




# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

DATE: March 17, 2021

TO: Department of Public Works and Planning, Attn: Steven E. White, Director  
Department of Public Works and Planning, Attn: Bernard Jimenez, Assistant Director  
Development Services, Attn: William M. Kettler, Division Manager  
Development Services, Attn: Chris Motta, Principal Planner  
Development Services, Current Planning, Attn: David Randall, Senior Planner  
Development Services, Policy Planning, ALCC, Attn: Mohammad Khorsand  
Development Services, Water and Natural Resources Division, Attn: Glenn Allen,  
Division Manager/Roy Jimenez  
Development Services, Zoning & Permit Review, Attn: Attn: Daniel Gutierrez/James  
Anders  
Development Services, Building & Safety/Plan Check, CASp, Attn: Dan Mather  
Resources Division, Solid Waste, Attn: Amina Flores-Becker/Chris Bump  
Development Engineering, Attn: Laurie Kennedy  
Road Maintenance and Operations, Attn: Martin Querin/Wendy Nakagawa/Nadia  
Lopez  
Design Division, Special Projects/Road Projects, Attn: Mohammad Alimi/Dale  
Siemer/Brian Spaunhurst/ Gloria Hensley  
Department of Public Health, Environmental Health Division, Attn: Deep Sidhu/  
Steven Rhodes/ Kevin Tsuda  
U.S. Army Corps of Engineers, Sacramento District, Regulatory Division, CA South  
Branch, Attn: Kathy Norton  
U.S. Department of Interior, Fish & Wildlife Service, San Joaquin Valley Division, Attn:  
Matthew Nelson  
U.S. Environmental Protection Agency, Air Division, Air Planning Office, Region 9,  
Attn: Dawn Richmond  
CA Regional Water Quality Control Board, Attn: Matt Scroggins  
CALTRANS, Attn: Dave Padilla  
CALTRANS, San Joaquin Environmental Branch, Attn: Shane Gunn  
CA Department of Fish and Wildlife, Attn: Craig Bailey, Environmental Scientist  
State Water Resources Control Board, Division of Drinking Water, Fresno District,  
Attn: Caitlin Juarez, Jose Robledo  
CA Department of Toxic Substances Control (CEQA unit), Attn: Dave Kereazis  
CA Department of Water Resources, Attn: Kevin Faulkenberry  
Table Mountain Rancheria, Attn: Robert Pennell, Cultural Resources Director  
Dumna Wo Wah Tribal Government, Attn: Robert Ledger, Tribal Chairman  
Santa Rosa Rancheria Tachi-Yokut Tribe, Attn: Attn: Shana Powers, Cultural Director  
Picayune Rancheria of the Chukchansi Indians, Attn: Heather Airey, THPO, Cultural  
Resources Director  
San Joaquin Valley Air Pollution Control District (PIC-CEQA Division), Attn: PIC  
Supervisor

Fresno Irrigation District, Attn: Engr-Review@fresnoirrigation.com  
Fresno Metropolitan Flood Control District, Attn:  
developmentreview@fresnofloodcontrol.org  
Kings River Conservation District, Attn: Paul Peschel, General Manager  
Fresno County Fire Protection District, Attn: Jim McDougald, Division Chief, Fire  
Prevention

FROM: Jeremy Shaw, Planner   
Development Services and Capital Projects Division

SUBJECT: Recirculation of Initial Study No. 7334: Fresno Canal Bridge Replacement Project

APPLICANT: The County of Fresno, Department of Public Works and Planning, Design Division

DUE DATE: March 30, 2021

This is the second circulation of Initial Study No. 7334. This Evaluation of Environmental Impacts was originally circulated for public review through the State Clearinghouse between May 27, 2020 and June 26, 2020. Public Comments received during the original circulation period expressed some concerns with certain aspects of the project related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Geology and Soils and Hazards and Hazardous Materials. In order to address some of those concerns, two supplemental biological studies were undertaken. Those studies have been attached.

The Department of Public Works and Planning, Development Services and Capital Projects Division has reviewed the subject proposal to replace the functionally obsolete Fresno Canal Bridge on North Del Rey Avenue and determined that a Mitigated Negative Declaration is appropriate.

The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The replacement would address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening a timber structure is not allowable, a replacement is the only option. The project site is located on N. Del Rey Avenue, approximately 0.5 miles south of McKinley Avenue, within the right-of-way near APN 309-090-51.

Based upon the Recirculated Initial Study prepared for the Fresno Canal Bridge Replacement Project staff has concluded that the project will not have a significant effect on the environment: It has been determined that there would be no impacts to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire. Potential impacts related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. have been determined to be less than significant. Potential impacts relating to Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources have determined to be less than significant with compliance with the identified Mitigation measures.

Please review the attached Initial Study for accuracy and adequacy in the area related to your expertise. We must have your comments by **March 30, 2021**. Any comments received after this date may not be used.

**If you do not have comments, please provide a “NO COMMENT” response to our office by the above deadline.**

Please address any correspondence or questions related to environmental and/or policy/design issues to me, Jeremy Shaw, Planner Development Services and Capital Projects Division, Fresno County Department of Public Works and Planning, 2220 Tulare Street, Sixth Floor, Fresno, CA 93721, or call (559) 600-4207 or email [jshaw@fresnocountyca.gov](mailto:jshaw@fresnocountyca.gov).

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*Activity Code (Internal Review): 2335*



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**County of Fresno**

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

**FILED**

MAR 11 2021

FRESNO COUNTY CLERK  
By \_\_\_\_\_ 3:20pm  
DEPUTY

For County Clerk's Stamp

**NOTICE OF INTENT TO ADOPT A  
MITIGATED NEGATIVE DECLARATION**

Notice is hereby given that the County of Fresno has prepared Initial Study (IS) No. 7334 pursuant to the requirements of the California Environmental Quality Act for the following proposed project:

**INITIAL STUDY NO. 7334** filed by **FRESNO COUNTY DEPARTMENT OF PUBLIC WORKS AND PLANNING, DESIGN DIVISION**, proposing to replace the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue. Adopt the Mitigated Negative Declaration prepared for Initial Study No. 7334.

(hereafter, the "Proposed Project")

The County of Fresno has determined that it is appropriate to adopt a Mitigated Negative Declaration for the Proposed Project. The purpose of this Notice is to (1) provide notice of the availability of IS No. 7334 and the draft Mitigated Negative Declaration and request written comments thereon; and (2) provide notice of the public hearing regarding the Proposed Project.

**Public Comment Period**

The County of Fresno will receive written comments on the Proposed Project and Mitigated Negative Declaration from March 12, 2021 through April 12, 2021.

Email written comments to [jshaw@fresnocountyca.gov](mailto:jshaw@fresnocountyca.gov), or mail comments to:

Fresno County Department of Public Works and Planning  
Development Services and Capital Projects Division  
Attn: Jeremy Shaw  
2220 Tulare Street, Suite A  
Fresno, CA 93721

IS No. 7334 and the draft Mitigated Negative Declaration may be viewed at the above address Monday through Thursday, 9:00 a.m. to 5:00 p.m., and Friday, 8:30 a.m. to 12:30 p.m. (except holidays), or at [www.co.fresno.ca.us/initialstudies](http://www.co.fresno.ca.us/initialstudies). An electronic copy of the draft Mitigated Negative Declaration for the Proposed Project may be obtained from Jeremy Shaw at the addresses above.

E20211000046

**Public Hearing**

The Board of Supervisors will hold a public hearing to consider approving the Proposed Project and the Mitigated Negative Declaration on May 11, 2021, at 10:00 a.m., or as soon thereafter as possible, in Room 301, Hall of Records, 2281 Tulare Street, Fresno, California 93721. Interested persons are invited to appear at the hearing and comment on the draft Mitigated Negative Declaration.

For questions please call Jeremy Shaw (559) 600-4207

Published: March 12, 2021

**Notice of Completion & Environmental Document Transmittal**

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613  
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #
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**Project Title:** Initial Study No. 7334 - Fresno Canal Bridge ReplacementLead Agency: County of FresnoContact Person: Jeremy ShawMailing Address: 2220 Tulare Street 6th FloorPhone: 559-600-4207City: FresnoZip: 93721County: Fresno**Project Location:** County: Fresno City/Nearest Community: SangerCross Streets: Fresno Canal and Del Rey Avenue Zip Code: 93657Longitude/Latitude (degrees, minutes and seconds): 36 ° 45 ' 23.86" N / 119 ° 35 ' 30.95" W Total Acres: 7.9 +/-Assessor's Parcel No.: Public Right-of-Way Section: 32, 33 Twp.: 13S Range: 22 E Base: MDBMWithin 2 Miles: State Hwy #: 180Waterways: Fresno Canal, Gould Canal, Dog Creek, Gray Colony DitAirports: N/ARailways: SJVRSchools: Fairmont Elementary**Document Type:**CEQA:  NOP Draft EIRNEPA:  NOIOther:  Joint Document Early Cons Supplement/Subsequent EIR EA Final Document Neg Dec

(Prior SCH No.) \_\_\_\_\_

 Draft EIS Other: \_\_\_\_\_ Mit Neg Dec

Other: \_\_\_\_\_

 FONSI**Local Action Type:** General Plan Update Specific Plan Rezone Annexation General Plan Amendment Master Plan Prezone Redevelopment General Plan Element Planned Unit Development Use Permit Coastal Permit Community Plan Site Plan Land Division (Subdivision, etc.) Other: Bridge Replace**Development Type:** Residential: Units \_\_\_\_\_ Acres \_\_\_\_\_ Office: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_ Commercial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_ Industrial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_ Educational: \_\_\_\_\_ Recreational: \_\_\_\_\_ Water Facilities: Type \_\_\_\_\_ MGD \_\_\_\_\_ Transportation: Type \_\_\_\_\_ Mining: Mineral \_\_\_\_\_ Power: Type \_\_\_\_\_ MW \_\_\_\_\_ Waste Treatment: Type \_\_\_\_\_ MGD \_\_\_\_\_ Hazardous Waste: Type \_\_\_\_\_ Other: Bridge Replacement**Project Issues Discussed in Document:** Aesthetic/Visual Fiscal Recreation/Parks Vegetation Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement Coastal Zone Noise Solid Waste Land Use Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects Economic/Jobs Public Services/Facilities Traffic/Circulation Other: \_\_\_\_\_**Present Land Use/Zoning/General Plan Designation:**

Existing bridge/AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) / Agriculture (Fresno County General Plan)

**Project Description:** (please use a separate page if necessary)

The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of E. McKinley. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards.

**Reviewing Agencies Checklist**

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".  
If you have already sent your document to the agency please denote that with an "S".

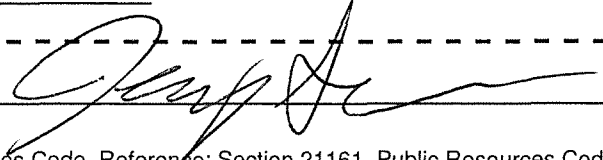
- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Air Resources Board              | <input type="checkbox"/> Office of Historic Preservation                     |
| <input type="checkbox"/> Boating & Waterways, Department of          | <input type="checkbox"/> Office of Public School Construction                |
| <input type="checkbox"/> California Emergency Management Agency      | <input type="checkbox"/> Parks & Recreation, Department of                   |
| <input checked="" type="checkbox"/> California Highway Patrol        | <input type="checkbox"/> Pesticide Regulation, Department of                 |
| <input checked="" type="checkbox"/> Caltrans District #6             | <input checked="" type="checkbox"/> Public Utilities Commission              |
| <input type="checkbox"/> Caltrans Division of Aeronautics            | <input type="checkbox"/> Regional WQCB # _____                               |
| <input type="checkbox"/> Caltrans Planning                           | <input type="checkbox"/> Resources Agency                                    |
| <input type="checkbox"/> Central Valley Flood Protection Board       | <input type="checkbox"/> Resources Recycling and Recovery, Department of     |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy          | <input type="checkbox"/> S.F. Bay Conservation & Development Comm.           |
| <input type="checkbox"/> Coastal Commission                          | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board                        | <input type="checkbox"/> San Joaquin River Conservancy                       |
| <input type="checkbox"/> Conservation, Department of                 | <input type="checkbox"/> Santa Monica Mtns. Conservancy                      |
| <input type="checkbox"/> Corrections, Department of                  | <input type="checkbox"/> State Lands Commission                              |
| <input type="checkbox"/> Delta Protection Commission                 | <input type="checkbox"/> SWRCB: Clean Water Grants                           |
| <input type="checkbox"/> Education, Department of                    | <input checked="" type="checkbox"/> SWRCB: Water Quality                     |
| <input type="checkbox"/> Energy Commission                           | <input type="checkbox"/> SWRCB: Water Rights                                 |
| <input checked="" type="checkbox"/> Fish & Game Region #4            | <input type="checkbox"/> Tahoe Regional Planning Agency                      |
| <input type="checkbox"/> Food & Agriculture, Department of           | <input checked="" type="checkbox"/> Toxic Substances Control, Department of  |
| <input type="checkbox"/> Forestry and Fire Protection, Department of | <input checked="" type="checkbox"/> Water Resources, Department of           |
| <input type="checkbox"/> General Services, Department of             | <input type="checkbox"/> Other: _____  |
| <input type="checkbox"/> Health Services, Department of              | <input type="checkbox"/> Other: _____  |
| <input type="checkbox"/> Housing & Community Development             |  |
| <input type="checkbox"/> Native American Heritage Commission         |  |

**Local Public Review Period (to be filled in by lead agency)**

Starting Date March 12, 2021 Ending Date April 12, 2021

**Lead Agency (Complete if applicable):**

Consulting Firm: \_\_\_\_\_ Applicant: \_\_\_\_\_  
 Address: \_\_\_\_\_ Address: \_\_\_\_\_  
 City/State/Zip: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_  
 Contact: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Phone: \_\_\_\_\_

Signature of Lead Agency Representative:  Date: March 9, 2021

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

File original and one copy with: <b>Fresno County Clerk 2221 Kern Street Fresno, California 93721</b>		Space Below For County Clerk Only.  CLK-2046.00 E04-73 R00-00	
Agency File No: <b>IS 7334</b>	<b>LOCAL AGENCY PROPOSED MITIGATED NEGATIVE DECLARATION</b>		County Clerk File No: <b>E-</b>
Responsible Agency (Name): Fresno County	Address (Street and P.O. Box): 2220 Tulare St. Sixth Floor	City: Fresno	Zip Code: 93721
Agency Contact Person (Name and Title): Jeremy Shaw Planner	Area Code: 559	Telephone Number: 600-4207	Extension: N/A
Project Applicant/Sponsor (Name): Alexis Rutherford, Fresno County Design	Project Title: Fresno Canal Bridge Replacement		
Project Description:  The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of E. McKinley. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards.			
Justification for Negative Declaration:  Based upon the Initial Study prepared for the Fresno Canal at Del Rey Avenue bridge replacement project staff has concluded that the project will not have a significant effect on the environment.  It has been determined that there would be no impacts to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire.  Potential impacts related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. have been determined to be less than significant.  Potential impacts relating to Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources have determined to be less than significant with compliance with the identified Mitigation measures.			
FINDING:  The proposed project will not have a significant impact on the environment.			
Newspaper and Date of Publication: Fresno Business Journal – March 12, 2021		Review Date Deadline: April 12, 2021	
Date:	Type or Print Signature:  David Randall, Senior Planner	Submitted by (Signature):  Jeremy Shaw, Planner	

State 15083, 15085

County Clerk File No.: \_\_\_\_\_

**LOCAL AGENCY  
MITIGATED NEGATIVE DECLARATION**





# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

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## INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

**1. Project title:**

Initial Study No. 7334 – Fresno Canal at Del Rey Avenue Bridge Replacement

**2. Lead agency name and address:**

Fresno County  
2220 Tulare Street, Suite A  
Fresno, CA 93721

**3. Contact person and phone number:**

Jeremy Shaw  
(559) 600-4207

**4. Project location:**

The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue. The replacement bridge will be constructed in the same location as the existing bridge.

**5. Project sponsor's name and address:**

Alexis Rutherford, Fresno County Design Division  
2220 Tulare Street, 6<sup>th</sup> Floor  
Fresno, CA 93721

**6. General Plan designation:**

Agriculture

**7. Zoning:**

AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)

**8. Description of project:**

The existing bridge is 71 feet long, 23.6 feet wide, was built in 1939 and widened in 1967. The proposed bridge will be 73 feet long and 39 feet wide to accommodate two 12-foot wide travel lanes and 6-foot wide shoulders. The bridge replacement is necessary to address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening the timber structure further is not allowable, a replacement is the only option.

Approach work is expected to extend up to 400 feet on either side of the bridge. The driveways/access roads on all four corners would require realignment to accommodate the new approach railing and private driveway gates and fences would require relocation. Trees and other vegetation would be removed during construction.

The bridge would be closed during construction requiring a 3.7-mile detour to allow a shorter construction period. The existing Average Daily Traffic (ADT) is 1,200 vehicles per day. Right-of-way acquisition is anticipated.

Existing utilities at the bridge will also need to be relocated: PGE electrical transmission overhead lines are located on the east side of the bridge and will remain in place. PGE will refeed the west side distribution lines from the north and remove the lines above the bridge. The distribution line feeding a house on the north side of the bridge will be moved northward to clear an access road. AT&T's telephone lines are located on the west side of the bridge and will be rerouted underground by directional bore method. A portion of Conterra's fiber optic cable located aurally on the north west side of the bridge will be rerouted underground with minimum depth of 10 feet below the canal bottom. Another portion, which is buried along west side of the north approach, will be relocated within County right-of-way, and buried at minimum 4 feet depth for a distance of approximately 300 feet. Directional bore method will be applied for this work with drilling diameter of 1.25 inch and two 3-foot by 5-foot bore pits.

The project would not involve pile driving; although structure demolition, excavation and some stream channel work is included in the scope of work, the work would be temporary and intermittent. Construction activities would occur during normal working hours, Monday through Friday, and would comply with Fresno County's Noise Ordinance and Caltrans Standard Specifications for noise.

**9. Surrounding land uses and setting: Briefly describe the project's surroundings:**

The land uses in the area of the project are agricultural and some parcels have single family residences. The Fresno Canal runs beneath and through the project site.

**10. Other public agencies whose approval is required (g., permits, financing approval, or participation agreement.)**

California Department of Fish and Wildlife  
California Department of Transportation  
Central Valley Regional Water Quality Control Board  
Fresno Irrigation District  
San Joaquin Valley Air Pollution Control District  
State Water Resources Control Board  
U.S. Department of Fish and Wildlife  
U.S. Environmental Protection Agency

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code 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.?**

Notice that this project application was complete was sent to three of the four tribes who have requested such formal consultation from the County. The notices were sent to Table Mountain Rancheria (TMR) and the Dumna Wo Wah Tribal Government (DWW) on August 24, 2017, and to the Picayune Rancheria of Chukchansi Indians (PRCI) on November 7, 2017. The reason for the later date is that the PRCI requested notice after the original letters had been sent. The project was outside the area of geographic interest for the fourth tribe: Santa Rosa Rancheria.

Neither TMR nor PRCI provided a response to the County's notice that the project application was complete. DWW requested consultation with the County in a letter dated September 7, 2017, which was within the 30-day response time prescribed by AB 52. A copy of the Archeological Survey Report and Historic Property Survey Report (Applied Earthworks, 2017) was provided to the Tribal Representative on February 21, 2018. On August 2, 2018, staff adopted mitigation and concluded consultation with the DWW. See Section XVIII. of the Initial Study for more details.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

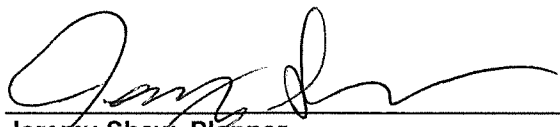
- |   |   |
|---|---|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources |
| <input type="checkbox"/> Air Quality                        | <input type="checkbox"/> Biological Resources               |
| <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology/Soils                      | <input type="checkbox"/> Greenhouse Gas Emissions           |
| <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Hydrology/Water Quality            |
| <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing                 |
| <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                           |
| <input type="checkbox"/> Mandatory Findings of Significance |   |

**DETERMINATION OF REQUIRED ENVIRONMENTAL DOCUMENT:**

On the basis of this initial evaluation:

- I find that the proposed project **COULD NOT** have a significant effect on the environment. **A NEGATIVE DECLARATION WILL BE PREPARED.**
- 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 the Mitigation Measures described on the attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION WILL BE PREPARED.**
- I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required
- I find that as a result of the proposed project, no new effects could occur, or new Mitigation Measures would be required that have not been addressed within the scope of a previous Environmental Impact Report.

**PERFORMED BY:**

  
 \_\_\_\_\_  
 Jeremy Shaw, Planner

Date: 3-11-21

**REVIEWED BY:**

  
 \_\_\_\_\_  
 David Randall, Senior Planner

Date: 3-11-21

**INITIAL STUDY  
ENVIRONMENTAL CHECKLIST FORM  
(Initial Study Application No. 7334)**

The following checklist is used to determine if the proposed project could potentially have a significant effect on the environment. Explanations and information regarding each question follow the checklist.

1 = No Impact

2 = Less Than Significant Impact

3 = Less Than Significant Impact with Mitigation Incorporated

4 = Potentially Significant Impact

**I. AESTHETICS**

Except as provided in Public Resources Code Section 21099, would the project:

- 2 a) Have a substantial adverse effect on a scenic vista?
- 2 b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- 2 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 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?
- 1 d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

**II. AGRICULTURAL 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) prepared by the California Dept. 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 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, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- 2 b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?
- 1 c) Conflict with existing zoning for forest land, timberland or timberland zoned Timberland Production?
- 1 d) Result in the loss of forest land or conversion of forest land to non-forest use?
- 1 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?

**III. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- 2 a) Conflict with or obstruct implementation of the applicable Air Quality Plan?
- 2 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?
- 2 c) Expose sensitive receptors to substantial pollutant concentrations?
- 2 d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**IV. BIOLOGICAL RESOURCES**

Would the project:

- 3 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?
- 2 b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 2 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?
- 2 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?
- 1 e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- 1 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?

**V. CULTURAL RESOURCES**

Would the project:

- 2 a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- 3 b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- 3 c) Disturb any human remains, including those interred outside of formal cemeteries?

**VI. ENERGY**

Would the project:

- 2 a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- 2 b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**VII. GEOLOGY AND SOILS**

Would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - 1 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?
  - 1 ii) Strong seismic ground shaking?
  - 1 iii) Seismic-related ground failure, including liquefaction?
  - 1 iv) Landslides?
- 1 b) Result in substantial soil erosion or loss of topsoil?
- 1 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?
- 1 d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- 1 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 waste water?
- 3 f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

- 2 a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- 1 b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- 2 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 result in substantial erosion or siltation on or off site?
  - 1 i) Result in substantial erosion or siltation on- or off-site;
  - 1 ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - 1 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
  - 1 iv) Impede or redirect flood flows?
- 1 d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- 2 e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**VIII. GREENHOUSE GAS EMISSIONS**

Would the project:

- 2 a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- 2 b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**IX. HAZARDS AND HAZARDOUS MATERIALS**

Would the project:

- 1 a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 2 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?
- 1 c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 1 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?
- 1 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?
- 1 f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 1 g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**X. HYDROLOGY AND WATER QUALITY**

Would the project:

**XI. LAND USE AND PLANNING**

Would the project:

- 1 a) Physically divide an established community?
- 1 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?

**XII. MINERAL RESOURCES**

Would the project:

- 1 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?
- 1 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?

**XIII. NOISE**

Would the project result in:

- 2 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 applicable standards of other agencies?
- 2 b) Generation of excessive ground-borne vibration or ground-borne noise levels?
- 1 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 two 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?

**XIV. POPULATION AND HOUSING**

Would the project:

- 1 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)?

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

forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

**XV. PUBLIC SERVICES**

Would the project:

- 1 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:
  - 1 i) Fire protection?
  - 1 ii) Police protection?
  - 1 iii) Schools?
  - 1 iv) Parks?
  - 1 v) Other public facilities?

**XVI. RECREATION**

Would the project:

- 1 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?
- 1 b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

**XVII. TRANSPORTATION**

Would the project:

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

**XVIII. TRIBAL CULTURAL RESOURCES**

Would the project:

- 3 a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:
  - 3 i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - 3 ii) 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 Public Resources Code Section 5024.1. In applying the criteria set

**XIX. UTILITIES AND SERVICE SYSTEMS**

Would the project:

- 2 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?
- 1 b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- 1 c) Result in a determination by the wastewater treatment provider which 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?
- 1 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?
- 1 e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**XX. WILDFIRE**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- 1 a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- 1 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?
- 1 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?
- 1 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?

**XXI. MANDATORY FINDINGS OF SIGNIFICANCE**

Would the project:

- 3 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- 3 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)
- 1 c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

**Documents Referenced:**

This Initial Study is referenced by the documents listed below. These documents are available for public review at the County of Fresno, Department of Public Works and Planning, Development Services and Capital Projects Division, 2220 Tulare Street, Suite A, Fresno, California (corner of M & Tulare Streets).

Air/Noise Study Memo by Shane Gunn (Caltrans), dated September 19, 2016  
Anticipated Tree Impacts by Live Oak Associates, Inc., dated May 2, 2018  
Farmland Conversion Impact Analysis for the Fresno Canal Bridge Replacement at Del Rey Avenue Project by Area West Environmental, Inc. April 28, 2017  
Fresno County General Plan, Policy Document, Background Report and Final EIR  
Fresno County Zoning Ordinance  
Greenhouse Gas Analysis for Fresno Canal on Del Rey Avenue Bridge Replacement Project by LSA, dated December 17, 2019  
Hazardous Waste Initial Site Assessment by Haro Environmental, November 11, 2015  
Historic Property Survey Report by Caltrans, January 2017  
Impacts to Habitats/Vegetation Types by Live Oak Associates, Inc.  
Important Farmland 2016 Map, State Department of Conservation  
Natural Environment Study (Minimal Impacts) by Caltrans, October 2016  
Potential Waters of the United States Fresno Canal at Del Rey Avenue, Fresno County, California by Live Oak Associates, Inc., October 2016  
Water Quality Technical Memorandum by Rincon Consultants, September 16, 2016  
Biological Resources Update Survey, Fresno Canal at Del Rey Avenue, California, by Live Oak Associates, Inc. November 13, 2020  
Fresno Canal Bridge on Del Rey Avenue Project Tree Removal Air Qualify Analysis, by LSA, September 17, 2020

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# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

## EVALUATION OF ENVIRONMENTAL IMPACTS

**APPLICANT:** Fresno County Design Division

**APPLICATION NOS.:** Initial Study Application No. 7334

**DESCRIPTION:** The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards.

**LOCATION:** The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue.

This is the second circulation of Initial Study No. 7334. This Evaluation of Environmental Impacts was originally circulated for public review through the State Clearinghouse between May 27, 2020 and June 26, 2020. Public Comments received during the original circulation period expressed some concerns with certain aspects of the project related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Biological Resources, Geology and Soils and Hazards and Hazardous Materials. In order to address some of those concerns, two supplemental biological studies were undertaken.

The replacement of the existing bridge would address deficiencies such as a narrow deck width, substandard barrier rails and approach guard rails as well as scour erosion at the existing abutments. Because widening a timber structure is not allowable, replacement is the only option. The existing bridge is 71 feet long, 23.6 feet wide, was built in 1939 and widened in 1967. The proposed bridge will be 73 feet long and 39 feet wide to accommodate two 12-foot wide travel lanes and 6-foot wide shoulders. Approach work is expected to extend up to 400 feet on either side of the bridge. The driveways/access roads on all four corners would require realignment to accommodate the new approach railing and private driveway gates and fences would require relocation. Trees and other vegetation would be removed during construction.

The bridge would be closed during construction requiring a 3.7-mile detour to allow a shorter construction period. The existing Average Daily Traffic (ADT) is 1,200 vehicles per day. Right-of-way acquisition is anticipated.

Existing utilities at the bridge will also need to be relocated: PG&E electrical transmission overhead lines are located on the east side of the bridge and will



remain in place. PG&E will refeed the west side distribution lines from the north and remove the lines above the bridge. The distribution line feeding a house on the north side of the bridge will be moved northward to clear an access road. AT&T's telephone lines are located on the west side of the bridge and will be rerouted underground by directional bore method. A portion of Conterra's fiber optic cable located aurally on the north west side of the bridge will be rerouted underground with minimum depth of 10 feet below the canal bottom. Another portion, which is buried along west side of the north approach, will be relocated within County right-of-way, and buried at minimum 4 feet depth for a distance of approximately 300 feet. Directional bore method will be applied for this work with drilling diameter of 1.25 inch and two 3-foot by 5-foot bore pits.

The project would not involve pile driving; although structure demolition, excavation and some stream channel work is included in the scope of work, the work would be temporary and intermittent. Construction activities would occur during normal working hours, Monday through Friday, and would comply with Fresno County's Noise Ordinance and Caltrans Standard Specifications for noise.

Note: The "entire project limits" as used in the following report and the associated Mitigation Measures, includes all of the following: the road approaches approximately 400 feet north and 400 feet south of the bridge easement; the Fresno Canal including the area of the canal beneath the existing bridge; approximately 230 feet up and 220 feet downstream of the 60-foot bridge right-of-way along the length of the project site; and a 4.3-acre staging area northwest of the bridge.

## I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

- A. Have a substantial adverse effect on a scenic vista; or
- B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

FINDING: LESS THAN SIGNIFICANT IMPACT:

In the original circulation of this Evaluation of Environmental Impacts, it incorrectly stated that up to 174 trees would be removed as a result of this project. An additional supplemental memo regarding tree removal, by LSA, dated September 17, 2020, indicated the project is anticipated to result in the removal of up to approximately 30 trees during construction. While these trees may be removed in order to allow the replacement of the bridge, this does not present a significant impact because there is always a break in the tree line and natural vegetation where a bridge is established. The slight increase in this gap in this area will not have a significant impact on the visual quality of the area. The air quality impact of tree removal is discussed under Section III Air Quality.

- 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 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

North Del Rey Avenue is not considered a scenic or landscaped drive. However, Belmont Avenue to the south and Academy Avenue to the east are considered to be scenic drives. The project will have no impact on these drives because the low elevation of the bridge prevents it from being visible from any location on these roads. The bridge itself is not eligible for inclusion in the National Register of Historic Places.

- D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

FINDING: NO IMPACT:

No new lighting is proposed as part of this application and the road surface will be of similar composite as the existing roadway: asphalt pavement. There are currently no streetlights along the bridge, and none are proposed as part of this application. As a result, there is no change to the existing sources of light or glare in the vicinity of the project and no impacts as a result of new sources of light and glare.

## II. AGRICULTURAL 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) prepared by the California Dept. 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 in Forest Protocols adopted by the California Air Resources Board. Would the project:

- A. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; or
- B. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would result in the conversion of approximately 0.13 acre (5,663 square feet) of Prime Farmland along the roadway edge to accommodate the bridge approaches. Approximately 3,431 square feet of the farmland which would be impacted is restricted by a Williamson Act Contract. The removal of this portion of land does not represent a conflict with the Contract because it does not present a reduction of farming acreage to less than 20 acres. Further, the removal of a small amount of fringe farmland from the larger parcel will not adversely affect the ability to farm the remainder and lastly, use of this section as right-of-way will not create pressure for surrounding farmland to convert to a non-agricultural use.

During review of this project under the provisions of the National Environmental Policy Act (NEPA), a Farmland Conversion Impact Rating was calculated to determine if the loss of farmland would be considered significant. The site was given a conversion rating of 122 (*Farmland Conversion Impact Analysis for the Fresno Canal Bridge Replacement at Del Rey Avenue Project* by Area West Environmental, Inc., dated April 28, 2017). According to 7 CFR §658.4, projects which score less than 160 “need not be given further consideration for protection” because the measurable impacts of farmland conversion show that impacts will be less than significant. In the case of this project, more than two thirds of the value for the site was due to the prime farmland designation; however, the small amount to be converted was determined to be negligible compared both to the parent property and the farmable land in the County.

- C. Conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production; or
- D. Result in the loss of forest land or conversion of forest land to non-forest use?

FINDING: NO IMPACT:

The project site is not located in an area where land is designated or zoned for timberland or timberland production. Therefore, the project will not result in the loss of forest land or conversion of forest land to non-forest use.

- 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?

FINDING: NO IMPACT:

Due to the lack of forestland in the vicinity of the project site, there will be no direct impacts to forestland. The replacement of this bridge will not result in the conversion of offsite forestland.

Despite the removal of a small amount of Prime and Williamson Act-restricted farmland, this project will not involve other changes which could result in the conversion of Farmland to non-agricultural use. The loss of farmland would be related to the need to

acquire additional right-of-way to ensure a safe approach to the bridge and farming in this area has historically occurred adjacent to the roadway.

The ultimate right-of-way along Del Rey Avenue in the project area is 60 feet, with 30 feet on either side of the section line and the existing right-of-way is 40 feet with 20 feet on either side of the section line. Based on the ultimate right-of-way, up to ten feet on either side of the section line could ultimately be converted to roadway. The ultimate right-of-way was determined as part of the Fresno County General Plan in October 2000 and loss of farmland associated with acquisition of right-of-way was considered in the General Plan EIR Background Report. Therefore, the proposed loss of farmland is not a new impact as a result of this application and this bridge replacement project will have no impact on pressures to convert farmland on nearby parcels.

### III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- A. Conflict with or obstruct implementation of the applicable Air Quality Plan; or
- 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; or
- C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under a Federal or State ambient air quality standard; or
- D. Expose sensitive receptors to substantial pollutant concentrations; or
- E. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The San Joaquin Valley Air Pollution Control District (Air District) reviewed this project and did not identify any concerns with potential air quality standards violations or nonconformity with existing Air Quality Plans. The project is anticipated to return to baseline traffic following construction because no additional through lanes are proposed. The proposed widening will create more space in each lane and add 6-foot shoulders for improved safety.

Therefore, the project's contribution to air quality impacts and release of greenhouse gases is limited to the construction period. The Greenhouse Gas Memo prepared by LSA (dated December 17, 2019) used the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (ROADMod) to estimate the

project's emissions during construction: 647.12 metric tons of Carbon Dioxide equivalent (MTCO<sub>2</sub>e).

That memo also calculated the following emissions for the project: 0.47 tons of ROG, 4.02 tons of Carbon Monoxide, 4.67 tons of Nitrogen Oxide, 0.26 tons of Particulate Matter less than 10 microns in size, 0.39 tons of Particulate Matter less than 2.5 microns in size, 0.1 tons of Sulfur Oxides, 915.47 tons of Carbon Dioxide, 0.02 tons of Nitrous Oxide (N<sub>2</sub>O), and 0.20 tons of Methane. Overall this results in 925.32 tons of CO<sub>2</sub>e, which is equivalent to 839.44 metric tons.

The Air District has not adopted significant thresholds for construction impacts; however, the anticipated release of 839.44 MTCO<sub>2</sub>e is less than the 900 MTCO<sub>2</sub>e threshold recommended by the California Air Pollution Control Officer's Association (CAPCOA) for construction impacts. Therefore, the project is determined to have less than significant impacts on release of criteria pollutants.

According to a supplemental memo regarding Air Quality Analysis related to tree removal, by LSA, dated September 17, 2020, the project is anticipated to remove approximately 30 trees as part of construction activities. Generally, some trees are recognized for their ability to remove ground level ozone; however, some tree varieties release biogenic gases that create ground level ozone. Trees can capture criteria pollutants such as nitrogen oxides and particulate matter. The emissions resulting from, or benefit of, biogenic sources, such as those from trees or other vegetation are not considered in any of the methodologies for project evaluation contained in the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Guide For Assessing and Mitigating Air Quality Impacts (GAMAQI). According to the SJVAPCD, project impacts shall be based on mass emissions of criteria pollutants during project construction and operation. The SJVAPCD's thresholds for criteria pollutants are measured in tons of emissions per year. The very small change in emission levels associated with removal of trees in the project vicinity would not be measurable against these thresholds. Additionally, biogenic emissions are not included in the emission analysis because trees have a life cycle that involves a growing period where emissions are captured, which is then followed by a period of decay where emissions are released back into the atmosphere. Trees sequester carbon dioxide while they are actively growing, which is typically limited to the first 20 years of tree life. Thereafter, the accumulation of carbon in biomass slows with age, and is completely offset by losses from clipping, pruning and death. Due to the limited sequestration life remaining in the trees that would be removed as part of the project, it is not anticipated that there would be air quality impacts in the vicinity of the project site, therefore impacts would be less than significant.

#### IV. BIOLOGICAL RESOURCES

Discussion in this section is based on the *Natural Environment Study (Minimal Impacts)* report, dated October 2016, and the Biological Resources Update Survey, Fresno Canal at Del Rey Avenue, dated November 13, 2020 prepared by Lone Oaks Associates .

Would the project:

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The Area of Potential Effects (APE) determined by Caltrans consists of the bridge itself; the road approaches approximately 400 feet north and south of the existing bridge easement; the Fresno Canal in the area of the bridge, 230 feet upstream, and 220 feet downstream of the bridge; a 4.3-acre staging area located northwest of the bridge, and a small portion of the adjacent farmland.

On June 19, 2016, a reconnaissance-level field survey of the APE was performed to determine if sensitive or protected species were likely to be present on site. Of special-status species which are known to occur in and around the quadrangle, the following have the potential to be present on site: western pond turtle, Swainson's hawk, and San Joaquin Kit Fox. On November 13, 2020, a field survey of the APE was conducted to provide an update on conditions within the APE since the 2016 survey, and determine if the avoidance measures of the original Natural Environmental Study are still appropriate to reduce all potential impacts to biological resources to a less than significant level. No changes to potential habitat or land uses since the 2016 survey were observed. No burrows of suitable dimensions for denning of San Joaquin Kit Fox were observed in the APE. No evidence of Kangaroo Rat, or American Badger habitation were observed. Suitable burrows for the Burrowing Owl are present within and adjacent to the proposed staging area northwest of the bridge. Based on the current site conditions, the mitigation measures stipulated in the original Natural Environmental Study are still appropriate.

Canals are capable of supporting western pond turtles; however, at the time of the survey, the water in the canal was flowing too quickly and the banks were too hard to support either swimming or basking. Therefore, it is unlikely that western pond turtle will be present onsite.

In regard to Swainson's Hawk, review of the project site determined that the site and surrounding area did not contain suitable foraging habitat, although the mature riparian trees in the vicinity of the canal offer potential nesting habitat. The surrounding development consists of tilled fields which have been eradicated of small mammals, such as ground squirrel, which would otherwise be a source of forage for the hawk. In the Central Valley, Swainson's hawks usually nest adjacent to areas where foraging is available, making this area generally unsuitable for long-term occupation; however, they may pass over the project site from time to time.

The San Joaquin kit fox prefers area of alkali sink scrub and alkali grassland, which is not present on the subject site. In addition, according to the *Natural Environment Study*, reports of observed kit fox in the area are not likely to be actual observations, as they appear to be at elevations of 1,000 to 2,000 feet in oak woodland habitat, where vegetation consists of brushy understory. The *Natural Environment Study* posits that based on the location of the observation these foxes were grey fox rather than kit fox

and determined that San Joaquin kit fox would be very unlikely to be present on site, even as transients.

At the existing bridge, birds were observed flying under the deck to roost and may have constructed nests in the underside of the bridge. No bats were observed during the field visit, but they have been known to roost on the undersides of timber bridges such as the existing bridge. No bat sign was observed; however, the water in the canal was only a few feet shy of the bridge deck, which prevented the biologist from close survey. Therefore, since it cannot be determined if bats are present on site and because raptors and other birds would find the underside of the bridge a suitable nesting location, mitigation is required to avoid impacts to these species. Impacts to birds outside of the nesting season would not be considered a significant impact.

\* **Mitigation Measures**

1. *In order to minimize adverse impacts to nesting raptors, migratory birds, and colonial nesting birds, the following mitigation measures shall be implemented:*
  - a. *If construction (including equipment staging and tree removal) will occur during the breeding season for migratory birds and raptors (generally between February 15 and September 1), the County shall retain a qualified biologist to conduct a preconstruction nesting bird and raptor survey before the onset of construction activities. The preconstruction nesting bird and raptor survey shall be conducted between February 15 and September 1 within suitable habitat within the entire project limits. Surveys for nesting migratory birds shall be completed within 250 feet of the entire project limits. Surveys for Swainson's hawk should also extend 0.25 mile from the entire project limits to ensure that hawks are not indirectly affected by construction noise. The survey shall be conducted not more than 10 days before the initiation of construction activities. If no active nests are detected during the survey, no additional mitigation is required to address concerns relating to migratory birds and raptors.*
  - b. *If migratory birds or raptors are found to be nesting in or adjacent to the entire project limits, a no-disturbance buffer of 100 feet around an active bird nest or 300 feet around an active raptor nest shall be established to avoid disturbance of the nest area and to avoid take. The buffer shall be maintained around the nest area until the end of the breeding season, or until a qualified biologist determines that the young have fledged and are foraging on their own. The extent of these buffers may be modified, as determined by the biologist (in coordination with Caltrans and CDFW), depending on the species identified, level of noise or construction disturbances, and other topographical or artificial barriers.*
2. *In order to minimize adverse impacts to roosting bats, the following mitigation measures shall be implemented:*

- a. *Pre-construction surveys for roosting bats shall be conducted by a qualified biologist within 15 days of the onset of construction, during dusk when bats are likely to be active. The survey area will include the North Del Rey Avenue bridge over the Fresno Canal.*
- b. *If construction activities commence between April 1 and August 31 (the bat breeding season) and the pre-construction surveys identified active roosting bats, a 100-foot construction setback shall be established around the bridge. Alternative avoidance measures may be approved by CDFW. Buffer areas will be identified on the ground with flagging, fencing, or by other easily visible means, to prevent construction equipment and workers from entering the setback area. Buffers shall remain in place for the duration of the breeding season, unless other arrangements are made with CDFW. After the breeding season, any remaining bats may be removed through passive relocation (see following measure).*
- c. *During the non-breeding season, (September 1 to March 31), resident bats occupying the North Del Rey Avenue and Fresno Canal bridge may be passively relocated by a qualified biologist or professional pest control specialist. Passive relocation would entail installing one-way doors on the bridge or utilizing other humane exclusion methods where the bats are located and leaving these devices in place for at least 48 hours to ensure bats have vacated the bridge.*

- B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Riparian habitat exists in the vicinity of the canal and is composed of a mix of native and non-native species and the canal itself is an engineered irrigation system lined with rock and riprap. The canal itself does not provide suitable habitat for special-status species; however, some riparian habitat exists on the banks of the canal. Approximately 0.02 acres of permanent impacts and 0.03 acres of temporary impacts will occur to non-native riparian habitat; and approximately 0.03 acre of temporary impacts and 0.02 acres of temporary impacts will occur to native riparian habitat. These impacts primarily occur in the areas immediately adjacent to the bridge where the land has been previously developed as the roadway and support for the existing bridge. Therefore, impacts to riparian habitat will be less than significant.

