable Well?	Depth:	Installation Date:	Prev. Sampled? (what for?)	

Sewer Supplier	N/A		
Septic (y/n) Prior?	(Describe details in sections below) N/A		
Solid Waste (trash) Dumpster?	(Describe details in sections below) Disposal Provider: N/A		
Natural Gas (y/n)	Southern California Gas		
Heating Oil (y/n) Prior?	(Describe details in sections below) N/A		
HVAC System	N/A		
Adjoining Properties (Usage)			
North	Permanent tree crops (nuts)		
South	Permanent tree crops (nuts)		
East	Unplanted agricultural land		
West	Unplanted agricultural land		
Interview			
Name	Andrew Bell		
Company	BVWSD	Number of Employees 22	Union/Non-Union
Title	Engineer		
Association with Site	Owner's representative		
Time Associated	6 years		
Knowledge of Prior Reports	None		
Environmental Enforcements	None		
Environmental Permits	None		
Environmental Liens	None on site		
Knowledge of Violations	None		
Knowledge of Fires	How was fire handled? N/A		
User Questionnaire (Phase I): Submitted <input checked="" type="checkbox"/> Received <input checked="" type="checkbox"/>			
Key Documents to Obtain if Available			
Chemical Inventory <input type="checkbox"/>	Manifests <input type="checkbox"/>	Site Plan <input type="checkbox"/>	Permits <input type="checkbox"/>
Potential RECs and/or AOCs			
<input type="checkbox"/> Aboveground Storage Tanks & Associated Piping (include number, size, contents)	Location: Surface Cover Beneath:	Notes: (evidence of leaks, type of storage, etc).	
<input type="checkbox"/> Area of Stressed Vegetation	Location:	Notes: (potential source)	

<input type="checkbox"/> Area Which Received Flood or Stormwater from Potentially Contaminated Areas	Location:	Notes:
<input type="checkbox"/> Chemical Storage	Location: Surface Cover Beneath:	Notes: (evidence of leaks, chemicals stored, containers, etc).
<input type="checkbox"/> Compressor Vent Discharge	Location: Surface Cover Beneath:	Notes: (evidence of staining) Stained, speedy dry on staining.
<input type="checkbox"/> Discharge Areas	Location:	Notes:
<input type="checkbox"/> Discolored or Spill Area	Location:	Notes: (potential source)
<input type="checkbox"/> Drainage Swale & Culvert	Location:	Notes: (wet or dry?)
<input type="checkbox"/> Drywell and Sump	Location:	Notes: (evidence of staining or odors?)
<input type="checkbox"/> Dumpster	Location: Surface Cover Beneath:	Notes: (disposal company, staining beneath? contents?)
<input type="checkbox"/> Electrical Transformer & Capacitor Labels:	Location: Type: (dry/pole/pad) Pole	Notes: (staining?) Transformer #:
<input type="checkbox"/> Floor Drain Collection System	Location: Discharge Location:	Notes:

<input checked="" type="checkbox"/> Former Agricultural	Years: 70+ years	Notes: According to aerial photos from EDR, crops varied from annual row crops, hay crops to most recent usage for permanent tree crops. Trees have been removed and mulched on-site.
<input type="checkbox"/> Hazardous Wastes & Materials Disposal Provider:	Location: Surface Cover Beneath:	Notes: (evidence of leaks, type of storage, etc).
<input type="checkbox"/> Historic/ Alternative/ Clean Fill	Location:	Notes:
<input type="checkbox"/> Hydraulic Lifts/Elevators	Location:	Notes: (maintenance records? Staining?)
<input type="checkbox"/> Incinerator	Location:	Notes:
<input type="checkbox"/> Landfill/Landfarm	Years:	Notes:
<input type="checkbox"/> Loading/ Unloading Docks	Location:	Notes: (staining?)
<input type="checkbox"/> Monitoring Wells	Location:	Notes: (abandoned or active?)
<input type="checkbox"/> Non-Contact Cooling Water Discharge	Location:	Notes:
<input type="checkbox"/> Open Area Away from Production Area	Location:	Notes:
<input type="checkbox"/> Piping, Aboveground and belowground pumping station/sump/pit	Location:	Notes:

<input type="checkbox"/> Process Area Sinks	Location: Discharges to:	Notes: (what is discharged?)
<input type="checkbox"/> Rail Car/Rail Line Current or historic?	Location:	Notes:
<input type="checkbox"/> Roof Leaders	Do Processes Vent to Roof:	Staining:
<input type="checkbox"/> Septic System, Leachfield or seepage pit	Location:	Notes:
<input type="checkbox"/> Silos	Location:	Notes: (what do they store)
<input type="checkbox"/> Sprayfield	Location:	Notes:
<input type="checkbox"/> Storage Pad including Drum and/or Waste Storage	Location: Surface Cover Beneath:	Notes: (staining? Condition, contents, number)
<input checked="" type="checkbox"/> Storm Sewer System/Storm Water Detention Pond	Location: Southwest corner of project site	Notes: (where does it discharge to?) There is no discharge outlet for this basin/borrow site. Water evaporates or percolates.
<input type="checkbox"/> Underground Industrial Sewer	Location:	Notes:
<input type="checkbox"/> Underground Storage Tanks (include registration no., how many, capacity, contents)	Location:	Notes:
<input type="checkbox"/> Waste Piles	Location:	Notes: (evidence of staining or odors?)
<input type="checkbox"/> Wastewater Treatment	Location: Discharges to:	Notes: (permits?)

Sketch of Facility:



Additional Notes/other conditions observed but not listed above:



Figure 1: Corner of Wasco Way and Buerkle Road, facing West



Figure 2: Project Site at Wasco Way, facing Southwest



Figure 3: Adjacent Parcel across Wasco Way, facing East



Figure 4: Buerkle Road and Wasco Way, facing North



Figure 5: Existing Reservoir, facing Southwest



Figure 6: Southeast Corner of Site, facing West



Figure 7: Media Filter Bank at Existing Reservoir



Figure 8: Existing Agricultural Supply Well



Figure 10: Arizona Ditch, facing West

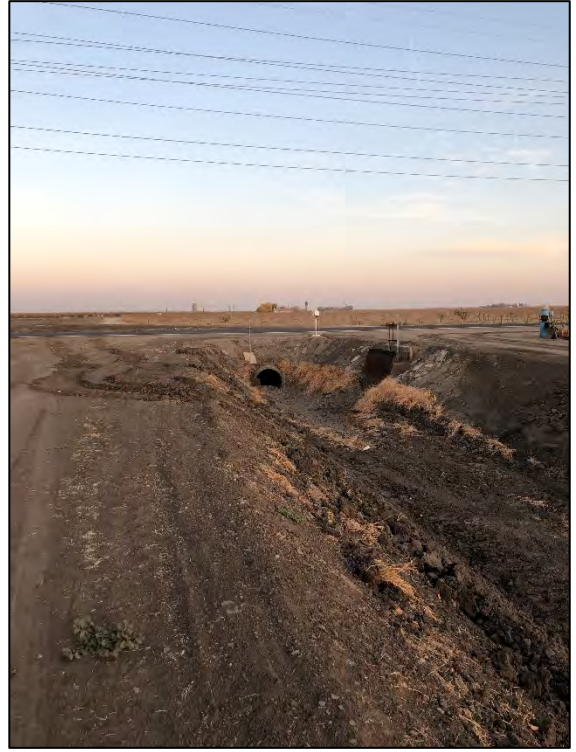


Figure 9: Arizona Ditch, facing East



Figure 11: Mulching Removed Trees at Site



Figure 12: Retention Basin on Project Site



Figure 13: Arizona Ditch (Left) and Retention Basin (Right)



Figure 14: Main Drain Canal (Left) at Southwest Corner, facing Southeast



Figure 15: Turnout at Mirasol Ditch and Arizona Ditch, facing North



Figure 16: Concrete Outlet for Main Drain Canal to Arizona Ditch



Figure 17: Arizona Ditch with Main Drain Canal Outlet (Right)



Figure 18: Exposed Gas Line, West Bank of Main Drain Canal



Figure 19: Main Drain Canal, facing North, with Gas Line Crossing



Figure 20: Northwest Corner of Site, with Main Drain Canal in the Foreground



Figure 21: Northwest Corner, facing East on Buerkle Road



Figure 22: Northwest Corner of Site, facing South

Appendix C: Site Questionnaire

Interview Questions. Environmental Site Assessment. Buerkle Road and Wasco Way.

Name and contact information of Interviewee (should be knowledgeable of site conditions)	Andrew Bell – 661-764-2902 AndrewB@bvh2o.com
Current occupants of property	No Occupants
Current use of property	Vacant Ground
If known, past uses and history of property	Dirt Borrow and Pistachio Field
What specific chemicals are present or once were present at the property?	In the past perhaps typical farming – fertilizer, etc
Location of chemical storage areas or areas of use.	N/A
Locations of any sumps, percolation ponds, above ground or underground storage tanks, septic tanks, or liquid discharge points such as drains.	One earth borrow area on the southwest side of the property. One reservoir for agricultural water along with a filter station.
Number and location of water wells onsite. Well type.	One deep well for non-potable water. Used for agricultural irrigation
Any oil and gas activities, wells, or facilities onsite	N/A (A gas line does cross the NW property corner, but it is from a utility purveyor, not part of activities related to this site.)
Features onsite with characteristics such as: potential staining, odors, debris, stressed vegetation, or unidentified substances?	N/A
Fill dirt that has been brought onto the property that is of an unknown origin or may have originated from a contaminated site?	N/A
Land-use restrictions or engineering controls?	The existing reservoir for agricultural water is to remain. Pipe is buried on the north and east edges of the property to allow for irrigation on this and adjacent properties.
Describe any known environmental issues (i.e. releases, cleanups, environmental liens?	N/A

Interview Questions. Environmental Site Assessment. Buerkle Road and Wasco Way.

Appendix D Assessment of Potential Groundwater Impacts

Assessment of Potential Groundwater Impacts

Daley Ranch Groundwater Recharge Project

Prepared for:
Buena Vista Water Storage District

Date: March 2021
Project Number: 2004962



David Miller
Principal Engineer



Ginger Gillin
Vice President

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Appendices

Appendix A – Well Completion Reports

Appendix B – Groundwater Hydrograph

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1. Introduction

1.1 Project Location and Description

Buena Vista Water Storage District (BVWSD, District) is located in the Kern County Groundwater Subbasin about 16 miles west of Bakersfield along the western edge of the southern San Joaquin Valley. The District lies entirely in Kern County and covers about 78.3 square miles in two distinct service areas: Buttonwillow Service Area (BSA) and the smaller Maples Service Area (MSA) which lies about 14 miles south of the BSA.

The District proposes to construct a groundwater recharge pond in the southern portion of the BSA, approximately 1.4 miles south of the unincorporated community of Buttonwillow, in the northeast quarter of Section 25, Range 23E, and Township 29S of the Buttonwillow U.S. Geological Survey (USGS) 7.5-minute quadrangle (**Figure 1**). The Daley Ranch Groundwater Recharge Pond Project (Project) is bound by Buerkle Road to the north, Wasco Way to the east, and the Main Drain Canal to the south and west (**Figure 2**). The Project would be situated on three parcels (Assessor Parcel Numbers 102-080-18; 102-080-19; and 102-080-200) totaling approximately 92 acres. The District owns the parcels, which are collectively known as Daley Ranch.

The approximately 40-acre recharge pond would expose sand for percolation at various depths from 6 to 14 feet deep. Approximately 650,000 cubic yards of soil would be excavated and retained onsite. Maximum recharge estimates, based on a full-year operation schedule, would average 12,000 AFY. Water from existing District sources (e.g., Kern River, State Water Project ([SWP])) would be delivered to the recharge pond via the existing Main Drain Canal. The District may apply to the U.S. Bureau of Reclamation (Reclamation) for authorization to bank Central Valley Project water at Daley Ranch. The Project does not include onsite recovery.

The Project will enable the District to better sustain groundwater levels and improve groundwater quality, two objectives of California's Sustainable Groundwater Management Act (SGMA). High quality water recharged by the Project will flow to aquifers that support a range of uses and are sources for domestic and municipal wells serving the disadvantaged community (DAC) of Buttonwillow, which is 1.4 miles north of the site.

The land where the Project will be located is registered as having an irrigated land use with an agricultural preserve designation (Kern County, 1988) and the parcel has an established history of irrigated crop production. Retiring these lands from irrigated agriculture will enable water to be delivered to the area based on availability of water for recharge rather than in response to crop demands. In addition to the change in timing of deliveries, water that would have been consumed by the pistachio orchard recently removed from the site will be recharged and made available at other locations and for other purposes that will benefit groundwater management in the Kern

County Subbasin. While cessation of irrigation deliveries will eliminate deep percolation of irrigation water, the intentional recharge of high-quality water will more than compensate for the reduction in deep percolation and will reduce leaching of nitrates, salts, and other contaminants. All activity, including storage of construction materials and staging of equipment, will take place within the 92-acre Project site which is under the District's ownership.