The modification of the canal bed with concrete and rock slope protection as part of the installation of the replacement bridge will not present a significant impact to the value of the canal to native and non-native species. The project is required to prepare an application for a Streambed Alteration Agreement, which allows the California Department of Fish and Wildlife to require specific minimization and avoidance measures for this project, if they are determined to be necessary. Compliance with this



existing regulation will result in less than significant impacts to riparian habitat or other sensitive natural communities.

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

An ecologist examined the entire project site for possible waters of the United States and determined that the bed and lower bank of the Fresno Canal below the ordinary high-water mark would likely be considered a tributary water of the United States. The rationale for this determination for an engineered canal is the existing connection between the canal and the San Joaquin River, although in most years water in the canal does not reach this connection point.

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The canal beneath the bridge is required to route fish waters in odd-numbered years. Therefore, the project would be required to install a diverter if water is flowing at the start of construction. If this is the case, an in-channel bypass will be provided by the Fresno Irrigation District. In addition, this project is required to comply with permitting associated with work in a streambed, such as the Streambed Alteration Agreement and preparation of a Stormwater Pollution Prevention Plan (SWPPP). Therefore, the project will have no significant adverse impacts on the movement of resident or migratory fish or wildlife species.

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

FINDING: NO IMPACT:

The project will not conflict with any local policies or ordinances protecting biological resources because it is not in area subject to any such regulations. Similarly, the project site is not subject to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

The County of Fresno has general plan policies recommending compliance with the Oak Woodland Management Plan for projects which have the potential to impact Oak Woodlands. A Tree Impact Study prepared by Live Oak Associates, Inc. indicated that

the trees to be affected included the following species: Fremont's Cottonwood, Citrus, Eucalyptus, Almond, Cherry, Goodding's Black Willow, Red Willow, and Chinaberry – none of which are protected tree species.

## V. CULTURAL RESOURCES

Would the project:

- A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Impacts to the canal were determined to be less than significant because the majority of work will occur outside of the streambed. While some work within the bed of the canal will occur, the installation and removal of bridge support structures will not impact the overall function of the canal as a water conveyance structure.

The subject bridge was constructed in 1939 and widened in 1967 and is listed in the Caltrans Historic Bridge Inventory as Category 5, which makes it ineligible for listing in the National Register of Historic Places. The Fresno Canal and a transmission line, which runs parallel to the canal, were also identified as historic-era construction.

The transmission line first appears on the 1947 Round Mountain Quadrangle map and appears to be part of a 130-kilovolt line which connects the Sanger Substation to the Kerckhoff Powerhouse. The nearest lattice towers which support the line are located approximately 570 feet south and 125 feet north of the edge of the bridge. While electric distribution lines and telephone wires on the west side of the project site will be modified such that they run underground in this area, the transmission line to the east will not be impacted by this project.

Therefore, impacts to historical resources will be less than significant because the scope of the project does not involve material changes to such resources.

- B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or
- C. Disturb any human remains, including those interred outside of formal cemeteries?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Tribal consultation pursuant to Assembly Bill 52 (AB 52) and Section 106 of the National Historic Preservation Act did not identify any existing cultural resources on the project site and the pedestrian survey conducted by Applied Earthworks on July 27, 2016 did not identify any resources that were visible at the surface of the project site. Records of surveys within the area of potential impacts and a 0.5-mile radius identified no known resources. However, one of the local tribes, Table Mountain Rancheria, identified that the project was proximate to an early native American trail, shown on an 1854 General

Land Office map (Applied Earthworks, 2017). Additional discussion is provided in Section XVIII. Tribal Cultural Resources. Due to the increased potential for previously unidentified cultural resources to be present at a subsurface level, mitigation measures shall be required to ensure that impacts to cultural resources remain less than significant.

\* **Mitigation Measures**

1. *A qualified archaeologist/paleontologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (the "Qualified Archaeologist"), shall be on call during any ground-disturbing activity within the entire project limits to evaluate any possible resources uncovered.*
2. *The Qualified Archaeologist shall conduct a preconstruction meeting to orient the construction crew to the potential for encountering prehistoric archaeological deposits during construction. This instructional meeting shall include a discussion of the types of artifacts that could be encountered and the steps to take upon discovery to avoid inadvertent impacts to such finds. The tribal monitors may be present at the preconstruction meeting.*
3. *In the event that unanticipated archaeological resources are encountered during Project activities, compliance with federal and state regulations and guidelines regarding the treatment of cultural resources and/or human remains shall be required, specifically Caltrans Standard Specifications 14-2, along with implementation of the following mitigation:*
  - a. *All construction activities within 60 feet shall halt, and the area of the find shall be secured to prevent the removal or taking of archaeological resources from the site. The Qualified Archaeologist shall be notified immediately.*
  - b. *The Qualified Archaeologist shall inspect the findings and report the results of the inspection to the Applicant.*
  - c. *In the event that the identified archaeological resource is determined to be prehistoric, the Applicant and Qualified Archaeologist will coordinate with and solicit input from the appropriate Native American Tribal Representatives, as determined by consultation with the Native American Heritage Commission (NAHC), regarding significance and treatment of the resource as a tribal cultural resource. Any tribal cultural resources discovered during project work shall be treated in consultation with the tribe, with the goal of preserving in place with proper treatment.*
  - d. *If the County, in consultation with the Qualified Archaeologist and Native American Tribal Representatives, determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and CEQA Guidelines Section 15126.4. Consistent with CEQA Guidelines Section 15126.4(b)(3), mitigation shall be accomplished through either*

*preservation in place or, if preservation in place is not feasible, data recovery through excavation conducted by a qualified archaeologist implementing a detailed archaeological treatment plan.*

4. *If human remains are uncovered during Project activities, the contractor shall immediately halt work and secure the area. The Applicant shall contact the Fresno County Sheriff-Coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.4 (e)(1). If the County Sheriff-Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c) and Public Resources Code Section 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code Section 5097.98, and the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98, with the MLD regarding their recommendations for the disposition of the remains, taking into account the possibility of multiple human remains.*

## VI. ENERGY

Would the project:

- A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;  
or
- B. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

FINDING: LESS THAN SIGNIFICANT IMPACT:

This project does not have the potential to cause a wasteful, inefficient, or unnecessary consumption of energy resources during operation because it will be a part of the existing circulation system and will not have any functions which require the use of energy. Therefore, the potential for inefficient use of energy may only occur during demolition of the existing bridge and construction of its replacement, along with the associated modifications to the utility structures. Uses include fuel necessary to operate construction equipment, transportation of materials to the project site, and the daily round trips by employees.

The Environmental Protection Agency and the National Highway Traffic Safety Administration, on behalf of the U.S. Department of Transportation have issued final rules to reduce greenhouse gas emissions and improve fuel economy by regulating the minimum acceptable miles-per-gallon ratio and other improvements such as air conditioner performance. Since these regulations apply to the manufacture of vehicles, they will be phased in as consumers replace old vehicles, leading to a general increase

in fuel efficiency. In addition, since this project will be constructed in coordination with the California Department of Transportation (Caltrans), it will be subject to those standards outlined in the Highway Design Manual, which include regulations for the conservation of materials and energy.

Compliance with these existing regulations will ensure that the project does not result in a wasteful or inefficient use of energy or nonrenewable resources during demolition, construction, and the reorganization of utility lines.

## VII. GEOLOGY AND SOILS

Would the project:

- A. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - 1. 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?
  - 2. Strong seismic ground shaking?
  - 3. Seismic-related ground failure, including liquefaction?
  - 4. Landslides?

FINDING: NO IMPACT:

The project site is not located in an area at risk of loss, injury, or death associated with the rupture of a known earthquake fault, strong seismic ground-shaking, seismic-related ground failure or landslides. The most recent Alquist-Priolo map shows that there are no known faults within 50 miles of the site and Figure 9-5 of the Fresno County General Plan Background Report (FCGPBR) shows that the project is located in an area with 0-20% risk of peak horizontal ground acceleration exceeding 10% within 50 years, which is the lowest level of risk.

Regarding landslides, the area of the project is generally flat except where the canal is located. As part of the preparation of a Storm Water Pollution Prevention Plan, which is a required part of Section 401 permitting, the project will be required to protect against collapse of the streambanks both during construction and during the operation period when the project site will be unmanned. With compliance to these requirements, no impacts to risk of loss, injury, or death associated with landslides will occur.

- B. Result in substantial soil erosion or loss of topsoil?

FINDING: LESS THAN SIGNIFICANT IMPACT:

According to the Water Quality Technical Memorandum prepared for this project by Rincon Consultants, dated September 16, 2016, construction activities associated with the proposed staging area has the potential to compact soil and therefore increase impermeability of the soil in the short term leading to increased storm water runoff and potentially erosion. However, the existing paved road will be utilized for access to the proposed staging area so as to eliminate the need for the construction of new access roads, thereby minimizing the potential for soil disturbance and erosion. Additionally, the project will be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which will identify and minimize the potential for increased erosion and runoff resulting from the project.

- 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?

FINDING: NO IMPACT:

The project site is not located in an area of steep slopes as identified by Figure 7-2 of the Fresno County General Plan Background Report (FCGPBR) and is therefore not at risk of on or off-site landslide. As previously discussed, the project site is area of low probability of strong seismic ground shaking which is associated with lateral spreading and liquefaction. According to the FCGPBR subsidence is the gradual settling or sinking of the earth's surface with little or no horizontal motion, usually as the result of the withdraw of oil, gas, or groundwater, or hydro compaction.

- D. Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

FINDING: NO IMPACT:

The project site is not located in an area of the County identified as having expansive soils, as identified by Figure 7-1 of the Fresno County General Plan Background Report (FCGPBR).

- 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 waste water?

FINDING: NO IMPACT:

The use of septic systems is not proposed as part of this application because such facilities are not required for bridge replacements. Portable facilities will be provided during construction and no such facilities are required for operation.

- F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

No such unique resources were identified at the project site; however, if unique resources were present at a subsurface level, grading and other construction activity could excavate them, resulting in potential damage. Mitigation measures relating to the protection of Cultural Resources (Section V), which relate to non-unique cultural artifacts will extend the same protection to these potentially unique artifacts.

\* **Mitigation Measures**

1. See Section V. Cultural Resources

VIII. GREENHOUSE GAS EMISSIONS

Would the project:

- A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- B. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

FINDING: LESS THAN SIGNIFICANT IMPACT:

In general, the opportunity for this project to release greenhouse gases into the environment is limited to the destruction of the existing bridge and construction of the replacement. Because the scope of the project does not include additional lanes which would lead to an increase in traffic, there will be no operational increase.

During construction, the sources of greenhouse gas emissions include: diesel-powered construction equipment, expenditure of fossil fuels by employees during commute, and increased travel distance for users of the road who would experience a detour during construction. Based on the results of the RoadMod, the project would generate a total of approximately 839.44 metric tons of CO<sub>2</sub>e.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32 and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

FINDING: NO IMPACT:

Routine operations for this project will not require the transport, use, or disposal of hazardous materials. While it is possible that vehicles which are transporting such materials may use the bridge in the course of their business, this usage is considered part of the baseline and the proposed bridge replacement will have no impact on this factor. Based on historic photographs of the project site (Hazardous Waste Initial Site Assessment, Haro Environmental, November 11, 2015), show that the area of the project has historically been used for agriculture. A site visit on October 19, 2015 did not identify any hazardous materials or petroleum products at the site or at nearby sites. In addition, no discolored vegetation or other signs of prior hazardous waste releases were observed.

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

As discussed above, the project will have no modification to the baseline risk associated with the release of hazardous materials to the public during operation, since it will operate as part of the complete circulation system. However, during demolition, it is possible that lead and other heavy metals contained in paint and asbestos contained in concrete may be exposed in such a manner that could cause adverse health impacts on workers and could lead to a contamination of the Fresno Canal.

On March 27, 2017, soil samples from adjacent to the bridge were tested for lead content and it was determined that aerially deposited lead was present. The developer will implement Caltrans Guidance regarding the treatment of aerially deposited lead, which will ensure that no adverse impacts occur due to excessive exposure to contaminated soil. On April 13, 2017 samples of the concrete from the existing bridge were tested for asbestos content. Asbestos was not detected in any samples.

The construction of this project will occur through the California Department of Transportation (Caltrans) and will therefore incorporate the most recent Caltrans Standard Specifications. These specifications establish handling methods and testing requirements necessary to first, determine if hazardous materials are present in significant amounts and second, to protect workers in such a case. Handling and disposal are proscribed for cases where debris is considered hazardous and in cases where it is considered nonhazardous (Section 14.11, Caltrans Standard Specifications, 2018), ensuring that workers and the public are protected. Additional provisions are made in this section for projects which cross a body of water, requiring additional precautions over and above those required by the Storm Water Pollution Prevention Plan. Compliance to these existing policies and regulations will result in less than significant impacts.

It is also possible that the use of construction equipment and other vehicles could result in accidental spills of oil, grease, gasoline, brake fluid, antifreeze, or other vehicle-



related pollutants. The preparation of the Storm Water Pollution Prevention Plan includes best management practices to ensure that spills are prevented from contaminating the canal. Erosion controls will be established where necessary and all equipment will be in good repair prior to use on the project site further reducing the possibility of leak or malfunction which could lead to pollution.

- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

FINDING: NO IMPACT:

The project will not emit hazardous emissions or handle hazardous materials and therefore will have no impact on the risk of the release of such materials within one quarter mile of a school.

- 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?

FINDING: NO IMPACT:

The project site is not located on a hazardous materials site as listed by the Resource Conservation and Recovery Act Information, the Toxics Releases Inventory, the National Priorities List, the Assessment Clean-up and Redevelopment Exchange System, or the Radiation Information Database.

- 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?

FINDING: NO IMPACT:

Following the demolition of the existing bridge and construction of its replacement, the project site will be unmanned and therefore will not result in a safety or noise hazard as a result of residency or employment in the vicinity of an airport.

- F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

FINDING: NO IMPACT:

The project site is located on North Del Rey Avenue, between its intersections with E. McKinley Avenue to the north and E. Belmont Avenue to the south. The Fresno Canal winds between McKinley and Belmont Avenues, running generally east to west. While this bridge is being demolished and rebuilt, the next nearest connection between these two roads is N. McCall Avenue, approximately one mile west of N. Del Rey Avenue.

Major roads in this area are developed on a grid system, which typically provides major intersections at one- or two-mile intervals along the cardinal directions. To the east, N. Academy Avenue is two miles away. The detour as a result of the road closure is anticipated to be 3.7 miles. Due to the pattern of connectivity of roads in this area and the limited amount of time that the bridge will be closed, no impacts to emergency response and emergency evacuations plans would be anticipated.

- G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

FINDING: NO IMPACT:

The project site is not located in an area which is at risk of wildland fires and is considered to be within a local responsibility area for fire protection services.

#### X. HYDROLOGY AND WATER QUALITY

Would the project:

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

This project has the potential to adversely impact water quality standards or to violate waste discharge requirements as a result of construction within the streambed; however, compliance to existing regulations will ensure that Fresno Canal is not contaminated by debris, lead-based paint, or other hazards. A Storm Water Pollution Prevention Plan will be developed and approved by Caltrans which requires the adoption of special standards for the handling of lead-based paint and asbestos-containing materials where their presence might be anticipated, such as with this project. Adherence to those regulations will result in no impacts to water quality standards or waste discharge requirements.

It is possible that use of the bridge by motor vehicles will result in deposit of pollutants into Fresno Canal as a result of the combustion of gasoline and diesel fuel. Since the project does not propose to increase the number of through lanes on this bridge, there will be no increase from the baseline average daily traffic. The replacement bridge will be approximately 16.6 feet wider than the existing bridge, with increased width of the travel lanes (up to twelve feet) and six-foot shoulders. Such increased surface area between the travel lanes and the edge of the bridge would reduce the amount of contamination from typical usage of the bridge by motor vehicles.

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

FINDING: NO IMPACT:

Some water may be used during construction for dust control and other necessary purposes; however, such usage will be limited in duration and therefore will not have a substantial impact on groundwater recharge or management.

- 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 result in substantial erosion or siltation on or off site?
1. Result in substantial erosion or siltation on- or off-site;
  2. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?
  3. 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
  4. Impede or redirect flood flows?

FINDING: LESS THAN SIGNIFICANT IMPACT:

During construction, impacts may occur in the streambed due to debris from the demolition of the existing bridge falling into the streambed and/or increased sediment loads and turbidity during installation of the supports for the replacement bridge; however, compliance with the SWPPP and the Streambed Alteration Agreement, along with implementation of best management practices as required by Caltrans, will ensure that these impacts are not significant. These regulations require developers to ensure that debris and dust do not run off into the bed of the stream.

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

FINDING: NO IMPACT:

The project site is not near a coastline, which precludes adverse impacts as a result of tsunami. It is similarly not located near a large, stationary body of water which could be subject to seiche.

The area of the canal, including the bridge structure is located within Special Flood Hazard Zone AE and the area north of the bridge is located in Zone AO (depth 1 foot). The special flood hazard zones in this area appear to originate within the canal itself and are not impacted by the bridge replacement. The proposed bridge will be of similar height to the existing (aligned with the roadway) and therefore is subject to the same risks as the existing bridge. Therefore, the proposed project has no impact on the risk of pollutant release due to location in a flood hazard zone.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

This project is required to prepare a Storm Water Pollution Prevention Plan, which will prevent the release of pollutants to the canal during construction. Some water usage will also be necessary during construction. However, construction and its associated impacts including the risk of spill and water usage, will be a relatively short term event over the life of the bridge. The temporary nature of construction and adoption of best management practices around the streambed will ensure that the project will have less than significant impacts on quality of water in the stream.

## XI. LAND USE AND PLANNING

Would the project:

- A. Physically divide an established community?

FINDING: NO IMPACT:

Bridges serve to connect places which are otherwise separated by a physical obstruction, in this case the Fresno Canal. Because this project will operate as an essential part of the circulation system as described in Section XVI. Transportation, it will not physically divide an established community. The two sides of the canal will temporarily be separated during the course of construction; however, there is a detour of less than three miles to make the connection. Further, the scattered residential development in the area of the canal do not represent an “established community.” Therefore, there are no impacts on the division of communities.

- 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?

FINDING: NO IMPACT:

This project will proceed in compliance with Caltrans specifications for construction, which include requirements to minimize the release of pollution into the environment. County regulations also serve to prevent adverse impacts. Due to the necessary nature of the bridge replacement and the existing regulations which ensure compliance with environmental standards established by the County General Plan. No conflicts with policies or plans adopted for the purpose of mitigating an environmental effect were identified.

## XII. MINERAL RESOURCES

Would the project:

- 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; or
- 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?

FINDING: NO IMPACT:

Figure 7-7 (FCGPBR) shows where valuable mineral resources are located in the County of Fresno. The project site is not located near any such mapped location and the scope of the project does not include the removal of any locally important mineral resource. Therefore, this project will have no impact on Mineral Resources.

### XIII. NOISE

Would the project result in:

- 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 applicable standards of other agencies; or
- B. Generation of excessive ground-borne vibration or ground-borne noise levels?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Noise is generally considered to be unwanted sound. Adverse noise impacts from the project could occur from two sources: demolition/construction equipment and increased vehicular traffic on Del Rey Ave. During operation, because no increase in the number of through lanes is proposed, no substantial increase in traffic is anticipated. As a result, there will be no increase in the ambient noise levels.

However, construction equipment has the potential to cause temporary increases to the ambient, intermittent, and impulse noise levels around the construction site and may have the potential to cause elevated ground borne vibration or noise levels. There are two residences within 500 feet of the canal, which are the most likely to be impacted by adverse noise impacts. However, noise sources associated with construction are exempt from compliance with the provisions of the Noise Ordinance (Fresno County Ordinance Code Chapter 8.40), provided such activities do not take place before six a.m. or after nine p.m. on any day except Saturday or Sunday, or before seven a.m. or after five p.m. on Saturday or Sunday (§8.40.060). In addition, the project will implement Caltrans Standard Specification 14-8.02 (or the most recent standard associated with noise control, if 14-8.02 has been superseded at the time of construction), which limits the project's noise to 86 a-weighted decibels at 50 feet from the job site from 9 P.M. to 6 A.M. and all internal combustion engines will be equipped with a muffler. This standard does not exempt the project from compliance with other noise standards.

Impacts from the demolition of the existing bridge and construction of the replacement will be temporary and will comply with the existing Noise Ordinance. As a result, impacts will be less than significant.

- 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 two 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?

FINDING: NO IMPACT:

The project site is not located within two miles of any airport, public or private. Therefore, no impacts will occur as a result of such location.

#### XIV. POPULATION AND HOUSING

Would the project:

- 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); or
- B. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

FINDING: NO IMPACT:

The replacement bridge will be approximately 16.6 feet wider than the existing bridge. Such increased area will allow for wider travel lanes and a six-foot shoulder in both directions; however, it will also require that the approach be widened for a smooth transition from roadway to bridge deck. This will result in necessary realignment of fences, driveways, and access roads which were constructed adjacent to the bridge approach. Despite the need to relocate or realign these features, no resident will be displaced from their home as a result of the project.

The proposed bridge replacement is not anticipated to result in substantial unplanned population growth because it represents required maintenance to a portion of the circulation system. Increasing the safety of the bridge on this section of N. Del Rey Avenue does not have the potential to induce an influx of residences to this area.

#### XV. PUBLIC SERVICES

Would the project:

- 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?

1. Fire protection;
2. Police protection;
3. Schools;
4. Parks; or
5. Other public facilities?

FINDING: NO IMPACT:

During demolition/construction traffic at the project site will be diverted around the bridge, resulting in an increase of approximately 3.7 miles per vehicle. As discussed previously, the major roads in this section of Fresno County are generally laid out in a mile-wide grid. Parallel roads exist one mile to the west and two miles to the east of N. Del Rey Avenue which provide the same connection between McKinley Avenue and Belmont Avenue. Because of the temporary nature of the detour and its short distance, this project will not have an adverse impact on response times in this area for police or fire protection. Because the project will not induce population growth, there will be no impact on the usage of schools, parks, and other public facilities and no impact on service ratios (the number of fire fighters and police officers serving a given population) for fire and police protection.

## XVI. RECREATION

Would the project:

- 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; or
- B. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

FINDING: NO IMPACT:

There are no neighborhood or regional parks within two miles of the project site. As previously discussed, this project will not induce population growth or an increase in traffic along N. Del Rey Avenue. As a result, it will not lead to an increase in the use of parks or other recreational facilities in the area.

## XVI. TRANSPORTATION

Would the project:

- A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; or
- B. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b); or
- C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- D. Result in inadequate emergency access?

FINDING: LESS THAN SIGNIFICANT IMPACT:

As described in Section VIII, Hazard and Hazardous Materials, the project site is located along N. Del Rey Ave, approximately halfway between N. Del Rey's intersections with E. McKinley Ave to the north and E. Belmont Ave to the south. N. Del Rey Ave is classified as a local road in the County's general plan with an existing pavement width of approximately 23 feet, a 20-foot right-of-way on both sides of the section line, and ultimate right-of-way of 60 feet (30 on each side of the center line). Some right-of-way acquisition is anticipated as part of this project.

Improvements to the road may occur in order to ensure a smooth transition between road surface and bridge deck. Such improvements to the bridge are necessary in order to meet current standards of safety and therefore will be in line with County plans, ordinances, and policies addressing the circulation system and will reduce hazards related to geometric design. No increase in traffic is anticipated as a result of this project, ensuring that the operation of the roadway after construction will be unchanged.

## XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

- A. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:
  - 1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or



2. 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

**FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:**

The County of Fresno consulted with local Native American Tribal Governments under the provisions of Assembly Bill 52 (AB 52). Notice that this application was complete was sent to Table Mountain Rancheria (TMR) and the Dumna Wo Wah Tribal Government (DWW) on August 24, 2017, with an additional notice being sent to the Picayune Rancheria of Chukchansi Indians (PRCI) on November 7, 2017. The letter to PRCI was sent later than the original letters because the County received their request for notification in late October of 2017. Staff determined that the project site was outside the area of interest for the Santa Rosa Rancheria Tribal Government, who also requested such notice.

Neither TMR nor PRCI provided a response to the County's notice that the project application was complete. DWW requested consultation with the County in a letter dated September 7, 2017, which was within the 30-day response time proscribed by AB 52. The County invited a tribal representative to a meeting to discuss this project and other projects on which the Tribe requested consultation in a letter dated October 25, 2017. A copy of the Archeological Survey Report and Historic Property Survey Report (Applied Earthworks, 2017) was provided to the Tribal Representative on February 21, 2018.

This report documents the surveys conducted by Applied Earthworks' (AE) Historical Archaeologist and Principal Architectural Historian and the results of AE's consultation with Table Mountain Rancheria. Caltrans was required to consult with Tribal Governments under the provisions of the National Environmental Policy Act (NEPA). The TMR Representative did not identify any known resources at the project site and no existing resources were identified as part of the archaeological survey performed on September 14, 2016; however, the Representative identified this area as part of a Native American Trail that once crossed the river at or near this location. In order to address the issue of potential of significant but currently unknown resources being present below the ground surface, Caltrans and TMR agreed that archaeological monitoring during project construction would be necessary. That mitigation measure is provided below. With the inclusion of that mitigation measure and additional discussion relating to historic-era structures in the vicinity (See Section V Cultural Resources), the report determined that the project would have no significant impacts to historic properties or known cultural resources.

Staff received no response from the DWW Tribal Government. Based on the concerns raised by the Tribe in their initial letter and the concerns raised by TMR during Section 106 consultation, an additional mitigation measure was proposed, which describes the steps which shall be taken in the event that a previously

unknown resource is excavated during construction. The consultation process was concluded pursuant to PRC §21080.3.2(b)(2) on August 2, 2018.

\* **Mitigation Measures**

*The Mitigation Measures listed in Section V. Cultural Resources shall also be implemented to address potential impacts to Tribal Cultural Resources.*

1. *Forty-eight (48) hours prior to any ground-disturbing activities within the entire project limits, such as digging, trenching, or grading, the Applicant shall notify the Dumna Wo Wah Tribe of the opportunity to have a certified Native American Monitor present during those construction activities. Notification shall be by email to Chris Acree and Robert Ledger with the Dumna Wo Wah Tribal Government at [cacree@hotmail.com](mailto:cacree@hotmail.com) and [ledgerrobert@ymail.com](mailto:ledgerrobert@ymail.com). The tribal monitors shall be independently insured with policies conforming to County of Fresno requirements in order to enter the construction zone. Notification shall also be provided in the same manner at least 48 hours prior to any preconstruction meetings.*
2. *In the event archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground disturbing activities within 60 feet of the find and secure the area. The qualified archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A), project redesign and preservation in place shall be the preferred means to avoid impacts to significant archaeological sites. Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curational facility. The qualified archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist.*

## XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

- 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; or

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project does not involve development of a well or sewage disposal system and will not require the use of water or wastewater disposal during operation.

PG&E electrical transmission overhead lines are located on the east side of the bridge and PG&E will refeed the west side distribution lines from the north and remove the lines above the bridge. The distribution line feeding a house on the north side of the bridge will be moved northward to clear an access road. AT&T's telephone lines are located on the west side of the bridge and will be rerouted underground by directional bore method. A portion of Conterra's fiber optic cable located aerially on the north west side of the bridge will be rerouted underground with minimum depth of 10 feet below the canal bottom. Another portion, which is buried along west side of the north approach, will be relocated within County right-of-way, and buried at minimum 4 feet depth for a distance of approximately 300 feet. Directional bore method will be applied for this work with drilling diameter of 1.25 inch throughout. Excavation will require two 3-foot by 5-foot bore pits to perform the drilling.

- B. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years; or
- C. Result in a determination by the wastewater treatment provider which 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; or
- 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; or
- E. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

FINDING: NO IMPACT:

The final project will have no daily employee presence and is not required to provide restroom facilities for users of the bridge. Portable units will serve the construction crew over the course of construction and will be removed when that portion of the project is complete.

During construction, the project will comply with all existing regulations, including those which regulate solid waste disposal and requirements to divert a percentage of waste to recycling centers rather than landfills. Based on experience with previous projects of this nature, the amount of solid waste generated by construction and demolition of the existing bridge will not be in excess of local standards.

Therefore, the project will have no impacts on wastewater treatment facilities or solid waste facilities and will comply with federal, state, and local regulations regarding waste management and reduction.

## XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- A. Substantially impair an adopted emergency response plan or emergency evacuation plan, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; or
- 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; or
- 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; or
- 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?

FINDING: NO IMPACT:

The project site is located in an area determined to be a non-wildland/non-urban hazard class, which is not a very high fire hazard severity zone. Further, following construction of the bridge, there will be no change in the risk at the site because the replacement bridge will serve the same purpose. The replacement bridge will have wider shoulders and wider lanes, which would improve safety for drivers in the event of an evacuation.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

- 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory; or
- 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)?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The project has the potential to adversely impact special status species, the existing flow of the Fresno Canal, and to adversely impact potential tribal and cultural resources if they are excavated during construction. In order to prevent these impacts, the Mitigation Measures listed in Sections IV. Biological Resources, V. Cultural Resources, and XVIII. Tribal Cultural Resources must be implemented. These measures require the developers to perform pre-construction surveys and training, and provide instructions on how to address potential impacts, such as the excavation of a resources or the observation of a nesting raptor.

\* **Mitigation Measures**

*See Section IV. Biological Resources*

*See Section V. Cultural Resources*

*See Section XVIII. Tribal Cultural Resources*

- C. Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

FINDING: NO IMPACT:

Impacts from this project are generally limited to the construction phase, which includes demolition of the existing bridge. The limited impacts during this time will not adversely affect human life and during operation, the replacement bridge will meet a higher standard of safety, potentially providing a beneficial impact to users of the bridge.

## CONCLUSION/SUMMARY

Based upon the Initial Study prepared for the Fresno Canal at Del Rey Avenue bridge replacement project staff has concluded that the project will not have a significant effect on the environment.

It has been determined that there would be no impacts to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire.

Potential impacts related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. have been determined to be less than significant.

Potential impacts relating to Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources have determined to be less than significant with compliance with the identified Mitigation measures.

A Mitigated Negative Declaration is recommended and is subject to approval by the decision-making body. The Initial Study is available for review at 2220 Tulare Street, Suite A, street level, located on the southwest corner of Tulare and "M" Street, Fresno, California.

CMM:JS

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Fresno Canal Bridge Replacement\IS-CEQA\IS Recirc 2021\Initial Study Writeup.docx



# LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

November 13, 2020

Alexis Rutherford  
County of Fresno  
2220 Tulare Street, 7<sup>th</sup> Floor  
Fresno, CA 93721

**RE: Biological Resources Update Survey, Fresno Canal at Del Rey Avenue, California**

Dear Alexis:

As requested, Live Oak Associates, Inc. (LOA) conducted a field survey within the area of potential effect (APE) for the Fresno Canal Bridge Replacement Project on Del Rey Avenue. LOA completed a Natural Environment Study (Minimal Impact) (NESMI) for the project in 2016. The purpose of this survey and letter report is to provide an update on existing conditions within the APE to determine if the avoidance measures of the original NESMI report are still appropriate to reduce all potential impacts to biological resources to a less than significant level. Specifically, some concerns were raised by adjacent property owners with regards to the presence of small mammals on the site. This letter will discuss any changes to habitats/land uses since the 2016 survey and will make a determination whether or not the avoidance measures outlined in the NESMI are still appropriate based on the current site conditions.

Bridge No. 42C0496 is located approximately four miles north to northwest of the City of Sanger, California along the eastern side of the San Joaquin Valley. It can be found 0.5 miles south of McKinley Avenue, where N. Del Rey Avenue crosses the Fresno Canal. The bridge can also be located on the *Round Mountain* U.S. Geological Survey (USGS) 7.5 minute quadrangle between sections 32 and 33 in Township 13 South, Range 22 East. The APE consists of 9.3 acres, including approximately 510 linear feet of the Fresno Canal. The APE includes road approaches approximately 400 feet north and 400 feet south of the bridge. Special attention was given to the potential 4.3 acre staging area northwest of the bridge (Attachment 1), where numerous small mammal burrows were observed.

## **SURVEY METHODOLOGY**

A field survey of the APE and immediately surrounding area was conducted on November 6, 2020. Any changes in biotic habitats/land use types since the 2016 survey were noted. The

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Oakhurst: P.O. Box 2697 • 39930 Sierra Way, Suite B • Oakhurst, CA 93644 • Phone: (559) 642-4880 • Fax: (559) 642-4883  
San Jose: 6840 Via Del Oro, Suite 220 • San Jose, CA 95119 • Phone: (408) 224-8300 • Fax: (408) 224-2411  
Truckee: P.O. Box 8810 • Truckee, CA 96161 • Phone: (530) 214-8947

[www.loainc.com](http://www.loainc.com)

Landowner provided access in and out of the gated pasture northwest of the bridge (i.e. potential staging area) during the November 6 site visit.

The survey entailed walking the project APE ensuring 100% visual coverage, including walking transects within the area proposed for staging, while searching for individuals or sign of sensitive biological resources. All burrows were inspected for sign of special status species known to use or create small mammal burrows within the region, including the San Joaquin kit fox (*Vulpes macrotis mutica*) (SJKF), Fresno kangaroo rat (*Dipodomys nitratoides ssp exilis*), American badger (*Taxidea taxus*), and burrowing owl (*Athene cunicularia*)(BUOW). The survey entailed visually inspecting the survey area for burrows of suitable dimensions for SJKF and American badger, and physical evidence of use including scat, tracks, claw marks, and/or prey remains. Potentially suitable burrows were also measured using a 4.5-inch wide probe to determine suitability for SJKF or badger use. Burrows potentially suitable for burrowing owl were visually inspected for physical evidence of use including whitewash, feathers, and cough pellets. The site was also inspected for distinctive burrow systems (known as precincts) used by the Fresno kangaroo rat.

During the survey, Ms. Fisher took representative photos of the survey area and habitat features of interest (Attachment 2) and recorded field observations, including all vertebrate species observed, on a field data sheet.

## **RESULTS AND DISCUSSION**

During the 2016 survey, the ruderal roadside west of Del Rey Avenue and north of the canal bordering irrigated pasture were lined with dead and dying mature Fremont's cottonwood trees and a few small almonds. All of these trees have since been removed. This constitutes the only noticeable change to existing conditions since the 2016 survey.

The only area of the APE that contained small mammal burrows was a portion of the 4.3-acre pasture proposed for staging in the northwestern part of the APE. This actively grazed pasture contained skeletal remains of trampled annual vegetation. The southern half of the pasture was irrigated and lacked burrows. Dozens of active (recent digging) and inactive (collapsed, vegetated, and filled with spider webs) California ground squirrel (*Otospermophilus beecheyi*) burrows were present within the northern half of the pasture. Ground squirrel scat littered the ground surface, and a skeleton of a ground squirrel was found on the site during the survey. The majority of burrows inspected were filled with spider webs, vegetation and did not have signs of recent digging. No burrows were of suitable size for SJKF, American badger, or kangaroo rat.

Following is a more detailed discussion of the survey findings for each of special status species known to use or create small mammal burrows in the region.

**SJKF:** Burrows of suitable dimensions for denning by this species were absent from the APE, and no individuals or sign of this species was observed. Because suitable burrows were absent, follow-up survey work for SJKF was unnecessary.

**Fresno Kangaroo Rat:** Distinctive burrow systems (known as precincts) built by kangaroo rats were absent from the APE. No sign of kangaroo rat habitation was observed. Furthermore, the general vicinity of the Project area is not known to support populations of Fresno kangaroo rat.



**American Badger:** Burrows of suitable dimensions for denning by this species were absent from the APE, and no individuals or sign of this species was observed. Because suitable burrows were absent, follow-up survey work for badger was unnecessary.

**BUOW:** Suitable burrows for BUOW are present within and adjacent to the proposed staging area. However, burrowing owls were not observed during the survey and none of the burrows showed any evidence of use by BUOW. BUOW is considered absent for the APE and immediate surrounding areas.

Based on the current site conditions, the mitigation measures stipulated in the NESMI are still appropriate for mitigating impacts to biological resources to a less than significant level.

Please feel free to contact me with any questions related to LOA's survey. I can be reached at (559) 696-6247 or wfisher@loainc.com.

Sincerely,

*Wendy C. Fisher*

Wendy C. Fisher  
Senior Project Manager/Staff Ecologist

**ATTACHMENT 1: AREA OF POTENTIAL EFFECT**

Attachment C

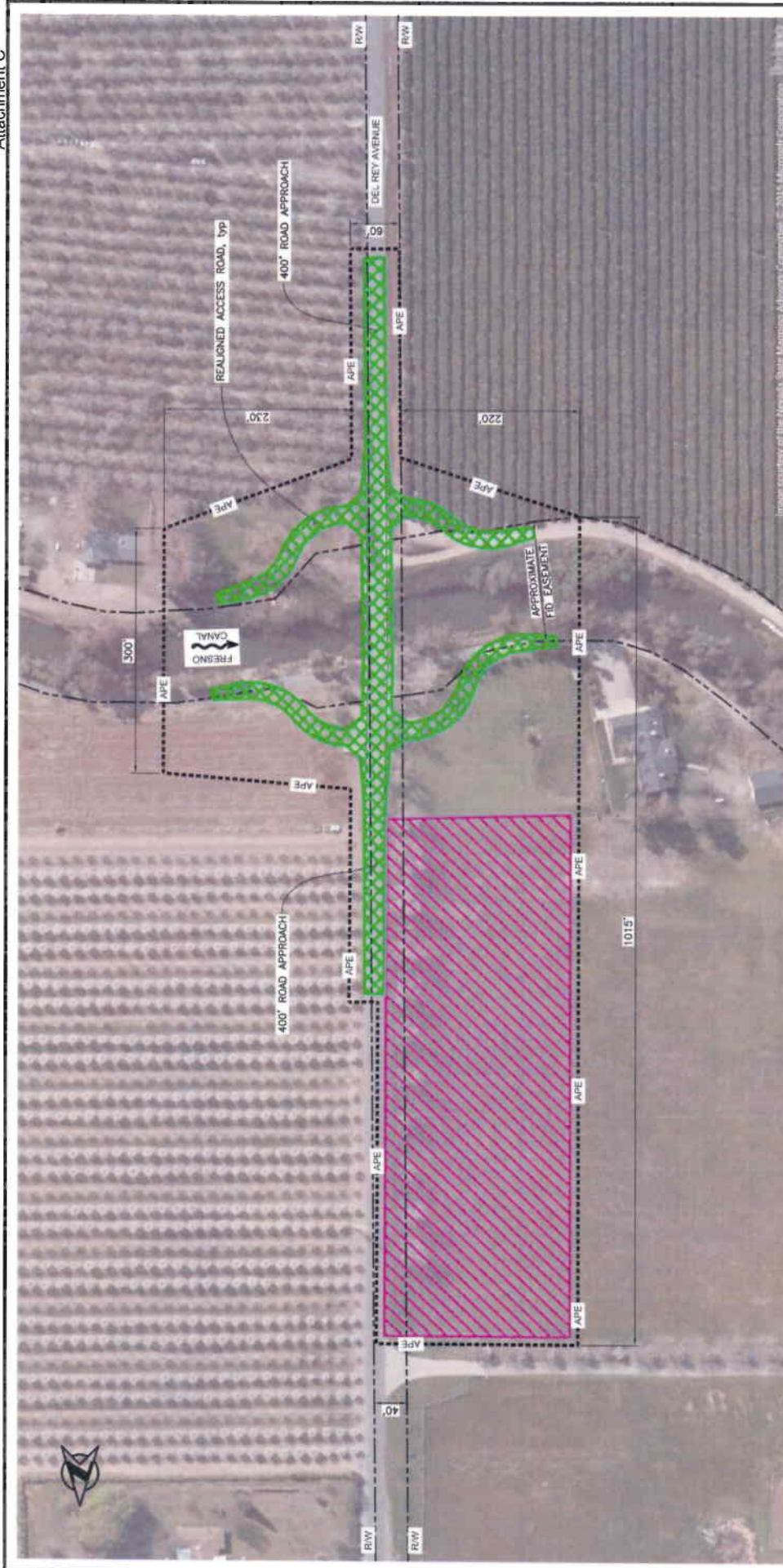


Image courtesy of the Nevada State Mapping Agency's Comptrol © 2015 Microsoft Corporation

- ABBREVIATIONS:**
- APE = Area of Potential Effect
  - FD = Fresno Irrigation District
  - R/W = Right of Way
- LEGEND:**
- indicates permanent impacts
  - indicates possible construction staging area

**PROJECT:**  
 FRESNO CANAL BRIDGE  
 AT DEL REY AVENUE

		DEPARTMENT OF PUBLIC WORKS AND PLANNING AREA OF POTENTIAL EFFECT	
COUNTY OF FRESNO PROJECT NO. 10-13-15	SHEET NO. 1 TOTAL 1	SCALE 0 60' 120' 	
RECORD DRAWING DATE: 10/13/15 ENGINEER: [Name] CHECKED BY: [Name]		SCALE DATE: 10/13/15 ENGINEER: [Name] CHECKED BY: [Name]	
CALIFORNIA DISTRICT 6 LOCAL ASSISTANCE ENGINEER DATE:		COUNTY OF FRESNO DATE:	
CALIFORNIA DISTRICT 6 PROFESSIONALLY QUALIFIED STAFF DATE:		TRC 4017 N. AVENUE 99, SUITE 206 FRESNO, CALIFORNIA 93710 PHONE: 559.241.1111 FAX: 559.241.1112 WWW.TRCENGINEERS.COM	

**ATTACHMENT 2: PHOTOGRAPHS OF THE PROJECT AREA**



Photograph #1 (above). The northern fenceline along Del Rey Avenue was formerly lined with trees, which died and have since been removed. Photograph #2 (below). Ground squirrel burrows riddled the dry horse pasture within the northeast part of the APE.



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## Fresno Canal Bridge Replacement on Del Rey

Fresno County prepared a document with photo representation of past projects to illustrate how the scope of work for the subject project will affect the surrounding lands. The photos below represent the temporary construction yards, access roads with paved driveways, and small drainage swales.

The temporary construction yards (Figures 1-4) were used to store equipment and materials as well as provide an area for construction workers to park. Upon completion of each project, these areas were restored to pre-construction conditions. The realigned access roads shown in Figures 5-8 were finished with a paved driveway, which improves the overall durability and lifespan of the road. Figures 9-11 illustrate drainage swales with a shallow depression to allow for proper drainage, provide storage for water runoff, and reduce potential flooding from stormwater.

### Photo Representation:

#### *Temporary Construction Yards*



*Figure 1 Temporary construction yard prior to the start of construction. Watts Creek Bridge Replacement Project.*



*Figure 2 Temporary construction yard during construction. Watts Creek Bridge Replacement Project.*



*Figure 3 Temporary construction yard after construction. Watts Creek Bridge Replacement Project.*





*Figure 4 Temporary construction yard during construction. Fresno Canal Bridge Replacement Project on McKinley (current project).*

*Realigned Access Roads with Paved Driveways*



*Figure 5 A realigned access road with paved driveway at the Outside Canal Bridge Replacement Project on Russell Avenue.*



*Figure 6 An additional realigned access road with a paved driveway at the Outside Canal Bridge Replacement Project on Russell Avenue.*



*Figure 7 Additional example of a realigned access road with a paved driveway.*



Figure 8 Additional example of a realigned access road with a paved driveway.

Small Drainage Swales



Figure 9 Graded drainage swale next to a small drainage canal at the Outside Canal Bridge Replacement Project on Russell Avenue.



Figure 10 Additional drainage swale with a shallow depression located near a small drainage canal. Outside Canal Bridge Replacement Project on Russell Avenue.



Figure 11 Additional drainage swale illustrating a shallow depression at the Outside Canal Bridge Replacement Project on Russell Avenue.

*Completed Project*



*Figure 12 View of the completed bridge and project site at Watts Creek on Watts Valley Road.*



*Figure 13 View of the top of completed bridge and project site at Watts Creek on Watts Valley Road.*



*Figure 14 Side view of the completed bridge and project site at Watts Creek on Watts Valley Road.*



*Figure 15 Side view of the completed bridge and project site at Watts Creek on Watts Valley Road.*



CARLSBAD  
FRESNO  
IRVINE  
LOS ANGELES  
PALM SPRINGS  
POINT RICHMOND  
RIVERSIDE  
ROSEVILLE  
SAN LUIS OBISPO

September 17, 2020

Alexis Rutherford  
Department of Public Works and Planning  
Fresno County  
2220 Tulare St. 6th Floor  
Fresno, CA 93721

Subject: Fresno Canal Bridge on Del Rey Avenue Project Tree Removal Air Quality Analysis

Dear Ms. Rutherford:

LSA has prepared this letter in response to the inquiry regarding the removal of trees associated with construction of the Fresno Canal Bridge on Del Rey Avenue. As described in the Project Description, the proposed project is a bridge widening project that would address safety deficiencies associated with the existing bridge. Once operational, implementation of the replacement bridge is not expected to result in increased emissions as current traffic operations would resume once the project is complete. Criteria air pollutant emissions associated with the project would be generated during project construction as described on page 5 of the County's Evaluation of Environmental Impacts report. These emissions would be temporary and would cease once project construction is complete. Emission levels during the project construction period would be well below the San Joaquin Valley Air Pollution Control District's (SJVAPCD's) significance threshold for construction period emissions.

The Evaluation of Environmental Impacts stated that the project would remove up to 174 trees during construction of the project. Based on current design plans, the project is anticipated to remove approximately 30 trees during the construction period. In general, some trees are recognized for their ability to remove ground level ozone; however some tree varieties release biogenic gases that create ground level ozone. Trees also can capture criteria air pollutants such as nitrogen oxides and particulate matter. The emissions from (or benefit of) biogenic sources, such as those from trees or other vegetation, are not considered in any of the methodologies for project evaluation contained in the SJVAPCD's Guide For Assessing and Mitigating Air Quality Impacts. According to the SJVAPCD, project impacts shall be based on mass emissions of criteria pollutants during project construction and operation. The SJVAPCD's thresholds are measured in tons of emissions per year. The very small change in emission levels associated with removal of trees in the project vicinity trees would not be measureable against such thresholds. Additionally, these biogenic emissions are not included in the emission analysis because trees have a life-cycle that involves a growing period where emissions are captured, which is then followed by a period of decay where emissions are released back into the atmosphere.

With regards to the carbon sequestration ability of trees, trees sequester CO<sub>2</sub> while they are actively growing, which is typically limited to the first 20 years of tree life. Thereafter, the accumulation of carbon in biomass slows with age, and is completely offset by losses from clipping, pruning, and

death. Due to the limited sequestration life remaining in the trees that would be removed as part of the project, it is not anticipated that removal of the trees would impact global climate change.

For these reasons, tree removal associated with the project would not change the air quality in the project vicinity. Air quality and greenhouse gas impacts associated with the project would be less than significant and no mitigation is required.

Please contact me at (559) 490-1213 or [amy.fischer@lsa.net](mailto:amy.fischer@lsa.net) if you have any questions and/or require additional information.

Sincerely,

**LSA Associates, Inc.**

A handwritten signature in black ink that reads "Amy Fischer". The signature is written in a cursive style with a large initial "A".

Amy Fischer  
Principal





# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

DATE: May 27, 2020

TO: Department of Public Works and Planning, Attn: Steven E. White, Director  
Department of Public Works and Planning, Attn: Bernard Jimenez, Assistant Director  
Development Services, Attn: William M. Kettler, Division Manager  
Development Services, Attn: Chris Motta, Principal Planner  
Development Services, Current Planning, Attn: Marianne Mollring, Senior Planner  
Development Services, Policy Planning, ALCC, Attn: Mohammad Khorsand  
Development Services, Water/Geology/Natural Resources, Attn: Glenn Allen, Division  
Manager; Roy Jimenez  
Development Services, Zoning & Permit Review, Attn: Attn: Daniel Gutierrez/James  
Anders  
Development Services, Building & Safety/Plan Check, CASp, Attn: Dan Mather  
Resources Division, Solid Waste, Attn: Amina Flores-Becker  
Development Engineering, Attn: Laurie Kennedy  
Road Maintenance and Operations, Attn: John Thompson/Nadia Lopez/Wendy  
Nakagawa  
Design Division, Special Projects/Road Projects, Attn: Mohammad Alimi/Dale Siemer  
Department of Public Health, Environmental Health Division, Attn: Deep Sidhu/  
Steven Hodges  
U.S. Army Corps of Engineers, Sacramento District, Regulatory Division, CA South  
Branch, Attn: Kathy Norton  
U.S. Department of Interior, Fish & Wildlife Service, San Joaquin Valley Division, Attn:  
Matthew Nelson  
U.S. Environmental Protection Agency, Air Division, Air Planning Office, Region 9,  
Attn: Dawn Richmond  
CA Regional Water Quality Control Board, Attn: Matt Scroggins  
CALTRANS, Attn: Dave Padilla  
CALTRANS, San Joaquin Environmental Branch, Attn: Shane Gunn  
CA Department of Fish and Wildlife, Attn: Craig Bailey, Environmental Scientist  
State Water Resources Control Board, Division of Drinking Water, Fresno District,  
Attn: Caitlin Juarez, Jose Robeldo  
CA Department of Toxic Substance Control (CEQA unit), Attn: Dave Kereazis  
CA Department of Water Resources, Attn: Kevin Faulkenberry  
Table Mountain Rancheria, Attn: Robert Pennell, Cultural Resources Director  
Dumna Wo Wah Tribal Government, Attn: Robert Ledger, Tribal Chairman;  
Santa Rosa Rancheria, Attn: Attn: Ruben Barrios, Tribal Chairman/Hector Franco,  
Director/Shana Powers, Cultural Specialist II  
San Joaquin Valley Unified Air Pollution Control District (PIC-CEQA Division), Attn:  
PIC Supervisor  
Fresno Irrigation District, Attn: Kassy D. Chauhan, P.E.  
Fresno Metropolitan Flood Control District  
Kings River Conservation District, Attn: Rick Hoelzel  
Fresno County Fire Protection District, Attn: Jim McDougald, Battalion Chief

INITIAL STUDY ROUTING  
MAY 27, 2020 TO JUNE 26, 2020

FROM: Christina Monfette, Planner *CMM*  
Development Services Division

SUBJECT: Initial Study Application No. 7334: Fresno Canal Bridge Replacement

APPLICANT: The County of Fresno, Public Works and Planning Design Division

DUE DATE: June 25, 2020

The Department of Public Works and Planning, Development Services Division has reviewed the subject application proposing to replace the functionally obsolete Fresno Canal Bridge on North Del Rey Avenue and determined that a Mitigated Negative Declaration as appropriate.

The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The replacement would address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening a timber structure is not allowable, a replacement is the only option. The project site is located approximately 0.5 miles south of McKinley, within the right-of-way near APN 309-090-51.

Based upon the Initial Study prepared for the Fresno Canal at Del Rey Avenue bridge replacement project staff has concluded that the project will not have a significant effect on the environment: It has been determined that there would be no impacts to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire. Potential impacts related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems, have been determined to be less than significant. Potential impacts relating to Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources have been determined to be less than significant with compliance with the identified Mitigation measures.

Please review the attached study for accuracy and adequacy in the area related to your expertise. We must have your comments by June 25, 2020. Any comments received after this date may not be used.

**NOTE - THIS WILL BE OUR ONLY REQUEST FOR WRITTEN COMMENTS. If you do not have comments, please provide a "NO COMMENT" response to our office by the above deadline.**

Please address any correspondence or questions related to environmental and/or policy/design issues to me, Chrissy Monfette, Planner Development Services Division, Fresno County Department of Public Works and Planning, 2220 Tulare Street, Sixth Floor, Fresno, CA 93721, or call (559) 600-4245 or email [cmonfette@co.fresno.ca.us](mailto:cmonfette@co.fresno.ca.us).

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*Activity Code (Internal Review): 2335*

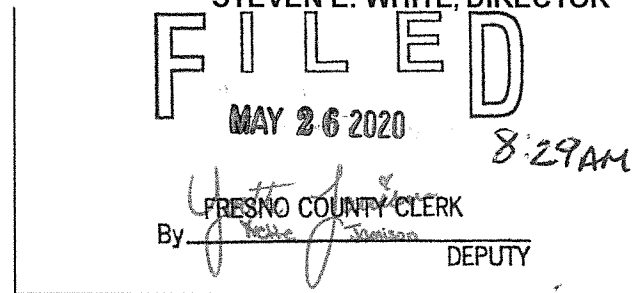
Enclosures



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# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR



## NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

For County Clerk's Stamp

Notice is hereby given that the County of Fresno has prepared Initial Study Application (IS) No. 7334 pursuant to the requirements of the California Environmental Quality Act for the following proposed project:

**INITIAL STUDY APPLICATION NO. 7734** filed by **FRESNO COUNTY DESIGN DIVISION**, proposing to replace the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of E. McKinley. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue. The replacement bridge will be constructed in the same location as the existing bridge. Adopt the Mitigated Negative Declaration prepared for Initial Study Application No. 7334.

### INITIAL STUDY ROUTING

(hereafter, the "Proposed Project")  
**MAY 27, 2020 TO JUNE 26, 2020**

The County of Fresno has determined that it is appropriate to adopt a Mitigated Negative Declaration for the Proposed Project. The purpose of this Notice is to (1) provide notice of the availability of IS Application No. 7334 and the draft Mitigated Negative Declaration and request written comments thereon; and (2) provide notice of the public hearing regarding the Proposed Project.

#### Public Comment Period

The County of Fresno will receive written comments on the Proposed Project and Mitigated Negative Declaration from May 27, 2020 through June 26, 2020

Email written comments to [cmonfette@co.fresno.ca.us](mailto:cmonfette@co.fresno.ca.us), or mail comments to:

Fresno County Department of Public Works and Planning  
Development Services and Capital Projects Division  
Attn: Chrissy Monfette  
2220 Tulare Street, Suite A  
Fresno, CA 93721

IS Application No. 7334 and the draft Mitigated Negative Declaration may be viewed at the above address Monday through Thursday, 9:00 a.m. to 5:00 p.m., and Friday, 8:30 a.m. to 12:30 p.m. (except holidays), or at [www.co.fresno.ca.us/initialstudies](http://www.co.fresno.ca.us/initialstudies). An electronic copy of the draft Mitigated Negative Declaration for the Proposed Project may be obtained from Chrissy Monfette at the addresses above.

**Public Hearing**

The Board of Supervisors will hold a public hearing to consider approving the Proposed Project and the Mitigated Negative Declaration on August 18, 2020, at 9:00 a.m., or as soon thereafter as possible, in Room 301, Hall of Records, 2281 Tulare Street, Fresno, California 93721. Interested persons are invited to appear at the hearing and comment on the draft Mitigated Negative Declaration.

For questions please call Chrissy Monfette (559) 600-4245

Published: May 27, 2020

**INITIAL STUDY ROUTING  
MAY 27, 2020 TO JUNE 26, 2020**



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

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## INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

**1. Project title:**

Initial Study No. 7334 – Fresno Canal at Del Rey Avenue Bridge Replacement

**2. Lead agency name and address:**

Fresno County  
2220 Tulare Street, Suite A  
Fresno, CA 93721

**3. Contact person and phone number:**

Chrissy Monfette  
(559) 600-4245

**4. Project location:**

The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue. The replacement bridge will be constructed in the same location as the existing bridge.

**5. Project sponsor's name and address:**

Alexis Rutherford, Fresno County Design Division  
2220 Tulare Street, 6<sup>th</sup> Floor  
Fresno, CA 93721

**6. General Plan designation:**

Agriculture

## INITIAL STUDY ROUTING

**7. Zoning:**

## MAY 27, 2020 TO JUNE 26, 2020

AE-20 (Exclusive Agricultural, 20-acre minimum parcel size)

**8. Description of project:**

The existing bridge is 71 feet long, 23.6 feet wide, was built in 1939 and widened in 1967. The proposed bridge will be 73 feet long and 39 feet wide to accommodate two 12-foot wide travel lanes and 6-foot wide shoulders. The bridge replacement is necessary to address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening the timber structure further is not allowable, a replacement is the only option.

Approach work is expected to extend up to 400 feet on either side of the bridge. The driveways/access roads on all four corners would require realignment to accommodate the new approach railing and private driveway gates and fences would require relocation. Trees and other vegetation would be removed during construction.

The bridge would be closed during construction requiring a 3.7-mile detour to allow a shorter construction period. The existing Average Daily Traffic (ADT) is 1,200 vehicles per day. Right-of-way acquisition is anticipated.

Existing utilities at the bridge will also need to be relocated: PGE electrical transmission overhead lines are located on the east side of the bridge and will remain in place. PGE will refeed the west side distribution lines from the north and remove the lines above the bridge. The distribution line feeding a house on the north side of the bridge will be moved northward to clear an access road. AT&T's telephone lines are located on the west side of the bridge and will be rerouted underground by directional bore method. A portion of Conterra's fiber optic cable located aerially on the north west side of the bridge will be rerouted underground with minimum depth of 10 feet below the canal bottom. Another portion, which is buried along west side of the north approach, will be relocated within County right-of-way, and buried at minimum 4 feet depth for a distance of approximately 300 feet. Directional bore method will be applied for this work with drilling diameter of 1.25 inch and two 3-foot by 5-foot bore pits.

The project would not involve pile driving; although structure demolition, excavation and some stream channel work is included in the scope of work, the work would be temporary and intermittent. Construction activities would occur during normal working hours, Monday through Friday, and would comply with Fresno County's Noise Ordinance and Caltrans Standard Specifications for noise.

**9. Surrounding land uses and setting: Briefly describe the project's surroundings:**

The land uses in the area of the project are agricultural and some parcels have single family residences. The Fresno Canal runs beneath and through the project site.

**10. Other public agencies whose approval is required (g., permits, financing approval, or participation agreement.)**

California Department of Fish and Wildlife  
California Department of Transportation  
Central Valley Regional Water Quality Control Board  
Fresno Irrigation District  
San Joaquin Valley Air Pollution Control District  
State Water Resources Control Board  
U.S. Department of Fish and Wildlife  
U.S. Environmental Protection Agency

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code 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.?**

Notice that this project application was complete was sent to three of the four tribes who have requested such formal consultation from the County. The notices were sent to Table Mountain Rancheria (TMR) and the Dumna Wo Wah Tribal Government (DWW) on August 24, 2017, and to the Picayune Rancheria of Chukchansi Indians (PRCI) on November 7, 2017. The reason for the later date is that the PRCI requested notice after the original letters had been sent. The project was outside the area of geographic interest for the fourth tribe: Santa Rosa Rancheria.

**INITIAL STUDY ROUTING**

Neither TMR nor PRCI provided a response to the County's notice that the project application was complete. DWW requested consultation with the County in a letter dated September 7, 2017, which was within the 30-day response time prescribed by AB 52. A copy of the Archeological Survey Report and Historic Property Survey Report (Applied Earthworks, 2017) was provided to the Tribal Representative on February 21, 2018. On August 2, 2018, staff adopted mitigation and concluded consultation with the DWW. See Section XVIII. of the Initial Study for more details.

MAY 27, 2020 TO JUNE 26, 2020

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |   |
|---|---|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources |
| <input type="checkbox"/> Air Quality                        | <input type="checkbox"/> Biological Resources               |
| <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology/Soils                      | <input type="checkbox"/> Greenhouse Gas Emissions           |
| <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Hydrology/Water Quality            |
| <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing                 |
| <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Wildfire                           |
| <input type="checkbox"/> Mandatory Findings of Significance |   |

**DETERMINATION OF REQUIRED ENVIRONMENTAL DOCUMENT:**

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment. **A NEGATIVE DECLARATION WILL BE PREPARED.**

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 the Mitigation Measures described on the attached sheet have been added to the project. **A MITIGATED NEGATIVE DECLARATION WILL BE PREPARED.**

I find the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required

I find that as a result of the proposed project, no new effects could occur, or new Mitigation Measures would be required that have not been addressed within the scope of a previous Environmental Impact Report.

**PERFORMED BY:**

**REVIEWED BY:**

\_\_\_\_\_  
**Chrissy Monfette, Planner**

\_\_\_\_\_  
**Marianne Mollring, Senior Planner**

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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**INITIAL STUDY  
ENVIRONMENTAL CHECKLIST FORM  
(Initial Study Application No. 7334)**

The following checklist is used to determine if the proposed project could potentially have a significant effect on the environment. Explanations and information regarding each question follow the checklist.

- 1 = No Impact
- 2 = Less Than Significant Impact
- 3 = Less Than Significant Impact with Mitigation Incorporated
- 4 = Potentially Significant Impact

**I. AESTHETICS**

Except as provided in Public Resources Code Section 21099, would the project:

- 2 a) Have a substantial adverse effect on a scenic vista?
- 2 b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- 2 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 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?
- 1 d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

**II. AGRICULTURAL 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) prepared by the California Dept. 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 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, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- 2 b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?
- 1 c) Conflict with existing zoning for forest land, timberland or timberland zoned Timberland Production?
- 1 d) Result in the loss of forest land or conversion of forest land to non-forest use?
- 1 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?

**III. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- 2 a) Conflict with or obstruct implementation of the applicable Air Quality Plan?
- 2 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?
- 2 c) Expose sensitive receptors to substantial pollutant concentrations?
- 2 d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

**IV. BIOLOGICAL RESOURCES**

Would the project:

- 3 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?
- 2 b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 2 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?
- 2 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?
- 1 e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- 1 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?

**V. CULTURAL RESOURCES**

Would the project:

- 2 a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- 3 b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- 3 c) Disturb any human remains, including those interred outside of formal cemeteries?

**VI. ENERGY**

Would the project:

- 2 a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- 2 b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**VII. GEOLOGY AND SOILS**

Would the project:

INITIAL STUDY REVIEW  
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- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - 1 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?
  - 1 ii) Strong seismic ground shaking?
  - 1 iii) Seismic-related ground failure, including liquefaction?
  - 1 iv) Landslides?
- 1 b) Result in substantial soil erosion or loss of topsoil?
- 1 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?
- 1 d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- 1 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 waste water?
- 3 f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

- 2 a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- 1 b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- 2 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 result in substantial erosion or siltation on or off site?
  - 1 i) Result in substantial erosion or siltation on- or off-site;
  - 1 ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
  - 1 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
  - 1 iv) Impede or redirect flood flows?
- 1 d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- 2 e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

**VIII. GREENHOUSE GAS EMISSIONS**

Would the project:

- 2 a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- 2 b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**XI. LAND USE AND PLANNING**

Would the project:

- 1 a) Physically divide an established community?
- 1 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?

**IX. HAZARDS AND HAZARDOUS MATERIALS**

Would the project:

- 1 a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- 2 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?
- 1 c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 1 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?
- 1 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?
- 1 f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 1 g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**XII. MINERAL RESOURCES**

Would the project:

- 1 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?
- 1 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?

**XIII. NOISE**

Would the project result in:

- 2 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 applicable standards of other agencies?
- 2 b) Generation of excessive ground-borne vibration or ground-borne noise levels?
- 1 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 two 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?

**XIV. POPULATION AND HOUSING**

Would the project:

- 1 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)?

**X. HYDROLOGY AND WATER QUALITY**

Would the project:

**INITIAL STUDY ROUTING**  
**MAY 27, 2020 TO JUNE 26, 2020**

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

forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

**XV. PUBLIC SERVICES**

Would the project:

- 1 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:
- 1 i) Fire protection?
- 1 ii) Police protection?
- 1 iii) Schools?
- 1 iv) Parks?
- 1 v) Other public facilities?

**XVI. RECREATION**

Would the project:

- 1 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?
- 1 b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

**XVII. TRANSPORTATION**

Would the project:

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

**XVIII. TRIBAL CULTURAL RESOURCES**

Would the project:

- 3 a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:
- 3 i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- 3 ii) 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 Public Resources Code Section 5024.1. In applying the criteria set

**XIX. UTILITIES AND SERVICE SYSTEMS**

Would the project:

- 2 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?
- 1 b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- 1 c) Result in a determination by the wastewater treatment provider which 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?
- 1 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?
- 1 e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

**XX. WILDFIRE**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- 1 a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- 1 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?
- 1 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?
- 1 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?

**XXI. MANDATORY FINDINGS OF SIGNIFICANCE**

Would the project:

- 3 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- 3 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)
- 1 c) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

**Documents Referenced:**

This Initial Study is referenced by the documents listed below. These documents are available for public review at the County of Fresno, Department of Public Works and Planning, Development Services and Capital Projects Division, 2220 Tulare Street, Suite A, Fresno, California (corner of M & Tulare Streets).

Air/Noise Study Memo by Shane Gunn (Caltrans), dated September 19, 2016  
Anticipated Tree Impacts by Live Oak Associates, Inc., dated May 2, 2018  
Farmland Conversion Impact Analysis for the Fresno Canal Bridge Replacement at Del Rey Avenue Project by Area West Environmental, Inc. April 28, 2017  
Fresno County General Plan, Policy Document, Background Report and Final EIR  
Fresno County Zoning Ordinance  
Greenhouse Gas Analysis for Fresno Canal on Del Rey Avenue Bridge Replacement Project by LSA, dated December 17, 2019  
Hazardous Waste Initial Site Assessment by Haro Environmental, November 11, 2015  
Historic Property Survey Report by Caltrans, January 2017  
Impacts to Habitats/Vegetation Types by Live Oak Associates, Inc.  
Important Farmland 2016 Map, State Department of Conservation  
Natural Environment Study (Minimal Impacts) by Caltrans, October 2016  
Potential Waters of the United States Fresno Canal at Del Rey Avenue, Fresno County, California by Live Oak Associates, Inc., October 2016  
Water Quality Technical Memorandum by Rincon Consultants, September 16, 2016

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## INITIAL STUDY ROUTING MAY 27, 2020 TO JUNE 26, 2020



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

## EVALUATION OF ENVIRONMENTAL IMPACTS

- APPLICANT:** Fresno County Design Division
- APPLICATION NOS.:** Initial Study Application No. 7334
- DESCRIPTION:** The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of E. McKinley. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards.
- LOCATION:** The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue. The replacement bridge will be constructed in the same location as the existing bridge.

The existing bridge is 71 feet long, 23.6 feet wide, was built in 1939 and widened in 1967. The proposed bridge will be 73 feet long and 39 feet wide to accommodate two 12-foot wide travel lanes and 6 foot wide shoulders. The bridge replacement is necessary to address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening the timber structure further is not allowable, a replacement is the only option.

Approach work is expected to extend up to 400 feet on either side of the bridge. The driveways/access roads on all four corners would require realignment to accommodate the new approach railing and private driveway gates and fences would require relocation. Up to 174 trees and other vegetation would be removed during construction.

The bridge would be closed during construction requiring a 3.7-mile detour to allow a shorter construction period. The existing Average Daily Traffic (ADT) is 1,200 vehicles per day. Right-of-way acquisition is anticipated.

Existing utilities at the bridge will also need to be relocated: PG&E electrical transmission overhead lines are located on the east side of the bridge and will remain in place. PG&E will refeed the west side distribution lines from the north and remove the lines above the bridge. The distribution line feeding a house on the north side of the bridge will be moved northward to clear an access road. AT&T's telephone lines are located on the west side of the bridge and will be rerouted underground by directional bore method. A portion of Conterra's fiber optic cable

located aerially on the north west side of the bridge will be rerouted underground with minimum depth of 10 feet below the canal bottom. Another portion, which is buried along west side of the north approach, will be relocated within County right-of-way, and buried at minimum 4 feet depth for a distance of approximately 300 feet. Directional bore method will be applied for this work with drilling diameter of 1.25 inch and two 3-foot by 5-foot bore pits.

The project would not involve pile driving; although structure demolition, excavation and some stream channel work is included in the scope of work, the work would be temporary and intermittent. Construction activities would occur during normal working hours, Monday through Friday, and would comply with Fresno County's Noise Ordinance and Caltrans Standard Specifications for noise.

Note: The "entire project limits" as used in the following report and the associated Mitigation Measures, includes all of the following: the road approaches approximately 400 feet north and 400 feet south of the bridge easement; the Fresno Canal including the area of the canal beneath the existing bridge; approximately 230 feet up and 220 feet downstream of the 60-foot bridge right-of-way along the length of the project site; and a .3-acre staging area northwest of the bridge.

#### I. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

- A. Have a substantial adverse effect on a scenic vista; or
- B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or
- 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 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

North Del Rey Avenue is not considered a scenic or landscaped drive. However, Belmont Avenue to the south and Academy Avenue to the east are considered to be scenic drives. The project will have no impact on these drives because the low elevation of the bridge prevents it from being visible from any location on these roads. The bridge itself is not eligible for inclusion in the National Register of Historic Places. While some trees may be removed in order to allow the wider replacement bridge, this does not present a significant impact because there is always a break in tree line and natural vegetation where a bridge is established. The slight increase in this gap in this area will not have a significant impact on the visual quality of the area.

- D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

FINDING: NO IMPACT:

No new lighting is proposed as part of this application and the road surface will be of similar composite as the existing roadway: asphalt pavement. There are currently no streetlights along the bridge, and none are proposed as part of this application. As a result, there is no change to the existing sources of light or glare in the vicinity of the project and no impacts as a result of new sources of light and glare.

## II. AGRICULTURAL 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) prepared by the California Dept. 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 in Forest Protocols adopted by the California Air Resources Board. Would the project:

- A. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; or
- B. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project would result in the conversion of approximately 0.13 acre (5,663 square feet) of Prime Farmland along the roadway edge to accommodate the bridge approaches. Approximately 3,431 square feet of the farmland which would be impacted is restricted by a Williamson Act Contract. The removal of this portion of land does not represent a conflict with the Contract because it does not present a reduction of farming acreage to less than 20 acres. Further, the removal of a small amount of fringe farmland from the larger parcel will not adversely affect the ability to farm the remainder and lastly, use of this section as right-of-way will not create pressure for surrounding farmland to convert to a non-agricultural use.

During review of this project under the provisions of the National Environmental Policy Act (NEPA), a Farmland Conversion Impact Rating was calculated to determine if the loss of farmland would be considered significant. The site was given a conversion rating of 122 (*Farmland Conversion Impact Analysis for the Fresno Canal Bridge Replacement at Del Rey Avenue Project* by Area West Environmental, Inc., dated April 28, 2017). According to 7 CFR §658.4, projects which score less than 160 “need not be given

further consideration for protection” because the measurable impacts of farmland conversion show that impacts will be less than significant. In the case of this project, more than two thirds of the value for the site was due to the prime farmland designation; however, the small amount to be converted was determined to be negligible compared both to the parent property and the farmable land in the County.

- C. Conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production; or
- D. Result in the loss of forest land or conversion of forest land to non-forest use?

FINDING: NO IMPACT:

The project site is not located in an area where land is designated or zoned for timberland or timberland production. Therefore, the project will not result in the loss of forest land or conversion of forest land to non-forest use.

- 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?

FINDING: NO IMPACT:

Due to the lack of forestland in the vicinity of the project site, there will be no direct impacts to forestland. The replacement of this bridge will not result in the conversion of offsite forestland.

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Despite the removal of a small amount of Prime and Williamson Act-restricted farmland, this project will not involve other changes which could result in the conversion of Farmland to non-agricultural use. The loss of farmland would be related to the need to acquire additional right-of-way to ensure a safe approach to the bridge and farming in this area has historically occurred adjacent to the roadway.

The ultimate right-of-way in this area is 60 feet, with 30 feet on either side of the section line and the existing right-of-way is 40 feet with 20 feet on either side of the section line. Based on the ultimate right-of-way, up to ten feet on either side of the section line could ultimately be converted to roadway. The ultimate right-of-way was determined as part of the Fresno County General Plan in October 2000 and loss of farmland associated with acquisition of right-of-way was considered in the General Plan EIR Background Report. Therefore, the proposed loss of farmland is not a new impact as a result of this application and this bridge replacement project will have no impact on pressures to convert farmland on nearby parcels.

### III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- A. Conflict with or obstruct implementation of the applicable Air Quality Plan; or
- 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; or
- C. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under a Federal or State ambient air quality standard; or
- D. Expose sensitive receptors to substantial pollutant concentrations; or
- E. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The San Joaquin Valley Air Pollution Control District (Air District) reviewed this project and did not identify any concerns with potential air quality standards violations or nonconformity with existing Air Quality Plans. The project is anticipated to return to baseline traffic following construction because no additional through lanes are proposed. The proposed widening will create more space in each lane and add 6-foot shoulders for improved safety.

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Therefore, the project's contribution to air quality impacts and release of greenhouse gases is limited to the construction period. The Greenhouse Gas Memo prepared by LSA (dated December 17, 2019) used the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (ROADMod) to estimate the project's emissions during construction: 647.12 metric tons of Carbon Dioxide equivalent (MTCO<sub>2e</sub>).

That memo also calculated the following emissions for the project: 0.47 tons of ROG, 4.02 tons of Carbon Monoxide, 4.67 tons of Nitrogen Oxide, 0.26 tons of Particulate Matter less than 10 microns in size, 0.39 tons of Particulate Matter less than 2.5 microns in size, 0.1 tons of Sulfur Oxides, 915.47 tons of Carbon Dioxide, 0.02 tons of Nitrous Oxide (N<sub>2</sub>O), and 0.20 tons of Methane. Overall this results in 925.32 tons of CO<sub>2e</sub>, which is equivalent to 839.44 metric tons.

The Air District has not adopted significant thresholds for construction impacts; however, the anticipated release of 839.44 MTCO<sub>2e</sub> is less than the 900 MTCO<sub>2e</sub> threshold recommended by the California Air Pollution Control Officer's Association (CAPCOA) for construction impacts. Therefore, the project is determined to have less than significant impacts on release of criteria pollutants.



#### IV. BIOLOGICAL RESOURCES

Discussion in this section is based on the *Natural Environment Study (Minimal Impacts)* report prepared by Lone Oaks Associates, dated October 2016.

Would the project:

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The Area of Potential Effects (APE) determined by Caltrans consists of the bridge itself; the road approaches approximately 400 feet north and south of the existing bridge easement; the Fresno Canal in the area of the bridge, 230 feet upstream, and 220 feet downstream of the bridge; a 4.3-acre staging area located northwest of the bridge, and a small portion of the adjacent farmland.

On June 19, 2016, a reconnaissance-level field survey of the APE was performed to determine if sensitive or protected species were likely to be present on site. Of special-status species which are known to occur in areas around the quadrangle, the following have the potential to be present on site: western pond turtle, Swainson's hawk, and San Joaquin Kit Fox.

Canals are capable of supporting western pond turtles; however, at the time of the survey, the water in the canal was flowing too quickly and the banks were too hard to support either swimming or basking. Therefore, it is unlikely that western pond turtle will be present onsite.

In regard to Swainson's Hawk, review of the project site determined that the site and surrounding area did not contain suitable foraging habitat, although the mature riparian trees in the vicinity of the canal offer potential nesting habitat. The surrounding development consists of tilled fields which have been eradicated of small mammals, such as ground squirrel, which would otherwise be a source of forage for the hawk. In the Central Valley, Swainson's hawks usually nest adjacent to areas where foraging is available, making this area generally unsuitable for long-term occupation; however, they may pass over the project site from time to time.

The San Joaquin kit fox prefers area of alkali sink scrub and alkali grassland, which is not present on the subject site. In addition, according to the *Natural Environment Study*, reports of observed kit fox in the area are not likely to be actual observations, as they appear to be at elevations of 1,000 to 2,000 feet in oak woodland habitat, where vegetation consists of brushy understory. The *Natural Environment Study* posits that based on the location of the observation these foxes were grey fox rather than kit fox and determined that San Joaquin kit fox would be very unlikely to be present on site, even as transients.

At the existing bridge, birds were observed flying under the deck to roost and may have constructed nests in the underside of the bridge. No bats were observed during the field visit, but they have been known to roost on the undersides of timber bridges such as the existing bridge. No bat sign was observed; however, the water in the canal was only a few feet shy of the bridge deck, which prevented the biologist from close survey. Therefore, since it cannot be determined if bats are present on site and because raptors and other birds would find the underside of the bridge a suitable nesting location, mitigation is required to avoid impacts to these species. Impacts to birds outside of the nesting season would not be considered a significant impact.

\* **Mitigation Measures**

1. *In order to minimize adverse impacts to nesting raptors, migratory birds, and colonial nesting birds, the following mitigation measures shall be implemented:*
  - a. *If construction (including equipment staging and tree removal) will occur during the breeding season for migratory birds and raptors (generally between February 15 and September 1), the County shall retain a qualified biologist to conduct a preconstruction nesting bird and raptor survey before the onset of construction activities. The preconstruction nesting bird and raptor survey shall be conducted between February 15 and September 1 within suitable habitat within the entire project limits. Surveys for nesting migratory birds shall be completed within 250 feet of the entire project limits. Surveys for Swainson's hawk should also extend 0.25 mile from the entire project limits to ensure that hawks are not indirectly affected by construction noise. The survey shall be conducted not more than 10 days before the initiation of construction activities. If no active nests are detected during the survey, no additional mitigation is required to address concerns relating to migratory birds and raptors.*
  - b. *If migratory birds or raptors are found to be nesting in or adjacent to the entire project limits, a no-disturbance buffer of 100 feet around an active bird nest or 300 feet around an active raptor nest shall be established to avoid disturbance of the nest area and to avoid take. The buffer shall be maintained around the nest area until the end of the breeding season, or until a qualified biologist determines that the young have fledged and are foraging on their own. The extent of these buffers may be modified, as determined by the biologist (in coordination with Caltrans and CDFW), depending on the species identified, level of noise or construction disturbances, and other topographical or artificial barriers.*
2. *In order to minimize adverse impacts to roosting bats, the following mitigation measures shall be implemented:*
  - a. *Pre-construction surveys for roosting bats shall be conducted by a qualified biologist within 15 days of the onset of construction, during dusk*

*when bats are likely to be active. The survey area will include the North Del Rey Avenue bridge over the Fresno Canal.*

- b. If construction activities commence between April 1 and August 31 (the bat breeding season) and the pre-construction surveys identified active roosting bats, a 100-foot construction setback shall be established around the bridge. Alternative avoidance measures may be approved by CDFW. Buffer areas will be identified on the ground with flagging, fencing, or by other easily visible means, to prevent construction equipment and workers from entering the setback area. Buffers shall remain in place for the duration of the breeding season, unless other arrangements are made with CDFW. After the breeding season, any remaining bats may be removed through passive relocation (see following measure).*
- c. During the non-breeding season, (September 1 to March 31), resident bats occupying the North Del Rey Avenue and Fresno Canal bridge may be passively relocated by a qualified biologist or professional pest control specialist. Passive relocation would entail installing one-way doors on the bridge or utilizing other humane exclusion methods where the bats are located and leaving these devices in place for at least 48 hours to ensure bats have vacated the bridge.*

B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

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FINDING: LESS THAN SIGNIFICANT IMPACT:

Riparian habitat exists in the vicinity of the canal and is composed of a mix of native and non-native species and the canal itself is an engineered irrigation system lined with rock and riprap. The canal itself does not provide suitable habitat for special-status species; however, some riparian habitat exists on the banks of the canal. Approximately 0.02 acres of permanent impacts and 0.03 acres of temporary impacts will occur to non-native riparian habitat; and approximately 0.03 acre of temporary impacts and 0.02 acres of temporary impacts will occur to native riparian habitat. These impacts primarily occur in the areas immediately adjacent to the bridge where the land has been previously developed as the roadway and support for the existing bridge. Therefore, impacts to riparian habitat will be less than significant.

The modification of the canal bed with concrete and rock slope protection as part of the installation of the replacement bridge will not present a significant impact to the value of the canal to native and non-native species. The project is required to prepare an application for a Streambed Alteration Agreement, which allows the California Department of Fish and Wildlife to require specific minimization and avoidance measures for this project, if they are determined to be necessary. Compliance with this existing regulation will result in less than significant impacts to riparian habitat or other sensitive natural communities.

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

An ecologist examined the entire project site for possible waters of the United States and determined that the bed and lower bank of the Fresno Canal below the ordinary high water mark would likely be considered a tributary water of the United States. The rationale for this determination for an engineered canal is the existing connection between the canal and the San Joaquin River, although in most years water in the canal does not reach this connection point.

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

The canal beneath the bridge is required to route fish waters in odd-numbered years. Therefore, the project would be required to install a diverter if water is flowing at the start of construction. If this is the case, an in-channel bypass will be provided by the Fresno Irrigation District. In addition, this project is required to comply with permitting associated with work in a streambed, such as the Streambed Alteration Agreement and preparation of a Stormwater Pollution Prevention Plan (SWPPP). Therefore, the project will have no significant adverse impacts on the movement of resident or migratory fish or wildlife species.

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

FINDING: NO IMPACT:

The project will not conflict with any local policies or ordinances protecting biological resources because it is not in area subject to any such regulations. Similarly, the project site is not subject to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

The County of Fresno has general plan policies recommending compliance with the Oak Woodland Management Plan for projects which have the potential to impact Oak Woodlands. A Tree Impact Study prepared by Live Oak Associates, Inc. indicated that the trees to be affected included the following species: Fremont's Cottonwood, Citrus, Eucalyptus, Almond, Cherry, Goodding's Black Willow, Red Willow, and Chinaberry – none of which are protected tree species.

## V. CULTURAL RESOURCES

Would the project:

- A. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Impacts to the canal were determined to be less than significant because the majority of work will occur outside of the streambed. While some work within the bed of the canal will occur, the installation and removal of bridge support structures will not impact the overall function of the canal as a water conveyance structure.

The subject bridge was constructed in 1939 and widened in 1967 and is listed in the Caltrans Historic Bridge Inventory as Category 5, which makes it ineligible for listing in the National Register of Historic Places. The Fresno Canal and a transmission line, which runs parallel to the canal, were also identified as historic-era construction.

The transmission line first appears on the 1947 Round Mountain Quadrangle map and appears to be part of a 130-kilovolt line which connects the Sanger Substation to the Kerckhoff Powerhouse. The nearest lattice towers which support the line are located approximately 570 feet south and 125 feet north of the edge of the bridge. While electric distribution lines and telephone wires on the west side of the project site will be modified such that they run underground in this area, the transmission line to the east will not be impacted by this project.

Therefore, impacts to historical resources will be less than significant because the scope of the project does not involve material changes to such resources.

- B. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; or
- C. Disturb any human remains, including those interred outside of formal cemeteries?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

Tribal consultation pursuant to Assembly Bill 52 (AB 52) and Section 106 of the National Historic Preservation Act did not identify any existing cultural resources on the project site and the pedestrian survey conducted by Applied Earthworks on July 27, 2016 did not identify any resources that were visible at the surface of the project site. Records of surveys within the area of potential impacts and a 0.5-mile radius identified no known resources. However, one of the local tribes, Table Mountain Rancheria, identified that the project was proximate to an early native American trail, shown on an 1854 General Land Office map (Applied Earthworks, 2017). Additional discussion is provided in Section XVIII. Tribal Cultural Resources. Due to the increased potential for previously unidentified cultural resources to be present at a subsurface level, mitigation measures

shall be required to ensure that impacts to cultural resources remain less than significant.