1.2 Hydrologic Setting

The San Joaquin Valley, forming the southern two-thirds of the Central Valley, is a broad structural trough bordered on the east by the Sierra Nevada Mountains and on the west by the Diablo and the Temblor ranges. The valley extends 220 miles southeastward from the confluence of the San Joaquin and the Sacramento rivers to the Tehachapi and the San Emigdio mountains. The width of the valley ranges from 25 miles in the northern portion to 55 miles in the south (Croft, 1972). The southern portion of the valley is internally drained by the Kings, Kaweah, Tule, and Kern rivers that flow into the Tulare Basin, which includes the beds of the former Tulare, Buena Vista, and Kern lakes.

BVWSD is located near the western edge of the Kern County Groundwater Subbasin (DWR, 2003). The subbasin is bounded on the north by the Kern County line and the Pleasant Valley, Tulare Lake, and Tule groundwater subbasins, on the east and southeast by the Sierra Nevada foothills and Tehachapi Mountains, and on the west and southwest by the San Emigdio Mountains and the Temblor Range. The Kern River is an important source of water for the BVWSD with the BSA located north of the river and the MSA to river's south. **Figure 1** shows the boundaries of the Kern Groundwater Subbasin.

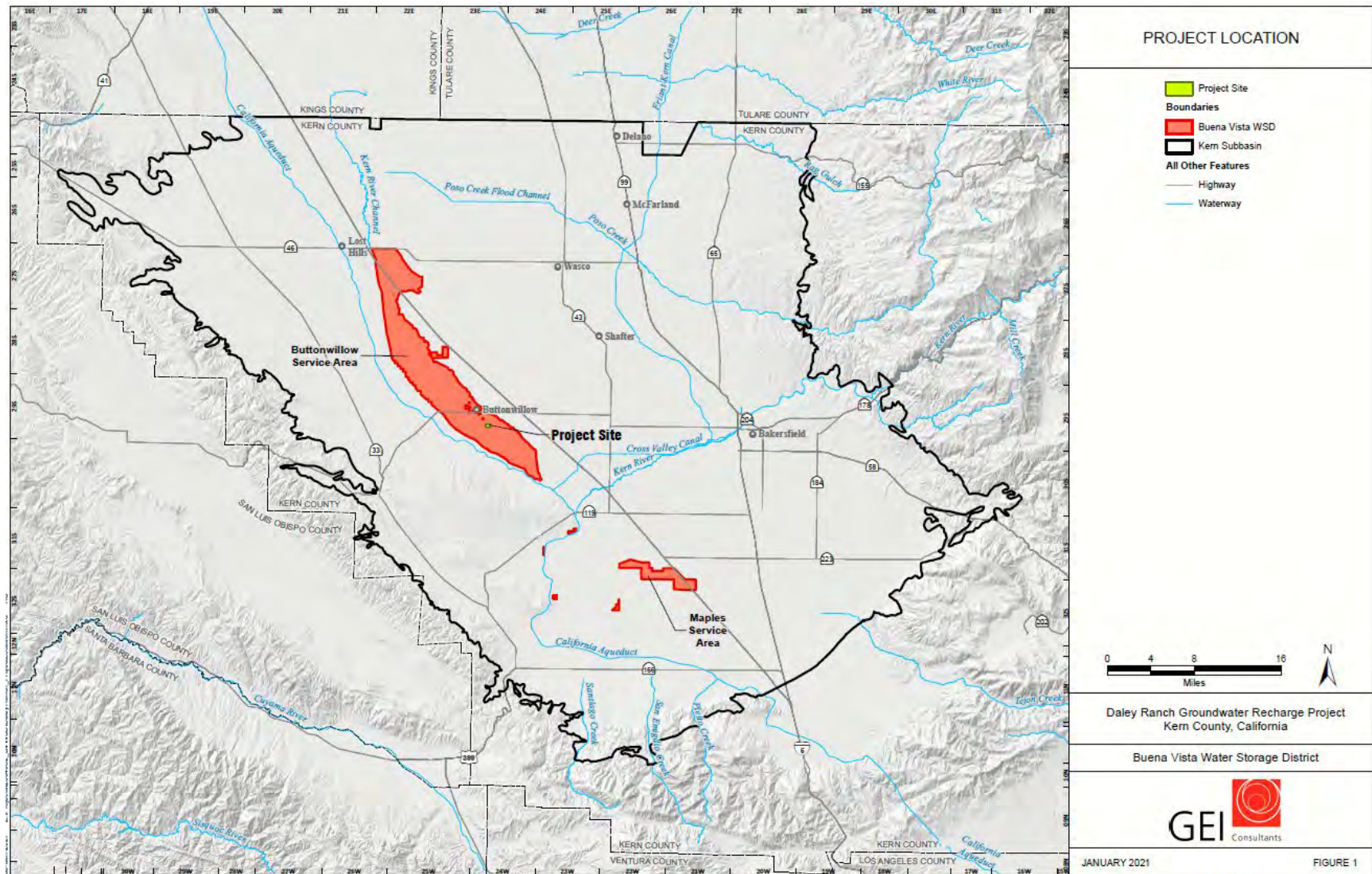


Figure 1 - Project Location Map



Figure 2 – Project Site Map

2. Geologic Conditions

The San Joaquin Valley is a structural trough filled to a depth of up to 32,000 feet with marine and continental sediments deposited during periodic inundation by the Pacific Ocean and by erosion of the surrounding mountains. Continental deposits shed from these mountains form an alluvial wedge that thickens from the valley margins toward the axis of the valley's structural trough. This depositional axis lies directly beneath to slightly west of the series of rivers, lakes, sloughs, and marshes, which mark the current and historic axis of surface drainage in the San Joaquin Valley and define the north/south alignment of the BSA.

2.1 Regional Geology

The southern part of the San Joaquin Valley is a broad structural trough of mostly interior drainage. The Sierra Nevada on the east is composed of consolidated igneous and metamorphic rocks of pre-Tertiary age (basement complex). The surface of the basement complex slopes 4 to 6 degrees south-westward from the foothills and underlies the valley. The Coast Ranges on the west consist mostly of complexly folded and faulted consolidated marine and non-marine sedimentary rocks of Jurassic, Cretaceous, and Tertiary age. These non-water-bearing deposits dip eastward and overlie the basement complex (Croft, 1972).

Unconsolidated deposits of Late Pliocene to Holocene age that blanket the underlying consolidated rocks are the source of most of the fresh groundwater. The unconsolidated deposits are divided into informal stratigraphic units on the basis of source of sediment, environment of deposition, and texture (Croft, 1972).

The unconsolidated sediments that comprise the shallow- to intermediate-depth water-bearing deposits are primarily of continental origin. From youngest to oldest (shallowest to deepest) the informal stratigraphic units consist of flood basin deposits, continental rocks and deposits, and marine rocks and deposits. **Figure 3** shows the regional geology (Page, 1986).

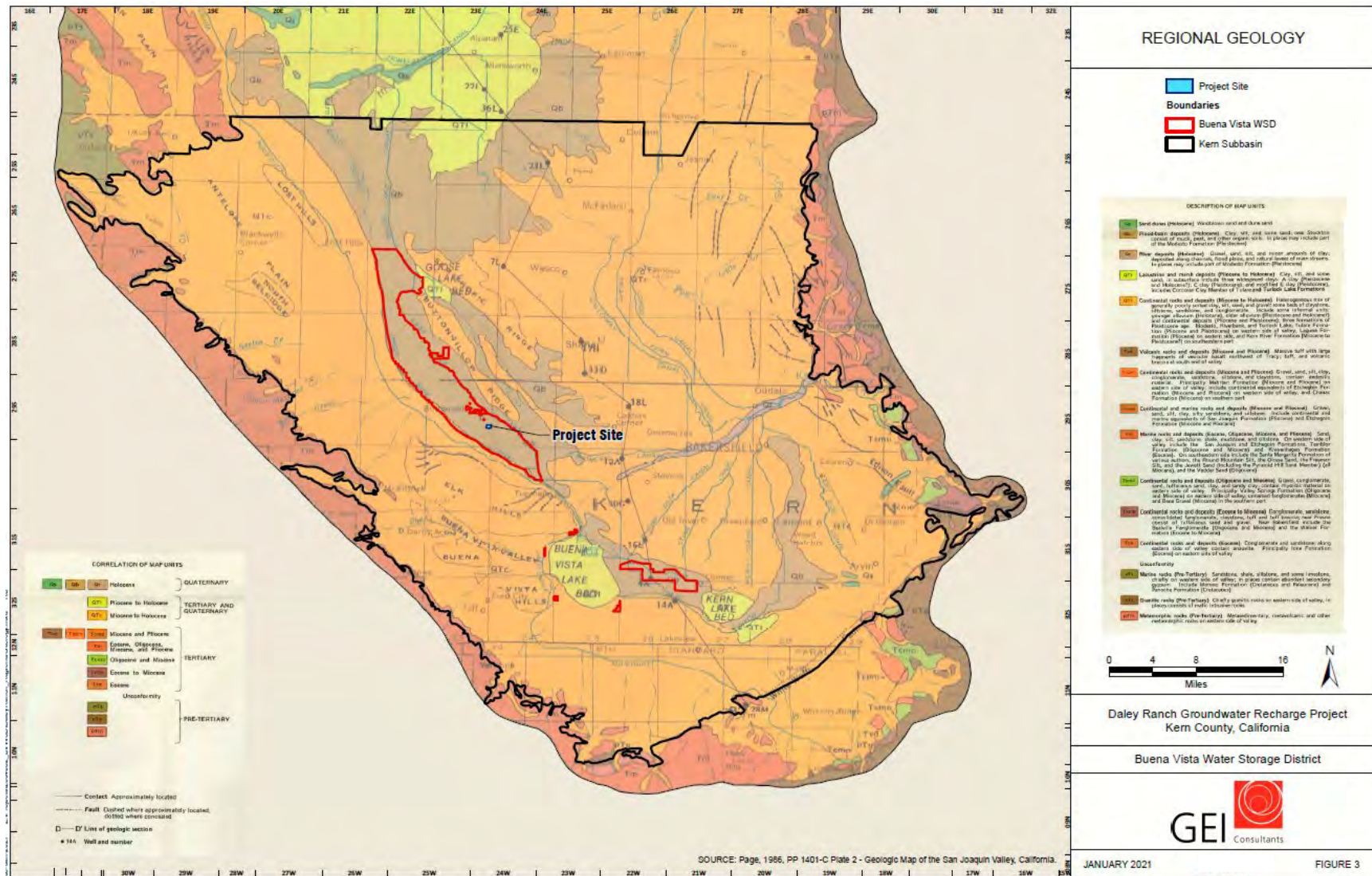


Figure 3 – Regional Geology

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The continental rocks and flood basin deposits in the San Joaquin Valley groundwater basin contain six distinct clay layers, given letter designations A through F, from shallowest to deepest. All six clay layers are present beneath the center of the former Tulare Lake, and each has a unique lateral extent. The E-clay (also known as the Corcoran Clay) has the greatest lateral extent and has been documented to be present beneath BVWSD. The C-Clay occurs in the northern part of the District and does not extend to the Daley Ranch. The A-Clay is also present in the northern part of the District, causing perched groundwater, but does not extend as far south as the Project. **Figure 4** shows the alignment of the north-south geologic cross-section G-G', and **Figure 5** presents this cross-section, which shows the extent, depth and thickness of the clay layers beneath the BSA and the Daley Ranch (Croft, 1972).

2.2 Geologic Structures

The sediments found in the Kern County groundwater subbasin were deposited into a large trough that has since been compressed and subsided, resulting in the sediments being folded into troughs and ridges, known in geologic terms as synclines and anticlines. The most prominent anticlines are the Bakersfield Arch and the Buttonwillow and Semitropic ridges. The Buttonwillow and Semitropic ridges are surface expressions of two prominent north-south trending anticlines which could potentially be barriers to groundwater flow to the east (*refer to Figure 3*). The intervening topographic troughs are the surface expressions of prominent synclines (Croft, 1968). The synclines typically contain a significantly thicker sequence of young sediments than do the anticlines (Pacific, 1991). Associated with the Buttonwillow and Semitropic anticlines are two concealed faults (CGS, 1991) that dip to the west. The faults are not active and do not extend to the ground surface.

There are varying interpretations of the extent of the E-clay in relation to the above described geologic structures. Reports prepared in 1972 and in 1991 show the E-clay to be continuous across the Buttonwillow and Semitropic ridges and their associated anticlines (Croft, 1972; Pacific, 1991). However, work by the United States Geologic Survey (USGS), which was used to prepare the Central Valley Hydrologic Model (CVHM) groundwater model, shows the E-clay is not continuous over this area. **Figure 6** shows the extent and depth of the modified E-clay and the contours of the top of the clay bed. It is possible the anticlines of the Buttonwillow and Semitropic ridges predate the E-clay and therefore the clay was not deposited onto these ridges. If this were the case, sedimentary beds on the east and west sides of the ridges would not be continuous unless they were deposited between the ridges.