\* **Mitigation Measures**

1. *A qualified archaeologist/paleontologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (the "Qualified Archaeologist"), shall be on call during any ground-disturbing activity within the entire project limits to evaluate any possible resources uncovered.*
2. *The Qualified Archaeologist shall conduct a preconstruction meeting to orient the construction crew to the potential for encountering prehistoric archaeological deposits during construction. This instructional meeting shall include a discussion of the types of artifacts that could be encountered and the steps to take upon discovery to avoid inadvertent impacts to such finds. The tribal monitors may be present at the preconstruction meeting.*
3. *In the event that unanticipated archaeological resources are encountered during Project activities, compliance with federal and state regulations and guidelines regarding the treatment of cultural resources and/or human remains shall be required, specifically Caltrans Standard Specifications 14-2, along with implementation of the following mitigation:*
  - a. *All construction activities within 60 feet shall halt, and the area of the find shall be secured to prevent the removal or taking of archaeological resources from the site. The Qualified Archaeologist shall be notified immediately.*
  - b. *The Qualified Archaeologist shall inspect the findings and report the results of the inspection to the Applicant.*
  - c. *In the event that the identified archaeological resource is determined to be prehistoric, the Applicant and Qualified Archaeologist will coordinate with and solicit input from the appropriate Native American Tribal Representatives, as determined by consultation with the Native American Heritage Commission (NAHC), regarding significance and treatment of the resource as a tribal cultural resource. Any tribal cultural resources discovered during project work shall be treated in consultation with the tribe, with the goal of preserving in place with proper treatment.*
  - d. *If the County, in consultation with the Qualified Archaeologist and Native American Tribal Representatives, determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with Public Resources Code Section 21083.2 and CEQA Guidelines Section 15126.4. Consistent with CEQA Guidelines Section 15126.4(b)(3), mitigation shall be accomplished through either preservation in place or, if preservation in place is not feasible, data recovery through excavation conducted by a qualified archaeologist implementing a detailed archaeological treatment plan.*
4. *If human remains are uncovered during Project activities, the contractor shall immediately halt work and secure the area. The Applicant shall contact the Fresno County Sheriff-Coroner to evaluate the remains, and follow the*

*procedures and protocols set forth in CEQA Guidelines Section 15064.4 (e)(1). If the County Sheriff-Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code Section 7050.5(c) and Public Resources Code Section 5097.98 (as amended by AB 2641). The NAHC shall designate a Most Likely Descendent (MLD) for the remains per Public Resources Code Section 5097.98, and the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in Public Resources Code Section 5097.98, with the MLD regarding their recommendations for the disposition of the remains, taking into account the possibility of multiple human remains.*

## VI. ENERGY

Would the project:

- A. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- B. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

FINDING: **LESS THAN SIGNIFICANT IMPACT** MAY 27, 2020 TO JUNE 26, 2020

This project does not have the potential to cause a wasteful, inefficient, or unnecessary consumption of energy resources during operation because it will be a part of the existing circulation system and will not have any functions which require the use of energy. Therefore, the potential for inefficient use of energy may only occur during demolition of the existing bridge and construction of its replacement, along with the associated modifications to the utility structures. Uses include fuel necessary to operate construction equipment, transportation of materials to the project site, and the daily round trips by employees.

The Environmental Protection Agency and the National Highway Traffic Safety Administration, on behalf of the U.S. Department of Transportation have issued final rules to reduce greenhouse gas emissions and improve fuel economy by regulating the minimum acceptable miles-per-gallon ratio and other improvements such as air conditioner performance. Since these regulations apply to the manufacture of vehicles, they will be phased in as consumers replace old vehicles, leading to a general increase in fuel efficiency. In addition, since this project will be constructed in coordination with the California Department of Transportation (Caltrans), it will be subject to those standards outlined in the Highway Design Manual, which include regulations for the conservation of materials and energy.

Compliance with these existing regulations will ensure that the project does not result in a wasteful or inefficient use of energy or nonrenewable resources during demolition, construction, and the reorganization of utility lines.

## VII. GEOLOGY AND SOILS

Would the project:

- A. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - 1. 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?
  - 2. Strong seismic ground shaking?
  - 3. Seismic-related ground failure, including liquefaction?
  - 4. Landslides?
- B. Result in substantial soil erosion or loss of topsoil; or
- 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 landslides, lateral spreading, subsidence, liquefaction, or collapse?

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FINDING: NO IMPACT:

The project site is not located in an area at risk of loss, injury, or death associated with the rupture of a known earthquake fault, strong seismic ground-shaking, seismic-related ground failure or landslides. The most recent Alquist-Priolo map shows that there are no known faults within 50 miles of the site and Figure 9-5 of the Fresno County General Plan Background Report (FCGPBR) shows that the project is located in an area with 0-20% risk of peak horizontal ground acceleration exceeding 10% within 50 years, which is the lowest level of risk.

Regarding landslides, the area of the project is generally flat except where the canal is located. As part of the preparation of a Storm Water Pollution Prevention Plan, which is a required part of Section 401 permitting, the project will be required to protect against collapse of the streambanks both during construction and during the operation period when the project site will be unmanned. With compliance to these requirements, no impacts to risk of loss, injury, or death associated with landslides will occur.

- D. Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property; or



- 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 waste water?

FINDING: NO IMPACT:

The use of septic systems is not proposed as part of this application because such facilities are not required for bridge replacements. Portable facilities will be provided during construction and no such facilities are required for operation.

- F. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

No such unique resources were identified at the project site; however, if unique resources were present at a subsurface level, grading and other construction activity could excavate them, resulting in potential damage. Mitigation measures relating to the protection of Cultural Resources (Section V), which relate to non-unique cultural artifacts will extend the same protection to these potentially unique artifacts.

\* Mitigation Measures

1. See Section V Cultural Resources

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VIII. GREENHOUSE GAS EMISSIONS

Would the project:

- A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- B. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

FINDING: LESS THAN SIGNIFICANT IMPACT:

In general, the opportunity for this project to release greenhouse gases into the environment is limited to the destruction of the existing bridge and construction of the replacement. Because the scope of the project does not include additional lanes which would lead to an increase in traffic, there will be no operational increase.

During construction, the sources of greenhouse gas emissions include: diesel-powered construction equipment, expenditure of fossil fuels by employees during commute, and increased travel distance for users of the road who would experience a detour during construction. Based on the results of the RoadMod, the project would generate a total of approximately 839.44 metric tons of CO<sub>2</sub>e.

The proposed project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32 and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

## VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

FINDING: NO IMPACT:

Routine operations for this project will not require the transport, use, or disposal of hazardous materials. While it is possible that vehicles which are transporting such materials may use the bridge in the course of their business, this usage is considered part of the baseline and the proposed bridge replacement will have no impact on this factor. Based on historic photographs of the project site (Hazardous Waste Initial Site Assessment, Haro Environmental, November 11, 2015), show that the area of the project has historically been used for agriculture. A site visit on October 19, 2015 did not identify any hazardous materials or petroleum products at the site or at nearby sites. In addition, no dispersed vegetation or other signs of prior hazardous waste releases were observed.

- 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?

FINDING: LESS THAN SIGNIFICANT IMPACT:

As discussed above, the project will have no modification to the baseline risk associated with the release of hazardous materials to the public during operation, since it will operate as part of the complete circulation system. However, during demolition, it is possible that lead and other heavy metals contained in paint and asbestos contained in concrete may be exposed in such a manner that could cause adverse health impacts on workers and could lead to a contamination of the Fresno Canal.

On March 27, 2017, soil samples from adjacent to the bridge were tested for lead content and it was determined that aerially deposited lead was present. The developer will implement Caltrans Guidance regarding the treatment of aerially deposited lead, which will ensure that no adverse impacts occur due to excessive exposure to contaminated soil. On April 13, 2017 samples of the concrete from the existing bridge were tested for asbestos content. Asbestos was not detected in any samples.

The construction of this project will occur through the California Department of Transportation (Caltrans) and will therefore incorporate the most recent Caltrans Standard Specifications. These specifications establish handling methods and testing requirements necessary to first, determine if hazardous materials are present in significant amounts and second, to protect workers in such a case. Handling and disposal are proscribed for cases where debris is considered hazardous and in cases where it is considered nonhazardous (Section 14.11, Caltrans Standard Specifications, 2018), ensuring that workers and the public are protected. Additional provisions are made in this section for projects which cross a body of water, requiring additional precautions over and above those required by the Storm Water Pollution Prevention Plan. Compliance to these existing policies and regulations will result in less than significant impacts.

It is also possible that the use of construction equipment and other vehicles could result in accidental spills of oil, grease, gasoline, brake fluid, antifreeze, or other vehicle-related pollutants. The preparation of the Storm Water Pollution Prevention Plan includes best management practices to ensure that spills are prevented from contaminating the canal. Erosion controls will be established where necessary and all equipment will be in good repair prior to use on the project site further reducing the possibility of leak or malfunction which could lead to pollution.

- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?

FINDING: **NO IMPACT**; **MAY 27, 2020 TO JUNE 26, 2020**

The project will not emit hazardous emissions or handle hazardous materials and therefore will have no impact on the risk of the release of such materials within one quarter mile of a school.

- 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?

FINDING: **NO IMPACT**:

The project site is not located on a hazardous materials site as listed by the Resource Conservation and Recovery Act Information, the Toxics Releases Inventory, the National Priorities List, the Assessment Clean-up and Redevelopment Exchange System, or the Radiation Information Database.

- 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?

FINDING: NO IMPACT:

Following the demolition of the existing bridge and construction of its replacement, the project site will be unmanned and therefore will not result in a safety or noise hazard as a result of residency or employment in the vicinity of an airport.

- F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

FINDING: NO IMPACT:

The project site is located on North Del Rey Avenue, between its intersections with E. McKinley Avenue to the north and E. Belmont Avenue to the south. The Fresno Canal winds between McKinley and Belmont Avenues, running generally east to west. While this bridge is being demolished and rebuilt, the next nearest connection between these two roads is N. McCall Avenue, approximately one mile west of N. Del Rey Avenue. Major roads in this area are developed on a grid system, which typically provides major intersections at one- or two-mile intervals along the cardinal directions. To the east, N. Academy Avenue is two miles away. The detour as a result of the road closure is anticipated to be 3.7 miles. Due to the pattern of connectivity of roads in this area and the limited amount of time that the bridge will be closed, no impacts to emergency response and emergency evacuations plans would be anticipated.

- G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

FINDING: NO IMPACT:

The project site is not located in an area which is at risk of wildland fires and is considered to be within a local responsibility area for fire protection services.

X. HYDROLOGY AND WATER QUALITY

Would the project:

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

This project has the potential to adversely impact water quality standards or to violate waste discharge requirements as a result of construction within the streambed; however, compliance to existing regulations will ensure that Fresno Canal is not contaminated by debris, lead-based paint, or other hazards. A Storm Water Pollution Prevention Plan will be developed and approved by Caltrans which requires the adoption of special standards for the handling of lead-based paint and asbestos-containing materials where their presence might be anticipated, such as with this

project. Adherence to those regulations will result in no impacts to water quality standards or waste discharge requirements.

It is possible that use of the bridge by motor vehicles will result in deposit of pollutants into Fresno Canal as a result of the combustion of gasoline and diesel fuel. Since the project does not propose to increase the number of through lanes on this bridge, there will be no increase from the baseline average daily traffic. The replacement bridge will be approximately 16.6 feet wider than the existing bridge, with increased width of the travel lanes (up to twelve feet) and six-foot shoulders. Such increased surface area between the travel lanes and the edge of the bridge would reduce the amount of contamination from typical usage of the bridge by motor vehicles.

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

FINDING: NO IMPACT:

Some water may be used during construction for dust control and other necessary purposes; however, such usage will be limited in duration and therefore will not have a substantial impact on groundwater recharge or management.

- 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 result in substantial erosion or siltation on or off site?

1. Result in substantial erosion or siltation on- or off-site;
2. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?
3. 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
4. Impede or redirect flood flows?

FINDING: LESS THAN SIGNIFICANT IMPACT:

During construction, impacts may occur in the streambed due to debris from the demolition of the existing bridge falling into the streambed and/or increased sediment loads and turbidity during installation of the supports for the replacement bridge; however, compliance with the SWPPP and the Streambed Alteration Agreement, along with implementation of best management practices as required by Caltrans, will ensure that these impacts are not significant. These regulations require developers to ensure that debris and dust do not run off into the bed of the stream.

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

FINDING: NO IMPACT:

The project site is not near a coastline, which precludes adverse impacts as a result of tsunami. It is similarly not located near a large, stationary body of water which could be subject to seiche.

The area of the canal, including the bridge structure is located within Special Flood Hazard Zone AE and the area north of the bridge is located in Zone AO (depth 1 feet). The special flood hazard zones in this area appear to originate within the canal itself and are not impacted by the bridge replacement. The proposed bridge will be of similar height to the existing (aligned with the roadway) and therefore is subject to the same risks as the existing bridge. Therefore, the proposed project has no impact on the risk of pollutant release due to location in a flood hazard zone.

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

FINDING: LESS THAN SIGNIFICANT IMPACT:

This project is required to prepare a Storm Water Pollution Prevention Plan, which will prevent the release of pollutants to the canal during construction. Some water usage will also be necessary during construction. However, construction and its associated impacts including the risk of spill and water usage, will be a relatively short term event over the life of the bridge. The temporary nature of construction and adoption of best management practices around the streambed will ensure that the project will have less than significant impacts on quality of water in the stream.

INITIAL STUDY ROUTING  
MAY 27, 2020 TO JUNE 26, 2020

## XI. LAND USE AND PLANNING

Would the project:

- A. Physically divide an established community?

FINDING: NO IMPACT:

Bridges serve to connect places which are otherwise separated by a physical obstruction, in this case the Fresno Canal. Because this project will operate as an essential part of the circulation system as described in Section XVI. Transportation, it will not physically divide an established community. The two sides of the canal will temporarily be separated during the course of construction; however, there is a detour of less than three miles to make the connection. Further, the scattered residential development in the area of the canal do not represent an “established community.” Therefore, there are no impacts on the division of communities.

- 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?

FINDING: NO IMPACT:

This project will proceed in compliance with Caltrans specifications for construction, which include requirements to minimize the release of pollution into the environment. County regulations also serve to prevent adverse impacts. Due to the necessary nature of the bridge replacement and the existing regulations which ensure compliance with environmental standards established by the County General Plan. No conflicts with policies or plans adopted for the purpose of mitigating an environmental effect were identified.

## XII. MINERAL RESOURCES

Would the project:

- 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; or
- 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?

FINDING: NO IMPACT; MAY 27, 2020 TO JUNE 26, 2020

Figure 7-7 (FCGPBR) shows where valuable mineral resources are located in the County of Fresno. The project site is not located near any such mapped location and the scope of the project does not include the removal of any locally-important mineral resource. Therefore, this project will have no impact on Mineral Resources.

## XIII. NOISE

Would the project result in:

- 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 applicable standards of other agencies; or
- B. Generation of excessive ground-borne vibration or ground-borne noise levels?

FINDING: LESS THAN SIGNIFICANT IMPACT:

Noise is generally considered to be unwanted sound. Adverse noise impacts from the project could occur from two sources: demolition/construction equipment and increased vehicular traffic on Del Rey Ave. During operation, because no increase in the number of through lanes is proposed, no substantial increase in traffic is anticipated. As a result, there will be no increase in the ambient noise levels.

However, construction equipment has the potential to cause temporary increases to the ambient, intermittent, and impulse noise levels around the construction site and may have the potential to cause elevated ground borne vibration or noise levels. There are two residences within 500 feet of the canal, which are the most likely to be impacted by adverse noise impacts. However, noise sources associated with construction are exempt from compliance with the provisions of the Noise Ordinance (Fresno County Ordinance Code Chapter 8.40), provided such activities do not take place before six a.m. or after nine p.m. on any day except Saturday or Sunday, or before seven a.m. or after five p.m. on Saturday or Sunday (§8.40.060). In addition, the project will implement Caltrans Standard Specification 14-8.02 (or the most recent standard associated with noise control, if 14-8.02 has been superseded at the time of construction), which limits the project's noise to 86 a-weighted decibels at 50 feet from the job site from 9 P.M. to 6 A.M. and all internal combustion engines will be equipped with a muffler. This standard does not exempt the project from compliance with other noise standards.

Impacts from the demolition of the existing bridge and construction of the replacement will be temporary and will comply with the existing Noise Ordinance. As a result, impacts will be less than significant.

- 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 two 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?

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FINDING: NO IMPACT:

The project site is not located within two miles of any airport, public or private. Therefore, no impacts will occur as a result of such location.

#### XIV. POPULATION AND HOUSING

Would the project:

- 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); or
- B. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

FINDING: NO IMPACT:

The replacement bridge will be approximately 16.6 feet wider than the existing bridge. Such increased area will allow for wider travel lanes and a six-foot shoulder in both directions; however, it will also require that the approach be widened for a smooth transition from roadway to bridge deck. This will result in necessary realignment of fences, driveways, and access roads which were constructed adjacent to the bridge



approach. Despite the need to relocate or realign these features, no resident will be displaced from their home as a result of the project.

The proposed bridge replacement is not anticipated to result in substantial unplanned population growth because it represents required maintenance to a portion of the circulation system. Increasing the safety of the bridge on this section of N. Del Rey Avenue does not have the potential to induce an influx of residences to this area.

## XV. PUBLIC SERVICES

Would the project:

- 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?

1. Fire protection;

2. Police protection;

3. Schools;

4. Parks;

5. Other public facilities?

## INITIAL STUDY ROUTING

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FINDING: NO IMPACT:

During demolition/construction traffic at the project site will be diverted around the bridge, resulting in an increase of approximately 3.7 miles per vehicle. As discussed previously, the major roads in this section of Fresno County are generally laid out in a mile-wide grid. Parallel roads exist one mile to the west and two miles to the east of N. Del Rey Avenue which provide the same connection between McKinley Avenue and Belmont Avenue. Because of the temporary nature of the detour and its short distance, this project will not have an adverse impact on response times in this area for police or fire protection. Because the project will not induce population growth, there will be no impact on the usage of schools, parks, and other public facilities and no impact on service ratios (the number of fire fighters and police officers serving a given population) for fire and police protection.

## XVI. RECREATION

Would the project:

- 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; or
- B. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

FINDING: NO IMPACT:

There are no neighborhood or regional parks within two miles of the project site. As previously discussed, this project will not induce population growth or an increase in traffic along N. Del Rey Avenue. As a result, it will not lead to an increase in the use of parks or other recreational facilities in the area.

XVI. TRANSPORTATION

Would the project:

- A. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; or
- B. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b); or
- C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- D. Result in inadequate emergency access?

FINDING: LESS THAN SIGNIFICANT IMPACT:

As described in Section VIII, Hazard and Hazardous Materials, the project site is located along N. Del Rey Ave, approximately halfway between N. Del Rey's intersections with E. McKinley Ave to the north and E. Belmont Ave to the south. N. Del Rey Ave is classified as a local road in the County's general plan with an existing pavement width of approximately 23 feet, a 20-foot right-of-way on both sides of the section line, and ultimate right-of-way of 60 feet (30 on each side of the center line). Some right-of-way acquisition is anticipated as part of this project.

Improvements to the road may occur in order to ensure a smooth transition between road surface and bridge deck. Such improvements to the bridge are necessary in order to meet current standards of safety and therefore will be in line with County plans, ordinances, and policies addressing the circulation system and will reduce hazards related to geometric design. No increase in traffic is anticipated as a result of this project, ensuring that the operation of the roadway after construction will be unchanged.

**INITIAL STUDY ROUTING**  
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## XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

- A. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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:
1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  2. 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The County of Fresno consulted with local Native American Tribal Governments under the provisions of Assembly Bill 52 (AB 52). Notice that this application was complete was sent to Table Mountain Rancheria (TMR), and the Dumna Wo Wah Tribal Government (DWW) on August 24, 2017, with an additional notice being sent to the Picayune Rancheria of Chukchansi Indians (PRCI) on November 7, 2017. The letter to PRCI was sent later than the original letters because the County received their request for notification in late October of 2017. Staff determined that the project site was outside the area of interest for the Santa Rosa Rancheria Tribal Government, who also requested such notice.

Neither TMR nor PRCI provided a response to the County's notice that the project application was complete. DWW requested consultation with the County in a letter dated September 7, 2017, which was within the 30-day response time proscribed by AB 52. The County invited a tribal representative to a meeting to discuss this project and other projects on which the Tribe requested consultation in a letter dated October 25, 2017. A copy of the Archeological Survey Report and Historic Property Survey Report (Applied Earthworks, 2017) was provided to the Tribal Representative on February 21, 2018.

This report documents the surveys conducted by Applied Earthworks' (AE) Historical Archaeologist and Principal Architectural Historian and the results of AE's consultation with Table Mountain Rancheria. Caltrans was required to consult with Tribal Governments under the provisions of the National Environmental Policy Act (NEPA). The TMR Representative did not identify any known resources at the project site and no existing resources were identified as part of the archaeological survey performed on September 14, 2016; however, the Representative identified

this area as part of a Native American Trail that once crossed the river at or near this location. In order to address the issue of potential of significant but currently unknown resources being present below the ground surface, Caltrans and TMR agreed that archaeological monitoring during project construction would be necessary. That mitigation measure is provided below. With the inclusion of that mitigation measure and additional discussion relating to historic-era structures in the vicinity (See Section V Cultural Resources), the report determined that the project would have no significant impacts to historic properties or known cultural resources.

Staff received no response from the DWW Tribal Government. Based on the concerns raised by the Tribe in their initial letter and the concerns raised by TMR during Section 106 consultation, an additional mitigation measure was proposed, which describes the steps which shall be taken in the event that a previously-unknown resource is excavated during construction. The consultation process was concluded pursuant to PRC §21080.3.2(b)(2) on August 2, 2018.

\* **Mitigation Measures**

*The Mitigation Measures listed in Section V. Cultural Resources shall also be implemented to address potential impacts to Tribal Cultural Resources.*

1. *Forty-eight (48) hours prior to any ground-disturbing activities within the entitlement limits such as digging, trenching or grading, the Applicant shall notify the Dumna Wo Wah Tribe of the opportunity to have a certified Native American Monitor present during those construction activities. Notification shall be by email to Chris Acree and Robert Ledger with the Dumna Wo Wah Tribal Government at [cacree@hotmail.com](mailto:cacree@hotmail.com) and [ledgerrobert@ymail.com](mailto:ledgerrobert@ymail.com). The tribal monitors shall be independently insured with policies conforming to County of Fresno requirements in order to enter the construction zone. Notification shall also be provided in the same manner at least 48 hours prior to any preconstruction meetings.*
2. *In the event archaeological materials are encountered during the course of grading or construction, the Project contractor shall cease any ground disturbing activities within 60 feet of the find and secure the area. The qualified archaeologist shall evaluate the significance of the resources and recommend appropriate treatment measures. Per CEQA Guidelines §15126.4(b)(3)(A), project redesign and preservation in place shall be the preferred means to avoid impacts to significant archaeological sites. Consistent with CEQA Guidelines §15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curational facility. The qualified archaeologist shall prepare a*

*report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the qualified archaeologist.*

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

- 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; or

FINDING: LESS THAN SIGNIFICANT IMPACT:

The project does not involve development of a well or sewage disposal system and will not require the use of water or wastewater disposal during operation.

PG&E electrical transmission overhead lines are located on the east side of the bridge and PG&E will refeed the west side distribution lines from the north and remove the lines above the bridge. The distribution line feeding a house on the north side of the bridge will be moved northward to clear an access road. PG&E's telephone lines are located on the west side of the bridge and will be rerouted underground by directional bore method. A portion of Conterra's fiber optic cable located aerially on the north west side of the bridge will be rerouted underground with minimum depth of 10 feet below the canal bottom. Another portion, which is buried along west side of the north approach, will be relocated within County right-of-way, and buried at minimum 4 feet depth for a distance of approximately 300 feet. Directional bore method will be applied for this work with drilling diameter of 1.25 inch throughout. Excavation will require two 3-foot by 5-foot bore pits to perform the drilling.

- B. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years; or
- C. Result in a determination by the wastewater treatment provider which 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; or
- 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; or
- E. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

FINDING: NO IMPACT:

The final project will have no daily employee presence and is not required to provide restroom facilities for users of the bridge. Portable units will serve the construction crew over the course of construction and will be removed when that portion of the project is complete.

During construction, the project will comply with all existing regulations, including those which regulate solid waste disposal and requirements to divert a percentage of waste to recycling centers rather than landfills. Based on experience with previous projects of this nature, the amount of solid waste generated by construction and demolition of the existing bridge will not be in excess of local standards.

Therefore, the project will have no impacts on wastewater treatment facilities or solid waste facilities and will comply with federal, state, and local regulations regarding waste management and reduction.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- A. Substantially impact an adopted emergency response plan or emergency evacuation plan, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; or
- 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; or
- 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; or
- 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?

FINDING: NO IMPACT:

The project site is located in an area determined to be a non-wildland/non-urban hazard class, which is not a very high fire hazard severity zone. Further, following construction of the bridge, there will be no change in the risk at the site because the replacement bridge will serve the same purpose. The replacement bridge will have wider shoulders and wider lanes, which would improve safety for drivers in the event of an evacuation.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

- 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 a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory; or
- 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)?

FINDING: LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED:

The project has the potential to adversely impact special status species, the existing flow of the Fresno Canal, and to adversely impact potential tribal and cultural resources if they are excavated during construction. In order to prevent these impacts, the Mitigation Measures listed in Sections IV. Biological Resources, V. Cultural Resources, and XVIII. Tribal Cultural Resources must be implemented. These measures require the developers to perform pre-construction surveys and training, and provide instructions on how to address potential impacts, such as the excavation of a resource or the observation of a nesting raptor.

\* **Mitigation Measures**

*See Section IV. Biological Resources*

*See Section V. Cultural Resources*

*See Section XVIII. Tribal Cultural Resources*

- C. Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

FINDING: NO IMPACT:

Impacts from this project are generally limited to the construction phase, which includes demolition of the existing bridge. The limited impacts during this time will not adversely affect human life and during operation, the replacement bridge will meet a higher standard of safety, potentially providing a beneficial impact to users of the bridge.

## CONCLUSION/SUMMARY

Based upon the Initial Study prepared for the Fresno Canal at Del Rey Avenue bridge replacement project staff has concluded that the project will not have a significant effect on the environment.

It has been determined that there would be no impacts to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildfire.

Potential impacts related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. have been determined to be less than significant.

Potential impacts relating to Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources have determined to be less than significant with compliance with the identified Mitigation measures.

A Mitigated Negative Declaration is recommended and is subject to approval by the decision-making body. The Initial Study is available for review at 2220 Tulare Street, Suite A, street level, located on the southwest corner of Tulare and "M" Street, Fresno, California.

CMM

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## INITIAL STUDY ROUTING MAY 27, 2020 TO JUNE 26, 2020



File original and one copy with: <b>Fresno County Clerk 2221 Kern Street Fresno, California 93721</b>		Space Below For County Clerk Only.  CLK-2046.00 E04-73 R00-00	
Agency File No: <b>IS 7334</b>	<b>LOCAL AGENCY PROPOSED MITIGATED NEGATIVE DECLARATION</b>		County Clerk File No: <b>E-</b>
Responsible Agency (Name): Fresno County	Address (Street and P.O. Box): 2220 Tulare St. Sixth Floor	City: Fresno	Zip Code: 93721
Agency Contact Person (Name and Title): Christina Monfette Planner	Area Code: 559	Telephone Number: 600-4245	Extension: N/A
Project Applicant/Sponsor (Name): Alexis Rutherford, Fresno County Design	Project Title: Fresno Canal Bridge Replacement		
Project Description: The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of E. McKinley. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards.			
Justification for Negative Declaration: Based upon the Initial Study prepared for the Fresno Canal at Del Rey Avenue bridge replacement project staff has concluded that the project will not have a significant effect on the environment. <b>INITIAL STUDY ROUTING MAY 27, 2020 TO JUNE 26, 2020</b> It has been determined that there would be no impacts to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, and Wildlife. Potential impacts related to Aesthetics, Agricultural and Forestry Resources, Air Quality, Energy, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Utilities and Service Systems. have been determined to be less than significant. Potential impacts relating to Biological Resources, Cultural Resources, Geology and Soils, and Tribal Cultural Resources have determined to be less than significant with compliance with the identified Mitigation measures.			
FINDING: The proposed project will not have a significant impact on the environment.			
Newspaper and Date of Publication: Fresno Business Journal – May 27, 2020		Review Date Deadline: June 26, 2020	
Date:	Type or Print Signature: Marianne Mollring, Senior Planner	Submitted by (Signature): Chrissy Monfette, Planner	

State 15083, 15085

County Clerk File No.: \_\_\_\_\_

**LOCAL AGENCY  
MITIGATED NEGATIVE DECLARATION**



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

## NOTICE OF DETERMINATION

To:  Office of Planning and Research  
1400 Tenth Street, Room 121  
Sacramento, CA 95814

County Clerk, County of Fresno  
2221 Kern Street  
Fresno, CA 93721

From: Fresno County Department of Public Works and Planning, Development Services and Capital Projects  
2220 Tulare Street (corner of Tulare and "M") Suite "A", Fresno, CA 93721

Subject: Filing of Notice of Determination in compliance with Section 21152 of the Public Resource Code

Project: Initial Study Application No. 7334

Location: The Fresno Canal Bridge is located on N. Del Rey Avenue, 0.5 miles south of its intersection with East McKinley Avenue. The replacement bridge will be constructed in the same location as the existing bridge.

Sponsor: Fresno County Design Division

Description: The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of E. McKinley. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards.

This is to advise that the County of Fresno ( Lead Agency  Responsible Agency) approved the above described project on August 28, 2020, and has made the following determination:

1. The project  **will**  **will not** have a significant effect on the environment.
2.  An Environmental Impact Report (EIR) **was not** prepared for this project pursuant to the provisions of CEQA. /  A Mitigated Negative Declaration **was** prepared for this project pursuant to the provisions of CEQA.
3. Mitigation Measures  **were**  **were not** made a condition of approval for the project.
4. A statement of Overriding Consideration  **was**  **was not** adopted for this project.

This is to certify that the Initial Study with comments and responses and record of project approval is available to the General Public at Fresno County Department of Public Works and Planning, 2220 Tulare Street, Suite A, Corner of Tulare and "M" Streets, Fresno, California.

\_\_\_\_\_  
Chrissy Monfette, Planner  
(559) 600-4245 / [cmonfette@fresnocountyca.gov](mailto:cmonfette@fresnocountyca.gov)

\_\_\_\_\_  
Date



# County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING  
STEVEN E. WHITE, DIRECTOR

DATE: August 23, 2017

TO: Department of Public Works and Planning, Attn: Steven E. White, Director  
Department of Public Works and Planning, Attn: Bernard Jimenez, Assistant Director  
Development Services, Attn: William M. Kettler, Division Manager  
Development Services, Attn: Chris Motta, Principal Planner  
Development Services, Current Planning, Attn: Marianne Mollring, Senior Planner  
Development Services, Policy Planning, ALCC, Attn: Mohammad Khorsand  
Development Services, Water/Geology/Natural Resources, Attn: Jennifer Parks  
Development Services, Zoning & Permit Review, Attn: Tawanda Mtunga  
Development Services, Building & Safety/Plan Check, Attn: Chuck Jonas  
Development Services, Building & Safety/Plan Check, CASp, Attn: Dan Mather  
Resources Division, Solid Waste, Attn: John R. Thompson  
Development Engineering, Attn: Jennifer Parks, Grading/Mapping  
Road Maintenance and Operations, Attn: Randy Ishii/Frank Daniele/Nadia Lopez  
Design Division, Special Projects/Road Projects, Attn: Mohammad Alimi/Dale Siemer  
Department of Public Health, Environmental Health Division, Attn: Glenn Allen/Janet Gardner/Kevin Tsuda  
Agricultural Commissioner, Attn: Les Wright  
U.S. Army Corps of Engineers, Sacramento District, Regulatory Division, CA South Branch, Attn: Kathleen Dadey  
U.S. Department of Interior, Fish & Wildlife Service, San Joaquin Valley Division, Attn: Patricia Cole, Chief  
U.S. Environmental Protection Agency, Air Division, Air Planning Office, Region 9, Attn: Dawn Richmond  
U.S. Environmental Protection Agency, Ground Water Office, Sole Source Aquifer, Region 9, Attn: Leslie Greenberg  
CA Regional Water Quality Control Board, Attn: Matt Scroggins  
CALTRANS, Attn: Dave Padilla  
CALTRANS, San Joaquin Environmental Branch, Attn: Shane Gunn  
CA Department of Fish and Wildlife, Attn: Steve Hulbert  
State Water Resources Control Board, Division of Drinking Water, Fresno District, Attn: Carl Carlucci, Jose Robeldo  
CA Environmental Protection Agency, Department of Toxic Substance Control, Attn: Don Plain  
CA Department of Toxic Substance Control (CEQA unit), Attn: Dave Kerezis  
CA Department of Water Resources, Attn: Kevin Faulkenberry  
Table Mountain Rancheria, Attn: Robert Pennell, Cultural Resources Director  
Dumna Wo Wah Tribal Government, Attn: Robert Ledger, Tribal Chairman;  
San Joaquin Valley Unified Air Pollution Control District (PIC-CEQA Division), Attn: PIC Supervisor  
Fresno Irrigation District, Attn: William R. Stretch and Sen Saetern  
Fresno Metropolitan Flood Control District  
Kings River Conservation District, Attn: Rick Hoelzel  
Fresno County Fire Protection District, Attn: Chris Christopherson, Battalion Chief

Pacific Gas & Electric Company, Land Services Department, Attn: Dale Overbay,  
Marisol Garcia

FROM: Christina Monfette, Planner *CMM*  
Development Services Division

SUBJECT: Initial Study Application No. 7334: Fresno Canal Bridge Replacement

APPLICANT: The County of Fresno, Public Works and Planning Design Division

DUE DATE: September 7, 2017

The Department of Public Works and Planning, Development Services Division is reviewing the subject application proposing to replace the functionally obsolete Fresno Canal Bridge on North Del Rey Avenue. The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The replacement would address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening a timber structure is not allowable, a replacement is the only option. The project site is located approximately 0.5 miles south of McKinley, within the right-of-way near APN 309-090-51.

The Department is reviewing for environmental effects, as mandated by the California Environmental Quality Act (CEQA) and for conformity with plans and policies of the County.

Based upon this review, a determination will be made regarding conditions to be imposed on the project, including necessary on-site and off-site improvements.

We must have your comments by **September 7, 2017**. Any comments received after this date may not be used.

**NOTE - THIS WILL BE OUR ONLY REQUEST FOR WRITTEN COMMENTS. If you do not have comments, please provide a "NO COMMENT" response to our office by the above deadline (e-mail is also acceptable; see email address below).**

Please address any correspondence or questions related to environmental and/or policy/design issues to me, Chrissy Monfette, Planner Development Services Division, Fresno County Department of Public Works and Planning, 2220 Tulare Street, Sixth Floor, Fresno, CA 93721, or call (559) 600-4245 or email [cmonfette@co.fresno.ca.us](mailto:cmonfette@co.fresno.ca.us).

G:\4360Devs&Pln\EnvPlan\Design\IS\Bridges\7334 Fresno Canal\ROUTING\IS7334 Routing Ltr.doc

*Activity Code (Internal Review): 2335*

Enclosures

## Fresno Canal Bridge Replacement Project on Del Rey Avenue, 0.5 miles south of McKinley Avenue

The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of McKinley (See Location Map and photos). The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The replacement would address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening a timber structure is not allowable, a replacement is the only option.

The existing bridge is 71' long, 23.6' wide, and was built in 1939 and widened in 1967. The proposed bridge will be 73' long and 39' wide to accommodate two 12' wide travel lanes and 6' wide shoulders. Approach work is expected to extend up to 400' on either side of the bridge. The driveways/access roads on all four corners would require realignment to accommodate approach railing. Private driveway gates and fences would require relocation. Trees and other vegetation would be removed during construction.

The bridge would be closed during construction requiring a 3.7-mile detour to allow a shorter construction period. The existing ADT is 1200. Right of way acquisition and utility relocations is anticipated.

The project does not involve a well or sewage disposal and would not result in a threat of aquifer contamination or a hazard to public health.

The project is not located within a DWR floodplain or Flood Zone A according to FEMA FIRM Map No. 06019C1615H (See FEMA Map).

Relocation of AT&T, Conterra, and PG&E facilities is anticipated. There are overhead utilities within the project limits.

Public controversy is not anticipated.

The project would not involve pile driving; however, structure demolition, excavation and some stream channel work is included in the scope of work; however the work would be temporary and intermittent. Construction activities would occur during normal working hours, Monday through Friday and would comply with Fresno County's Noise Ordinance and Caltrans Standard Specifications for noise.

The County would obtain a Stream Alteration Agreement from the California Department of Fish and Wildlife and a Section 401 Water Quality Certification from the Regional Water Quality Control Board, and submit a Preconstruction Notification to the Army Corps of Engineers prior to construction activities as required by the regulations.

Caltrans Standard Specifications for the unearthing of cultural materials would be included in the construction specifications.



Fresno County Department of Public Works and Planning

IS 7334

(Application No.)

MAILING ADDRESS:

Department of Public Works and Planning
Development Services Division
2220 Tulare St., 6th Floor
Fresno, Ca. 93721

LOCATION:

Southwest corner of Tulare & "M" Streets, Suite A
Street Level
Fresno Phone: (559) 600-4497
Toll Free: 1-800-742-1011 Ext. 0-4497

APPLICATION FOR:

- Pre-Application (Type)
Amendment Application
Amendment to Text
Conditional Use Permit
Variance (Class )/Minor Variance
Site Plan Review/Occupancy Permit
No Shoot/Dog Leash Law Boundary
General Plan Amendment/Specific Plan/SP Amendment
Time Extension for
Director Review and Approval
for 2nd Residence
Determination of Merger
Agreements
ALCC/RLCC
Other

DESCRIPTION OF PROPOSED USE OR

REQUEST: Fresno Canal Bridge Replacement on Del Rey Avenue

CEQA DOCUMENTATION: Initial Study PER N/A

PLEASE USE FILL-IN FORM OR PRINT IN BLACK INK. Answer all questions completely. Attach required site plans, forms, statements, and deeds as specified on the Pre-Application Review. Attach Copy of Deed, including Legal Description.

LOCATION OF PROPERTY: side of Del Rey Avenue, 0.5 miles south of McKinley Avenue

between and

Street address:

APN: Parcel size: Section(s)-Twp/Rg: S - T S/R E

ADDITIONAL APN(s):

I, Alexis Rutherford (signature), declare that I am the owner, or authorized representative of the owner, of the above described property and that the application and attached documents are in all respects true and correct to the best of my knowledge. The foregoing declaration is made under penalty of perjury.

County of Fresno

Owner (Print or Type) Address City Zip Phone

Public Works and Planning, Design Division

Applicant (Print or Type) Address City Zip Phone

Alexis Rutherford 04530

Representative (Print or Type) Address City Zip Phone

CONTACT EMAIL:

OFFICE USE ONLY (PRINT FORM ON GREEN PAPER)

Application Type / No.: Fee: \$
Application Type / No.: Fee: \$
Application Type / No.: Fee: \$
Application Type / No.: Fee: \$
PER/Initial Study No.: IS 7334 Fee: \$ 1212
Ag Department Review: Fee: \$
Health Department Review: Fee: \$ 338
Received By: CMM Invoice No.: 98584 TOTAL: \$ 1,550

UTILITIES AVAILABLE:

WATER: Yes No
Agency:
SEWER: Yes No
Agency:

STAFF DETERMINATION: This permit is sought under Ordinance Section:

Related Application(s):

Zone District:

Parcel Size:

Sect-Twp/Rg: - T S/R E

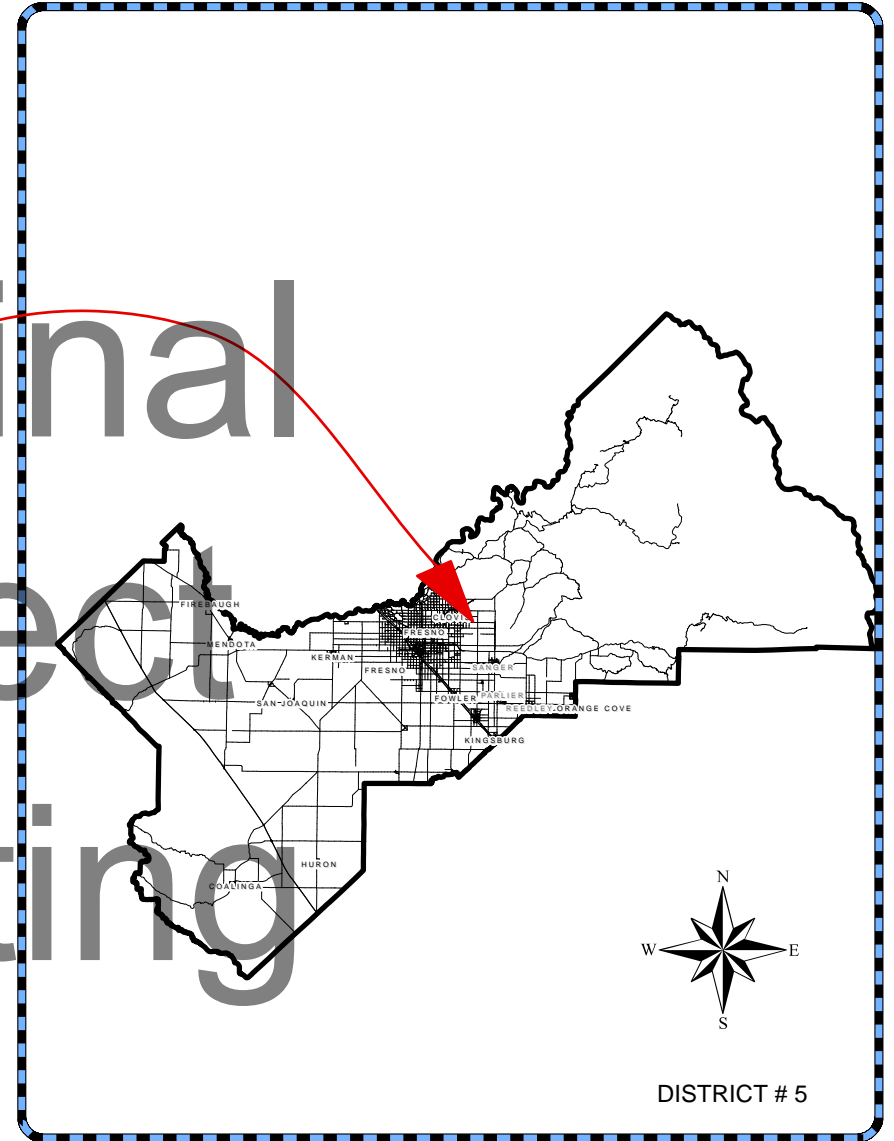
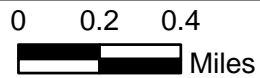
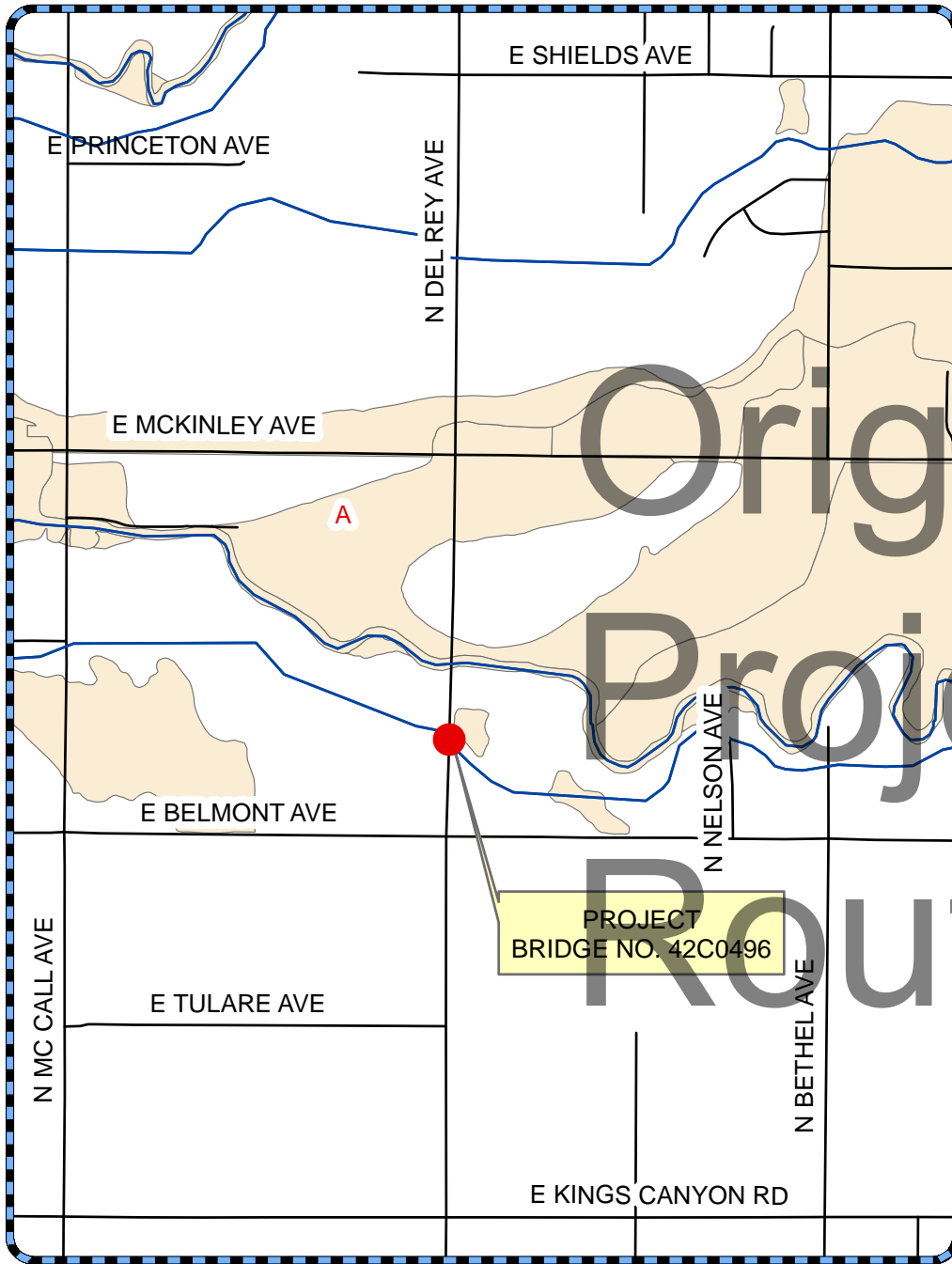
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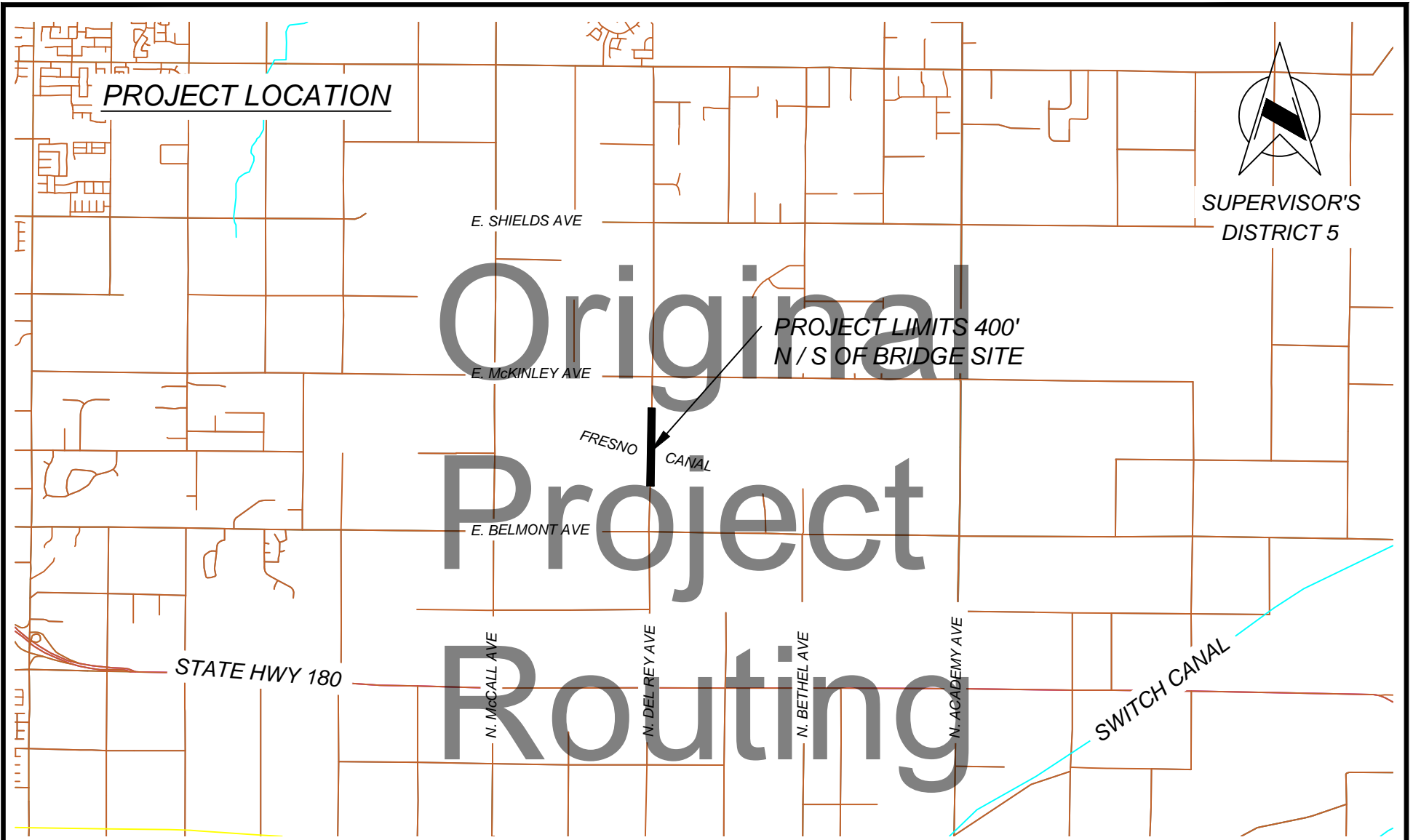
APN # - -

APN # - -

APN # - -

**LOCATION MAP**  
FRESNO CANAL BRIDGE REPLACEMENT  
ON N DEL REY AVE  
BRIDGE NO. 42C0496





Original  
Project  
Routing

DESIGNED	M.Y.S.	DATE	01/14	SCALE	NONE
DRAWN	J.M.	DATE	01/14		
<b>BRIDGE NO. 42C0496 / 08-039</b>					



**DEPARTMENT OF PUBLIC WORKS AND PLANNING**

**FRESNO CANAL BRIDGE REPLACEMENT ON DEL REY AVE**



Photos



Looking north at bridge on Del Rey Avenue (toward McKinley Avenue)



Looking south at bridge on Del Rey Avenue (toward Belmont Avenue)

Photos



Looking east at Fresno Canal



Looking west at Fresno Canal

Photos



Driveway on northeast corner of Fresno Canal



Driveway on southeast corner of Fresno Canal  
Attachment B

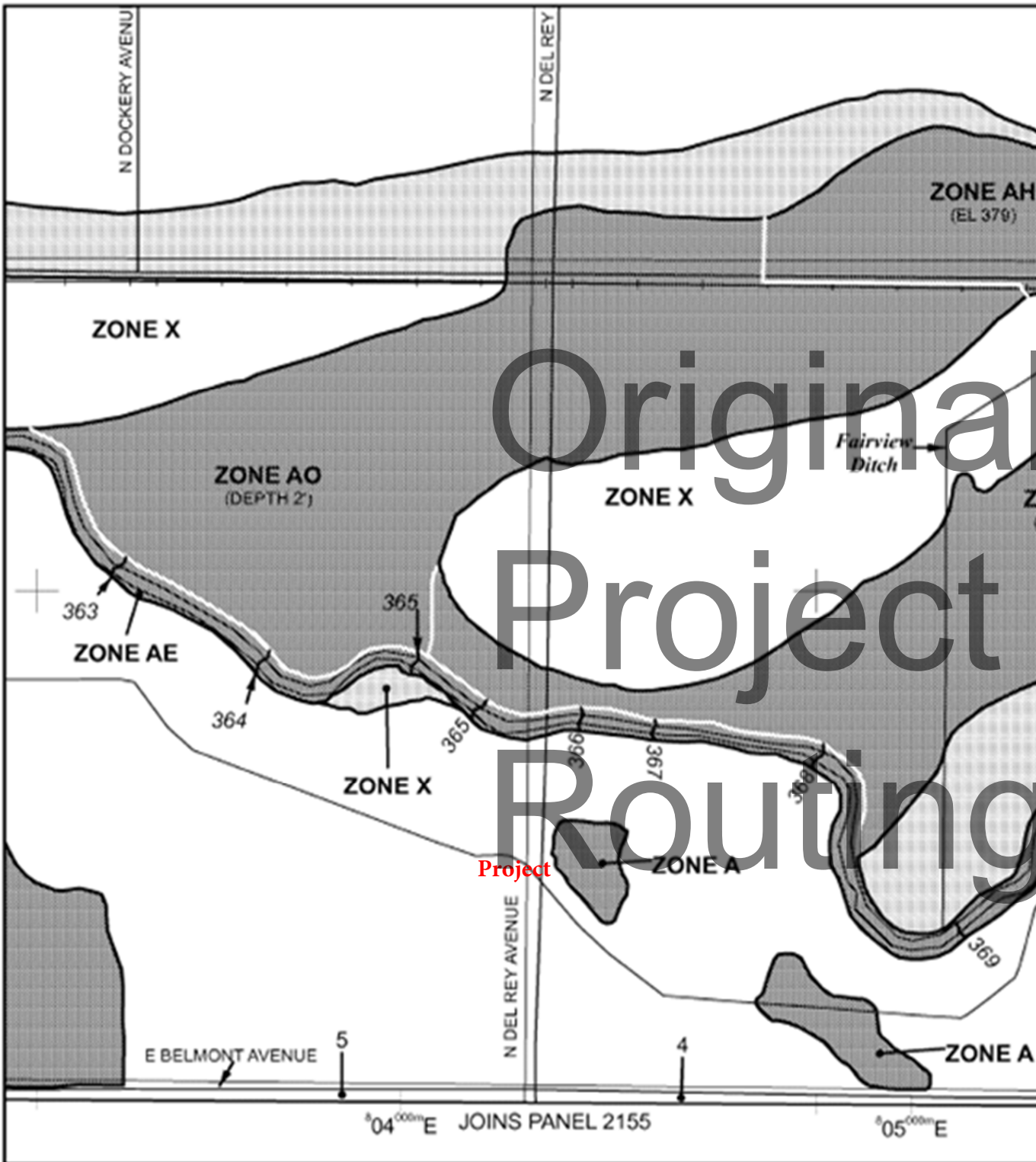
Photos



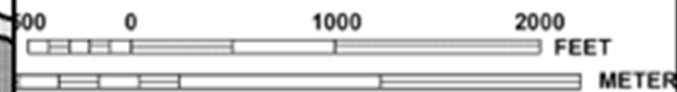
**Driveway on northwest corner of Fresno Canal**



**Access road on southwest corner of Fresno Canal**



MAP SCALE 1" = 1000'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1615H

**FIRM**  
FLOOD INSURANCE RATE MAP

FRESNO COUNTY,  
CALIFORNIA  
AND INCORPORATED AREAS

PANEL 1615 OF 3525  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FRESNO COUNTY	06029	1615	H

*Notice to User:* The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER  
06019C1615H

MAP REVISED  
FEBRUARY 18, 2009

Federal Emergency Management Agency

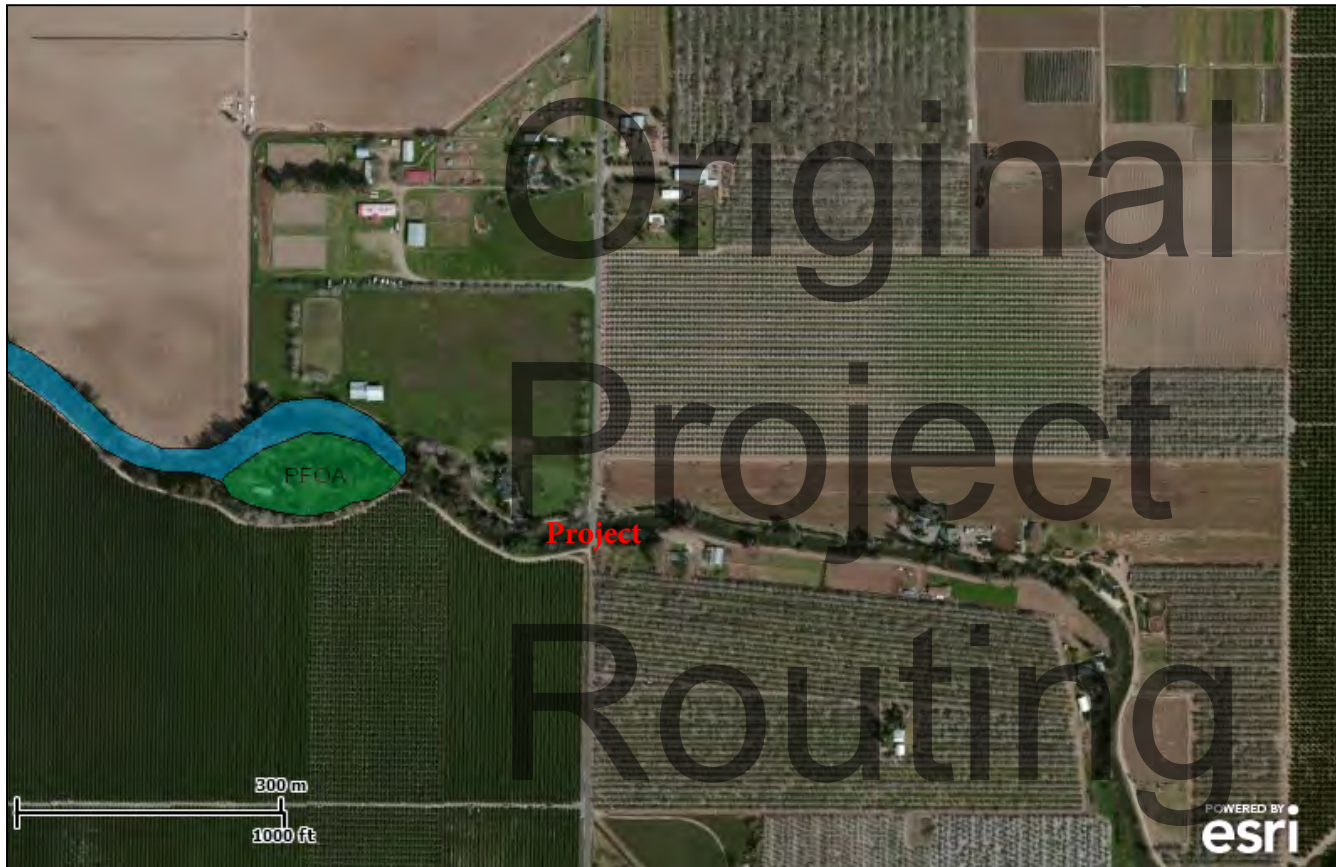
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



U.S. Fish and Wildlife Service  
National Wetlands Inventory

Fresno Canal  
Bridge at Del Rey  
Avenue

Sep 15, 2014



**Wetlands**

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

**Riparian**

- Herbaceous
- Forested/Shrub

**Riparian Status**

- Digital Data

User Remarks:  
BRLO-5942(249)

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

GeoTracker - Windows Internet Explorer

http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=del+rey+avenue+and+mckinley+avenue#

File Edit View Favorites Tools Help

Convert Select

Favorites Conformity Areas Table - ... Web Slice Gallery Conformity Areas Table Free Hotmail

GeoTracker how many feet in a half mi...

del rey avenue and mckinley avenue Map Address

# Original Project Routing

Map Address

Map Satellite

**MAP LAYERS**

- Leaking Underground Tank (LUST) Cleanup Sites
- Other Cleanup Sites
- Land Disposal Sites
- Military Sites
- WDR Sites
- Irrigated Lands Regulatory Program
- Permitted Underground Storage Tank (UST) Facilities
- Zoom in to See Field Points
- DTSC Cleanup Sites
- DTSC Haz Waste Permit

SIGNIFIES A CLOSED SITE

Measure a Distance

Map data ©2014 Google 500 m

Terms of Use Report a map error

EXPORT THIS LIST TO EXCEL

**SITES CURRENTLY VISIBLE ON MAP** 7 SITES LISTED

SITE NAME	GLOBAL ID	FAC ID	STATUS	ADDRESS	CITY
<input checked="" type="checkbox"/> COUNTRY HOME VIDEO	T0801900322		COMPLETED - CASE CLOSED	2015 ACADEMY N	SANGER
<input checked="" type="checkbox"/> FAR VIEW RANCH	T0801900191		COMPLETED - CASE CLOSED	12345 MCKINLEY AVE E	SANGER
<input checked="" type="checkbox"/> NARLIAN RESIDENCE	T0801900543		COMPLETED - CASE CLOSED	7910 KINGS CANYON E	FRESNO
<input checked="" type="checkbox"/> PRIVATE RESIDENCE	T0801900239		COMPLETED - CASE CLOSED	9337 MCKINLEY AVE E	FRESNO
<input checked="" type="checkbox"/> PRIVATE RESIDENCE	T0801900332		OPEN - SITE ASSESSMENT	PRIVATE RESIDENCE	FRESNO
<input checked="" type="checkbox"/> SUN MAID GROCERY	T0801988784		OPEN - SITE ASSESSMENT	1952 ACADEMY AVE N	SANGER
<input checked="" type="checkbox"/> U&A MINI MART #2		FA0000498		13015 KINGS CANYON RD E	SANGER

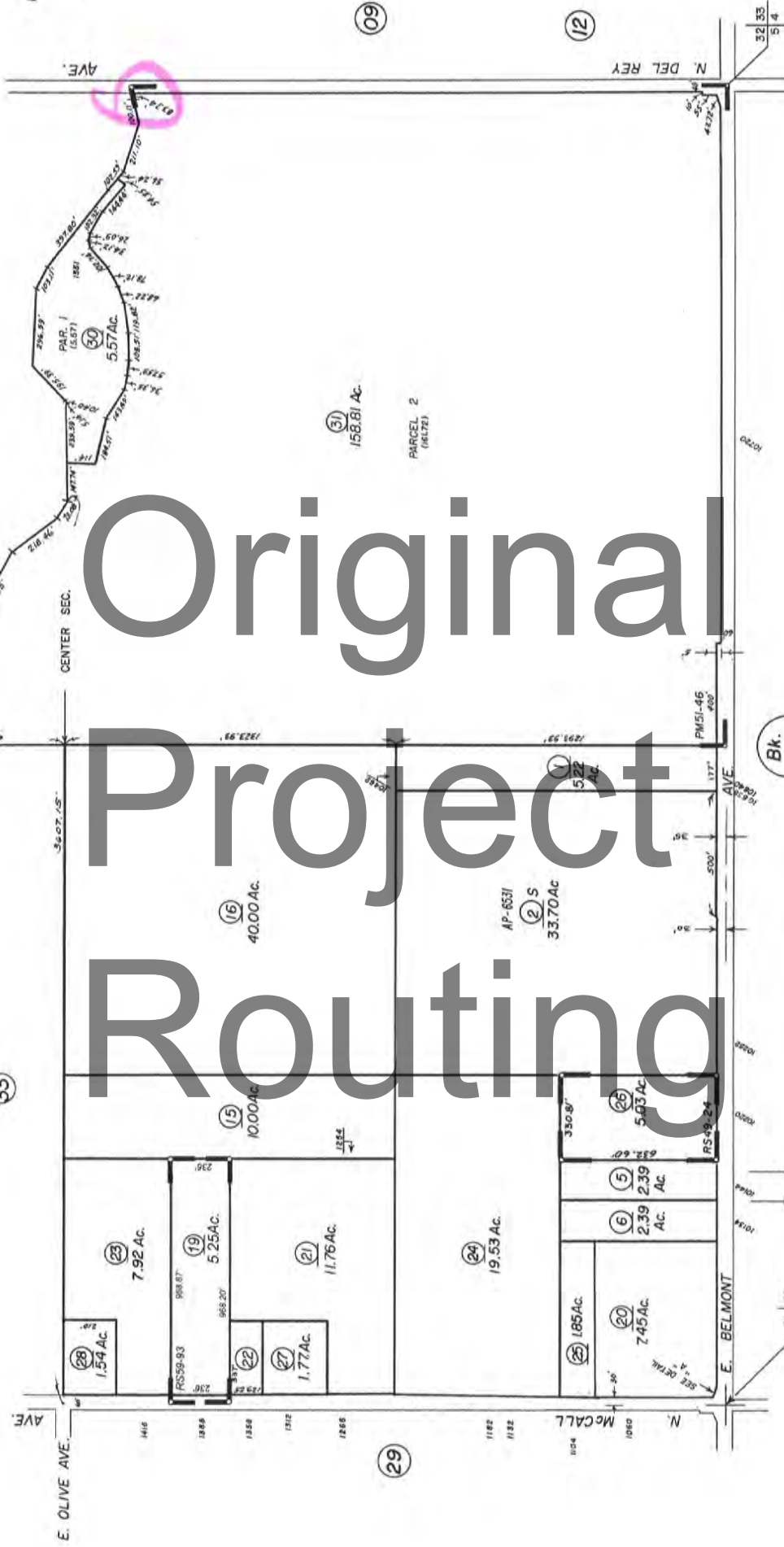
Internet | Protected Mode: Off 95%

309-30

Tax Area  
71-023  
76-021

POR. SEC. 32, T. 13S, R. 22E. M.D.B. & M.

NOTE —  
This map is for Assessment purposes only.  
It is not to be construed as portraying legal  
ownership or divisions of land for purposes  
of zoning or subdivision law.



Bk.  
314

Agricultural Preserve  
Parcel Map No. 7357 - Bk. 51, Pg. 46  
Record of Survey - Bk. 49, Pg. 24  
Record of Survey - Bk. 59, Pg. 93

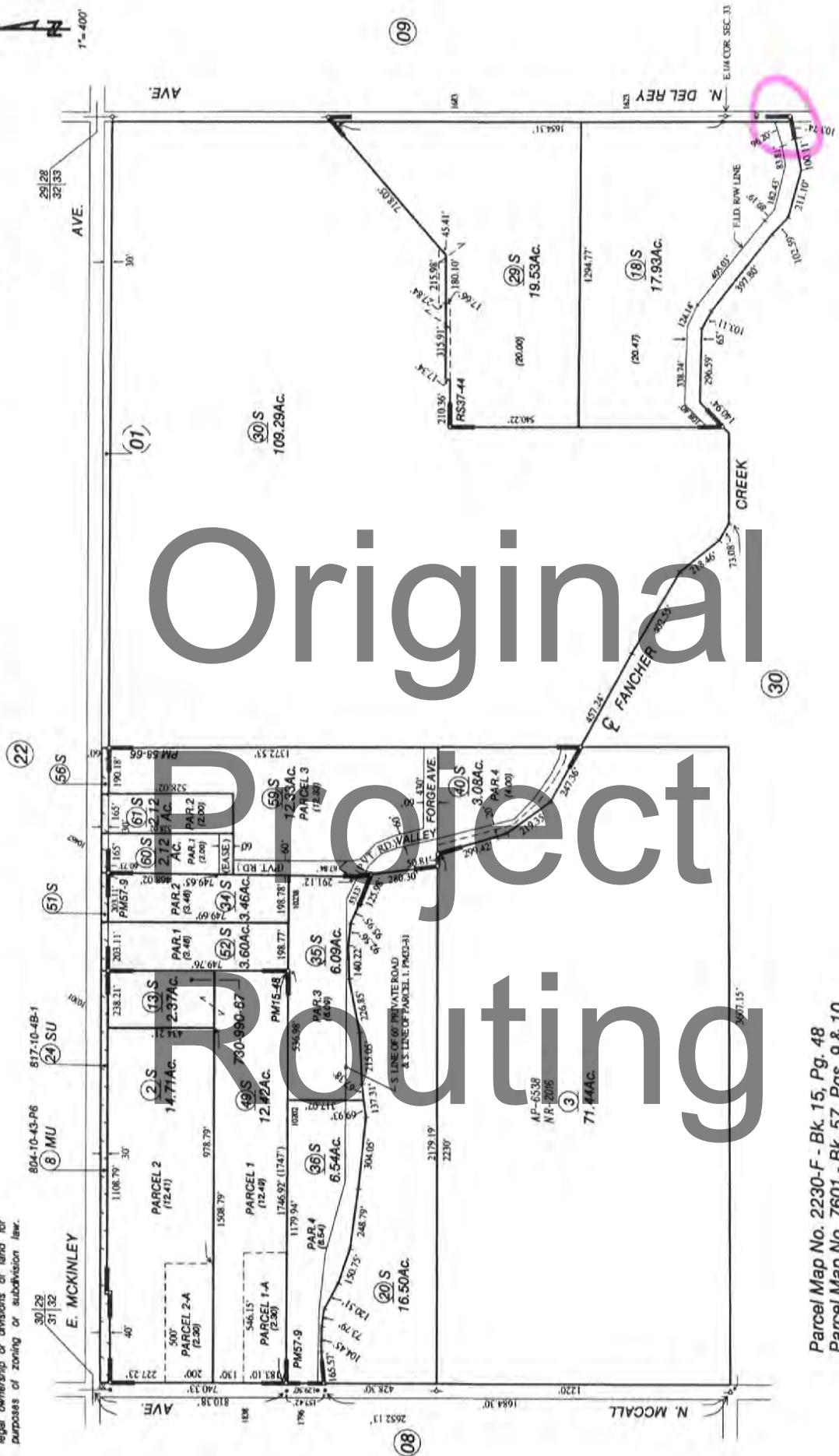
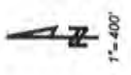
Assessor's Map Bk. 309 - Pg. 30

County of Fresno, Calif.

NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.



NOTE  
This map is for Assessment purposes only.  
It is not to be construed as portraying  
legal ownership or divisions of land for  
purposes of zoning or subdivision law.



Original  
Project  
Outing

Parcel Map No. 2230-F - Bk. 15, Pg. 48  
Parcel Map No. 7601 - Bk. 57, Pgs. 9 & 10  
Record of Survey - Bk. 37, Pg. 44  
Parcel Map No. 7693 - Bk. 58, Pgs. 66-67

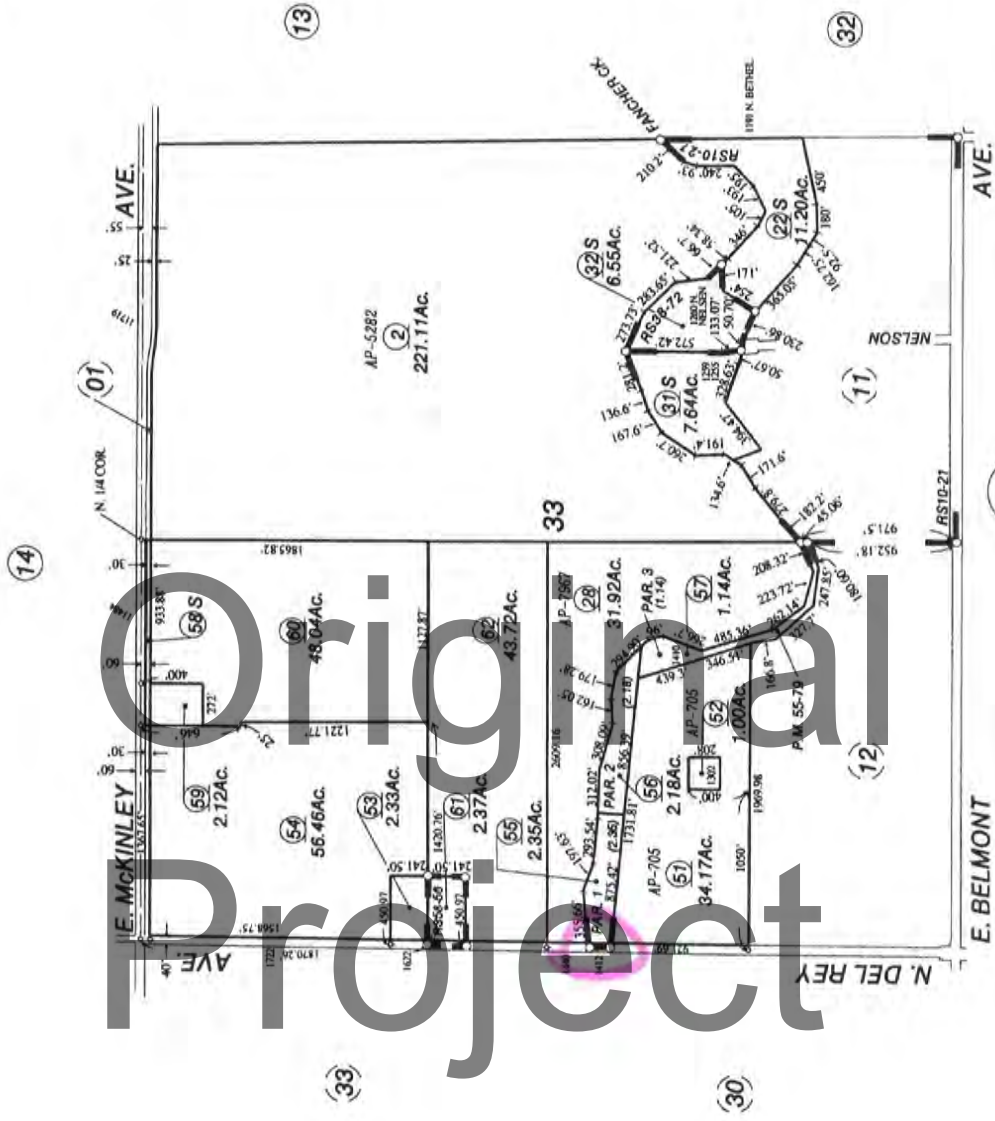
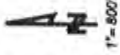
NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

NOTE  
 This map is for Assessment purposes only.  
 It is not to be construed as portraying  
 legal ownership or divisions of land for  
 purposes of zoning or subdivision law.

SUBDIVIDED LAND IN POR. SEC. 33, T.13 S., R.22 E., M.D.B. & M.

Town Range Area  
 71-023

309-09



Original Project Routing

Agricultural Preserve  
 Parcel Map No. 2731 - Bk. 18, Pg. 30  
 Parcel Map No. 7565 - Bk. 55, Pgs. 79 - 80  
 Record of Survey - Bk. 10, Pg. 21  
 Record of Survey - Bk. 38, Pg. 72  
 Record of Survey - Bk. 58, Pg. 56

NOTE - Assessor's Block Numbers Shown in Ellipses.  
 Assessor's Parcel Numbers Shown in Circles.

Bk. 314

Assessor's Map Bk. 309 - Pg. 09  
 County of Fresno, Calif.

## Memorandum

*Serious drought.  
Help save water!*

**To:** Alex Rangel  
Associate Environmental Planner

**Date:** September 19, 2016

**File:** BRLO-5942(249)

**From:** Shane Gunn   
Chief, Environmental Analysis, Planning and Local Programs

**Subject:** AIR/NOISE STUDY MEMO

### LOCATION

In Fresno County, near Sanger on Del Rey Avenue over the Fresno Canal.

### PROJECT DESCRIPTION

Replace the existing two lane bridge with a new two lane bridge.

### AIR STUDY

The project area lies within the San Joaquin Valley Air Basin (SJVAB). The Air Basin is comprised of eight counties: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. This air basin has been designated as a non-attainment area for failing to meet National Ambient Air Quality Standards (NAAQS) for ozone, PM 2.5 and PM 10.

The project will not conflict with or obstruct implementation of any applicable air quality plan, violate any air quality standard or contribute substantially to an existing or projected air quality violation.

This project is exempt from all project level conformity requirements: 40 CFR 93.126, Table 2, bridge replacement (no additional travel lanes).

**No further analysis is necessary**

### NOISE STUDY

A Type 1 project is defined by 23 CFR 772 as follows:

1. The construction of a highway on new location; or,
2. The physical alteration of an existing highway where there is either:
  - a. Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
  - b. Substantial Vertical Alteration. A project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by

altering the topography between the highway traffic noise source and the receptor; or,

3. The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
4. The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or,
5. The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
6. Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or,
7. The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
8. If a project is determined to be a Type I project per § 772.5 then the entire project area as defined in the environmental document is a Type I project.

Construction noise is only substantial in exceptional cases, such as when pile driving and crack and seal pavement rehabilitation occurs. This project is not anticipated to generate adverse construction noise impacts on land uses or activities within the area as construction noise will be temporary and intermittent.

Furthermore, it is recommended that the local agency implement the Caltrans Standard Specifications 14-8.02A to not exceed 86 dBA LMax at 50 feet from the job site from 9 p.m. to 6 a.m. and all internal combustion engines must be equipped with a manufacturer-recommended muffler. Caltrans SSP 14-8.02A should be used in conjunction with any local noise ordinances.

**This project is not considered a Type 1 under NEPA and no further analysis is necessary.**

If you have any questions about this air-noise-water study, please contact Shane Gunn, Senior Environmental Planner at (559) 445-6310 or [shane.gunn@dot.ca.gov](mailto:shane.gunn@dot.ca.gov)

Attachment:  
Water Quality Hydrologic area map



April 28, 2017

Alexis Rutherford  
Staff Analyst  
Fresno County Public Works and Planning  
2220 Tulare Street, Fresno, CA 93721

**Subject: Farmland Conversion Impact Analysis for the Fresno Canal Bridge Replacement at Del Rey Avenue Project**

Ms. Rutherford,

In the following, please find a completed U.S. Department of Agriculture Farmland Conversion Impact Rating analysis for Corridor Type Projects, specifically Part VI of Form NRCS-CPA-106, for the Fresno Canal Bridge Replacement at Del Rey Avenue Project (Project). Table 1 below summarizes the rationale behind the ratings provided in Part VI.

Part II and Part IV of Form NRCS-CPA-106 were completed previously for the Project by the Natural Resources Conservation Service and provided to Area West Environmental by Fresno County as a scanned pdf<sup>1</sup>. The information from the Parts II and IV of the scanned NRCS pdf was copied and pasted into the fillable pdf of the NRCS-CPA-106 Form enclosed herein.

#### **Farmland Impact Summary**

The Project would not result in an adverse effect on local and regional farmland resources. The Project, which would replace an existing bridge over Fresno Canal along an existing road alignment, would result in the conversion of 0.13 acre of prime farmland along the roadway edge to accommodate the bridge approaches and links to maintenance/access roads along the canal (see attached exhibit). This impact acreage represents less than 0.0001% of the available farmland in Fresno County. Removing these slivers of land from the adjacent orchards and fields would not impair the short- or long-term agricultural productivity of these lands or otherwise harm existing farmland investments. The proposed Project is compatible with the Fresno County General Plan farmland policies and the County has made every effort to minimize farmland impacts during Project design. As shown on the attached form, the Farmland Conversion Impact Rating for the Project is 122. No additional consultation with NRCS is required.

---

<sup>1</sup> NRCS originally provided their input on Farmland Conversion Impact Rating Form AD-1006; the questions in these sections of the two forms are identical.

Please call or email me at (916) 987-3362 or [adour-smith@areawest.net](mailto:adour-smith@areawest.net) with any questions.

Sincerely,

A handwritten signature in black ink that reads "Aimee Dour-Smith". The signature is written in a cursive, flowing style.

Aimee Dour-Smith

Enclosures:

- Form NRCS-CPA-106 for the Fresno Canal Bridge Replacement at Del Rey Avenue Project
- Project Limits and Farmland Impact Exhibit

# Original Project Routing

**Table 1. Scoring Information for Form NRCS-CPA-106, Part VI for the Fresno Canal Bridge Replacement at Del Rey Avenue Project.**

Form NRCS-CPA-106, Part VI, Site Assessment Criteria	Maximum Score	Scoring Criteria from 7 CFR 658.5 b.	Project Site Assessment	Project Score
1. Area In Non-urban Use	15	How much land is in nonurban use within a radius of 1.0 mile from where the project is intended? <ul style="list-style-type: none"> <li>• More than 90 percent—15 points</li> <li>• 90 to 20 percent—14 to 1 point(s)</li> <li>• Less than 20 percent—0 points</li> </ul>	More than 90% land within 1 mile is non-urban <sup>2</sup> .	15
2. Perimeter In Non-urban Use	10	How much of the perimeter of the site borders on land in nonurban use? <ul style="list-style-type: none"> <li>• More than 90 percent—10 points</li> <li>• 90 to 20 percent—9 to 1 point(s)</li> <li>• Less than 20 percent—0 points</li> </ul>	All land that borders the Project corridor is non-urban <sup>1</sup> .	10
3. Percent Of Site Being Farmed	20	How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than 5 of the last 10 years? <ul style="list-style-type: none"> <li>• More than 90 percent—20 points</li> <li>• 90 to 20 percent—19 to 1 points(s)</li> <li>• Less than 20 percent—0 points</li> </ul>	Based on available historical imagery from Google Earth, it appears that 0.13 acre of the 2.89-acre Project corridor has been farmed the majority of the past 10 years; this translates to 4.5% of the Project area.	0
4. Protection Provided By State and Local Government	20	Is the site subject to State or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland? <ul style="list-style-type: none"> <li>• Site is protected—20 points</li> <li>• Site is not protected—0 points</li> </ul>	One of the adjacent parcels (APN 309-009-028) is under a Williamson Act Contract <sup>3</sup> . The other agricultural parcel (APN 309-030-031) is not protected. Because 0.06 acre (2%) of the Project corridor is protected, the site was given a score of 1.	1

<sup>2</sup> [ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/fre14\\_e.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2014/fre14_e.pdf).

<sup>3</sup> [ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Fresno\\_e\\_15\\_16\\_WA.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Fresno_e_15_16_WA.pdf).