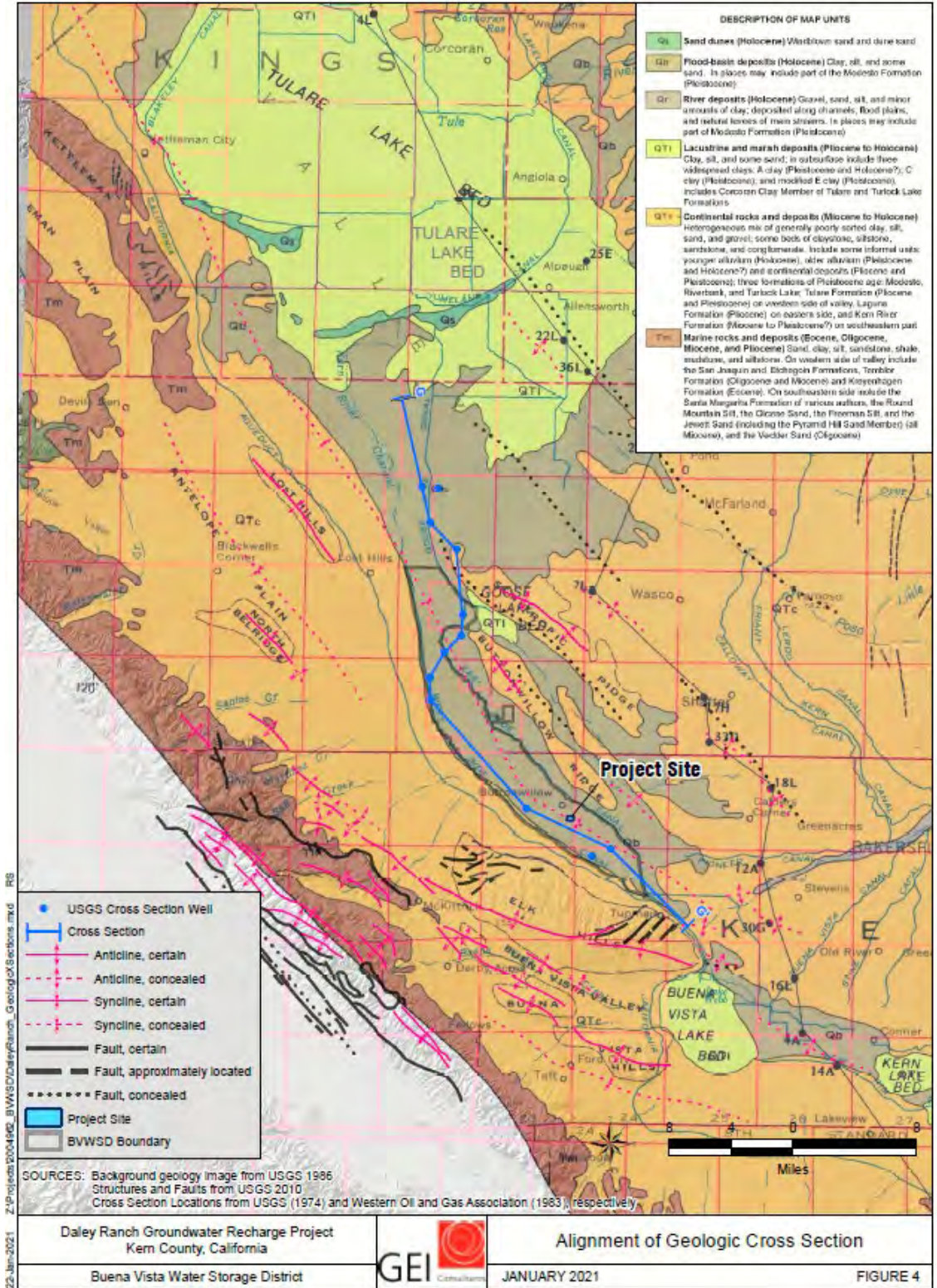


Figure 4 – Alignment of Geologic Cross-Section

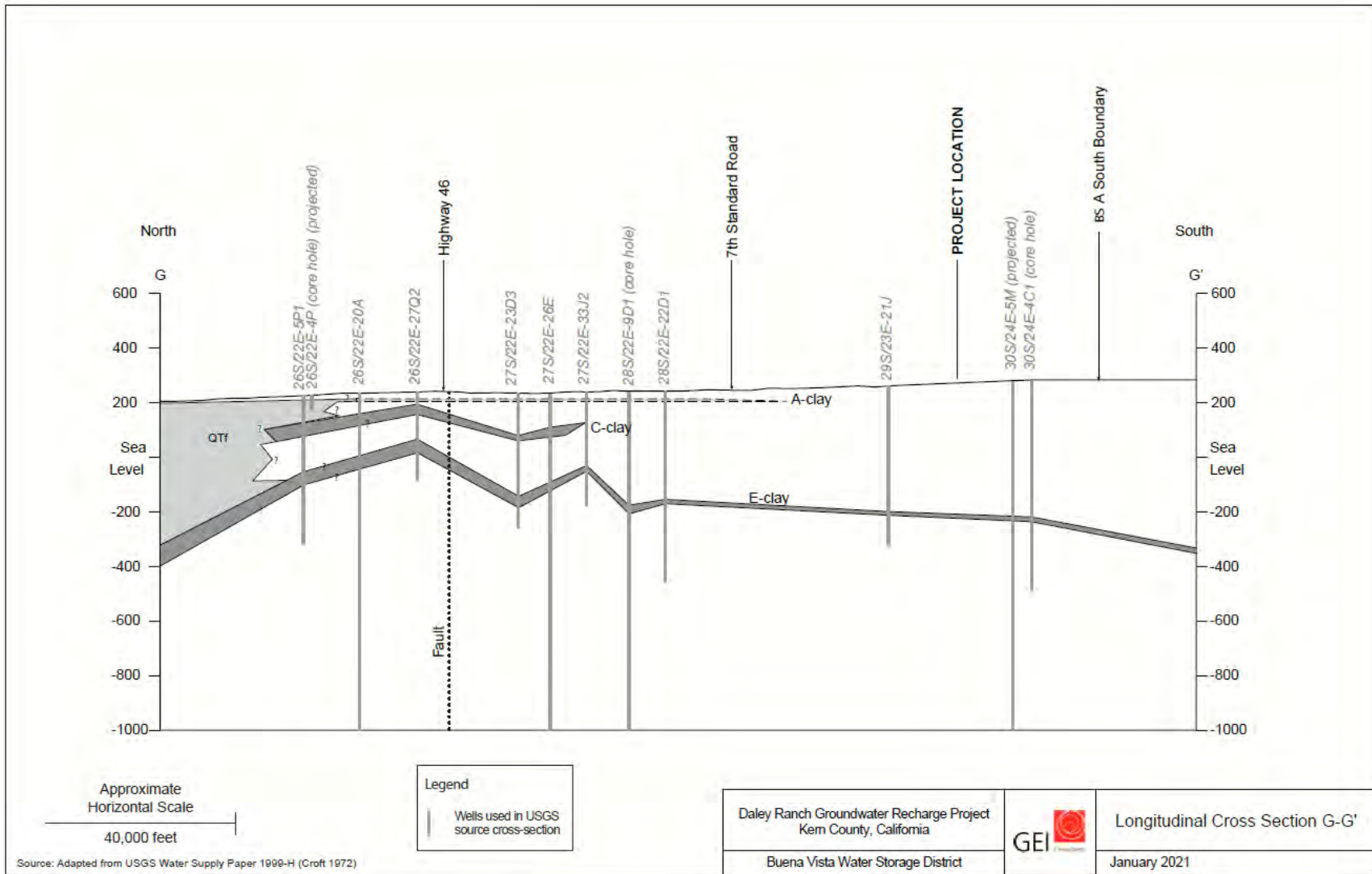


Figure 5 – Geologic Cross Section G-G'

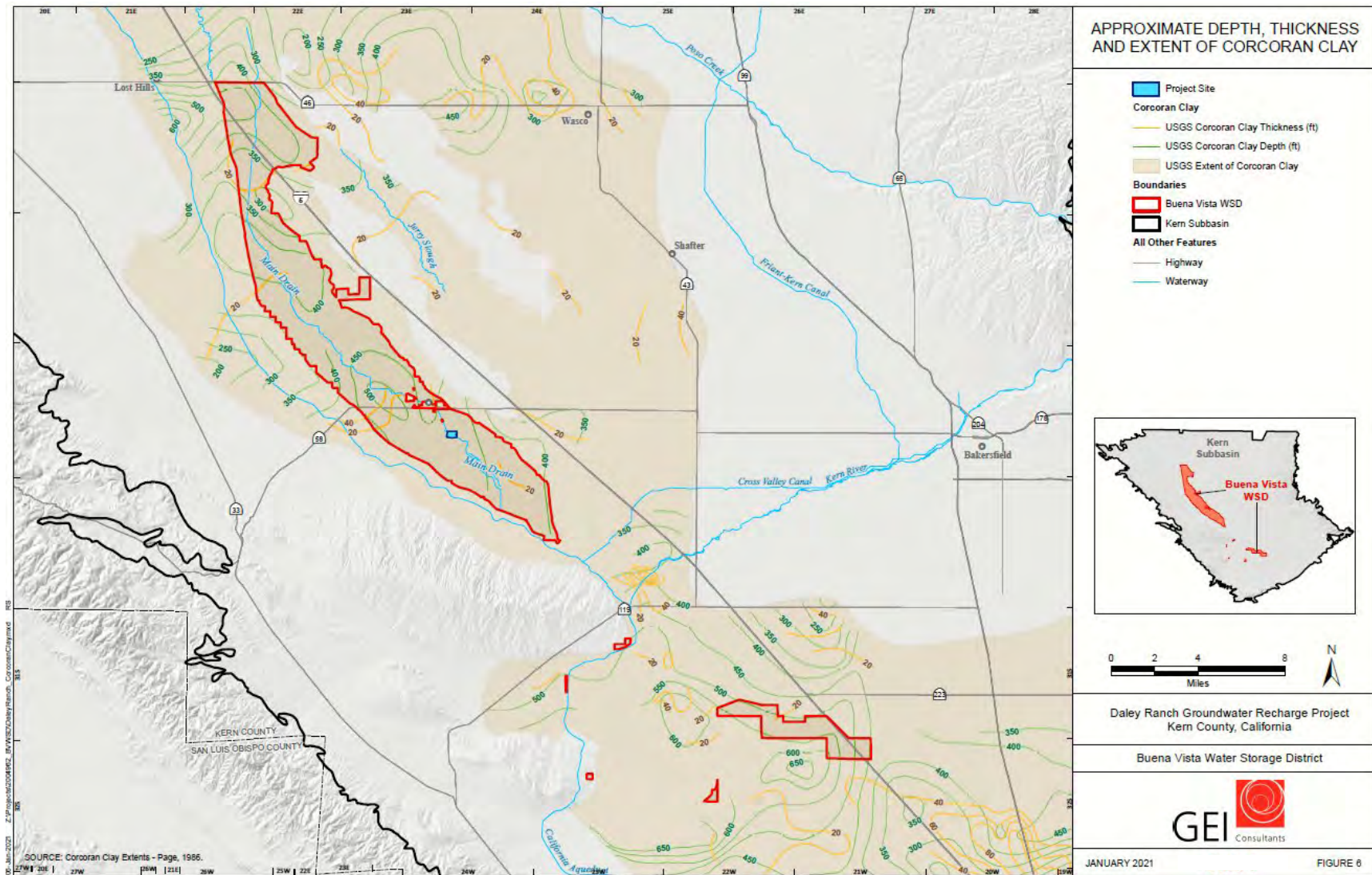


Figure 6 – Approximate Depth, Thickness and Extent of E-Clay

2.3 Local Soils and Geology

The National Resources Conservation Service (NRCS) produces soils maps which indicate the type of surface soils present in the top few feet of the subsurface as part of its Soil Survey Geographic Database (SSURGO) dataset. One of the properties that the NRCS designates is the hydrologic soils group (HSG) which indicates the rate at which water will percolate through the surface soils. **Figure 7** shows the HSGs for the vicinity of the Daley Ranch Project and illustrates that the entire Project area has been designated as “HSG C” or having a moderately low infiltration potential. NRCS documentation shows that HSG C soils have a saturated hydraulic conductivity of between 0.14 and 1.42 inches per hour.

Beneath the low permeability surficial soils are sands that transmit water at a higher rate than the overlying soils. **Appendix A** includes Well Completion Reports (WCRs) from 8 wells within a 2-mile radius of Daley Ranch. The locations of these wells are shown on **Figure 8**. The sediment logs presented in these reports show sands interspersed with clay lenses extending to depths exceeding 400 feet. As indicated in these logs, drilling is generally halted when the boring reaches a clay layer, interpreted to be the modified E-clay, which is a regional confining stratigraphic unit and is assumed to define the base of the main aquifer. Typically wells drilled in the District do not extend beyond the E-clay as water drawn from below this layer is characterized by high Total Dissolved Solids (TDS) concentrations. In addition, pumping from beneath the E-clay is discouraged by the Buena Vista Groundwater Sustainability Agency (BVGSA) because of the possibility that extraction from the confined aquifer may induce subsidence. Water infiltrated at Daley Ranch is expected to recharge aquifer zones above the E-clay since this confining layer extends throughout the Project area (*refer to Figure 6*).

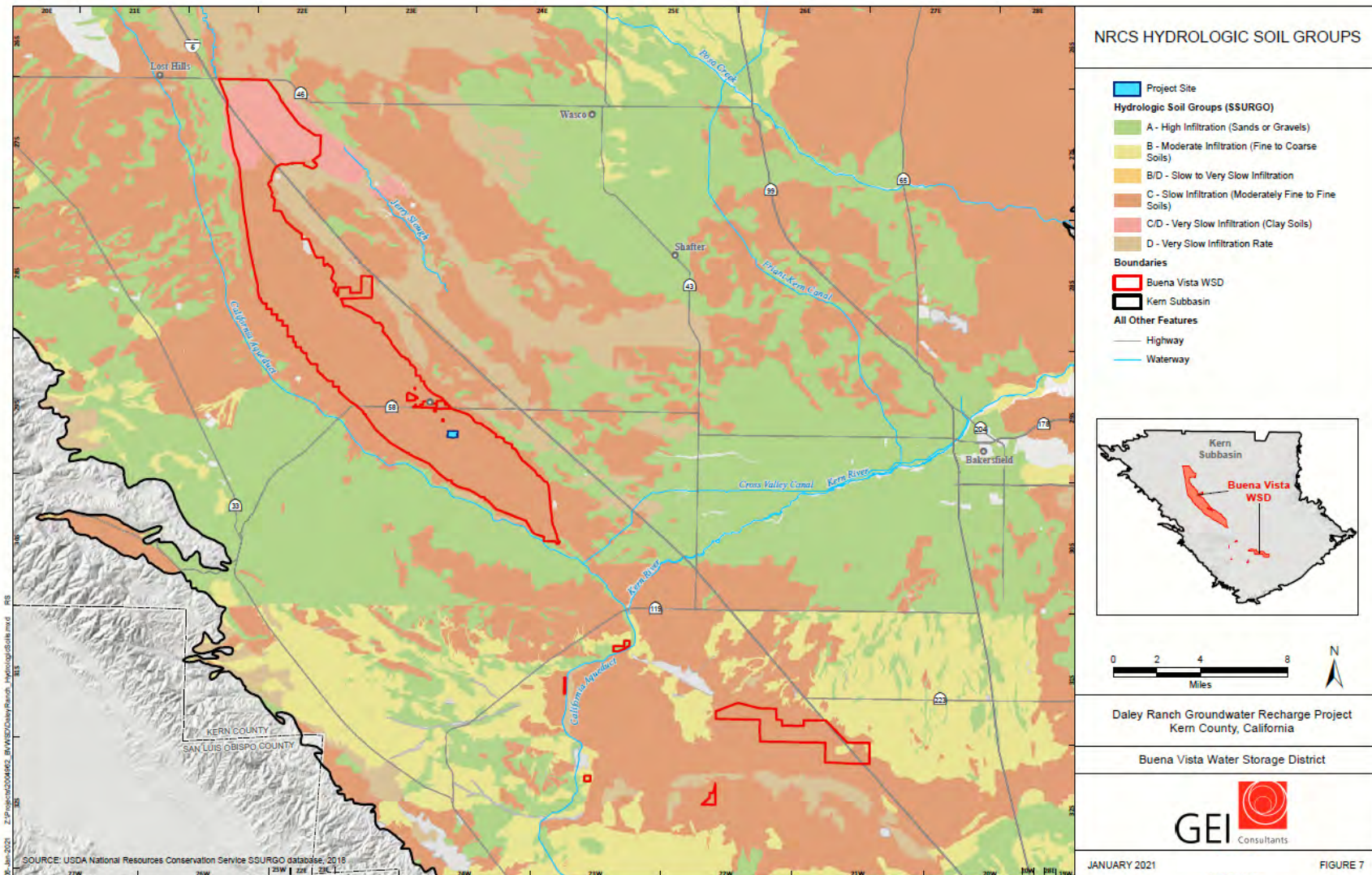


Figure 7 – Hydrologic Soils Groups

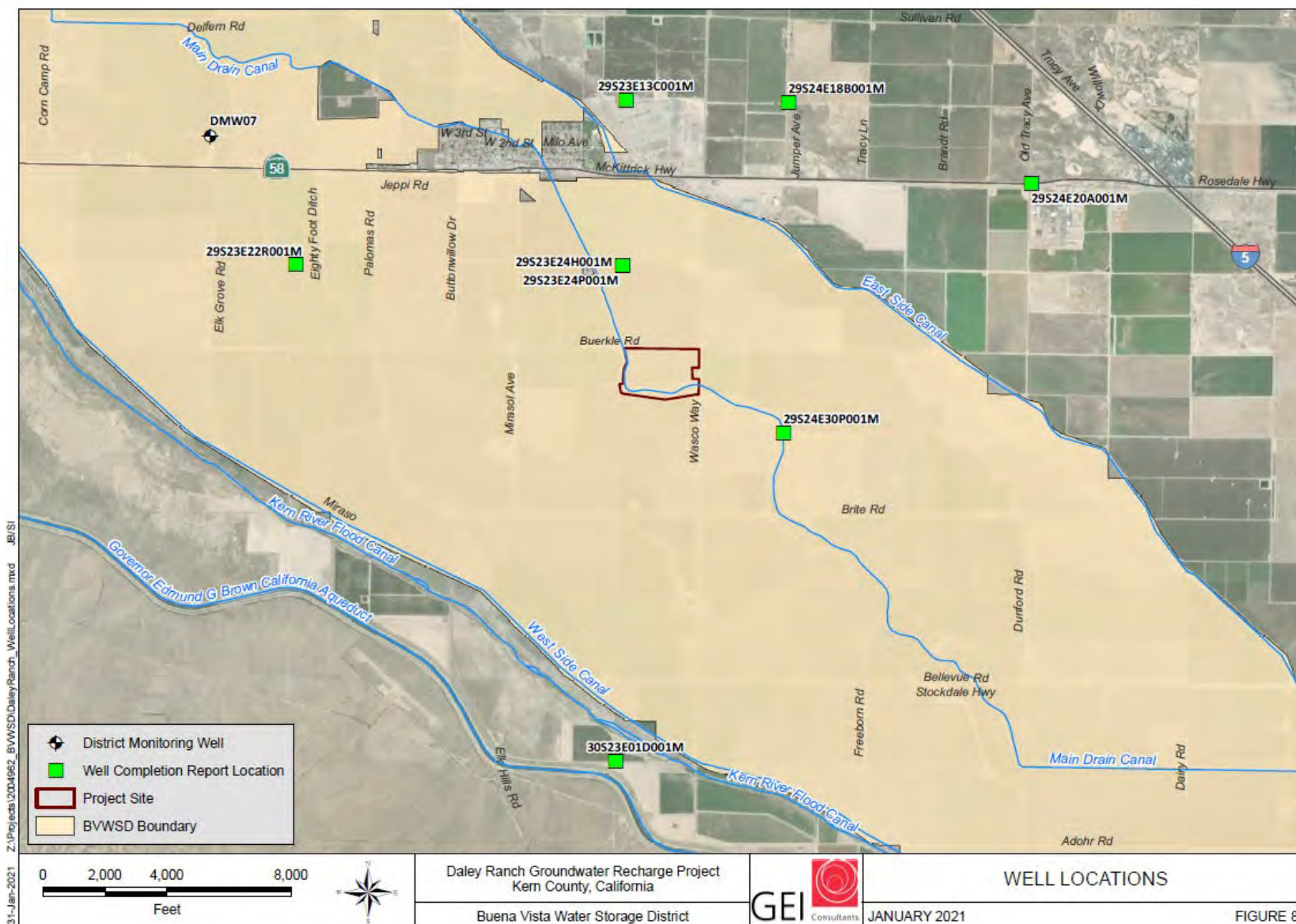


Figure 8 – Locations of Wells with WCRs Presented in Appendices A and B

3. Hydrogeologic Conditions

This section describes existing hydrogeologic data collected in the vicinity of Daley Ranch and provides a summary of aquifer properties that govern groundwater movement.

3.1 Aquifers

The majority of irrigation wells in the District are completed to depths between 200 and 500 feet with perforated intervals beginning at around 150 feet and extending to the bottom (BVWSD, 2014). As illustrated by the WCRs presented in **Appendix A**, some of the wells drilled in the vicinity of the Daley Ranch Project were constructed in this manner while one, constructed near the Buttonwillow Sewer Disposal Plant is considerably shallower and others are deeper and appear to extend beneath the E-clay.

The main groundwater aquifer under the Daley Ranch Project extends from the ground surface to the top of the modified E-clay, found at a depth of approximately -300 feet AMSL. As shown in the WCRs presented in **Appendix A**, the aquifer supplying these wells has interbedded zones of sand and blue or yellow clay.

3.2 Confining Beds

The E-clay is known regionally to be a low permeability barrier to vertical groundwater flow, but it is not completely impermeable. The top of the clay layer is about -300 feet AMSL under the Daley Ranch Project area. Water-bearing units below the modified E-clay are typically not used by BVWSD as they contain poor quality water due to recharge from marine sediments of the Coast Ranges.

3.3 Groundwater Levels

District Monitoring Well 7 (DMW 07) is near the Daley Ranch Project, and BVWSD has recorded groundwater elevations at this well four times per year since about 1993. **Figure 8** shows the location of this well, and **Appendix B** presents a hydrograph showing groundwater elevations at this location. Depths to groundwater between 1995 and 2018 have ranged from 20 to 126 feet bgs.

3.4 Groundwater Flow Direction

Figures 9 and 10 were produced by BVWSD and show regional groundwater level and elevation contours for October 2018 in feet bgs and in feet above sea level (respectively). Both maps illustrate how water recharged at the Project site would flow in a southeasterly direction through the Community of Buttonwillow and towards the southeastern corner of the BSA.