Form NRCS-CPA-106, Part VI, Site Assessment Criteria	Maximum Score	Scoring Criteria from 7 CFR 658.5 b.	Project Site Assessment	Project Score
5. Size Of Present Farm Unit Compared To Average	10	<p>Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the NRCS field offices in each State. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)</p> <ul style="list-style-type: none"> <li>• As large or larger—10 points</li> <li>• Below average—deduct 1 point for each 5 percent below the average, down to 0 points if</li> <li>• 50 percent or more below average—9 to 0 points</li> </ul>	<p>The average farming unit in Fresno County is approximately 300 acres<sup>4</sup>. One parcel containing the affected farmland (APN 309-030-031) is 158.81 acres, or 53% of average, which equates to 1 point. The other parcel containing the affected farmland (APN 309-009-028) is 31.92 acres, or 11% of average, which equates to 0 points. Combined score for entire site of 0.5 was rounded up to 1.</p>	1
6. Creation Of Non-farmable Farmland	10	<p>If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?</p> <ul style="list-style-type: none"> <li>• Acreage equal to more than 25 percent of acres directly converted by the project—10 Points</li> <li>• Acreage equal to between 25 and 5 percent of the acres directly converted by the project—9 to 1 point(s)</li> <li>• Acreage equal to less than 5 percent of the acres directly converted by the project—0 points</li> </ul>	<p>The Project is not expected to affect remaining farmland.</p>	0
7. Availability Of Farm Support Services	5	<p>Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?</p> <ul style="list-style-type: none"> <li>• All required services are available—5 points</li> <li>• Some required services are available—4 to 1 point(s)</li> </ul>	<p>The site has adequate farm support services and markets.</p>	5

<sup>4</sup> [https://www.agcensus.usda.gov/Publications/2012/Online\\_Resources/County\\_Profiles/California/cp06019.pdf](https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/California/cp06019.pdf)



Form NRCS-CPA-106, Part VI, Site Assessment Criteria	Maximum Score	Scoring Criteria from 7 CFR 658.5 b.	Project Site Assessment	Project Score
		<ul style="list-style-type: none"> <li>No required services are available—0 points</li> </ul>		
8. On-Farm Investments	20	<p>Does the site have substantial and well-maintained on-farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?</p> <ul style="list-style-type: none"> <li>High amount of on-farm investment—20 points</li> <li>Moderate amount of on-farm investment—19 to 1 point(s)</li> <li>No on-farm investment—0 points</li> </ul>	A portion of the farmland impact area overlaps with established orchards. This area represents 2% of the Project corridor. Therefore, the corridor was given a score of 1.	1
9. Effects Of Conversion On Farm Support Services (10)	10	<p>Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?</p> <ul style="list-style-type: none"> <li>Substantial reduction in demand for support services if the site is converted—10 points</li> <li>Some reduction in demand for support services if the site is converted—9 to 1 point(s)</li> <li>No significant reduction in demand for support services if the site is converted—0 points</li> </ul>	The project would not result in a reduction in demand for support services.	0
10. Compatibility With Existing Agricultural Use (10)	10	<p>Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?</p> <ul style="list-style-type: none"> <li>Proposed project is incompatible with existing agricultural use of surrounding farmland— 10 points</li> <li>Proposed project is tolerable to existing agricultural use of surrounding farmland—9 to 1 point(s)</li> <li>Proposed project is fully compatible with existing agricultural use of surrounding farmland—0 points</li> </ul>	Project is fully compatible with existing agricultural use of surrounding farmland.	0

**FARMLAND CONVERSION IMPACT RATING  
FOR CORRIDOR TYPE PROJECTS**

<b>PART I (To be completed by Federal Agency)</b>		3. Date of Land Evaluation Request <b>1/10/17</b>	4. Sheet 1 of <b>1</b>
1. Name of Project <b>Del Rey Ave. Bridge over Fresno Canal</b>		5. Federal Agency Involved <b>Caltrans - FHWA</b>	
2. Type of Project <b>Bridge replacement</b>		6. County and State <b>Fresno County, California</b>	
<b>PART II (To be completed by NRCS)</b>		1. Date Request Received by NRCS <b>1/10/17</b>	2. Person Completing Form <b>Jose Bermudez</b>
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated <b>1,153,812</b>	Average Farm Size <b>285</b>
5. Major Crop(s) <b>Grapes- Tomatoes- Almonds</b>	6. Farmable Land in Government Jurisdiction Acres: <b>1,250,984</b> % <b>32.7</b>	7. Amount of Farmland As Defined in FPPA Acres: <b>597,055</b> % <b>15.6</b>	
8. Name of Land Evaluation System Used <b>California- Storie - System</b>	9. Name of Local Site Assessment System <b>None</b>	10. Date Land Evaluation Returned by NRCS <b>1/19/17</b>	

<b>PART III (To be completed by Federal Agency)</b>	Alternative Corridor For Segment			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	<b>0.13</b>			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	<b>0</b>			
C. Total Acres In Corridor	<b>2.89</b>			

<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>	
A. Total Acres Prime And Unique Farmland	<b>0.13</b>
B. Total Acres Statewide And Local Important Farmland	<b>0</b>
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<b>0.00002%</b>
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	

<b>PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)</b>	<b>89</b>
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<b>PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))</b>	Maximum Points			
1. Area in Nonurban Use	15	15		
2. Perimeter in Nonurban Use	10	10		
3. Percent Of Corridor Being Farmed	20	0		
4. Protection Provided By State And Local Government	20	1		
5. Size of Present Farm Unit Compared To Average	10	1		
6. Creation Of Nonfarmable Farmland	25	0		
7. Availability Of Farm Support Services	5	5		
8. On-Farm Investments	20	1		
9. Effects Of Conversion On Farm Support Services	25	0		
10. Compatibility With Existing Agricultural Use	10	0		
<b>TOTAL CORRIDOR ASSESSMENT POINTS</b>	<b>160</b>	<b>33</b>	<b>0</b>	<b>0</b>

<b>PART VII (To be completed by Federal Agency)</b>				
Relative Value Of Farmland (From Part V)	100	89	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)	160	33	0	0
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>122</b>	<b>0</b>	<b>0</b>

1. Corridor Selected: <b>A - Replace along existing alignment</b>	2. Total Acres of Farmlands to be Converted by Project: <b>0.13</b>	3. Date Of Selection: <b>5/1/07</b>	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
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5. Reason For Selection:  
**Replacing the bridge along its current alignment would minimize the farmland impacts. No avoidance alternatives are available to meet the purpose and need for the project.**

Signature of Person Completing this Part: \_\_\_\_\_ DATE: \_\_\_\_\_

NOTE: Complete a form for each segment with more than one Alternate Corridor

## CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

- (1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent - 15 points  
 90 to 20 percent - 14 to 1 point(s)  
 Less than 20 percent - 0 points

- (2) How much of the perimeter of the site borders on land in nonurban use?

More than 90 percent - 10 points  
 90 to 20 percent - 9 to 1 point(s)  
 Less than 20 percent - 0 points

- (3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

More than 90 percent - 20 points  
 90 to 20 percent - 19 to 1 point(s)  
 Less than 20 percent - 0 points

- (4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected - 20 points  
 Site is not protected - 0 points

- (5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ?

(Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with \$1,000 or more in sales.)  
 As large or larger - 10 points  
 Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

- (6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project - 25 points  
 Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)  
 Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

- (7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available - 5 points  
 Some required services are available - 4 to 1 point(s)  
 No required services are available - 0 points

- (8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

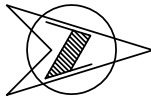
High amount of on-farm investment - 20 points  
 Moderate amount of on-farm investment - 19 to 1 point(s)  
 No on-farm investment - 0 points

- (9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted - 25 points  
 Some reduction in demand for support services if the site is converted - 1 to 24 point(s)  
 No significant reduction in demand for support services if the site is converted - 0 points

- (10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points  
 Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)  
 Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points



**LEGEND**



FARMLAND IMPACT AREA



PROJECT LIMITS  
(126,100 SF OR 2.89 ACRES)



DESIGNED: A. BEDAL	DATE	RECORD DRAWING		<p>SCALE</p> <p>PLAN 0 40' 80' HZ</p> <p>PROFILE 0 4' 8' VT</p>	<p>6051 N. Fresno St, Suite 200 Fresno, California 93710</p> <p>SUPERVISING ENGINEER</p>		PROJECT		DEPARTMENT OF PUBLIC WORKS AND PLANNING		
DRAWN: A. BEDAL		RESIDENT ENGINEER	DATE				FRESNO CANAL BRIDGE REPLACEMENT		PROJECT LIMITS AND FARMLAND IMPACTS EXHIBIT		
CHECKED: G. GROSS							AT DEL REY AVENUE				
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.							ROAD NO. E1100	BRIDGE NO. 42C0696	DRAWING NO. 11264	SHEET NO.	TOTAL 1 OF 1

**HISTORIC PROPERTY SURVEY REPORT****1. UNDERTAKING DESCRIPTION AND LOCATION**

<i>District</i>	<i>County</i>	<i>Federal Project. Number. (Prefix, Agency Code, Project No.)</i>	<i>Location</i>
06	FRE	FSTIP BRLO-5942(249)	Del Rey Avenue, Fresno County

**Project Description:**

The County of Fresno (County), with the support of the Federal State Transportation Improvement Program (FSTIP), plans to replace an existing two-lane timber bridge (42C0496) over the Fresno Canal on Del Rey Avenue near Sanger, California (Exhibit A). The project lies within Township 13 South, Range 22 East, Sections 32 and 33 as depicted on the U.S. Geological Survey (USGS) Round Mountain (1964, PI 1978) 7.5-minute quadrangle (Exhibit B). The County has determined that the bridge is obsolete and needs to be replaced with a wider bridge. Since widening the existing timber structure is not possible, replacement of the bridge with a new two-lane concrete bridge is the only option. The project will involve structure demolition, pile driving, vegetation removal, equipment staging, and stream channel work. FSTIP funds for the project will be administered through California Department of Transportation (Caltrans) District 6 (BRLO-5942[249]).

**2. AREA OF POTENTIAL EFFECTS**

In accordance with Section 106 Programmatic Agreement Stipulation VIII.A, the Area of Potential Effects (APE) for the project was established in consultation with John Whitehouse, PI—Prehistoric and Historical Archaeology, and James Perrault, Caltrans' Local Assistance Engineer, on January 30, 2017. The APE map is attached as Exhibit C of this Historic Property Survey Report.

Section 106 regulations (36 CFR 800.16[d]) define the APE as the area within which a project has the potential to directly or indirectly cause alterations to historic properties. The APE is established as an 8.96-acre area that includes the current bridge and areas directly adjacent to the road and stream channel surrounding the bridge (Exhibit C). To account for any subsurface archaeological deposits, the APE extends 10 feet below the surface.

**3. CONSULTING PARTIES / PUBLIC PARTICIPATION**

Local Government (*Head of local government, Preservation Office / Planning Department*)

- Alexis Rutherford, Department of Public Works and Planning, County of Fresno

Native American Tribes, Groups and Individuals

On September 2, 2016, Applied EarthWorks, Inc. (Æ) mailed letters to the following individuals:

- Leanne Walker-Grant of the Table Mountain Rancheria;
- Michael Russell of the Table Mountain Rancheria;
- Bob Pennell of the Table Mountain Rancheria;
- Claudia Gonzales of the Picayune Rancheria of Chukchansi;
- Mary Matola of the Picayune Rancheria of Chukchansi;
- Robert Ledger, Sr. of the Dumna Wo-Wah Tribal Government;
- Eric Smith of the Dumna Wo-Wah Tribal Government;

## HISTORIC PROPERTY SURVEY REPORT

- John Ledger of the Dumna Wo-Wah Tribal Government;
- Lawrence Bill of the Dunlap Band of Mono Indians;
- Rosemary Smith of the Choinumni Tribe of Yokuts;
- Kenneth Woodrow of the Wuksache Indian Tribe/Eshom Valley Band;
- Rueben Barrios Sr. of the Tachi Yokut Tribe;
- Lalo Franco of the Tachi Yokut Tribe;
- Neil Peyron of the Tule River Indian Tribe;
- Kerri Vera of the Tule River Indian Tribe;
- Joey Garfield of the Tule River Indian Tribe; and
- Darlene Tapleras Franco of the Wukchumni Tribal Council.

Two Native American groups responded to the request for information. Environmental Director Kerri Vera of the Tule River Indian Tribe acknowledged via telephone that the project was outside of the tribe's area of interest and suggested contacting Table Mountain Rancheria. Through telephone conversations and e-mails dated August 12, 2016, Table Mountain Rancheria representatives Sara Barnett and Robert Pennell expressed concerns about the area's sensitivity—specifically, that the route of the “Stockton to Four Creeks Road by Pool's Ferry” (also referred to as the Stockton-Los Angeles Road), identified on an 1854 General Land Office map, passed through the project APE (see Figure 1 in Attachment III [Archaeological Survey Report]). The Rancheria identified this route as a Native American trail. On October 14, 2016, John Whitehouse, Caltrans NHPA Section 106 coordinator for the project, and Pennell met at the bridge site to discuss the cultural sensitivity of the project area. It was agreed that due to the project's proximity to the place where the historical road and native trail crossed Fancher Creek, a cultural resource monitoring program would be appropriate during project construction. No further responses have been received to date. A summary of correspondences with Native American representatives is provided in Appendix C of Attachment III.

### X Native American Heritage Commission

- On June 17, 2016, A sent an e-mail to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File and the contact information for local Native American representatives who may have information about the area or an interest in the project. Gayle Totton of the NAHC responded on June 20, 2016, stating that no sacred sites have been identified within or adjacent to the APE (Attachment III, Appendix C). The commission cautioned that its sacred lands inventory is not exhaustive and the absence of recorded sites does not preclude the discovery of cultural resources during project activities (see Attachment III, Appendix C).

## 4. SUMMARY OF IDENTIFICATION EFFORTS

- |  |   |
|--|---|
| <u>X</u> National Register of Historic Places                                  | <u>X</u> California Historical Resources Information System (CHRIS) |
| <u>X</u> California Register of Historical Resources                           | <u>X</u> Caltrans Historic Highway Bridge Inventory                 |
| <u>X</u> California Inventory of Historic Resources                            |   |
| <u>X</u> Archaeological Determinations of Eligibility                          |   |
| <u>X</u> Historic Properties Directory of the Office of Historic Preservation. |   |

**HISTORIC PROPERTY SURVEY REPORT**

**X** Other Sources consulted [e.g., historical societies, city archives, etc. List names and dates below]

- Applied EarthWorks' in-house library, which includes local histories;
- Online Map and Aerial Locator Tool (MALT), Henry Madden Library, California State University, Fresno; and
- Online US Topo and Historical Topographic Map Collection.

**X** **Results:** (Provide a brief summary and research results, as well as inventory findings.)

- On June 17, 2016, the staff of the Southern San Joaquin Valley Information Center (SSJVIC) at California State University, Bakersfield performed a records search of the CHRIS, which encompassed the project APE and a 0.5-mile radius surrounding the APE (RS# 16-257; see Attachment III, Appendix B). SSJVIC staff examined the Historic Properties Directory, Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources (1976).

The records search identified no previously recorded resources within the APE or within the 0.5-mile vicinity. The records search did not identify any previous cultural resources studies within the APE; three previous studies have been conducted within 0.5 mile of the APE.

- Constructed in 1939 and widened in 1967, Bridge 42C0496 is listed in the Caltrans Historic Bridge Inventory as Category 5, and has been determined not eligible for the National Register of Historic Places.
- An archaeological survey on September 14, 2016, encountered no cultural resources within the 8.96-acre APE.
- Caltrans' meeting with the Bob Pennell of the Table Mountain Rancheria at the project site concluded that the APE is sensitive for cultural deposits, given that an 1850s road and reputed Native American trail once crossed Fancher Creek—the precursor to the portion of the Fresno Canal within the APE—at or very near this location. As a result of this meeting, Caltrans and the Rancheria agreed that archaeological monitoring during project construction is warranted (see Attachment III).

**5. PROPERTIES IDENTIFIED**

**X** **John Whitehouse**, who meets the Professionally Qualified Staff Standards in Section 106 Programmatic Agreement Attachment 1 as a(n) Historical Archaeologist and Principal Architectural Historian (PQS), has determined that the only/only other properties present within the APE meet the criteria for Section 106 Programmatic Agreement Attachment 4 (**Properties Exempt from Evaluation**).

**X** **Bridges listed as Category 5** in the Caltrans Historic Bridge Inventory are present within the APE. Appropriate pages from the Caltrans Historic Bridge Inventory area attached.

- Bridge 42C0496

**6. HPSR to District File**

**X** Caltrans, pursuant to Section 106 Programmatic Agreement Stipulation VIII.B, has determined that there are no cultural resources present in the APE and/or there are properties within the APE that are exempt from evaluation; see Section 5.

**HISTORIC PROPERTY SURVEY REPORT**

- Caltrans, pursuant to Section 106 Programmatic Agreement Stipulation IX.A, has determined a Finding of No Historic Properties Affected is appropriate for this undertaking because there are no historic properties within the APE.

**7. HPSR to SHPO**

- Not applicable.

**8. HPSR to CSO**

- Not applicable.

**9. Findings for State-Owned Properties**

- Not applicable; project does not involve Caltrans right-of-way or there are no Caltrans-owned cultural resources within the APE.

**10. CEQA Considerations**

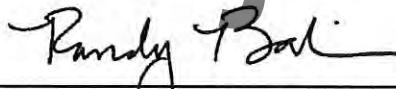
- Not applicable; Caltrans is not the lead agency under CEQA.

**11. List of Attached Documentation**

- Attachment I: Project Vicinity, Location, and APE Maps (Exhibits A, B, and C)
- Attachment II: California Historic Bridge Inventory sheet
- Attachment III: Archaeological Survey Report (ASR)
- Prepared by Katie Asselin (January 2017); reviewed by John Whitehouse (January 2017).

**12. HPSR Preparation and Caltrans Approval**

Prepared by:



January 23, 2017

Consultant/discipline: Randy Baldiah, M.A., Associate Historian  
 Affiliation: Applied EarthWorks, Inc.

Date

Reviewed for approval by:



1/31/2017

District 6 Caltrans PQS discipline/level:

John Whitehouse, M.A., PI—Prehistoric and Historical Archaeology  
 Environmental Analysis, Planning and Local Programs

Date

Approved by:



1/31/2017

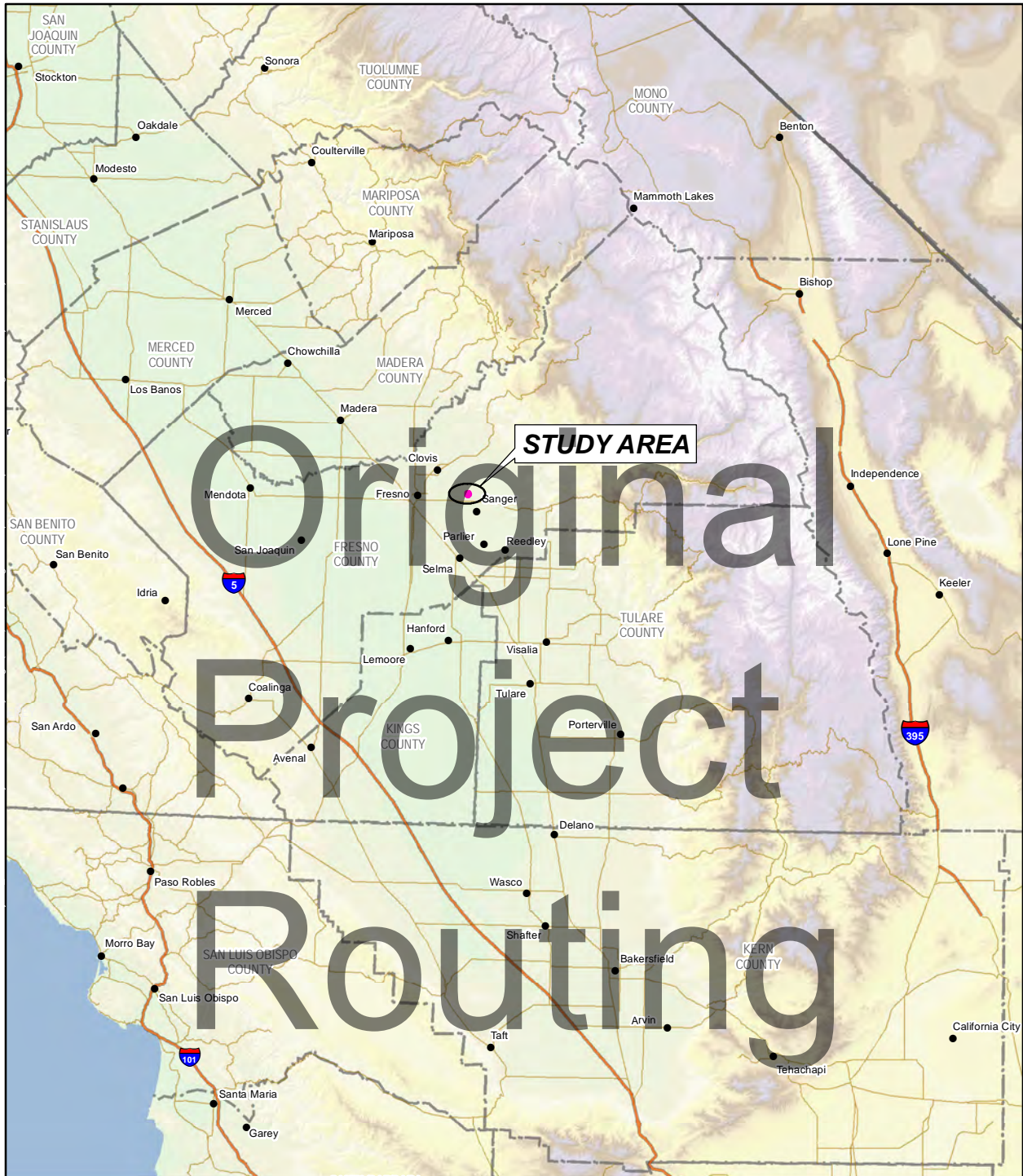
District 6 EBC:

Shane Gunn, Branch Chief  
 Environmental Analysis, Planning and Local Programs

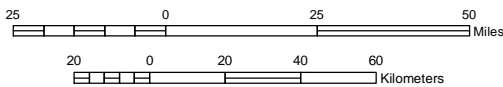
Date



ARCHAEOLOGICAL SURVEY REPORT



SCALE 1:2,000,000



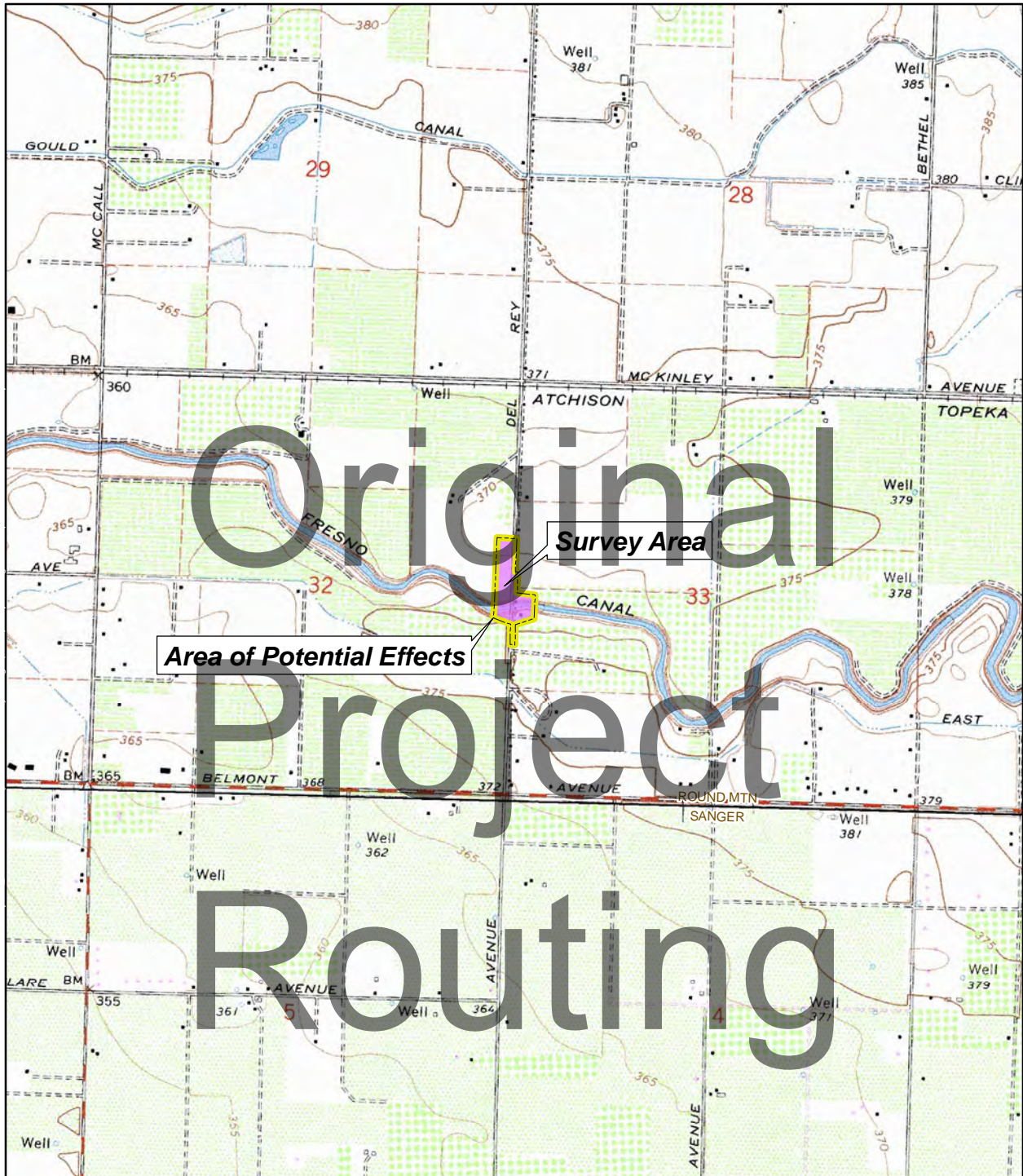
**STUDY VICINITY**

Replacement of Bridge 42C0496  
over Fresno Canal on Del Rey Avenue

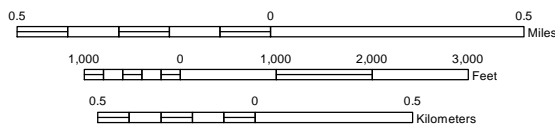
Caltrans District 6  
Fresno County

BRLO 5942(249)

ARCHAEOLOGICAL SURVEY REPORT



SCALE 1:24,000



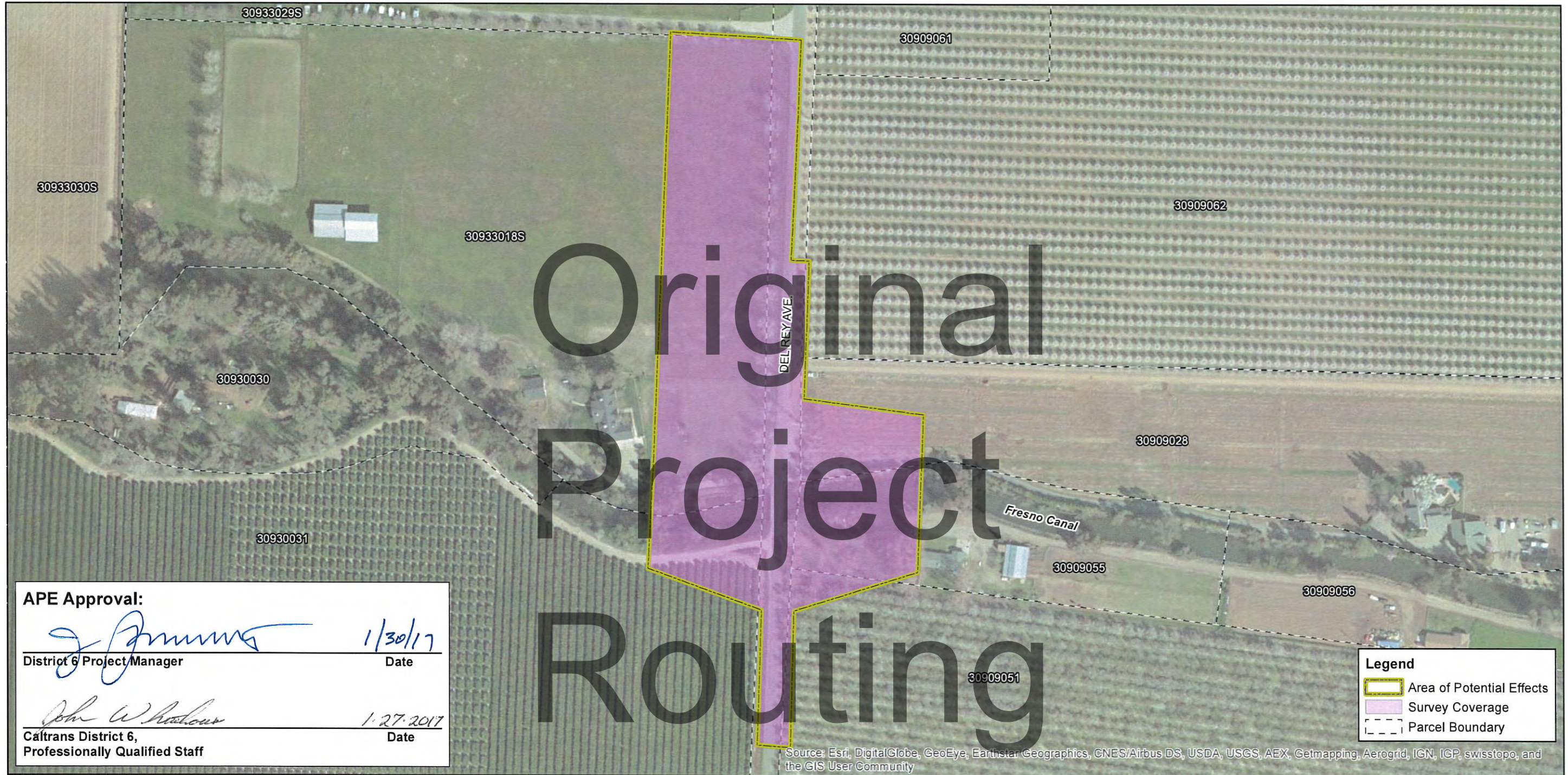
**STUDY LOCATION**

Replacement of Bridge 42C0496  
over Fresno Canal on Del Rey Avenue

Caltrans District 6  
Fresno County

BRLO 5942(249)




Township 13S /Range 22E , Section(s) 32, 33  
Round Mountain (1964-PI1978) , CA 7.5' USGS Quadrangle



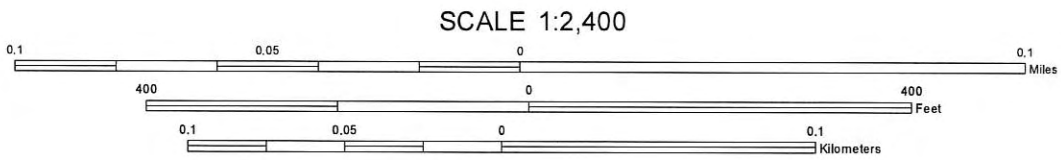
**APE Approval:**

	1/30/17
District 6 Project Manager	Date
	1-27-2017
Caltrans District 6, Professionally Qualified Staff	Date

**Legend**

-  Area of Potential Effects
-  Survey Coverage
-  Parcel Boundary

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



**SURVEY COVERAGE**  
Replacement of Bridge 42C0496  
over Fresno Canal on Del Rey Avenue

Caltrans District 6  
Fresno County  
BRLO 5942(249)

# Original Project Routing

# ARCHAEOLOGICAL SURVEY REPORT

## Replacement of Bridge 42C0496 over Fresno Canal on Del Rey Avenue, Fresno County, California

BRLO-5942(249)

Original  
Project  
Routing

Prepared By:

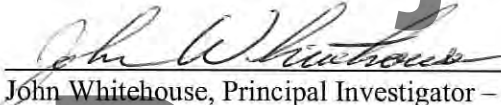


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January 2017

# Original Project Routing

## SUMMARY OF FINDINGS

The County of Fresno (County), under the Federal State Transportation Improvement Program as administered through the California Department of Transportation (Caltrans), plans to replace Bridge 42C0496 over the Fresno Canal on Del Rey Avenue, 0.5 mile south of McKinley Avenue in Fresno County. Caltrans is the lead agency responsible for compliance with the National Environmental Policy Act of 1969 and Section 106 of the National Historic Preservation Act (NHPA) of 1966 and associated implementing regulations at 36 CFR Part 800. The County retained Applied EarthWorks, Inc. (Æ) to perform the cultural resource identification tasks necessary for comply with Section 106 of the NHPA.

The current investigation included: (1) a records search at the Southern San Joaquin Valley Information Center of the California Historical Resources Information System; (2) Native American consultation; and (3) pedestrian survey of a 8.96-acre Area of Potential Effects (APE) surrounding the existing bridge to identify archaeological resources

The records search revealed that there have been no previous cultural resources studies within the APE and that three cultural resources studies have been conducted within a 0.5-mile radius of the APE. The records search did not identify any cultural resources within the APE or within a 0.5-mile radius of the APE. A search of the Native American Heritage Commission's Sacred Lands File did not identify any sacred sites within or adjacent to the APE. However, consultation with Table Mountain Rancheria representatives identified the historic-era "Stockton to Four Creeks Road by Pool's Ferry" (also referred to as the Stockton-Los Angeles Road), shown on an 1854 General Land Office map, that passed through the project APE. The rancheria identified this route as an early Native American trail. As such, Caltrans and Table Mountain Rancheria agreed that due to the project's proximity to the place where the historical road and native trail crossed Fancher Creek, a cultural resource monitoring program would be appropriate during project construction. Æ's pedestrian survey on July 27, 2016, did not identify any prehistoric or historic-era archaeological sites within the APE and observed no physical evidence of the historical trail. Bridge 42C0496, constructed in 1939 and widened in 1967, is listed in the Caltrans Historic Bridge Inventory as Category 5 and has been determined not eligible for the National Register of Historic Places. Two other structures of historic age that occur within the APE were exempted from the project per Caltrans' direction following Attachment 4 of the Federal Highway Administration Section 106 Programmatic Agreement. These are the historical Fresno Canal and a 130-kilovolt transmission line with modern lattice towers that parallels Del Rey Avenue.

It is Caltrans' policy to avoid cultural resources whenever possible. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the APE changes to include areas not previously surveyed.

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# Original Project Routing

## 1 INTRODUCTION

The County of Fresno (County), with the support of the Federal State Transportation Improvement Program (FSTIP), plans to replace an existing two-lane timber bridge over the Fresno Canal on Del Rey Avenue near Sanger, California (see Maps 1 and 2 in Appendix A). The County has determined that the bridge is obsolete and needs to be replaced with a wider bridge. Since widening the existing timber structure is not possible, replacement of the bridge with a new two-lane concrete bridge is the only option.

FSTIP funds for the project will be administered through California Department of Transportation (Caltrans) District 6 (BRLO-5942[249]). Because the project involves federal funds, it is subject to the cultural resources provisions of the National Environmental Policy Act of 1969 (NEPA) and Section 106 of the National Historic Preservation Act, as implemented through the January 1, 2014, *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance With Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (FHWA Section 106 PA). This statute mandates that government agencies consider the effects of their actions on historic properties—i.e., archaeological or built-environment resources that are eligible for inclusion in the National Register of Historic Places (National Register) per 36 CFR 800.16(l). Caltrans is the lead agency responsible for compliance with the NEPA and Section 106 of the NHPA.

On behalf of the County, Applied EarthWorks, Inc. (Æ) requested a records search from the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System and reviewed the results; (2) performed an archaeological survey of the project area; and (3) initiated Native American consultation. These investigations were conducted in accordance with the guidelines for identification of prehistoric archaeological resources provided in *Caltrans Standard Environmental Reference, Vol. 2: Cultural*, available online at <http://www.dot.ca.gov/ser/vol2/vol2.htm>.

Æ Associate Archaeologist Katie Asselin, who holds a master's degree in archaeology (2009) and is a Registered Professional Archaeologist (RPA), conducted the survey on July 27, 2016. She has 8 years of experience performing and documenting archaeological investigations throughout California, including 2 years of experience in the Central Valley. Æ Senior Archaeologist Mary Clark Baloian served as project manager and provided technical oversight for the project. She holds a doctoral degree in anthropology (2003) and is an RPA with more than 25 years of experience in California archaeology.

## 2 PROJECT DESCRIPTION AND LOCATION

Bridge 42C0496 is in Caltrans District 6 within Fresno County (Map 1). The project lies within Township 13 South, Range 22 East, Sections 32 and 33 as depicted on the U.S. Geological Survey (USGS) Round Mountain (1964, PI 1978) 7.5-minute quadrangle (Map 2). Bridge 42C0496 carries Del Rey Avenue over the Fresno Canal (Map 3). Del Rey Avenue is a two-lane paved road in the San Joaquin Valley, approximately 3.85 miles northwest of the community of

Sanger. There are several agricultural properties with residences along Del Rey Avenue adjacent to the project area.

The County proposes to widen and realign the existing roadway and replace the deficient two-lane timber bridge with a new concrete two-lane bridge. The new bridge will be 38.83 feet wide with two 12-foot lanes and two 6-foot shoulders to meet current standards. This will involve vegetation and tree removal and street closure requiring a 3.7-mile detour during bridge work. Del Rey Avenue will be realigned with the new bridge to meet current standards. Ground disturbance will include road cut and fill, excavation to a maximum depth of 15 feet at the abutments and 80 feet for piles, approach and stream channel work, pile driving, and demolition. There will be 400 feet of road work on the north and south sides of the bridge to account for approach improvements. The County will need easements for equipment staging and utility relocation and may need to acquire temporary or permanent right-of-way.

The Area of Potential Effects (APE) has been determined by reviewing the direct impacts of construction work, including the demolition of the existing bridge and establishing staging areas and temporary access roads, as an 8.96 acre area that includes the current bridge and areas directly adjacent to the road and stream channel surrounding the bridge (Map 3). There is also the potential to affect resources below the surface through excavation and pile driving during construction of the new bridge. The depth of these ground-disturbing activities has been determined to be a maximum of 15 feet for the abutments and 80 feet for pile driving, areas which are included in the APE.

### **3 SOURCES CONSULTED**

#### **3.1 RECORDS SEARCH**

On June 17, 2016, the staff of the SSJVIC at California State University, Bakersfield performed a records search of the California Historical Resources Information System (CHRIS), which encompassed the project APE and a 0.5-mile radius surrounding the APE (RS# 16-257; Appendix B). SSJVIC staff examined the Historic Properties Directory (OHP), Archaeological Determinations of Eligibility, and the California Inventory of Historic Resources (1976).

The records search identified no previously recorded resources within the APE or within the 0.5-mile vicinity. The records search did not identify any previous cultural resources studies within the APE; however, three previous studies have been conducted within 0.5 mile of the APE.

Æ consulted the Caltrans Historic Bridge Inventory for information regarding Bridge 42C0496 over the Fresno Canal. The bridge was constructed in 1939 and widened in 1967; it has been evaluated as Category 5, not eligible for the National Register (Appendix B).

#### **3.2 ARCHIVAL RESEARCH**

The purpose of archival research for archaeological studies is to provide information regarding the potential for historical deposits to exist within the APE. The investigation compiled information from several sources, including:

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- Map Aerial Locator Tool (MALT) of the Henry Madden Library at California State University, Fresno (<http://malt.lib.csufresno.edu/MALT/>);
- Various online resources for historical maps and documents; and
- Æ's in-house library, which includes local histories.

Æ consulted several historic topographic maps and aerial photographs. The 1922 Round Mountain quadrangle depicts a prior bridge with the same alignment as Bridge 42C0496 across the Fresno Canal, but no buildings or other structures appear within or near the APE (U.S. Geological Survey [USGS] 1922). A 1937 aerial photograph similarly shows Del Rey crossing the Fresno Canal, and the surrounding land consists mainly of undeveloped rural parcels, although some are being used for agriculture (Agricultural Adjustment Administration 1937).

The 1947 USGS Round Mountain quadrangle (USGS 1947) and the 1950 aerial photograph (U.S. Department of Agriculture 1950) indicate what appears to be a rural complex in the vicinity of the southeastern APE (within present-day APN 30909055); however, none of the buildings in the photograph correspond to the location or footprint of the existing residence. Additionally, the map shows that by 1947 a north-south transmission line has been constructed on the east side of Del Rey Avenue.

Aerial photographs from 1957 and 1961, as well as the 1964 USGS Round Mountain quadrangle, indicate that an undetermined number of buildings lay within or near the southeast part of the APE (Commodity Stabilization Service 1957, 1961; USGS 1964). Large orchards were planted on both sides of Del Rey Avenue.

Finally, a 1993 aerial photograph shows that the previous buildings have been replaced by the modern residence that currently lies just east of the APE (California Department of Transportation 1993).

### 3.3 NATIVE AMERICAN CONSULTATION

On June 17, 2016, Æ sent an e-mail to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File and the contact information for local Native American representatives who may have information about the area or an interest in the project. The NAHC responded on June 20, 2016, stating that it did not identify any sacred sites within or adjacent to the APE (Appendix C). The commission cautioned that its Sacred Lands Inventory is not exhaustive and the absence of recorded sites does not preclude the discovery of cultural resources during project activities. The NAHC also provided the names and contact information for 17 Native American representatives who may have an interest in the project. On July 6, 2016, Æ sent a letter to each representative describing the project, including a map of its location, and requesting information about the study area. On August 12, 2016, approximately 5 weeks after the initial correspondence, Æ attempted follow-up contact with the representatives by telephone and/or e-mail.

Æ received two responses to its request for information. Environmental Director Kerri Vera of the Tule River Indian Tribe acknowledged via telephone that the project was outside of the Tribe's area of interest and suggested contacting Table Mountain Rancheria. Through telephone

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conversations and e-mails dated August 12, 2016, Table Mountain Rancheria representatives Sara Barnett and Robert Pennell expressed concerns about the area’s sensitivity—specifically, that the route of the “Stockton to Four Creeks Road by Pool’s Ferry” (also referred to as the Stockton-Los Angeles Road), identified on an 1854 General Land Office (GLO) map, passed through the project APE (Figure 1). The rancheria identified this route as a Native American trail. On October 14, 2016, John Whitehouse, Caltrans NHPA Section 106 coordinator for the project, and Pennell met at the bridge site to discuss the cultural sensitivity of the project area. It was agreed that due to the project’s proximity to the place where the historical road and native trail crossed Fancher Creek, a cultural resource monitoring program would be appropriate during project construction.



**Figure 1** 1854 GLO map depicting “Road from Stockton to Four Creeks by Pool’s Ferry” crossing through the APE.

Æ will forward any further communication with Native American representatives to the County of Fresno. A summary of correspondences with Native American representatives is provided in Appendix C.

## 4 BACKGROUND

### 4.1 ENVIRONMENT

The project area lies in the eastern half of the San Joaquin Valley, approximately 10 miles from the base of the Sierra Nevada foothills. The San Joaquin Valley and its northern counterpart the Sacramento Valley make-up the Great Valley—a 50-mile-wide lowland that extends approximately 500 miles south from the Cascade Range to the Tehachapi Mountains (Norris and Webb 1990:412). The upper levels of the Great Valley floor are composed of alluvium and flood materials. Below these strata are layers of marine and nonmarine rocks, including claystone, sandstone, shale, basalt, andesite, and serpentine. The Great Valley is primarily drained by its two prominent hydrologic features, the Sacramento and San Joaquin rivers, which flow into San Francisco Bay. Between the Mesozoic and Cenozoic eras, the Great Valley served as a shallow marine embayment containing numerous lakes, primarily within the San Joaquin Valley (Norris and Webb 1990:412). Waters began to diminish about 10 million years ago, eventually dwindling to the drainages, tributaries, and small lakes that exist today (Hill 1984:28).