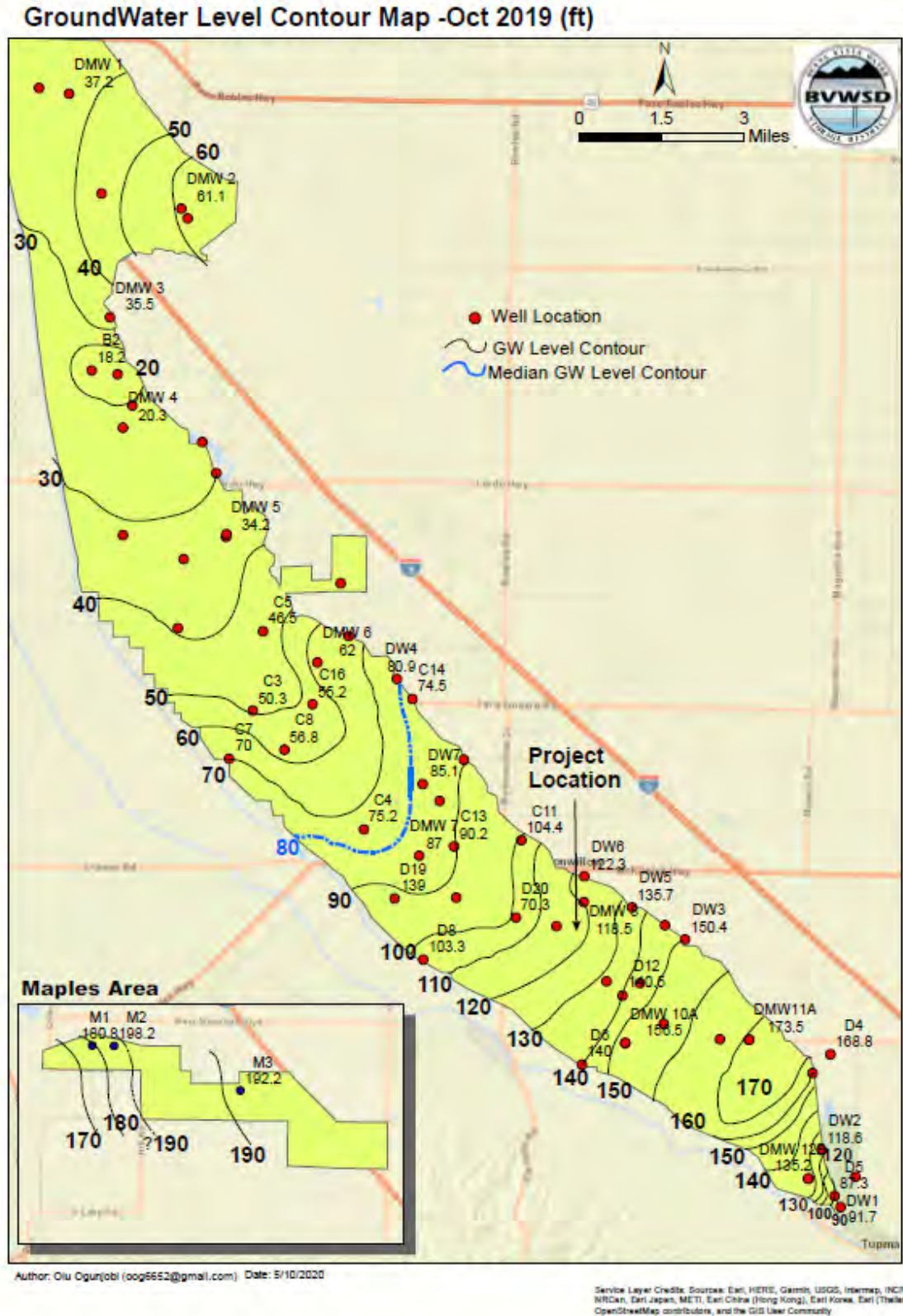
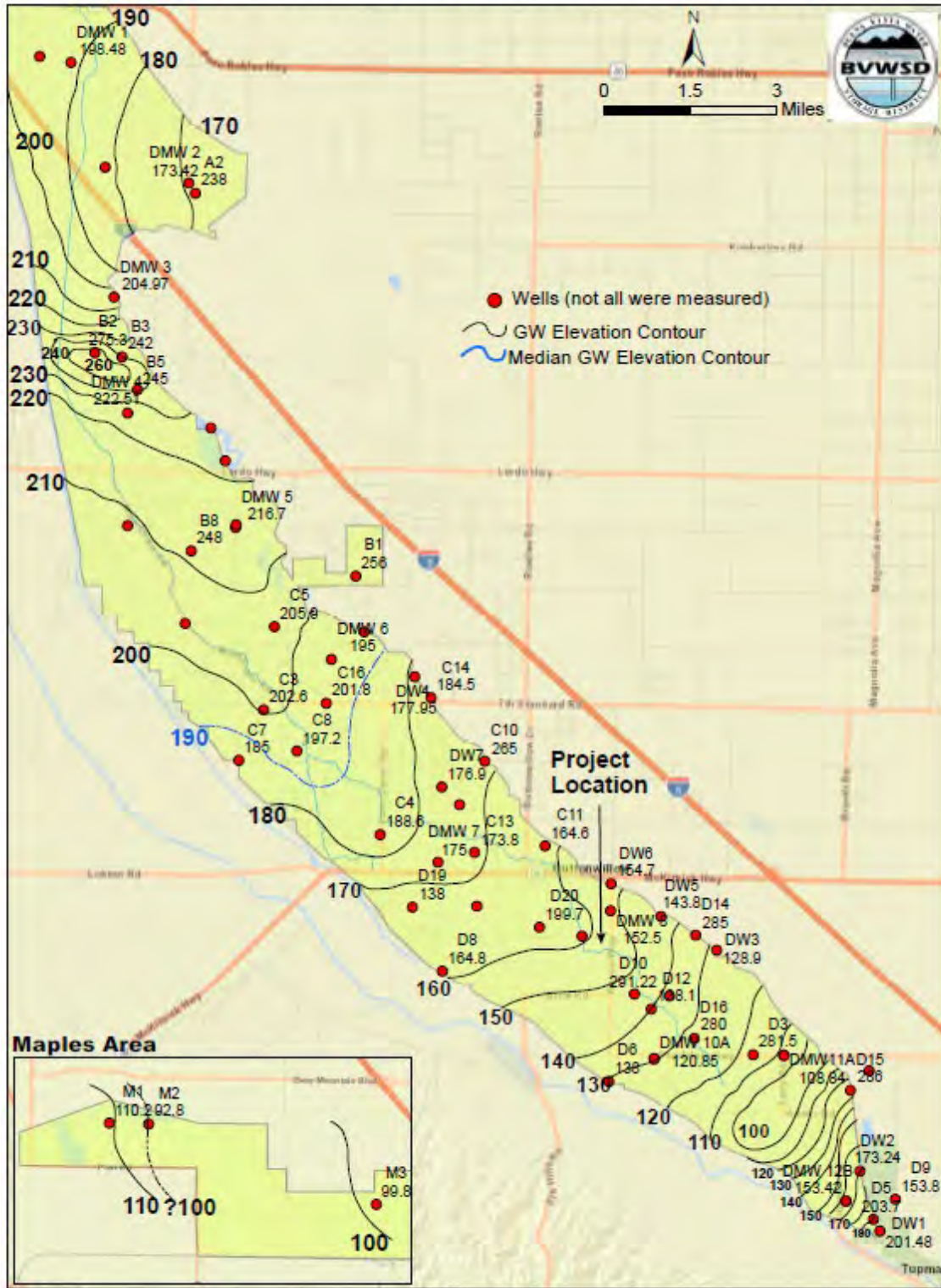


Figure 9 – Regional Groundwater Level Contours (Feet Below Ground Surface) – October 2018

Groundwater Elevation Contour Map -Oct 2019 (ft above SL)



Author: Olu Ogunjobi (oog6652@gmail.com) Date: 5/10/2020

Figure 10 – Regional Groundwater Elevation Contours (in Feet Above Sea Level) – October 2018

3.5 Aquifer Hydraulic Characteristics

The hydraulic characteristics of the production aquifer govern the rate at which water will recharge and move through the aquifer. Hydraulic characteristics can be estimated based on the type of aquifer material. However, a more reliable method is to perform an aquifer test where a well is pumped and changes in groundwater elevations are measured at the test location and ideally in other nearby wells.

The nearest known tests were performed by the consulting firm URS at seven locations within 1.2 miles of the intersection of Seventh Standard Rd and Main Drain Rd (URS, 2010). Due to the proximity to these wells to the Daley Ranch Project, the results of the URS testing program have been used to represent the aquifer characteristics of the Project.

To summarize the URS findings, the production aquifer is defined as extending from 200 ft bgs to 600 ft bgs. The seven irrigation wells used in the testing program have completion intervals ranging from 100 feet to 300 feet within this depth range. Based on the results of the pump tests, aquifer transmissivity was estimated to range from 15,000 to 25,000 ft²/d, with an average aquifer transmissivity of 18,200 +/- 4,400 ft²/day. Representative horizontal hydraulic conductivity (K) values were based on a range of values described in the Groundwater Sustainability Report developed for the Buena Vista Groundwater Sustainability Agency (BVGSA, 2020) and K values applied in modeling for the draft Environmental Impact Report prepared for the BVWSD's Palms Groundwater Recharge Project (BVWSD, 2020). Representative values used to characterize upper aquifer layers presented in these documents ranged from 50 to 180 ft/day with a mid-point value of 105 ft/day.

Due to the presence of the interbedded silt and clay layers shown in the WCRs presented in Appendix A, the overall vertical permeability is assumed to be much lower than the average horizontal K-value with the long-term rate of infiltration from the recharge ponds likely to be further reduced by fine, suspended sediments introduced in the water delivered for recharge. For these reasons, an infiltration rate of 0.78 in/hour (1.5 ft/day) has been assumed for this Project. This value corresponds to the mid-point of the infiltration rate associated with HSG C soils.

Regional specific yield estimates made by the USGS for the San Joaquin Valley have an average value of 0.15, a value consistent with estimates made by the California Energy Commission (URS, 2012). Based on these estimates, a specific yield range of from 0.10 to 0.20 has been assumed for this analysis, the range assumed in analyses presented in the Buena Vista Groundwater Sustainability Agency's Groundwater Sustainability Plan (GSP) (BVWSD, 2020).

3.6 Sources of Water for Recharge

Surface water available to BVWSD for use in the Daley Ranch Project will include water from the Kern River diverted under the BVWSD's rights to Kern River water available at the Second Point of Measurement on the river, a location commonly referred to as Second Point.

A second source of recharge water is BVWSD's contract with the Kern County Water Agency for SWP water, which is delivered to the District through turnouts from the California Aqueduct. In addition to its contract entitlement, SWP Article 21 water is available from time to time under this contract, typically early in the year when irrigation demands are relatively low. BVWSD has the right to purchase a share of this supply, which represents another source of water for recharge at the Daley Ranch Project. **Figure 11** shows historical deliveries to the BVWSD through the Outlet Canal and turnouts from the California Aqueduct over the 27-year period extending from 1993 through 2019.

The Daley Ranch Groundwater Recharge Project is part of an initiative being undertaken by Buena Vista to become recognized by Reclamation as an acknowledged groundwater bank, eligible to store water received from Central Valley Project contractors. Therefore, the Daley Ranch Groundwater Recharge Pond may, in the future, also receive water from the Central Valley Project, if approved by Reclamation.

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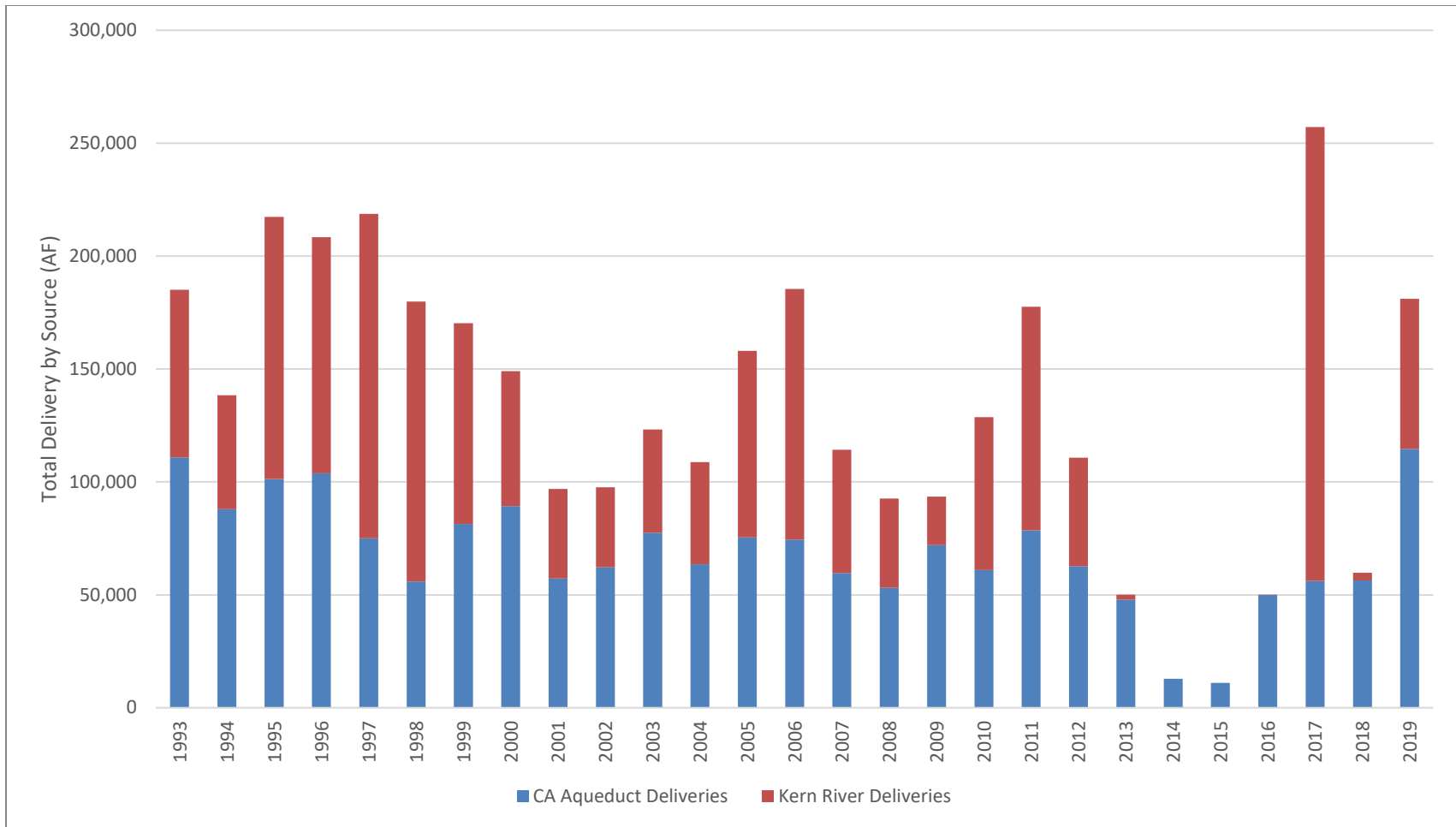


Figure 11 – Surface Water Deliveries to the Buttonwillow Service Area

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4. Water Quality and the Environment

4.1 Water Quality

This section summarizes groundwater quality data at the proposed Project location as well as the quality of surface water that would be used as the source for recharge.