The San Joaquin Valley is bounded by the Sacramento–San Joaquin River Delta to the north, the Sierra Nevada to the east, the Coast Ranges to the west, and the Tehachapi Mountains to the south. Before historic drainage projects and modern reclamation, seasonal flooding produced extensive wetlands. Lakes, marshes, and sloughs once covered more than 5,000 square kilometers in the San Joaquin Valley (Moratto 1984:168). The largest of these was ancient Tulare Lake, which occupied a structural basin formed by downwarping and extended as much as 45 kilometers from shore to shore (Davis et al. 1959).

The development of agriculture within the county resulted in the replacement of native plants and animals with domesticated species. Common native plants included white, blue, and live oaks as well as walnut, cottonwood, willow, and tule. Also predominant were bulrush and cattail, various grasses, flowers, and saltbrush. The previously swampy valley floor once provided a lush habitat for a variety of animals. Large mammals included mule deer, tule elk, pronghorn, grizzly and black bears, and mountain lion (Preston 1981:245–247). Other mammals noted are the gray wolf, valley coyote, bobcat, gray and kit foxes, and rabbits. Birds like the American osprey, redwing blackbird, marsh hawk, willow and Nuttall woodpeckers, western meadowlark, and quail flocked to the area. The lakes, rivers, and streams throughout the vicinity provided habitat for anadromous and freshwater fish, including Chinook salmon, white sturgeon, Sacramento perch, rainbow trout, thick-tailed chub, and Sacramento sucker (Preston 1981:249).

### 4.2 ETHNOGRAPHY

At the time of first contact with the Spanish missionaries, the Yokuts, including Southern Valley, Northern Valley, and Foothill groups, collectively inhabited the San Joaquin Valley as well as the eastern foothills of the Sierra Nevada from the Calaveras River southward to the Kern River (Wallace 1978a, 1978b). The Yokuts language belongs to the broader Penutian family, which

subsumes a relatively diverse assemblage of languages including Miwok, Costanoan, Maiduan, and Wintuan (Silverstein 1978). Compared to other Penutian languages, however, Yokuts shows considerable internal linguistic homogeneity, especially given the extent of its geographic distribution. Dialects differ minimally and were mutually intelligible, at least among individuals from contiguous groups. This relative lack of linguistic differentiation suggests that ancestors of the Yokuts entered California after the arrival and subsequent radiation of the more linguistically diverse Penutian groups such as the Miwok and Costanoan (Moratto 1984:554).

The study area is within territory that could reasonably be ascribed to both the Gashowu, a tribelet that occupied the drainages of Big Dry Creek and Little Dry Creek, and the Wéchikit, another Yokuts group that occupied lands along the Kings River near Sanger (Kroeber 1976:483, Plate 47; Latta 1999:171; Wallace 1978a:448; Wallace and Kroeber use the alternate names Wechihit/Wechahit and Wetehit).

Two major settlements are attributed to the Gashowu: *Pohonui*, below Letcher on Big Dry Creek, and *Yokau*, on Little Dry Creek in Auberry Valley (Kroeber 1976:481, plate 47). These villages appear to have been central year-round settlements that were occupied more intensively in the winter. Food-gathering forays in the spring or summer expanded the Gashowu range to the lowlands of present-day Clovis and Fresno, possibly including the project area.

The primary settlements attributed to the Wéchikit were *Musanau*, between the channels of the Kings River near Sanger, and *Wewio*, on Wahtoke Creek (Latta 1999:171). Little is known regarding these villages, as the Wéchikit population had died off before Kroeber (1976:483) performed his fieldwork in the early twentieth century. Both Kroeber and Wallace identify the Wéchikit as an independent and distinct group, although Latta questions to what extent they were distinct from the surrounding Yokuts tribelets.

Acorns were a Yokuts staple; additional nutrition was culled from other nuts and seeds, berries, fruit, and game. These dietary items as well as tool stone and a variety of other resources were gathered at summer camps. Procurement sites survive today as scatters of lithic artifacts, granite outcrops with bedrock milling stations where plants and seeds were processed, and scattered and cached ground stone artifacts. Steatite is available in the Sierra Nevada foothills, and items made from this material (including cooking bowls, beads, and ornaments) are often found at Yokuts sites.

The villages of the Southern Valley Yokuts, including the Gashowu and the Wéchikit, profited from the east-west trade of goods that flowed between the Pacific Coast and the High Sierra and Great Basin (Davis 1961). The Yokuts bartered their local staples (e.g., freshwater fish, acorns, steatite goods, and tule reeds) to obtain such goods as obsidian, pine nuts, shell beads and ornaments, and other exotic commodities.

As with other Indian groups in California, the lifeways of the Yokuts were dramatically altered as a result of contact with Spanish explorers and missionaries, miners, ranchers, and other immigrants who entered the San Joaquin Valley after 1700. In particular, the introduction of European diseases, such as smallpox, proved devastating to the native population. Having been pushed off their land by settlers, many Yokuts ended up as impoverished agricultural workers or otherwise occupied the lower echelons of the new California society (Wallace 1978a).



### 4.3 PREHISTORY

Archaeological studies in the San Joaquin Valley began in the early 1900s with a series of investigations primarily in the Stockton and Kern County areas (Gifford and Schenck 1926; Schenck and Dawson 1929). By the late 1930s, efforts were made to link the more well-known southern and northern valley areas through an exploration of the central San Joaquin Valley. University of California Berkeley's Gordon Hewes discovered 107 sites, most near streams and marshes on the east side of the valley (Moratto 1984:186). Archaeological investigations in the San Joaquin Valley intensified during the 1960s with the advent of cultural resources management work (Olsen and Payen 1968, 1969; Riddell and Olsen 1969; Treganza 1960). More recent analyses have reevaluated these artifacts by examining the changing environmental conditions at the time and considering the mobility and adaptability of the inhabitants (Dillon 2002; Holliday and Miller 2014; Negrini et al. 2006).

Archaeological evidence suggests that the valley's initial occupants settled in lakeshore and streamside environments, utilizing the foothills periodically for seasonally available resources (Fredrickson and Grossman 1977; Riddell and Olsen 1969). The ancient shores of Tulare Lake, south of the project primarily in Kings County, have yielded numerous early projectile point styles, including fluted Clovis-like specimens associated with human occupation dating to the Late Pleistocene-Early Holocene transitions 11,000 or more years ago (Riddell and Olsen 1969). Specifically, excavations at the Witt Site (CA-KIN-32) on the southwest shore, revealed fluted projectile points as well as a procession of later types, suggesting continual occupation of the basin until historic contact (Fenenga 1993; Moratto 1984:81–82). The shore of Tulare Lake also has yielded various scrapers, flaked stone crescents, Lake Mojave projectile points, and other stone artifacts typical of the Lake Mojave Period, which is presumed to have begun somewhat earlier at 9500 before present (B.P.) and lasted to perhaps 7000–6500 B.P. (Hall 1993; Moratto 1984). Thus, the evidence, albeit scant, indicates that the area was frequented at an early date by bands of hunters preying on the large herds of game animals.

As compared with their predecessors, the Archaic groups in the middle and late Holocene utilized a broader resource base, supplementing their subsistence with small game and hard seeds. Handstones, milling slabs, mortars, and pestles are common in Archaic assemblages, as are atlatl dart points. Favorable climatic conditions between 3,000 and 3,500 years ago instigated widespread settlement along the western Sierran slopes. The late Holocene witnessed various technological and social changes, including the adoption of the bow and arrow, expansion of trade, increasing use of acorns, and improved food storage techniques. Based on archaeological investigations conducted throughout the valley (Latta 1999; McCarthy 1995; McGuire 1995; Moratto 1988; Price 1992; Roper 2005), it is apparent that the Yokuts occupied most of the San Joaquin Valley over a period extending as long as 2,000 years (Spier 1978; Wallace 1978a, 1978b). As populations grew, social relations became more complex. Violence among many Sierran and foothill groups was common as economic stress and social instability became more pronounced during a period of xeric climates between circa A.D. 450 and 1250. Thereafter, new levels of population growth were achieved, resulting in part from movement of new Sierran groups. By circa A.D. 1600–1700, most groups claimed the territories that would identify them ethnographically.

#### 4.4 HISTORY

The California gold rush, which brought droves of miners to the Sierra Nevada foothills in search of the precious ore, marked the beginning of the first significant Euro-American settlements in what would become Fresno County. Although the watersheds of the San Joaquin and Kings rivers were not nearly as productive as the better known Mother Lode in the northern part of the state, they did see their share of mining activity. Getting to these mines from the inland port at Stockton meant traveling a network of roads that ran along the eastern margins of the valley and through the lower foothills. An 1854 GLO map of Township 13S, Range 23E shows three northwest-southeast trending roads (see Figure 1). The westernmost of these routes, labeled “Road from Stockton to Four Creeks by Pool’s Ferry,” crossed through the northern part of the APE before fording Fancher Creek at a point approximately 300 feet east of Bridge 42C0496 (Figure 1). Historical and ethnographic investigations—most notably Latta’s (1936) account of the El Camino Viejo on the valley’s west side—strongly suggest that such pioneer roads followed the routes of earlier Native American trails. ■

Whereas traversing Fancher Creek, a modest and seasonal waterway, was likely accomplished with relative ease, passage across the Kings and San Joaquin rivers typically required the services of a ferryman. John Pool along with his partner William Campbell apparently established at least two ferry stations. In 1851 or 1852, they began operating on the upper Kings River at a site that eventually became the town of Centerville (Clough and Secrest 1984:53; Vandor 1919:82). Flooding in 1852–1853 compelled the partners to move their business downstream (south) to a location about 2 miles upstream (north) of present-day Reedley. It is this second location that is referred to as “Pool’s Ferry” on the 1854 GLO map mentioned above. To the northwest and along the San Joaquin River was Ira McCray’s ferry, which, like his various other enterprises, serviced the town of Millerton. Millerton became the seat of government when Fresno County was formed in 1856 (Vandor 1919:140).

During the 1850s and 1860s, much of the county’s populations could be found to the east in Millerton or Centerville, or, alternatively, to the west around such places as Fresno City, Las Juntas, and Rancho de Los Californios (Hoover et al. 1966:91–92). Those demographics clearly reflected the local economy. Mining activity centered around Millerton, while Centerville eventually evolved into a hub for cattle ranching. The steamboats that cruised the lower San Joaquin River and Fresno Slough brought people, goods, and opportunity to the county’s west side communities, which, at the time, lay along an important commercial/transportation route. Few (if any) people lived in what is now the Fresno-Clovis metropolitan area, although that began to change by the late 1860s.

In 1868, southerners from Alabama, Mississippi, and Tennessee fleeing the hardships of the Reconstruction founded the Alabama Settlement in what is present-day Madera County (Vandor 1919:170–171). In the same year, Bay Area developer A. Y. Easterby purchased 5,000 acres, originally patented by William S. Chapman. Both ventures sought to establish large-scale agricultural colonies in Fresno County. By 1874, the Alabama Settlement was a disappointment after drought, lack of irrigation water, and free-roaming cattle had spoiled the efforts of its settlers to raise grain. Easterby’s initial experimental wheat crop near Millerton also met with failure. However, his second attempt, the Easterby Rancho located in the present-day Sunnyside district of Fresno, proved to be a major success. He planted 2,000 acres of wheat on the ranch, which at the time was miles from the county’s nearest commercial centers—Millerton and

Centerville (Scottsburg)—and major waterways—the San Joaquin and Kings rivers. Like Chapman and other land moguls, Easterby was no doubt anticipating the coming of the railroad and, as the story goes, after visiting Easterby’s thriving wheat fields in late 1871, Southern Pacific Railroad boss Leland Stanford decided to place the local train stop and townsite near the ranch (Clough and Secrest 1984:121). In the spring of 1872, the railroad rolled into Fresno County, connecting this previously remote region with the northern part of California. Shortly after the arrival of the railway, the town of Fresno was born, and within 2 short years it displaced Millerton as the county seat.

The key to Easterby’s success was overcoming the 20 miles that separated his ranch from the waters of the Kings River. That problem was solved by his business associate Moses Church. By July 1870, Church had purchased or acquired controlling interest in the existing ditches around the Centerville area, thus giving him legal and logistical access to the Kings River; the following year, Church, Easterby, and other developers established the Fresno Canal and Irrigation Company (FCIC) (Elliot 1882:102). As early as 1871, water began flowing toward Easterby’s wheat fields (Vandor 1919:171). In 1872, the company completed construction of the first main head gate that allowed 2,000 acre-feet of water to be diverted into the irrigation system (Elliot 1882:102).

The routes of the various interconnecting canals of the FCIC system have remained essentially the same for the past 140 years (Willison 1980:270). From the head gate at the Kings River, the Fresno Canal is the FCIC’s primary channel, flowing westerly for about 12 miles. The channels of the older Centerville ditches formed part of the alignment of the upper segments of the Fresno Canal (Mead 1901:287). As work progressed farther from the Kings River, Church took advantage of the creeks and sloughs that once flowed across the Fresno County landscape. This is particularly evident in portion of the canal that flows through the study vicinity. The course of Fancher Creek shown on the 1854 GLO map closely corresponds to the modern alignment of the Fresno Canal within the APE, indicating very clearly that this section of the canal once followed a natural creek. At the terminus of the Fresno Canal, the Fancher Creek Canal continued to convey the water in a southwesterly direction for another 9 miles, irrigating the Easterby Rancho and other properties. By 1876, the Fancher Creek leg of the system had been expanded to reach agricultural subdivisions southwest of Fresno (Willison 1980:84). Also heading at the terminus of the Fresno Canal is the Mill Ditch, which flows westerly for about 8 miles where it connects with the Dry Creek Canal and the 27-mile-long Herndon Canal, which irrigate southwest and northwest Fresno, respectively.

With the railroad in place, irrigation became the driving force in the valley’s development and economic expansion. Additionally, agricultural interests typically trumped ranching interests in the political arena, mainly because of the growing commercial importance of irrigation to the local, regional, and state economy. The enactment of the 1874 “no fence” law, which obligated stock owners to herd their livestock and made the owners liable for damage done by the animals, occurred under these circumstances. Although it did not deal a death blow to valley ranching, the law did greatly curtail the influence and importance of this industry.

In the coming decades, a network of other canals and ditches sprouted from the banks of the Kings River to provide water to farm colonies (Mead 1901). For Church, Easterby, Chapman, and other developers, the intended effect of irrigation was to increase the value of their properties so that they could be subdivided and sold to newly arriving homesteaders at a hefty profit. As

irrigation water became more readily available, individual farmers realized that premium crops like grapes, citrus, and tree fruit could be profitably grown on lots as small as 20 acres.

The 1887 Wright Act, which provides for the creation of irrigation districts, is also seen as an important step in solidifying the interests of agriculture. However, in its original form, the law could not be implemented and therefore municipal irrigation districts did not begin replacing private irrigation companies until the early twentieth century. At its initial passage, the Wright Act was, nevertheless, another legislative expression of the growing need for appropriated water.

The trend toward smaller farms continued well into the twentieth century. Between 1900 and 1920, 45,000 new farms were established in California, of which about 85 percent were less than 50 acres (Hall 1986:170). Yet whether a farm was small or large, the decision as to which crop(s) to grow from year to year has historically been a speculative one for valley farmers. Given the decentralized nature of the industry, the market for a particular product was capable of unpredictable and dramatic changes in its volume and price. Out of this instability, many new fruits and vegetables have been introduced to the valley, including numerous fruit tree varieties, melons, berries, various tomatoes and peppers, and Asian vegetables.

World War I resulted in increased demand for agricultural goods, especially those resistant to damage from storage and transportation (i.e., canned fruits and vegetables, dried and preserved fruit, wine, and cotton). This increased demand, coupled with the introduction of an increasingly broad range of crops, fueled local agribusiness. However, the end of World War I and the onset of Prohibition in the early 1920s, which hit local viticulture especially hard, resulted in hard times for farmers and the local businesses that relied upon agriculture.

Technological improvements in electric water pump technology allowed wells to extend even deeper into the aquifer, seriously impacting the water table in the valley. Beginning in the mid twentieth century, water management methods became more diverse and included the development of major irrigation projects such as the Central Valley Project, the integration of local irrigation systems with these larger projects, the storage of runoff in reservoirs for hydroelectric power and flood control, and maintenance of underground water tables for such uses as irrigation and drinking water. By the 1950s, these advancements spurred further agricultural development, creating the agricultural system as it exists today.

## 5 FIELD METHODS

On July 27, 2016, Æ Associate Archaeologist Katie Asselin performed an intensive pedestrian survey of the entire 8.96-acre APE (Map 3) surrounding Bridge 42C0496 using parallel and meandering transects spaced no more than 15–20 meters apart. Asselin photographed the survey area using an Olympus TG-830 digital camera and documented field conditions on a Survey Field Record. All field notes and photographs are on file Æ's Fresno office.

Ground visibility varied greatly throughout the APE, ranging from less than 10 to 80 percent (Figures 2 and 3). Exposure was generally good to excellent (70–80 percent) among the almond orchard rows in APNs 30909051 and 30909028. In APN 30933018S, the miniature horse pasture had 20–50 percent ground visibility, obscured by patches of low-lying grass; the adjacent horse pasture to the north, which is a proposed staging area, had less than 10 percent visibility due to



**Figure 2** Project area overview, facing north from the southern end of APE, showing orange grove to the left, Del Rey Avenue, and almond orchard to the right.



**Figure 3** Overview of project area, facing southeast from northwest corner of the APE, showing survey conditions in the horse pasture and proposed staging area.

thick grasses. Organic debris between the rows of the citrus grove in the southwest corner of the APE (APN 30930031) reduced visibility to less than 10 percent. Finally, the land around the residence on APN 30909055 had very poor visibility (less than 5 percent); the area was inundated by weeds, some as high as 6 feet (Figure 4). The unpaved roads throughout the APE offered excellent visibility, while the paved roadway of Del Rey Avenue completely obscured ground visibility.



Figure 4 Overview of survey conditions in APN 30909055 from the APE boundary, facing west.

## 6 STUDY FINDINGS AND CONCLUSIONS

The APE surrounds Bridge 42C0496 on Del Rey Avenue, 0.5 mile south of McKinley Avenue in Fresno County, California. Æ observed three built environment resources within the APE during the pedestrian survey: the Fresno Canal, Bridge 42C0496, and a transmission line that parallels Del Rey Avenue to the east. No historic or prehistoric archaeological resources were identified during the survey and there were no previously recorded cultural resources or sacred areas identified in the Sacred Lands File or from the records search at the SSJVIC. Æ observed modern refuse, modern glass and plastic bottle fragments, food wrappers, and aluminum cans along the shoulders of Del Rey Avenue.

Bridge 42C0496 (Figure 5), constructed in 1939, and widened in 1967, is listed in the Caltrans Historic Bridge Inventory as Category 5 and has been determined not eligible for the National Register. Because the bridge is not eligible for the National Register, it does not require management consideration under Section 106 of the National Historic Preservation Act.



**Figure 5** Overview of Bridge 42C0496 from northeast corner, facing southwest.

The Fresno Canal dates to the early 1870s and continues to operate as a modern water conveyance structure. Although of historic age, Caltrans has excluded the Fresno Canal from further consideration (John Whitehouse, personal communication 2016) because it will not be impacted by the project.

The transmission line with metal lattice towers that parallels Del Rey Avenue to the east appears to be part of a 130-kilovolt line connecting the Sanger Substation to the Kerckhoff Powerhouse. Although the transmission alignment first appears on the 1947 Round Mountain quadrangle, the lattice towers are a more recent addition. For the current project, Caltrans has similarly exempted the line from evaluation as a historic property (John Whitehouse, personal communication 2016) as per FHWA Section 106 PA, Attachment 4, Property Type 1. Because the transmission line is exempt from the project under the FHWA Section 106 PA, Æ noted its presence but did not formally record it as a cultural resource.

Although archival research indicated that buildings dating to the historic period once occupied APN 30909055 in the project vicinity, Æ did not observe any archaeological evidence of these buildings. The buildings that are present on APN 30909055 are modern residences and outbuildings that appear less than 30 years old. They are thus exempt from the project under FHWA Section 106 PA, Attachment 4, Property Type 2.

## ARCHAEOLOGICAL SURVEY REPORT

Caltrans' meeting with the Cultural Resource Director of the Table Mountain Rancheria concluded that the APE is sensitive for cultural deposits, given that an 1850s road and reputed Native American trail once crossed Fancher Creek—the precursor to the portion of the Fresno Canal within the APE—at or very near this location. As a result of this meeting, Caltrans and the Rancheria agreed that archaeological monitoring during the project construction is warranted.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

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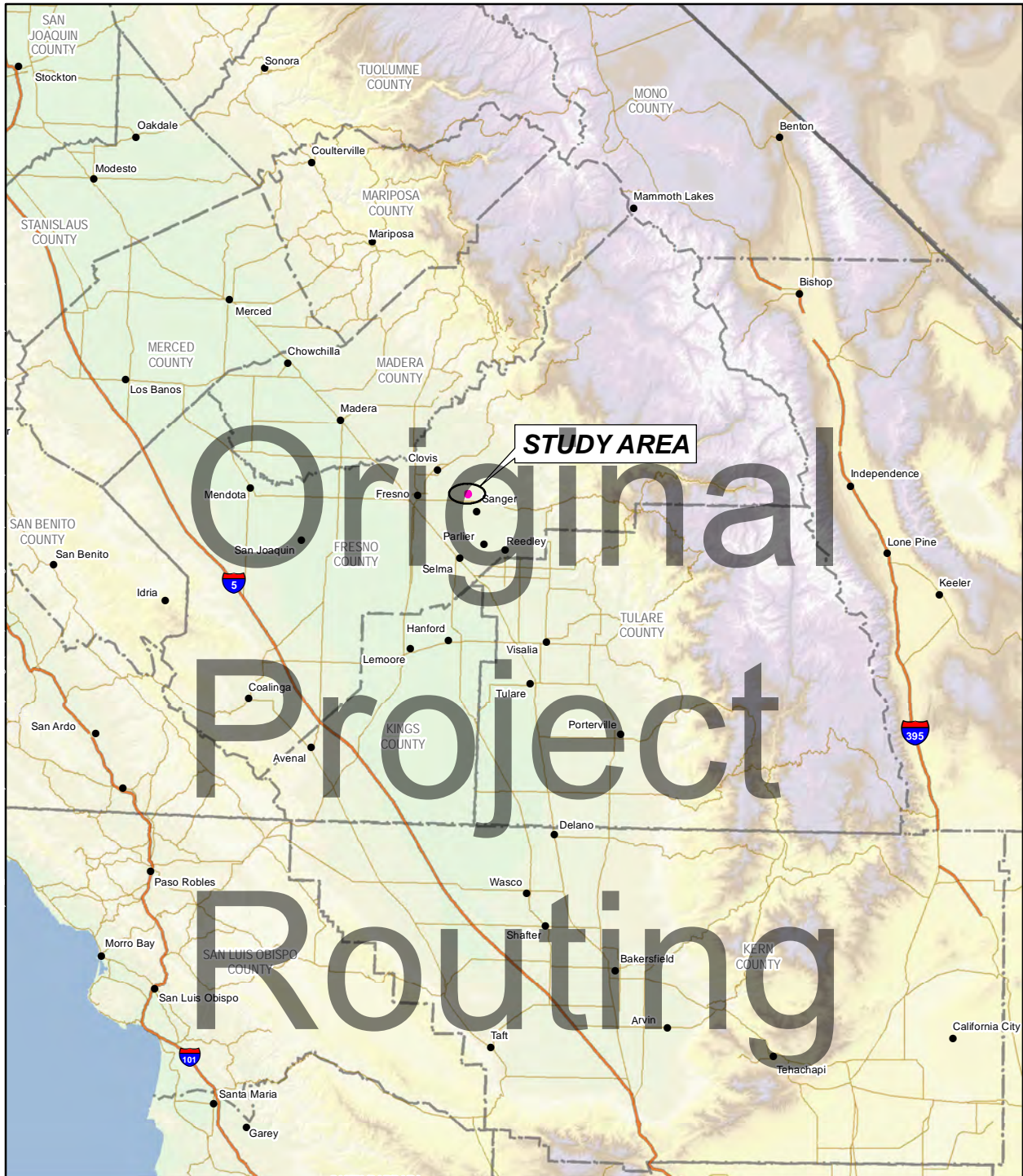
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**APPENDIX A**

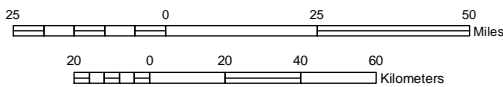
**Maps**

Original  
Project  
Routing

ARCHAEOLOGICAL SURVEY REPORT



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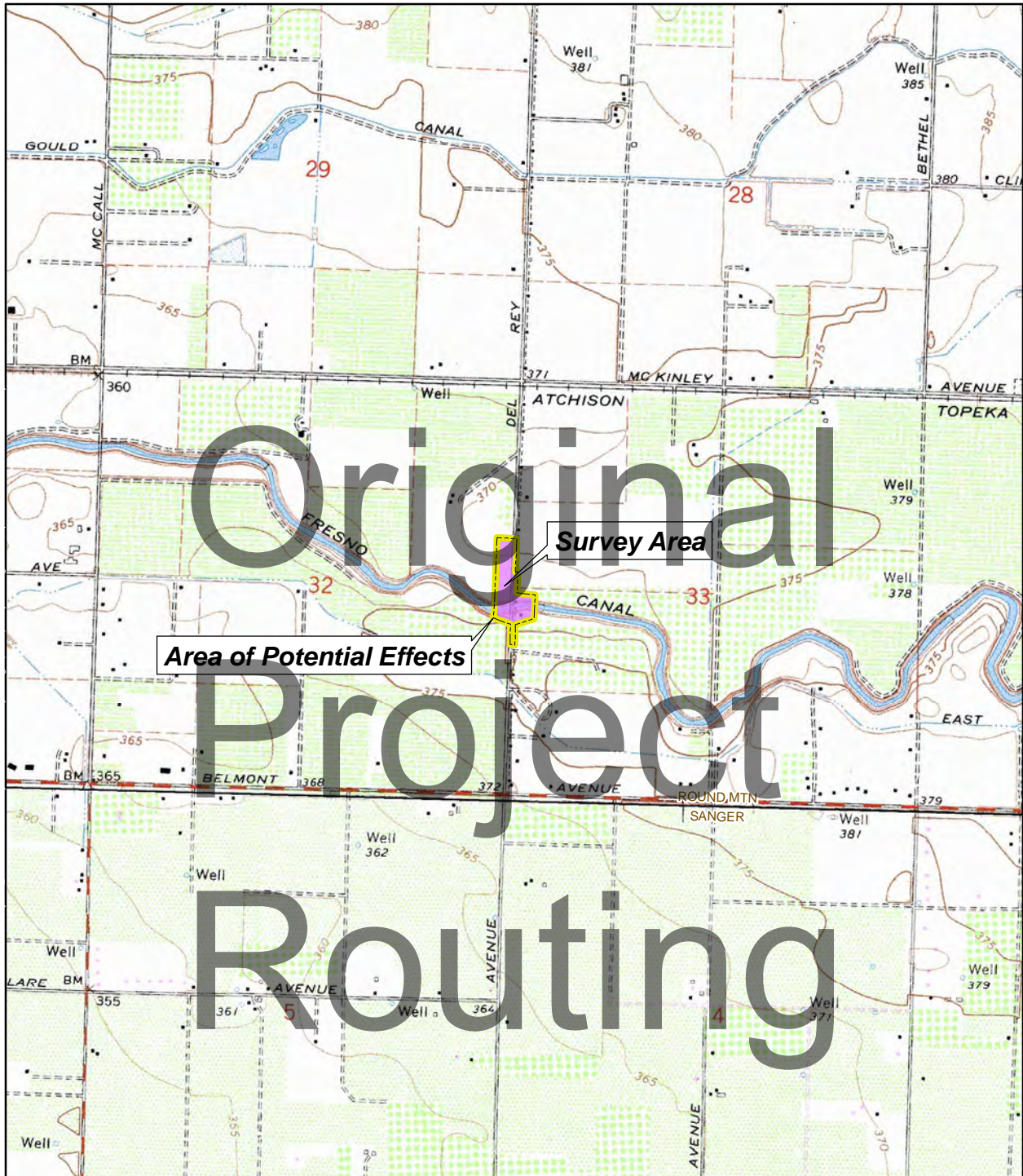
**STUDY VICINITY**

Replacement of Bridge 42C0496  
over Fresno Canal on Del Rey Avenue

Caltrans District 6  
Fresno County

BRLO 5942(249)

ARCHAEOLOGICAL SURVEY REPORT



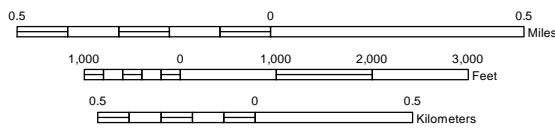
Original  
Project  
Routing

Survey Area

Area of Potential Effects



SCALE 1:24,000



**STUDY LOCATION**

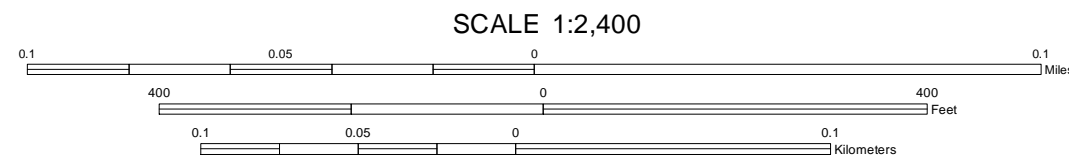
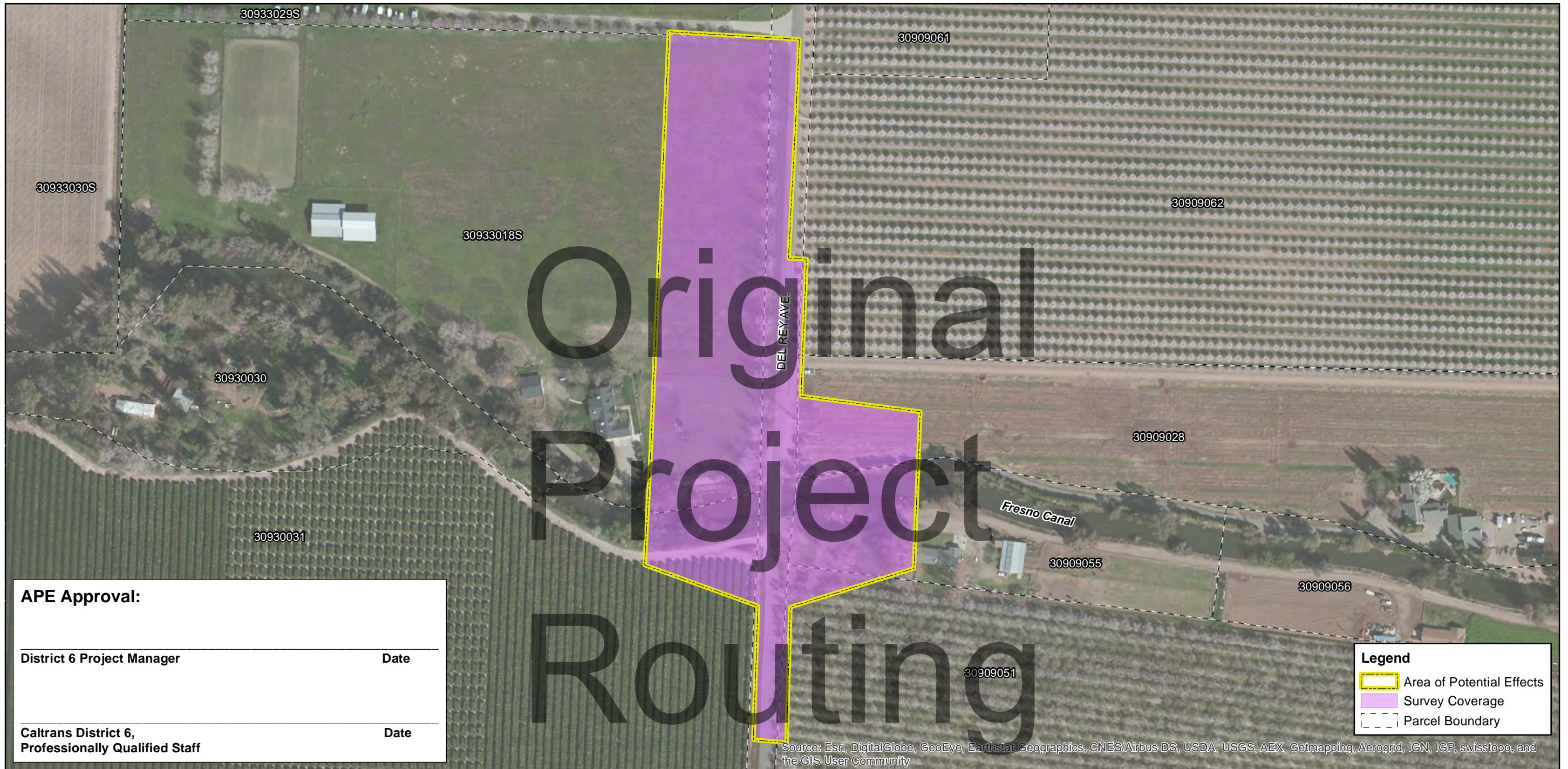
Replacement of Bridge 42C0496  
over Fresno Canal on Del Rey Avenue

Caltrans District 6  
Fresno County

BRLO 5942(249)

Township 13S /Range 22E , Section(s) 32, 33  
Round Mountain (1964-PI1978) , CA 7.5' USGS Quadrangle

ARCHAEOLOGICAL SURVEY REPORT



**SURVEY COVERAGE**  
Replacement of Bridge 42C0496  
over Fresno Canal on Del Rey Avenue

Caltrans District 6  
Fresno County

BRLO 5942(249)

Map 3



**APPENDIX B**

**Records Search Results**

Original  
Project  
Routing



6/30/2016

Katie Asselin  
Applied EarthWorks, Inc.  
1391 W. Shaw Ave., Suite C  
Fresno, CA 93711

Re: Del Rey Avenue Bridge Project  
Records Search File No.: 16-257

The Southern San Joaquin Valley Information Center received your record search request for the project area referenced above, located on the Round Mountain and Sanger USGS 7.5' quads. The following reflects the results of the records search for the project area and the 0.5 mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format:  custom GIS maps  shapefiles  hand-drawn maps

Resources within project area:	None
Resources within 0.5 mile radius:	None
Reports within project area:	None
Reports within 0.5 mile radius:	FR-01043, 01122, 02657

**Resource Database Printout (list):**

enclosed  not requested  nothing listed

**Resource Database Printout (details):**

enclosed  not requested  nothing listed

**Resource Digital Database Records:**

enclosed  not requested  nothing listed

**Report Database Printout (list):**

enclosed  not requested  nothing listed

**Report Database Printout (details):**

enclosed  not requested  nothing listed

**Report Digital Database Records:**

enclosed  not requested  nothing listed

**Resource Record Copies:**

enclosed  not requested  nothing listed

**Report Copies:**

enclosed  not requested  nothing listed

**OHP Historic Properties Directory:**

enclosed  not requested  nothing listed

**Archaeological Determinations of Eligibility:**

enclosed  not requested  nothing listed

**CA Inventory of Historic Resources (1976):**

enclosed  not requested  nothing listed

**Caltrans Bridge Survey:** Not available at SSJVIC; please see  
<http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>

**Ethnographic Information:** Not available at SSJVIC

**Historical Literature:** Not available at SSJVIC

**Historical Maps:** Not available at SSJVIC; please see  
<http://historicalmaps.arcgis.com/usgs/>

**Local Inventories:** Not available at SSJVIC

**GLO and/or Rancho Plat Maps:** Not available at SSJVIC

**Shipwreck Inventory:** Not available at SSJVIC; please see  
[http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks\\_Database.asp](http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp)

**Soil Survey Maps:** Not available at SSJVIC; please see  
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.


The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

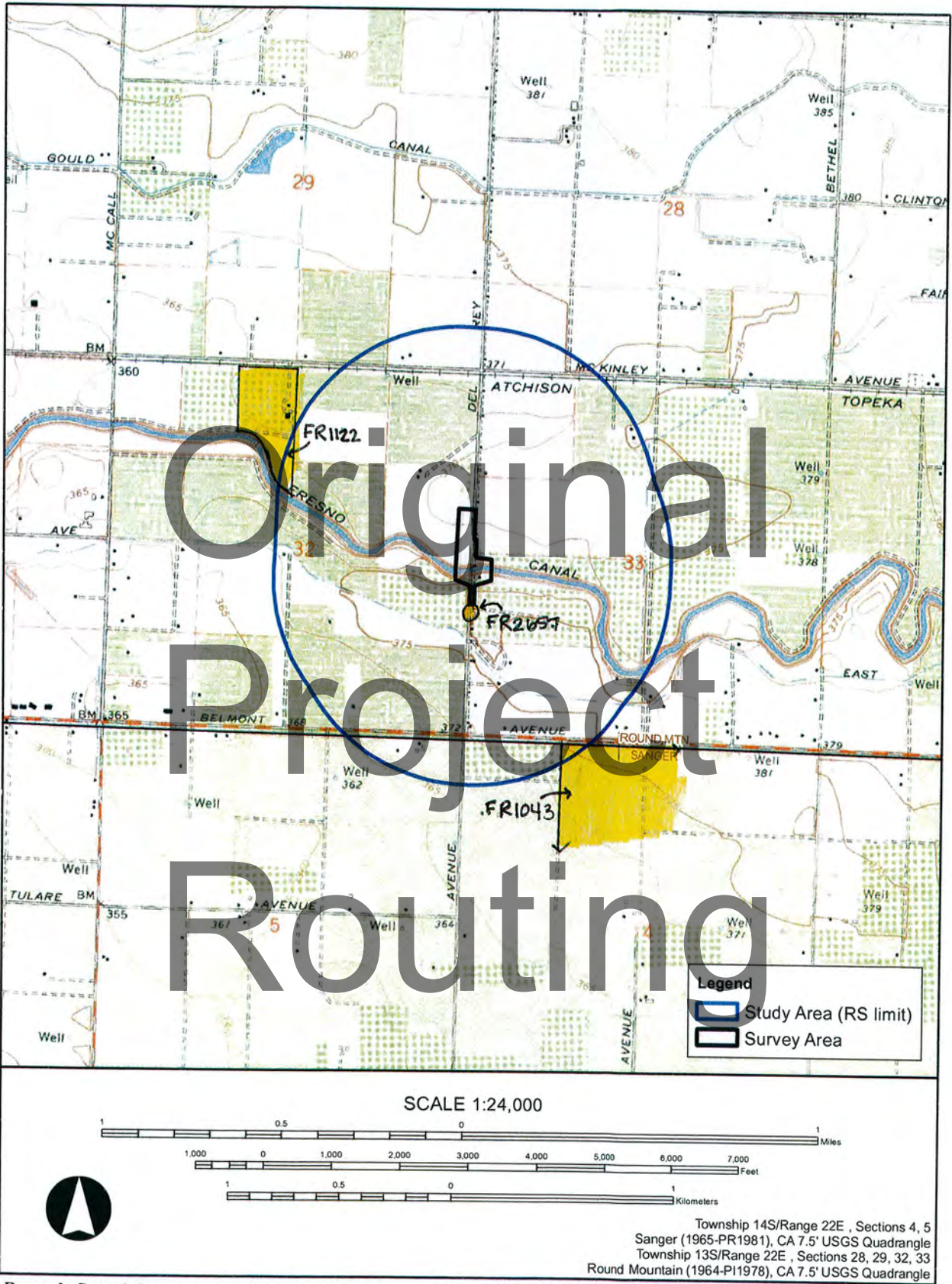
Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

  
Celeste M. Thomson  
Coordinator



Records Search location map for the Del Rey Avenue Bridge Project - 3502.

## Report List

SSJVIC Record Search 16-257

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
FR-01043		1990	Wren, Donald G.	An Archaeological Survey of the Proposed Bel-Indianola Golf Course	individual consultant	
FR-01122		1996	Wren, Donald G.	An Archaeological Survey of the Alan Thomas Property 10467 E. McKinley Avenue, Sanger, California	Individual Consultant	
FR-02657		2013	Unknown	Verizon Cellular Communications Tower Site - N. Del Rey, 1302 Del Rey Ave, Sanger, Fresno County, California 93657	URS Corporation	

Original  
Project  
Routing

**APPENDIX C**

**Native American Consultation**

**Original  
Project  
Routing**

**Native American Consultation Log**  
**Del Rey Avenue Bridge Replacement over Fresno Canal, Fresno County**

Organization	Name	Position	Letter	E-mail	Phone	Summary of Contact
Native American Heritage Commision	Gayle Totton	Associate Governmental Program Analyst		06/20/16		Received email dated 6/20/16 that stated a search of the sacred land file failed to indicate any resources. The NAHC included a list of 17 Native American tribes and individuals to contact.
Santa Rosa Rancheria Tachi Yokut Tribe	Rueben Barrios Sr.	Chairperson	07/06/16		08/12/16	Left phone message. No response to date.
Santa Rosa Rancheria Tachi Yokut Tribe	Lalo Franco	Cultural Coordinator	07/06/16		08/12/16	Left phone message. No response to date.
Table Mountain Rancheria	Leanne Walker-Grant	Chairperson	07/06/16		08/12/16	Left phone message. No response to date.
Table Mountain Rancheria	Bob Pennell	Cultural Resources Director	07/06/16	08/12/16	08/12/16	Table Mountain (Sara Barnett) initially expressed concern for the sensitivity of the area and suggested measures to implement during construction. In a subsequent email, Bob Pennell requested the contact information for Caltrans NHPA Section 106 coordinator in order to continue consultation on the project. AE provided Pennell with Caltrans Contract information in an email dated 8/15/2016.
Table Mountain Rancheria	Michael Russell	Tribal Administrator	07/06/16		08/12/16	Left phone message. No response to date.
Sierra Nevada Native American Coalition	Lawrence Bill	Interim Chairperson	07/06/16		08/12/16	Telephoned but unable to leave message.
Choinumni Tribe of Yokuts	Rosemary Smith	Chairperson	07/06/16	08/12/16		Follow up email. No response to date.
Picayune Rancheria of Chukchansi	Claudia Gonzalea	Chairperson	07/06/16			No further contact information provided.
Picayune Rancheria of Chukchansi	Mary Matola	THPO	07/06/16			No further contact information provided.
Dumna Wo-Wah Tribal Government+A12	Robert Ledger Sr.	Tribal Chairperson	07/06/16		08/12/16	Left phone message. No response to date.
Dumna Wo-Wah Tribal Government+A13	Eric Smith	Cultural Resource Manager	07/06/16		08/12/16	Left phone message. No response to date.
Dumna Wo-Wah Tribal Government	John Ledger	Asst. Cultural Resource Manager	07/06/16		08/12/16	Left phone message. No response to date.