4.1.1 Groundwater Quality

Table 1 summarizes groundwater quality observations recorded at District Monitoring Well 7 (DMW 7). This data shows concentrations of TDS above the Secondary Maximum Contaminant Level (Secondary MCL) on one occasion. Arsenic occurs naturally in soils in this area, and concentrations observed at DMW 7 are uniformly at or very close to the Primary MCL.

Table 1 – Summary of Water Quality Data from DMW 7

Constituent	Sample Date	MCL	Test Result	Units
Chloride ¹	7/24/2008	250	46	mg/L
	8/9/2012	250	35	mg/L
	7/25/2013	250	37	mg/L
	7/30/2014	250	37	mg/L
	7/8/2015	250	41	mg/L
	9/12/2017	250	40	mg/L
	Sodium ²	7/24/2008		119
10/20/2010			83	mg/L
8/9/2012			91	mg/L
7/24/2013			94	mg/L
7/30/2014			110	mg/L
7/8/2015			110	mg/L
9/12/2017			110	mg/L
TDS ¹	7/24/2008	500	539	mg/L
	8/9/2012	500	330	mg/L
	7/24/2013	500	340	mg/L
	7/30/2014	500	380	mg/L
	9/12/2017	500	370	mg/L
Arsenic	7/24/2013	10	10	ug/L
	7/30/3014	10	10	ug/L
	7/8/2015	10	9.4	ug/L

Constituent	Sample Date	MCL	Test Result	Units
	9/12/2017	10	11	ug/L
Nitrate (as NO ₃)	8/5/2008	45	0.4	mg/L
	6/19/2013	45	0	mg/L
	7/15/2014	45	0	mg/L
	4/10/2015	45	0	mg/L

¹ Secondary MCL

² No MCL - not toxic in drinking water

4.1.2 Source Water for Recharge

Table 2 summarizes water quality for the potential surface water sources waters to be used for recharge. Water quality in the source water is generally better quality than in groundwater, with concentrations for all constituents below their Maximum Contaminant Levels (MCLs).

Table 2 – Summary of Water Quality Data from Surface Water Sources (mg/L)¹

California Aqueduct		
Constituent	MCL	Average
Chloride	250	43.2
Sodium	²	31.3
TDS	500	191
Arsenic	10	ND
Nitrate (as NO ₃)	45	0.24
Kern River		
Constituent	MCL	Average
Chloride	250	3.81
Sodium	²	9.28
TDS	500	95
Arsenic	0.01	0.003
Nitrate (as NO ₃)	45	ND

¹ Source: KCWA Improvement District No. 4. (ID2 2020)

² No MCL - not toxic in drinking water

4.2 Environmental Records Search

Environmental data records were reviewed to determine potential sources of groundwater pollution in the Daley Ranch Camp Project area. The results of this review are presented in the Phase 1 Environmental Site Assessment included in **Appendix C** of the IS/MND.

5. Assessment of Project Effects

5.1 Approach

The proposed Project will affect groundwater levels and groundwater quality during recharge operations. The effects of a range of recharge operations on groundwater levels were evaluated using a groundwater mounding tool to estimate changes in groundwater levels given an estimated infiltration rate, aquifer properties and depth to groundwater that are based on the well tests and geotechnical information detailed in Section 3.5 – Aquifer Hydraulic Characteristics. Changes in groundwater quality were determined qualitatively by comparing surface and groundwater quality to forecast long term changes in groundwater quality likely to result from the mixing with surface water from the Kern River watershed and California Aqueduct.

5.2 Project Effects on Groundwater Levels

Figure 9 and the hydrograph presented in Appendix B show that depths to groundwater in the vicinity of the Daley Ranch Project recorded at the 8 wells identified in the Project area having both well completion reports and reporting on groundwater levels showed maximum groundwater levels for the 8 wells that averaged 224 feet above mean sea level (AMSL) while minimum groundwater levels averaged 138 feet AMSL. For this Project area, the minimum threshold (MT) is 52 feet AMSL. Thus, the average groundwater elevation of 181 feet AMSL is approximately 129 feet above the MT, and this distance was used to define the average saturated zone thickness that would be influenced by operation of the Daley Ranch Project. The mounding analysis was performed using a tool developed by the USGS (2010) which uses the Hantush analytical equation for groundwater flow. The analysis assumes a square recharge basin and does not consider groundwater flow based on partially saturated sediments.

The mounding analysis used the following inputs:

- Infiltration rate: 1.5 ft/day
- Average saturated zone thickness based on a 129-foot operational saturated zone thickness, representing the thickness of the saturated zone between the average groundwater elevation and the MT for the Project area.
- Horizontal hydraulic conductivity:
 - 50 ft/day minimum
 - 100 ft/day average
 - 180 ft/day maximum.

Specific yield is not an input into the Hantush equation, so no assumptions with respect to specific yield were needed for this analysis.

Table 3 presents the results of this analysis by displaying increases in groundwater elevations resulting from the following four periods of recharge:

- 60 days
- 120 days
- 200 days
- 300 days

Results are presented for the range of K values described above and at three locations:

- Project Center
- 1-mile radius
- 2-mile radius

Table 3 – Groundwater Mound Heights for Recharge Periods of 60, 120, 200, and 300 Days (ft)

Recharge Period	Distance from Project Center (miles)	K (feet/day)		
		50 feet/day	100 feet/day	180 feet/day
60 days	0	137.2	91.9	63.4
	1	2.1	5.3	7.3
	2	0.2	0.2	0.5
120 days	0	161.2	106.4	72.6
	1	10.7	15.1	15.3
	2	0.5	1.2	2.4
200 days	0	177.8	116.6	79.2
	1	24.2	25.7	22.6
	2	1.4	3.8	5.9
300 days	0	190.4	124.4	84.3
	1	39.0	35.3	28.8
	2	4.0	8.1	10.1

The results of the mounding analysis indicate that the proposed Project will have the beneficial impact of raising groundwater levels in the vicinity of the recharge site, resulting in lower energy costs to lift water from nearby wells. Due to the fact that a constant infiltration rate is being used under all conditions, the rate at which water infiltrates into the ground is the same regardless of the horizontal conductivity (K). However, the height and extent of the groundwater mound produced by recharge is influenced by the K value. Low horizontal conductivities retard migration of water away from the recharge site resulting in a steep, narrow mound geometry, while higher K values result in lower, broader mounds because of the relative ease with which water can move from the point of recharge to the periphery of the mound.

Figures 12, 13, 14, and 15 show the changes in anticipated groundwater levels at increasing distances from the Project's center for the operational saturated zone thickness of 129 feet for recharge periods of 60, 120, 200, and 300 days, respectively. These figures indicate that for a

120-day recharge period, the Project could raise groundwater levels from 73 to 161 feet in the center of the recharge basin and that levels could rise by 11 to 15 feet at a distance of 1 mile. For a continuous recharge duration of 60 days, groundwater elevations at the Project site could be expected to increase by 63 to 137 feet, while 200 days of continual recharge could be expected to increase groundwater elevations at the Project site by 79 to 178 feet. For a continuous recharge duration of 300 days, groundwater elevations at the Project site could be expected to increase by 84 to 190 feet. The height and extent of the groundwater mound will be monitored once the Project comes into operation.

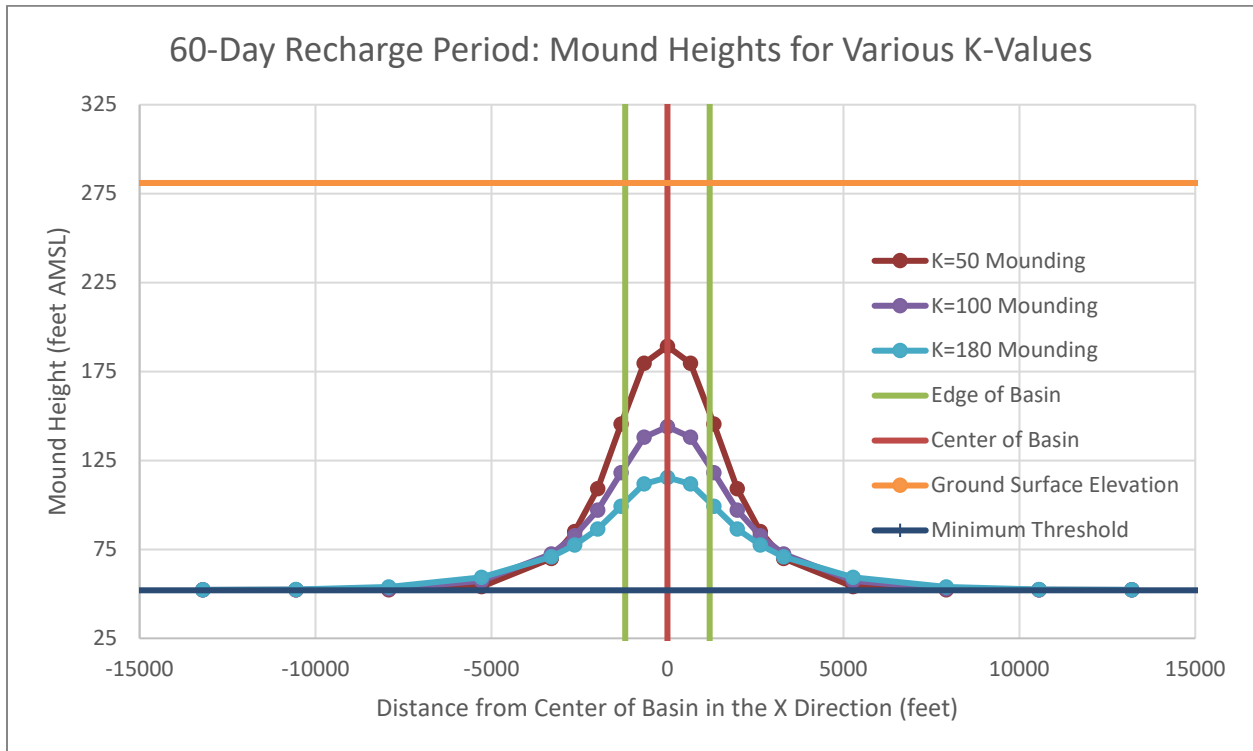


Figure 12 – Predicted Recharge Mound Height: 60-day Recharge Period

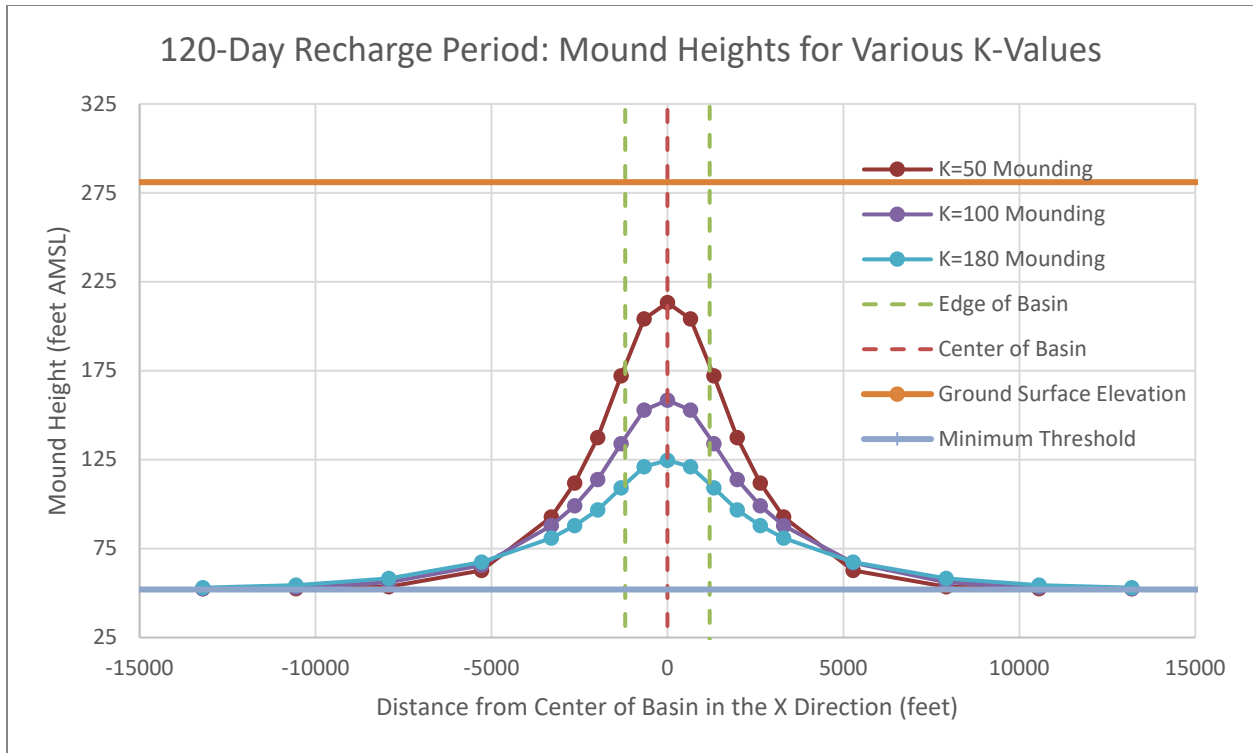


Figure 13 – Predicted Recharge Mound Height: 120-day Recharge Period

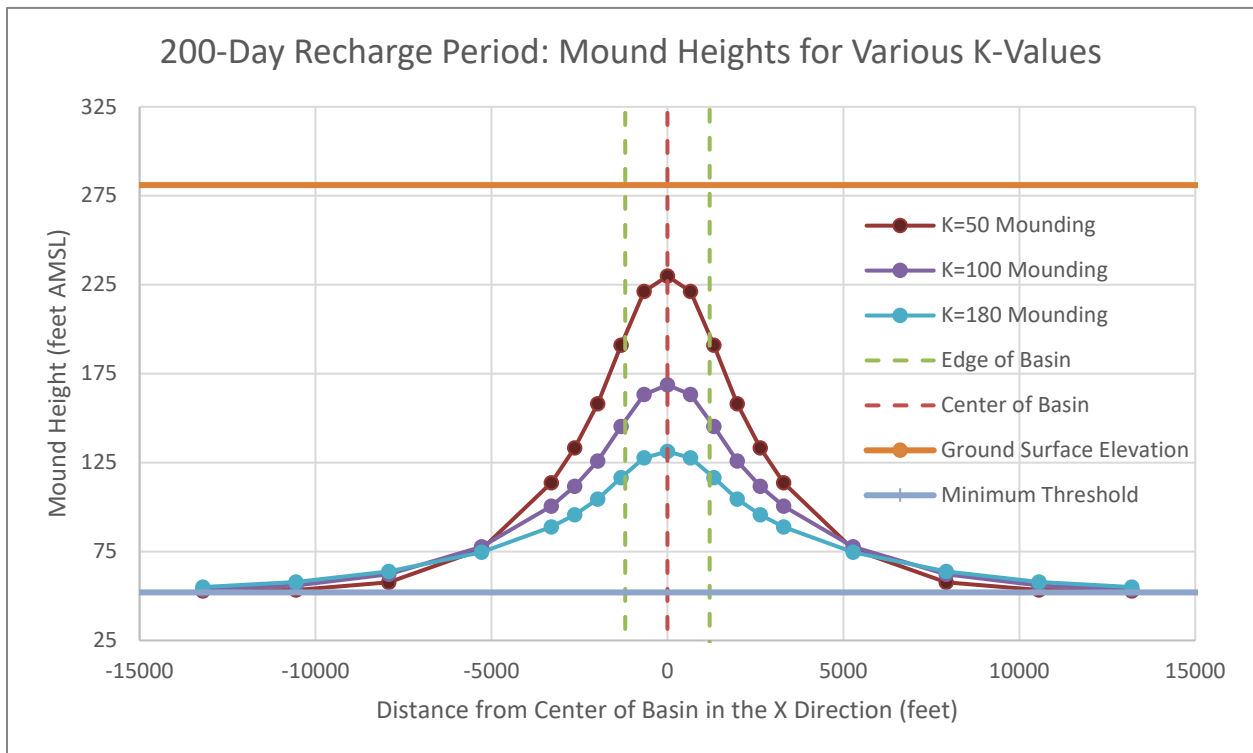


Figure 14 – Predicted Recharge Mound Height: 200-day Recharge Period

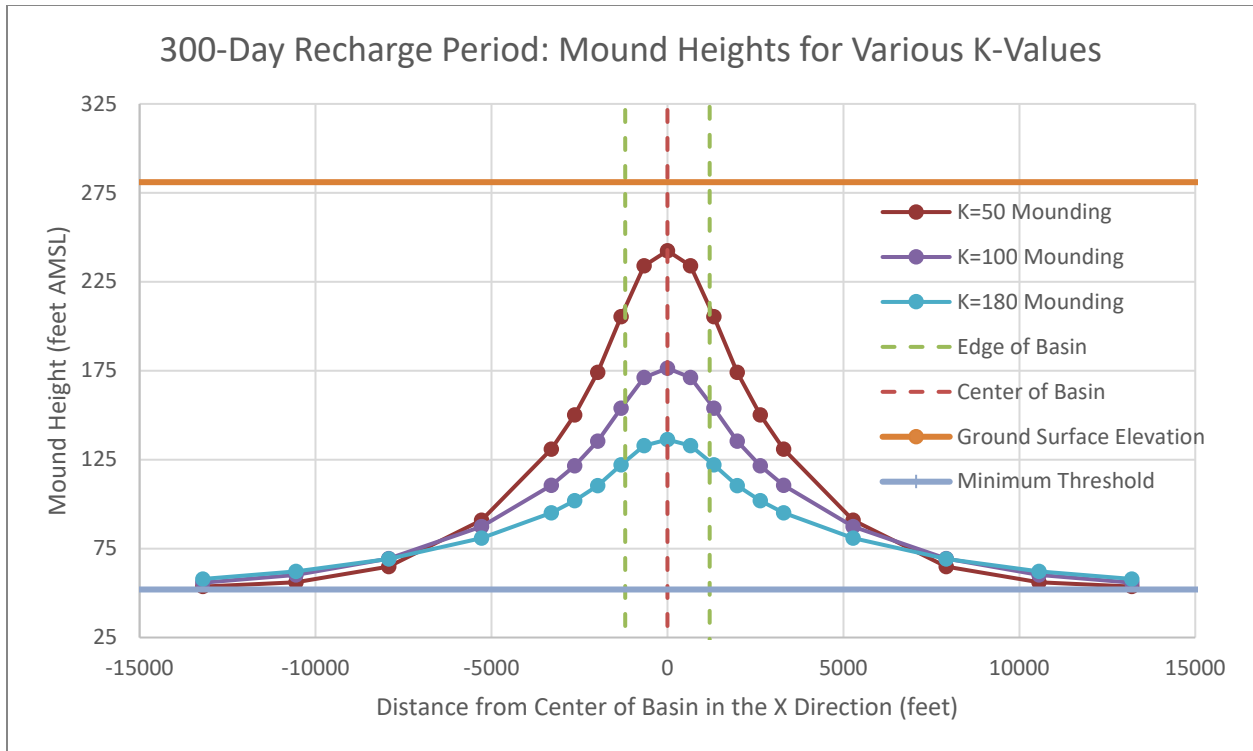


Figure 15 – Predicted Recharge Mound Height: 300-day Recharge Period

5.3 Project Effects on Groundwater Quality

Section 4.1 – Water Quality, describes the quality of groundwater in aquifers underlying the Project and of the surface water sources that will be used for recharge. The water quality in the aquifer resulting from the recharge program will depend on the volume of surface water recharged, the duration of recharge and the distance from the recharge site water quality samples are taken. No adverse geochemical reactions are predicted based on the mixing of surface water and groundwater for the Project. Since both surface water sources have levels of dissolved solids, trace minerals and major ions lower than those found in groundwater, the blended water will have levels of total dissolved solids, major ions and trace minerals lower than those found in groundwater native to the aquifer.

5.4 Summary of Project Impacts

The analysis documented in this report indicates that groundwater levels and groundwater quality will be affected by the Daley Ranch Recharge Project. In both cases, the changes are beneficial to existing and potential users of the groundwater resource. Groundwater levels will rise and total dissolved solids concentrations will decline with the absolute amount of the changes depending on the volume and duration of recharge. Due to the regionally extensive nature of the E-clay as described in Section 2.1 – Regional Geology and shown on **Figure 6**, the recharge benefits described above pertain to wells screened above the E-clay but will also reduce the risk of poor-quality water migrating vertically from beneath the E-clay.

The only potentially negative impact to groundwater quality would be the migration of pollutants (if present) from the soil into the groundwater system during recharge. To mitigate for this condition, BVWSD will monitor for the presence of contaminated soils during construction of the recharge basins.

6. References

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Infiltration Basins. USGS Scientific Investigations Report 2010-5102 by Glen S. Carleton.

Appendix A – Well Completion Reports

29/23-24H/1
(CONT.)

①

County Kern Owner _____ U.S.B.R. No. 29-23-24
 Dist. _____ Use _____ Local No. USBR Salinity K-21
 Quad. Buttonwillow Driller Rosco Moss Date _____
 Location SE Corner of NE 1/4 100' W 50'S, E₂ Corner.

Surf. Elev. 230 Groundwater Elev. _____ Date _____
 Depth 468 Groundwater Elev. _____ Date _____
 Yield _____ Aquifers _____ Date 286
 Drawdown _____ Artesian head _____ Date _____
 Casing _____ 3 Sand-Gravel _____

Source of data Driller (Riddell) type drill Cable _____ Diam. hole 16"

Depth	Elev.	Thick	Description
0	280	1	Ground Surface
1	279	13	Top Soil
14	266	4	Clay
18	262	30	Sand
48	232	28	Clay
76	204	24	Sand
100	180	6	Clay
106	174	14	Sandy Clay
120	160	3	Clay
123	157	27	Sandy Clay
150	130	6	Clay
156	124	6	Sandy Clay
162	118	8	Clay
170	110	12	Sandy Clay
182	98	7	Sticky Clay
189	91	5	Sand
194	85	28	Blue Clay
222	58	5	Sandy Clay
227	53	67	Clay
294	-14	14	Sandy Clay
308	-28	46	Sand
354	-74	6	Clay
360	-80	3	Sand
363	-83	7	Clay
370	-90	24	Sand
394	-114	10	Clay
404	-124	19	Sand
423	-143	4	Clay
427	-147	3	Sand
430	-150	7	Clay
437	-157	13	Sand
450	-170	16	Clay
466	-186	2	Clay and sand streaks
468	-188		Clay
			Bottom of the hole

MICROFILMED

29/23-22R

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

LOCATION NOT CHECKED

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

STATE OF CALIFORNIA

Do Not Fill In
No. **97118**
State Well No. _____
Other Well No. 29/23-22R

(1) OWNER:

Name _____
Address _____

(2) LOCATION OF WELL:

County Kern Owner's number, if any— _____
R. F. D. or Street No. _____
Sec. 22 Tws. 29S. Range 23E. M.D.
200 yards West of Palomas Road
60 ft. North of Buerkle Road

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal
Irrigation Test Well Other

(5) EQUIPMENT:

Rotary
Cable
Dug Well

(6) CASING INSTALLED:

SINGLE <input checked="" type="checkbox"/> DOUBLE <input type="checkbox"/>		Gage or Wall	Diam.	If gravel packed	
From	ft. to			yes Diameter of Bore	from ft.
0	504	18" ID 5/16" wall	27 1/2"	0	504
Blank bottom welded on.					
Type and size of shoe or well ring			Size of gravel: 1/8" to 3/8"		
Describe joint <u>Welded</u>					

(7) PERFORATIONS:

Type of perforator used Horizontal Louvre

Size of perforations	ft. in.	ft.	in., length, by	in.
150	504	10 rows	4 rows per ft.	
Perf. per row _____ Rows per ft. _____				

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any strata sealed against pollution? Yes No If yes, note depth of strata _____
From _____ to _____
Method of Sealing MICROFILMED

(9) WATER LEVELS:

Depth at which water was first found _____ ft.
Standing level before perforating _____ ft.
Standing level after perforating 74 ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom? _____
Yield: _____ gal./min. with _____ ft. draw down after _____ hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was an electric log made of well? Yes No

(11) WELL LOG:

Total depth	ft.	Depth of completed well	ft.
504		504	
Formations: Describe by color, character, size of material, and structure.			
0	ft. to	4	ft. Heavy soil
4		12	Fine sand
12		22	Yellow clay
22		30	Fine sand
30		38	Blue clay
38		50	Fine sand
50		60	Yellow clay
60		75	Fine sand
75		85	Blue clay
85		101	Coarse sand
101		112	Blue clay
112		128	Coarse sand
128		140	Blue clay
140		156	Coarse sand
156		170	Blue clay
170		190	Coarse sand
190		198	Blue clay
198		214	Coarse sand
214		222	Blue clay
222		238	Coarse sand
238		245	Blue clay
245		262	Coarse sand
262		275	Blue clay
275		298	Coarse sand
298		310	Blue clay
310		328	Coarse sand
328		340	Blue clay
340		355	Coarse sand
355		363	Blue clay
363		380	Coarse sand
380		390	Blue clay
390		395	Coarse sand
395		405	Blue clay
405		423	Coarse sand
423		432	Blue clay
432		450	Coarse sand
450		460	Blue clay
460		479	Coarse sand
479		485	Blue clay
485		499	Coarse sand
499		504	Blue clay

Work started June 5, 1961 Completed June 22, 1961

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME D.W. Slocum Water Well Drilling

(Person, firm, or corporation) (Typed or printed)

Address 1900 Ming Road

Bakersfield, California

MARY E. SLOCUM EXECUTRIX OF THE Will of DAN W. SLOCUM, DECEASED

License No. 198639 C 57 Dated June 23, 1961

29/24-30P 29/24-30P

No well scheduled
written

Well No. 11

Drilled by Cort Laswell - 12/1927 close to
29/24-30P

according to old map
of land

0 ft	to	ft	Top soil
0	"	25	Clay
25	"	35	Sand
35	"	50	Clay
50	"	75	Sand
75	"	90	Clay
90	"	150	Sand
150	"	165	clay
166	"	190	Coarse sand
190	"	194	Clay

Landed at 194 foot in hard clay

29/23-1301
WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

LOCATION NOT CHECKED
Do Not Fill In
No. 42841
State Well No. _____
Other Well No. 29/23E-1301

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. _____
(Insert appropriate number)

STATE OF CALIFORNIA

(1) OWNER:
Name _____
Address _____

(2) LOCATION OF WELL: Buttonwillow Sewer Disposal Plant
County Kern Owner's number, if any _____
R. F. D. or Street No. _____
Sec. 13 Twp. 29S. Range 23E. M.D.
2604 ft. East to Sec. line from well
1224 ft. North to Sec. line from well

(3) TYPE OF WORK (check):
New well Deepening Reconditioning Abandon
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic Industrial Municipal
Irrigation Test Well Other
(5) EQUIPMENT:
Rotary
Cable
Dug Well

(6) CASING INSTALLED:
SINGLE DOUBLE
From 0 to 100 ft. Diam. 8" 10ga.
If gravel packed Yes
Diameter of Bore 11" from ft. to ft.
Type and size of shoe or well ring Point
Describe joint Butt welded
Size of gravel: 3/16" 7/16"

(7) PERFORATIONS:
Type of perforator used Clean cut
Size of perforations 1/8" in., length, by 1" cc. in.
From 60 to 100 ft. Perf. per row 3" Centers Rows per ft. _____

(8) CONSTRUCTION:
Was a surface sanitary seal provided? Yes No To what depth _____ ft.
Were any struts sealed against pollution? Yes No If yes, note depth of struts _____
From _____ ft. to _____ ft.
Method of Sealing _____

(9) WATER LEVELS:
Depth at which water was first found 30' 6" ft.
Standing level before perforating 30' 6" ft.
Standing level after perforating/pumping 31' 8" ft.

(10) WELL TESTS: Water clear, no sand
Was a pump test made? Yes No If yes, by whom? D.W. Slocum
Yield: 60 gal./min. with 13' 6" ft. draw down after 8 hrs.
Temperature of water _____ Was a chemical analysis made? Yes No
Was electric log made of well? Yes No

(11) WELL LOG:
Total depth 100 ft. Depth of completed well 100 ft.
Formation: Describe by color, character, size of material, and structure.
0 ft. to 3 ft. Heavy soil
3 39 Yellow clay
39 47 Sand
47 50 Yellow clay
50 58 Medium sand
58 66 Yellow clay
66 71 Medium sand
71 78 Yellow clay
78 86 Medium sand
86 90 Yellow clay
90 97 Medium sand
97 100 Yellow clay

MICROFILMED

CONFIDENTIAL
Section 7076.1, Water Code

Work started April 3, 1957 Completed April 6, 1957

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME D.W. Slocum (Person, firm, or corporation) (Typed or printed)
Address 1900 Ming Road
Bakersfield, California
[Signed] D.W. Slocum Well Driller
License No. 63074 C 57 Dated April 9, 1957
DWR FORM NO. 246 (REV. 3-54)

ORIGINAL

File with DWR

STATE OF CALIFORNIA THE RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES WATER WELL DRILLERS REPORT

Do not fill in

No. 146092

29/29-20

Notice of Intent No. _____

Local Permit No. or Date _____

State Well No. _____

Other Well No. _____

(2) LOCATION OF WELL (See instructions): County Kern Owner's Well Number _____ Well address if different from above _____ Township 29 Range 24 Section 20 Distance from cities, roads, railroads, fences, etc. _____

(3) TYPE OF WORK: New Well [X] Deepening [] Reconstruction [] Reconditioning [] Horizontal Well [] Destruction [] (Describe destruction materials and procedures in Item 12) (4) PROPOSED USE: Domestic [] Irrigation [X] Industrial [] Test Well [] Stock [] Municipal [] Other []

(5) EQUIPMENT: Rotary [] Cable [] Other [] Reverse [X] Air [] Bucket [] (6) GRAVEL PACK: Yes [X] No [] Size BE Diameter of bore 28 Packed from 0 to 530 ft.

(7) CASING INSTALLED: Steel [X] Plastic [] Concrete [] (8) PERFORATIONS: Type of perforation or size of screen Table with columns: From ft., To ft., Dia. in., Gauge or Wall, From ft., To ft., Slot size

(9) WELL SEAL: Was surface sanitary seal provided? Yes [X] No [] If yes, to depth 50 ft. Were strata sealed against pollution? Yes [] No [X] Interval _____ ft. Method of sealing _____ Work started 4-5-79 Completed 4-7-79

(10) WATER LEVELS: Depth of first water, if known _____ ft. Standing level after well completion _____ ft. WELL DRILLER'S STATEMENT: This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

(11) WELL TESTS: Was well test made? Yes [] No [X] If yes, by whom? _____ Type of test Pump [] Bailer [] Air lift [] Depth to water at start of test _____ ft. At end of test _____ ft. Discharge _____ gal/min after _____ hours Water temperature _____ Chemical analysis made? Yes [] No [X] If yes, by whom? _____ Was electric log made? Yes [] No [X] If yes, attach copy to this report

SIGNED: (Well Driller: Johnson Drilling Co. NAME: _____ (Person, firm, or corporation) (Typed or printed) Address: P.O. Box 1853 City: Bakersfield, Calif. Zip: 93303 License No. 295856 Date of this report 4-7-79

30/23-1 WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

LOCATION NOT CHECKED

Do Not Fill In

No. 72565

DUPLICATE

File Original, Duplicate and Triplicate with the

REGIONAL WATER POLLUTION

CONTROL BOARD No. _____

(Insert appropriate number)

STATE OF CALIFORNIA

2203

State Well No. _____

Other Well No. _____

30/23E-1A
1H2?
(1H2)

(1) OWNER:

Name _____

Address _____

(2) LOCATION OF WELL:

County Kern Owner's number, if any— _____

R. F. D. or Street No. _____

Sec. 1 Twp. 30 S Range 23 E M.D.

30 Ft. North East of Main Canal

70 Ft. West of Wasco Way

(3) TYPE OF WORK (check):

New well Deepening Reconditioning Abandon

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic Industrial Municipal

Irrigation Test Well Other

(5) EQUIPMENT:

Rotary

Cable

Dug Well

(6) CASING INSTALLED:

SINGLE DOUBLE

From _____ ft. to _____ ft. Diam. _____ Gage or Wall _____

0 32 1/2 5/16

If gravel packed

Diameter of Bore from _____ to _____ ft.

27 1/2 0 32 1/2

Type and size of shoe or well ring point

Describe joint welded

Size of gravel: 1/8-3/8

(7) PERFORATIONS:

Type of perforator used clean cut

Size of perforations 1" in. length by 5/32" in.

From _____ ft. to _____ ft. Perf. per row _____ Rows per ft. _____

102 32 3" centers

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes No To what depth _____ ft.

Were any strata sealed against pollution? Yes No If yes, note depth of strata _____

From _____ ft. to _____ ft.

Method of Sealing _____

(9) WATER LEVELS:

Depth at which water was first found 55 ft. ft.

Standing level before perforating _____ ft.

Standing level after perforating _____ ft.

(10) WELL TESTS:

Was a pump test made? Yes No If yes, by whom? _____

Yield: _____ gal./min. with _____ ft. draw down after _____ hrs.

Temperature of water _____ Was a chemical analysis made? Yes No

Was electric log made of well? Yes No

(11) WELL LOG:

Total depth 32 1/2 ft. Depth of completed well 32 1/2 ft.

Formations: Describe by color, character, size of material, and structure.

0 ft. to 8 ft. black soil

8 " 36 " yellow sandy clay

36 " 60 " fine sand

60 " 73 " yellow sandy clay

73 " 90 " fine sand

90 " 98 " blue sandy clay

98 " 110 " coarse sand

110 " 130 " blue sandy clay

130 " 148 " coarse sand

148 " 170 " yellow sandy clay

170 " 179 " fine sandy clay

179 " 209 " yellow sandy clay, streaks

" " muddy sand

209 " 220 " coarse sand and fine sand

220 " 238 " yellow sandy clay

238 " 249 " coarse sand, gravel

249 " 264 " yellow clay

264 " 274 " coarse sand, gravel

274 " 293 " yellow clay

293 " 318 " coarse sand and gravel

318 " 32 1/2 " yellow clay

Work started 11-24-61 19 _____ Completed 12-5-61 19 _____

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Slocum Water Well Drilling (Typed or printed)

Address 1900 Ming Road

Bakersfield, California

[SIGNED] Mary E. Slocum by U.A. Bowles Well Driller

License No. 198639-C-57 Dated 12-6-61 19 _____

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

DWR USE ONLY — DO NOT FILL IN

29S24E18

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

Page 1 of 1

Owner's Well No. 1

No. **0992490**

Date Work Began 8/23/2015, Ended 8/28/2015

Local Permit Agency KERN County Public Health Services Department

Permit No. WP 16225 Permit Date 5/27/2015

GEOLOGIC LOG

WELL OWNER

ORIENTATION () VERTICAL HORIZONTAL ANGLE (SPECIFY)

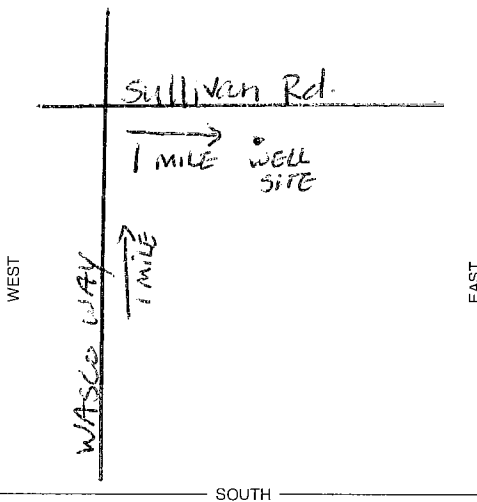
DRILLING METHOD Reverse Rotary FLUID water

DEPTH FROM SURFACE		DESCRIPTION
Fl.	to Fl.	
0	40	conductor
40	230	course sand
230	310	clay
310	490	course sand
490	530	clay
530	600	fine sand
600	630	clay
630	714	fine sand

WELL LOCATION

Address Wasco way & Sullivan Rd.
City Buttonwillow
County KERN
APN Book 103 Page 100 Parcel 019
Township 29S Range 24E Section 18
Lat _____ Deg. _____ Min. _____ Sec. _____ N Long _____ Deg. _____ Min. _____ Sec. _____ W

LOCATION SKETCH



ACTIVITY ()

- NEW WELL
- MODIFICATION/REPAIR
 - Deepen
 - Other (Specify)
- DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")
- USES ()
 - WATER SUPPLY
 - Domestic Public
 - Irrigation Industrial
 - MONITORING
 - TEST WELL
 - CATHODIC PROTECTION
 - HEAT EXCHANGE
 - DIRECT PUSH
 - INJECTION
 - VAPOR EXTRACTION
 - SPARGING
 - REMEDIATION
 - OTHER (SPECIFY)

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. **PLEASE BE ACCURATE & COMPLETE.**

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____
ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____
TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)
* May not be representative of a well's long-term yield.

TOTAL DEPTH OF BORING 723 (Feet)
TOTAL DEPTH OF COMPLETED WELL 714 (Feet)

DEPTH FROM SURFACE	BORE-HOLE DIA. (Inches)	CASING (S)				MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	DEPTH FROM SURFACE	ANNULAR MATERIAL			
		TYPE ()	BLANK	SCREEN	CONDUCTOR						TYPE	CE-MENT ()	BEN-TONITE ()	FILL ()
0 to 40	29 1/2"					STEEL	32"	.375		0 to 336				10 SACK
0 to 336	32"					STEEL	16"	.375						
336 to 714	32"					STEEL	16"	.375	.090					

ATTACHMENTS ()

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analyses
- Other _____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bob Lackey Drilling
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 17854 Byford Ave. Bakersfield CA 93314
CITY STATE ZIP
Signed Bl Lackey DATE SIGNED 9/14/2015 C-57 LICENSE NUMBER 663034
C-57 LICENSED WATER WELL CONTRACTOR

Appendix B – Groundwater Hydrograph

Appendix B