**Native American Consultation Log**  
**Del Rey Avenue Bridge Replacement over Fresno Canal, Fresno County**

<b>Organization</b>	<b>Name</b>	<b>Position</b>	<b>Letter</b>	<b>E-mail</b>	<b>Phone</b>	<b>Summary of Contact</b>
Wuksache Indian Tribe/Eshom Valley Band	Kenneth Woodrow	Chairperson	07/06/16		08/12/16	Telephoned but unable to leave message.
Tule River Indian Tribe	Neil Peyron	Chairperson	07/06/16		08/12/16	Spoke with Ms. Keri Vera, see response below.
Tule River Indian Tribe	Keri Vera	Environmental Department	07/06/16		08/12/16	Spoke on telephone. Ms. Vera stated that this was Table Mountain's area of concern and to reach out to Mr. Bob Pennell. If unable to get a response from Mr. Pennell, please reach back out to Tule River.
Tule River Indian Tribe	Joey Garfield	Tribal Archeologist	07/06/16		08/12/16	No longer works for Tule River Indian Tribe.
Wukchumni Tribal Council	Darlene Tapleras Franco	Chairperson	07/06/16		08/12/16	Left phone message. No response to date.

Original  
Project  
Routing



## NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100  
West Sacramento, CA 95691  
(916) 373-3710  
(916) 373-5471 FAX



June 20, 2016

Katie Asselin  
Applied EarthWorks, Inc.

Sent by E-mail: [kasselin@appliedearthworks.com](mailto:kasselin@appliedearthworks.com)  
Number of Pages: 4

RE: Proposed Del Rey Avenue Bridge Project, near the City of Sanger; Round Mountain USGS Quadrangle,  
Fresno County, California

Dear Ms. Asselin:

Attached is a Contact List of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. A search of the SFL was completed for the USGS quadrangle information provided with negative results.

**Our records indicate that the lead agency for this project has not requested a Native American Consultation List for the purposes of formal consultation.** Contact Lists for cultural resource assessments are different than Consultation Lists. Please note that the intent of the referenced codes below is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 **require public agencies** to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

**Within 14 days** of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
  - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
  - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
  - If the probability is low, moderate, or high that cultural resources are located in the APE.

- Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
  - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
2. The results of any archaeological inventory survey that was conducted, including:
    - Any report that may contain site forms, site significance, and suggested mitigation measures.
    - All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.
  3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission.
  4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
  5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

The results of these searches and surveys should be included in the "Tribal Cultural Resources" subsection of the Cultural Resources section of the environmental document submitted for review.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: [gayle.totton@nahc.ca.gov](mailto:gayle.totton@nahc.ca.gov).

Sincerely,



Gayle Totton, M.A., PhD.  
Associate Governmental Program Analyst

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**Native American Contact List  
Fresno County  
June 20, 2016**

Picayune Rancheria of Chukchansi  
Claudia Gonzalea, Chairperson  
8080 Palm Ave, Suite 207 Chukchansi / Yokut  
Fresno , CA 93711

Sierra Nevada Native American Coalition  
Lawrence Bill, Interim Chairperson  
P.O. Box 125 Mono  
Dunlap , CA 93621 Foothill Yokuts  
(559) 338-2354 Choinumni

Santa Rosa Rancheria Tachi Yokut Tribe  
Rueben Barrios Sr., Chairperson  
P.O. Box 8 Tache  
Lemoore , CA 93245 Tachi  
(559) 924-1278 Yokut

Picayune Rancheria of Chukchansi  
Mary Matola, THPO  
8080 Palm Ave, Suite 207 Chukchansi / Yokut  
Fresno , CA 93711

(559) 924-3583 Fax

Table Mountain Rancheria  
Leanne Walker-Grant, Chairperson  
P.O. Box 410 Yokuts  
Friant , CA 93626  
(559) 822-2587

Table Mountain Rancheria  
Michael Russell, Tribal Administrator  
P.O. Box 410 Yokuts  
Friant , CA 93626  
(559) 822-2587

(559) 822-2693 Fax

(559) 822-2693 Fax

Tule River Indian Tribe  
Neil Peyron, Chairperson  
P.O. Box 589 Yokuts  
Porterville , CA 93258  
chairman@tulerivertribe-nsn.gov  
(559) 781-4271

Table Mountain Rancheria  
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Friant , CA 93626  
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(559) 217-9718 - cell  
(559) 325-0394 Fax

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Dumna Wo-Wah Tribal Government  
Robert Ledger SR., Tribal Chairperson  
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ledgerrobert@ymail.com  
(559) 519-1742 Office

Wuksache Indian Tribe/Eshom Valley Band  
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1179 Rock Haven Ct. Foothill Yokuts  
Salinas , CA 93906 Mono  
kwood8934@aol.com Wuksache  
(831) 443-9702

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person or agency of statutory responsibility as defined in Public Resources Code Sections 21080.3.1 Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Del Rey Avenue Bridge Replacement Project; near the City of Sanger; Round Mountain USGS Quadrangle, Fresno County, California.

**Native American Contact List  
Fresno County  
June 20, 2016**

The Choinumni Tribe of Yokuts  
Rosemary Smith, Chairperson  
1099 Pistachio Avenue Choinumni  
Clovis, CA 96311 Foothill Yokut  
monoclovis@yahoo.com

Tule River Indian Tribe  
Joey Garfield, Tribal Archeological  
P.O. Box 589 Yokuts  
Porterville, CA 93258  
(559) 783-8892

(559) 783-8932 Fax

Santa Rosa Rancheria Tachi Yokut Tribe  
Lalo Franco, Cultural Coordinator  
P.O. Box 8 Tachi  
Lemoore, CA 93245 Tache  
(559) 924-1278 Ext. 5 Yokut

Wukchumni Tribal Council  
Darlene Tapleras Franco, Chairperson  
P.O. Box 6576 Foothill Yokuts  
Visalia, CA 93291 Wukchumni  
(559) 372-8923

(559) 924-3583 Fax

Dumna Wo-Wah Tribal Government  
Eric Smith, Cultural Resource Manager  
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Fresno, CA 93602 Mono  
nuem2007@yahoo.com  
(559) 519-1742

Dumna Wo-Wah Tribal Government  
John Ledger, Assistant Cultural Resource Manager  
2216 East Hammond Street Dumna/Foothill  
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Tule River Indian Tribe  
Kerri Vera, Environmental Department  
P.O. Box 589 Yokuts  
Porterville, CA 93258  
(559) 783-8892

(559) 783-8932 Fax

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**This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Del Rey Avenue Bridge Replacement Project; near the City of Sanger; Round Mountain USGS Quadrangle, Fresno County, California.**



EXAMPLE

1391 W. Shaw Ave., Suite C  
Fresno, CA 93711-3600  
O: (559) 229-1856 | F: (559) 229-2019

July 6, 2016

Rueben Barrios Sr., Chairperson  
Santa Rosa Rancheria Tachi Yokut Tribe  
P.O. Box 8  
Lemoore, CA 93245

RE: Del Rey Avenue Bridge (No. 42C0496) Replacement over Fresno Canal Project, Fresno County.

Mr. Rueben Barrios Sr.,

Applied EarthWorks, Inc. (Æ), under contract to the County of Fresno (County), is providing cultural resources services in support of the Del Rey Avenue Bridge (No. 42C0496) Replacement over Fresno Canal Project (Project). The Project is located on Del Rey Avenue, 0.5 miles south of McKinley Avenue, just northwest of the community of Sanger in Fresno County. The County intends to replace the existing bridge and use adjacent areas for staging. Because the project will receive federal support, it is considered a federal undertaking (per 36 CFR 800.16[y]) subject to the national Historic Preservation Act of 1966, as amended (NHPA). The project is also subject to the California Environmental Quality Act (CEQA).

The project Area of Potential Effects (APE) lies within Township 13 South, Range 22 East, Sections 32 and 33 of the Round Mountain, CA 7.5-minute USGS quadrangle (see attached map). A search of the Native American Heritage Commission (NAHC) Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate project area. Applied EarthWorks, Inc. also requested a records search of the California Historic Resources Information System, Southern San Joaquin Valley Information Center. The records search did not identify any cultural resources within the APE or within 0.5 mile of the APE. There has been three previous cultural resources investigations within 0.5 mile of the APE; however, none have occurred within the APE.

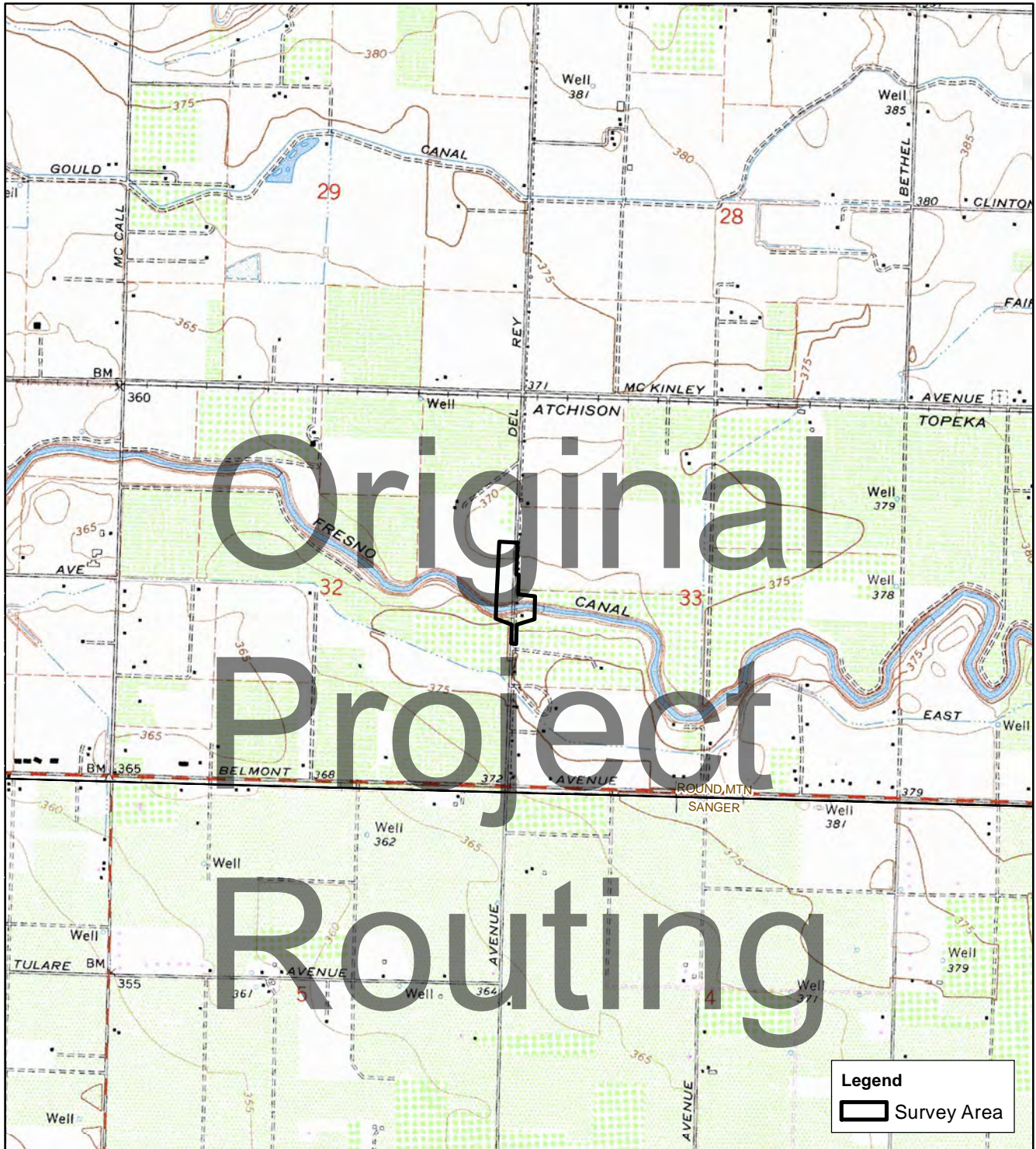
Applied EarthWorks, Inc. will conduct a pedestrian survey of the project area to identify and record cultural resources within the APE. The NAHC provided your name and address as someone who might have information on sacred sites, tribal cultural resources, or other important sites in the project area. If you have any information that you wish to share, or have questions or would like more information about the project, please do not hesitate to contact me by phone (559) 229-1856, email (kasselin@appliedearthworks.com), or send a letter to my attention. I would appreciate any information you might provide to assist us with our inventory efforts. Be assured that any locations of archaeological sites, cemeteries, or sacred places will be treated confidentially, as required by law, and not disclosed in any document available to the general public.

Sincerely,

A handwritten signature in black ink that reads "Katie Asselin".

Katie Asselin, M.A., RPA  
Associate Archaeologist

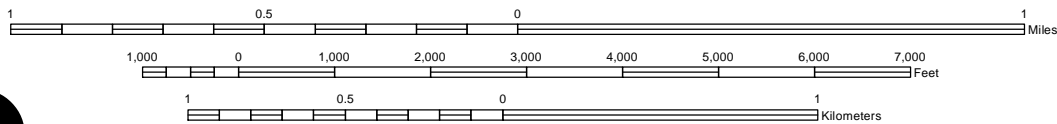
encl.: Project Location Map



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**Legend**  
 Survey Area

SCALE 1:24,000



Township 13S/Range 22E, Sections 32, 33  
 Round Mountain (1964-PI1978), CA 7.5' USGS Quadrangle

NAHC location map for the Del Rey Avenue Bridge Project - 3502.



**HAZARDOUS WASTE  
INITIAL SITE ASSESSMENT**

*Federal Project No. BRLO 5942 (249)  
Fresno Canal Bridge  
Fresno County, California*

November 11, 2015

Prepared by:  
**Haro Environmental**  
Project 6013-2015

In conjunction with:  
**SWCA Environmental Consultants**  
1422 Monterey Street, Suite C200  
San Luis Obispo, California

*Prepared for:*

**County of Fresno**  
**Erin Haagenson**  
2220 Tulare Street, Suite 600  
Fresno, CA 93721

*Prepared by:*

*Elliot R. Haro*

---

Elliot R. Haro  
Principal Scientist

*Reviewed by:*

*TJ*

---

Timothy Nelligan  
Professional Engineer

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- Plate 1 Site Vicinity Map
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- Appendix A – Regulatory Records and Historical Documentation Reports  
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- Appendix B – Preliminary Environmental Study
- Appendix C – Photo Log
- Appendix D – Caltrans Unknown Hazards Procedures
- Appendix E – Qualifications

## EXECUTIVE SUMMARY

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This Hazardous Waste Initial Site Assessment (ISA) was performed by Haro Environmental, Inc. in conjunction with SWCA Environmental Consultants (SWCA) for the County of Fresno (county) in support of the Federal Project BRLO-5942 (249) Fresno Canal Bridge (project) in the County of Fresno, California. A site vicinity map is provided on Plate 1. The area evaluated for this ISA, defined as the “project area,” includes those areas which would be disturbed during construction of the proposed project (refer to Plate 2 for identification of the project area). Haro Environmental performed this ISA consistent with the California Department of Transportation (Caltrans) Environmental Guidance Handbook, Volume 1, Chapter 10 Hazardous Materials, Hazardous Waste, and Contamination, Initial Site Assessment (Caltrans, 2014b), and the American Society for Testing and Materials (ASTM) Practice E-1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard). Exceptions to, or deletions from, this practice are described in this report.

The purpose of this assessment was to identify known, potential, and historic recognized environmental conditions (RECs) resulting from historic and/or current uses of hazardous substances or petroleum products at the project area. We understand SWCA has requested this ISA on behalf of the County of Fresno (project proponent). The findings of this assessment are based on Haro Environmental’s knowledge of the project area from observations and information gathered during this ISA.

The project area occupies approximately 500 feet south and 1,000 feet north of Fresno Canal Bridge No. 42C0496, along North Del Rey Avenue, extending approximately 300 feet east and west with a staging area located northwest of the Fresno Canal Bridge. Elevation at the project area is approximately 363 feet about mean sea level (MSL) with relief in the area sloping towards the north. The proposed project consists of replacing the existing timber two-lane bridge with a two-lane concrete bridge. The work to be done consists of roads cuts and fill to an undefined depth, widening of road, pile driving, and demolition. A negligible amount of Right of Way will be acquired to accommodate street widening. Utility relocation will be required.

Results of a regulatory agency database search performed by Environmental Database Resources (EDR) indicate the project area was not listed in any of the databases searched. One active nearby property was listed; however, based on the type and detail of listing (non-release site and no violations) and on the distance from the Fresno Canal Bridge, the one listed site would not be expected to pose an environmental concern to the project area.

A review of historic aerial photographs, topographic maps, and city directory listings indicate the Fresno Canal Bridge was present by at least 1922, and agricultural land uses and rural residences have been present since at least 1937.

A field visit of the project area was conducted by a Haro Environmental representative on October 19, 2015. During the field visit, Haro Environmental did not observe hazardous materials and/or petroleum products under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. No hazardous materials or petroleum products were observed at off-site, nearby properties under current conditions that would pose a significant environmental concern to the project area. A pole-mounted electrical transformer was observed on the west side of N. Del Rey Avenue, approximately 100 feet north of the Fresno Canal Bridge.

Based on the data gathered and reviewed during this ISA, Haro Environmental did not identify RECs that have impacted, or pose a significant environmental threat to the project area with the exception of the following:

- The concrete used to construct Fresno Canal Bridge may contain asbestos.
- The pole-mounted transformer may contain PCBs.

Based on the findings of this ISA, Haro Environmental provides the following recommendations:

- An asbestos survey should be performed to determine whether or not the concrete will require special handling and disposal.
- The electrical company responsible for the electrical transformer should be contacted to determine if the transformer contains PCBs, and if so, the transformer should be properly disposed of in accordance with all applicable rules and regulations.
- Testing and removal requirements for yellow traffic striping and pavement marking materials should be performed in accordance with Caltrans Construction Policy Bulletin 99-2 (Caltrans Construction Manual Chapter 7-107E; Caltrans, 2014a).

Haro Environmental provides the following general recommendations:

- As for all projects proposing excavation or grading, the potential exists for unknown hazardous contamination to be encountered during the project construction. Therefore, for any previously unknown hazardous waste/material encountered as part of construction of the proposed project, the procedures outlined in Appendix E (Caltrans Unknown Hazards Procedures) shall be followed (Caltrans, 2002).

Based on the information gathered and reviewed during preparation of this ISA, the potential appears low for hazardous materials to be encountered during the project, and as such, the potential impact to the overall project scope, cost, and schedule from hazardous materials is expected to be low.

# Original Project Routing

## 1.0 INTRODUCTION

---

This Hazardous Waste Initial Site Assessment (ISA) was performed by Haro Environmental, Inc. in conjunction with SWCA Environmental Consultants (SWCA) for the County of Fresno in support of the Federal Project BRLO-5942 (249) Fresno Canal Bridge (project) in the County of Fresno, California. A site vicinity map is provided on Plate 1. The area evaluated for this ISA, defined as the “project area,” includes those areas which would be disturbed during construction of the proposed project (refer to Plate 2 for identification of the project area). Haro Environmental performed this ISA consistent with the California Department of Transportation (Caltrans) Environmental Guidance Handbook, Volume 1, Chapter 10 Hazardous Materials, Hazardous Waste, and Contamination, Initial Site Assessment (Caltrans, 2014b), and the American Society for Testing and Materials (ASTM) Practice E-1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard). Exceptions to, or deletions from, this practice are described in this report.

### 1.1 PURPOSE

This ISA was performed to identify potential hazardous materials encountered during implementation of the proposed project. We understand the County of Fresno has requested this ISA to meet the requirement for federal funding of the proposed project. In addition, we understand that the project is federally funded; however, no land will be deeded over to Caltrans from the County. Although the purpose of this assessment is to identify potential hazardous materials encountered during the proposed project, the identification of recognized environmental conditions (RECs) was used to maintain consistency with the ASTM Standard.

The ASTM Standard defines a REC as:

“The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate

governmental agencies. Conditions determined to be *de minimis* are not recognized environmental conditions”

The ASTM Standard defines a historical REC as:

“An environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently.” For example, a historical REC could be identified if a past release of any hazardous substances or petroleum products has occurred in connection with the property and has been remediated to the satisfaction of the lead regulatory agency as evidenced by a no further action letter or a case closure determination.”

At the request of SWCA, on behalf of the County of Fresno, Haro Environmental has completed this ISA. This report is subject to the limitations presented in this ISA report. This report describes Haro Environmental’s assessment methodology, presents our findings, and provides our opinion as to the potential presence of RECs in connection with the project area.

## 1.2 SCOPE OF SERVICES

The scope of services conducted for this study included the following tasks:

- Perform an on-site reconnaissance to identify indicators of the existence of hazardous materials or petroleum products.
- Observe adjacent or nearby properties from the project area and public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials or petroleum products.
- Obtain and review an environmental records database search from Environmental Data Resources, Inc. (EDR) to acquire information about the potential for hazardous materials to exist on-site or at nearby properties.
- Review the current U.S. Geological Survey (USGS) topographic map to obtain information about topography and uses of the project area and nearby properties.

- Review historic aerial photographs, topographic maps, Sanborn Fire Insurance Maps, and historic city directory listings, if available, to obtain information about historic uses of the project area and adjacent properties.
- Review California Division of Oil, Gas and Geothermal Resources records to obtain information about historic oil and gas activity in the vicinity of the project area.
- Conduct interviews with persons familiar with the project area development and local and/or State government agencies, as warranted, to obtain information about current and historic uses of the property.
- Prepare this report documenting the findings of the ISA.

The scope of services did not include any inquiries with respect to non-scope ASTM considerations including, but not limited to, mold, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, electromagnetic fields or geologic hazards.

# Original Project Routing

## 2.0 PROJECT INFORMATION

A description of the proposed project setting is presented in this section and describes the condition of the project area at the time of the ISA. Tables 2-1 and 2-2 summarize the physical characteristics of the project area and adjoining properties. A Site and Adjacent Land Use Map is provided on Plate 2.

### 2.1 PROJECT DESCRIPTION

The project area occupies approximately 500 feet south and 1,000 feet north of Fresno Canal Bridge No. 42C0496, along North Del Rey Avenue, extending approximately 300 feet east and west with a staging area located northwest of the Fresno Canal Bridge. Elevation at the project area is approximately 363 feet about mean sea level (MSL) with relief in the area sloping towards the north. The proposed project consists of replacing the existing timber two-lane bridge with a two-lane concrete bridge. The work to be done consists of roads cuts and fill to an undefined depth, widening of road, pile driving, and demolition. A negligible amount of Right of Way will be acquired to accommodate street widening. Utility relocation is anticipated.

### 2.2 PROJECT AREA DESCRIPTION

Table 2-1 provides a summary of the physical location and size of the project area, as well as the current and proposed land uses. This information was obtained from review of various maps (such as topographic maps and tax assessor maps) and aerial photographs. Additional site description information was obtained during the site visit. Please refer to the Section 5.0 for site reconnaissance information.

**TABLE 2-1  
PROJECT AREA LOCATION AND LAND USE**

<b>Parameter</b>	<b>Information/Comments</b>
Location	The project area is located north and south of the Fresno Canal Bridge along North Del Rey Avenue. The project area is located in an area of agricultural and rural residential land uses.
Assessor's Parcel Nos. (APNs)	The project area is located within APNs 309-30-31, 309-33-18S, and 309-09-55.
Section, Township, and Range	Sections 33, Township 13 South, Range 22 East of the Mount Diablo Base and Meridian.
Current Use	Fresno Canal Bridge No. 42C0496



## 2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

Information on regional geology and hydrogeology is presented in Table 2-2. This information was obtained from published data and maps of the project area vicinity.

**TABLE 2-2  
PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS**

<b>Geologic/Hydrogeologic Parameter</b>	<b>Information/Comments</b>
Project Area Topography	Based on a review of the USGS 5603242 Round Mountain, California 7.5-Minute Topographic Quadrangle Map dated 2012, elevation at the project area is approximately 363 feet above MSL. The site has a gentle slope north.
Project Area Geology and Soil Types	<p>The project area is located within the Great Valley Geomorphic Province in California (CGS, 2002). The Great Valley is an alluvial plain, extending approximately 50 miles wide by 400 miles long. The northern part is identified as the Sacramento Valley (drained by the Sacramento River) and the southern part is identified as the San Joaquin Valley (drained by the San Joaquin River). The Great Valley is a trough in which sediments have been deposited almost continuously since the Jurassic period (about 160 million years ago). The Great Valley is bound by the Klamath Mountains to the north, the Sierra Nevada to the east, the Coast Ranges to the west, and the Tehachapi Mountains to the south.</p> <p>According to the Geologic Atlas of California – Fresno Sheet (CGS, 1965), geologic deposits beneath the site consist of alluvial fan deposits.</p> <p>Based on information provided in the Geo-Check® section of the EDR report (Appendix A), soils at the project area include the Atwater sandy loam series. These soils are deep to moderately deep and are well drained, and have a sandy loam surface texture with moderate infiltration.</p>
Project Area Hydrogeologic Setting	<p>The site is located within the Kings Subbasin of the San Joaquin Valley Groundwater Basin (DWR, 2006). The San Joaquin Valley represents the southern portion of the Great Central Valley of California. The San Joaquin Valley is a structural trough up to 200 miles long and 70 miles wide filled with up to 32,000 feet of marine and continental sediments deposited during periodic inundation by the Pacific Ocean and by erosion of the surrounding mountains, respectively. Sediments that comprise the shallow-to-intermediate depth of water-bearing deposits in the groundwater subbasin are primarily continental deposits of Tertiary and Quaternary age.</p> <p>According to the GeoCheck® section of the EDR report (Appendix A), no groundwater wells are located within a one-quarter mile radius of the site. The nearest surface water body is the Fresno Canal located within the project area. No groundwater wells are located within the project area.</p>

## **2.4 ADJOINING AREA LAND USE**

A drive-by survey of the land adjoining the project area was performed by Haro Environmental personnel on October 19, 2015. The results of this survey indicate agricultural and rural residential land uses are present in the vicinity of the project area. The project area and adjoining land uses are depicted on Plate 2.

## **2.5 LOCATION AND LEGAL DESCRIPTIONS**

The project area is located along North Del Rey Avenue, north and south of Fresno Canal Bridge in Fresno County.

## **2.6 USER PROVIDED INFORMATION**

The Preliminary Environmental Study (PES) prepared by Ms. Erin Haagenson was reviewed as part of this ISA and a copy is provided in Appendix B. Based on the answers to the questions in the PES, Ms. Haagenson indicated he was not aware of the presence of railroads or hazardous materials associated with the project, and that there are no clean-up or listed sites with the vicinity of the project area.

## **2.7 ENVIRONMENTAL LIENS**

No environmental lien search was conducted by the user or preparer of this ISA report.

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### 3.0 RECORDS REVIEW

Government agency database records are sources of information that may be helpful in evaluating activities that may have contributed to a release of hazardous substances or petroleum products to soil and/or groundwater. Haro Environmental contracted a government agency database search from EDR. A copy of the EDR report, which specifies the approximate minimum search distance for each public list as defined in the ASTM Standard, is included as Appendix A. Properties that were identified within the approximate minimum search distance from the site, as stated in the ASTM Standards, are listed in Table 3-1, EDR Listing Summary (see Appendix A for acronyms used by EDR). The project area was not listed in any of the databases searched by EDR. One (1) nearby site was listed in the following database: Statewide Environmental Evaluation and Planning System Underground Storage Tank Database (SWEEPS UST), and EDR Historical Underground Storage Tank database (HIST UST).

**TABLE 3-1  
EDR LISTING SUMMARY**

Site Name	Site Address	Distance/Direction from Project Site	Database Reference
Victor Martinez	1683 N. Dey Rey	1,200 feet – North	SWEEPS UST, HIST UST

### 3.1 RESULTS OF DATABASE SEARCH

The following sections contain information on the results of the government records search conducted by EDR. Opinions presented below are based on information provided in the EDR report (unless otherwise noted) and on criteria such as distance from the project area, anticipated groundwater movement and direction in the vicinity of the project area, and the nature of any reported unauthorized releases. In assessing the potential impact to buildings, materials, soil, soil vapor, and/or groundwater beneath the project area, the shallowest groundwater was considered with an anticipated groundwater movement direction assumed to be south, southwest.

#### 3.1.1 Subject Property

The project area was not listed in the databases searched by EDR.

### **3.1.2 Adjacent Properties**

No immediately adjacent properties were listed in the databases searched by EDR.

### **3.1.3 Nearby Properties**

#### **Victor Martinez (1,200 Feet – North) – 1683 North Del Rey Avenue**

The Victor Martinez site was listed in the EDR HIST UST and SWEEPS UST databases. The site contains three underground storage tanks which contain: leaded, unleaded, and diesel fuel. Due to the lack of reported violations and release, and the distance of this site from the project area, the Victor Martinez site would not be expected to pose an environmental concern to the project area.

### **3.1.4 EDR Orphan List**

Sites that have poor or inadequate address information are not plotted by EDR and are referred to as orphan sites. One unmapped orphan site was listed in the EDR Report. The orphan summary/unmapped sites report was reviewed by Haro Environmental to assess the potential for off-site properties to affect the project area. Because they have incomplete addresses, this orphan site is not practicably reviewable as defined by the ASTM standard. However, based upon the street names, locations reported, and Haro Environmental's knowledge of the area, the one orphan/unmapped site does not have the potential to impact the project area.

### **3.1.5 Non-ASTM Issues**

Assessment of non-ASTM issues including, but not limited to, mold, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, electromagnetic fields or geologic hazards was not included as part of this ISA. According to the National Wetland Inventory Map, the project area is not located within a wetland (USFWS, 2014).

## **3.2 OTHER RECORDS REVIEWED**

### **3.2.1 Public Agency Records**

The National Pipeline Mapping System maintained by the Pipeline and Hazardous Materials Safety Administration was reviewed for the presence of gas and hazardous liquid transmission pipelines, and the

results indicate there are no mapped pipelines located within a one-mile radius of the project area (PHMSA, 2015).

The following additional public agencies were contacted regarding files for the project area and indicated no files are available:

- Fresno County Department Public Health – Environmental Health Division
- Regional Water Quality Control Board – Central Valley Region
- California Department of Toxic Substances Control
- San Joaquin Valley Unified Air Pollution Control District

### **3.2.2 Previous Environmental Reports**

No previous environmental reports were provided for review.

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## 4.0 PROJECT AREA HISTORY

The history of the project area was researched to identify obvious uses of the project area as early as the first developed use, or at least 40 years ago, whichever is earlier or readily available. Four data gaps since 1940 of greater than 5 years was identified in the historical records reviewed and included the years from 1937 to 1946, from 1950 to 1957, from 1965 to 1970, and from 1970 to 1975. These data gaps are considered insignificant because the project area use appears to be similar during the data gaps.

### 4.1 AERIAL PHOTOGRAPHS

A review of historical aerial photography may indicate past activities at a property that may not be documented by other means, or observed during a site visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from several historical photograph collections through EDR. A tabulation of the aerial photographs reviewed is presented in Table 4-1.

**TABLE 4-1  
HISTORICAL AERIAL PHOTOGRAPHS REVIEWED**

Date	Approximate Scale	Source
1937	1" = 500'	USGS
1946	1" = 500'	USGS
1950	1" = 500'	USGS
1957	1" = 500'	Cartwright
1962	1" = 500'	USGS
1970	1" = 500'	Cartwright
1984	1" = 500'	USGS
1987	1" = 500'	USGS
1998	1" = 500'	USGS/DOQQ
2005	1" = 500'	USDA/NAIP
2006	1" = 500'	USDA/NAIP
2009	1" = 500'	USDA/NAIP
2010	1" = 500'	USDA/NAIP
2012	1" = 500'	USDA/NAIP

**Note:** Aerial photographs only provide information on indications of land use and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of photographs alone.

Copies of the reviewed aerial photographs are included in Appendix A. The following is a summary of our review of these photographs.

- **1937** – Light duty road is located in the present day location of North Dey Rey Avenue. In the vicinity of the project area, the surrounding lands appear to be utilized as by agricultural fields with two structures.
- **1946** – The project area and nearby properties appear similar to the 1937 aerial photograph.
- **1950** – The project area and nearby properties appear similar to the 1946 aerial photograph.
- **1957** – The project area and nearby properties appear similar to the 1950 aerial photograph.
- **1962** – The project area and nearby properties appear similar to the 1957 aerial photograph.
- **1970** – The project area and nearby properties appear similar to the 1962 aerial photograph.
- **1984** – The project area and nearby properties appear similar to the 1970 aerial photograph with the change of the light duty road to a primary road.
- **1987** – The project area and nearby properties appear similar to the 1984 aerial photograph.
- **1998** – The project area and nearby properties appear similar to the 1984 aerial photograph with the addition of rural agricultural homes adjacent to the agricultural fields.
- **2005** – The project area and nearby properties appear similar to the 1998 aerial photograph.
- **2006** – The project area and nearby properties appear similar to the 2005 aerial photograph.
- **2009** – The project area and nearby properties appear similar to the 2006 aerial photograph.
- **2010** – The project area and nearby properties appear similar to the 2009 aerial photograph.
- **2012** – The project area and nearby properties appear similar to the 2010 aerial photograph.

## 4.2 HISTORICAL TOPOGRAPHIC MAPS

Haro Environmental reviewed historical topographic maps of the project area vicinity. The topographic maps reviewed for this assessment are listed below in Table 4-2.

**TABLE 4-2  
HISTORICAL TOPOGRAPHIC MAPS REVIEWED**

Year	Quadrangle	Series	Scale
1922	Round Mountain	7.5 minute	1: 31,680
1923	Sanger	7.5 minute	1: 31,680
1946	Clovis	15 minute	1:62,500
1946	Selma	15 minute	1:62,500
1947	Sanger	7.5 minute	1:24,000
1948	Round Mountain	7.5 minute	1:25,000
1964	Round Mountain	7.5 minute	1:24,000
1965	Sanger	7.5 minute	1:24,000
1978	Round Mountain	7.5 minute	1:24,000
1981	Sanger	7.5 minute	1:24,000

The following is a summary of our review of the maps.

- **1922** – The project area is depicted with the bridge. North Del Rey Avenue is depicted in its present day location as a light duty road. The surrounding land is depicted as undeveloped.
- **1923** – The project area and surrounding properties are depicted similar to the 1922.
- **1946** – The project area is depicted similar to the 1923 map with the conversion of undeveloped land to agricultural land in the surrounding properties.
- **1947** – The project area and surrounding properties are depicted similar to the 1946 map.
- **1948** – The project area and surrounding properties are depicted similar to the 1946 map with the addition of a few structures.
- **1964** – The project area and surrounding properties are depicted similar to the 1948 map.



- **1965** – The project area and surrounding properties are depicted similar to the 1964 map with the expansion of the agricultural land use.
- **1978** – The project area and surrounding properties are depicted similar to the 1965 map.
- **1981** – The project area and surrounding properties are depicted similar to the 1978 map.

#### **4.3 SANBORN® FIRE INSURANCE MAPS**

Sanborn® Fire Insurance Maps provide historical land use information in some metropolitan areas and small, established towns. EDR indicated Sanborn® Fire Insurance Maps are not available for the project area. A copy of the no-coverage letter is included in Appendix A.

#### **4.4 CITY DIRECTORIES**

Haro Environmental contacted EDR to obtain a historical City Directory Abstract, which lists the names and/or businesses that historically occupied an address. The City Directory Abstract, which covers the period from 1975 to 2013, provides tenant information for an address and/or adjoining streets. In general, residential listings were noted for surrounding properties, and is consistent with the agricultural residential setting of the project area. The complete EDR City Directory Abstract listing results is provided in Appendix A.

#### **4.5 OIL AND GAS MAPS**

Maps provided online by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) were reviewed to determine the current and historic presence of oil and gas wells in the vicinity of the project area (DOGGR, 2003). The maps indicated there are no oil or gas wells located within a one-quarter-mile radius of the project area.

#### **4.6 CHAIN OF TITLE RECORDS**

Haro Environmental was not provided a Preliminary Title Report for the project area.

## 5.0 SITE RECONNAISSANCE AND INTERVIEWS

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### 5.1 SITE RECONNAISSANCE

Haro Environmental's assessment activities included a site reconnaissance. This section summarizes the findings from the site reconnaissance.

#### 5.1.1 Methodology and Limiting Conditions

Haro Environmental performed a reconnaissance of the project area on October 19, 2015. The project area reconnaissance was conducted by observing the project area and adjacent properties from public thoroughfares. The purpose of the site reconnaissance was to identify the presence or likely presence of hazardous substances or petroleum products under conditions that indicate an existing release, a past release, or threat of release into soil, groundwater, or surface water at the project area (RECs). Observations from the site reconnaissance are summarized in the following sections. A photo log of photographs taken during the site reconnaissance is provided in Appendix C.

#### 5.1.2 Current Use of the Property and Adjoining Properties

The project area is currently developed as primary road on North Dey Rey Avenue. The project area occupies approximately 500 feet south and 1,000 feet north of Fresno Canal Bridge No. 42C0496, along North Del Rey Avenue, extending approximately 300 feet east and west with a staging area located northwest of the Fresno Canal Bridge. The primary land use of the area is agricultural land with few rural homes. Project area and adjoining land uses are depicted on Plate 2.

#### 5.1.3 General Description of Structures

One two-lane timber bridge is located within the project area.

#### 5.1.4 Interior and Exterior Observations

No buildings are located within the project area.

### **5.1.5 Hazardous Substances and Petroleum Products**

No hazardous substances were observed at the project area.

### **5.1.6 Unidentified Substance Containers**

Unidentified hazardous substance containers or unidentified containers that might contain hazardous substances were not observed during the site reconnaissance.

### **5.1.7 Storage Tanks**

During the site reconnaissance, Haro Environmental did not observe evidence of underground storage tanks (USTs) or above ground storage tanks (ASTs) at the project area.

### **5.1.8 Odors**

During the site reconnaissance, Haro Environmental did not identify any strong, pungent, or noxious odors.

### **5.1.9 Pools of Liquid**

During the site reconnaissance Haro Environmental did not identify any pools of liquid or standing surface water. In addition, sumps containing liquids such as hazardous substances or spent petroleum products were not observed.

### **5.1.10 Drums**

During the site reconnaissance, Haro Environmental did not observe drums at the project area. A drum is a container (typically, but not necessarily, holding 55-gallons of liquid) that may be used to store hazardous substances or petroleum products.

### 5.1.11 Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Haro Environmental did not observe evidence of PCBs onsite. A pole-mounted electrical transformer was observed on the west side of N. Del Rey Avenue, approximately 100 feet north of the Fresno Canal Bridge.

### 5.1.12 Other Conditions of Concern

During the site reconnaissance, Haro Environmental did not note any of the following:

- Corrosion
- Clarifiers, and/or sumps
- Stressed vegetation
- Waste water
- Storm drains
- Ponds
- Septic tanks

The concrete used to construct the Fresno Canal Bridge may contain asbestos.

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## 6.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

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This Hazardous Waste ISA was performed by Haro Environmental, Inc. in conjunction with SWCA for the Federal Project BRLO-5942 (249) Fresno Canal Bridge (project) in the County of Fresno, California. The area evaluated for this ISA, defined as the “project area,” includes those areas, which will be disturbed during construction of the proposed project. Haro Environmental performed this ISA consistent with the Caltrans Environmental Guidance Handbook, Volume 1, Chapter 10 Hazardous Materials, Hazardous Waste, and Contamination, Initial Site Assessment (Caltrans, 2014b), and the ASTM Practice E-1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Exceptions to, or deletions from, this practice are described in this report.

Based on the data gathered and reviewed during this ISA, Haro Environmental did not identify RECs that have impacted, or pose a significant environmental threat to the project area with the exception of the following:

- The concrete used to construct Fresno Canal Bridge may contain asbestos.
- The pole-mounted transformer may contain PCBs.

Based on the findings of this ISA, Haro Environmental provides the following recommendations:

- An asbestos survey should be performed to determine whether or not the concrete will require special handling and disposal.
- The electrical company responsible for the electrical transformer should be contacted to determine if the transformer contains PCBs, and if so, the transformer should be properly disposed of in accordance with all applicable rules and regulations.
- Testing and removal requirements for yellow traffic striping and pavement marking materials should be performed in accordance with Caltrans Construction Policy Bulletin 99-2 (Caltrans Construction Manual Chapter 7-107E; Caltrans, 2014a).

Haro Environmental provides the following general recommendations:

- As for all projects proposing excavation or grading, the potential exists for unknown hazardous contamination to be encountered during the project construction. Therefore, for any previously unknown hazardous waste/material encountered as part of construction of the proposed project,

the procedures outlined in Appendix E (Caltrans Unknown Hazards Procedures) shall be followed (Caltrans, 2002).

Based on the information gathered and reviewed during preparation of this ISA, the potential appears low for hazardous materials to be encountered during the project, and as such, the potential impact to the overall project scope, cost, and schedule from hazardous materials is expected to be low.

# Original Project Routing

## 7.0 STANDARD OF CARE

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The findings and conclusions contained in this ISA are based upon professional opinions with regard to the subject matter. These conclusions have been made in accordance with currently accepted industry standards and practices applicable to this location and are subject to the following inherent limitations:

**Accuracy of Information.** Certain information utilized by Haro Environmental in this assessment has been obtained, reviewed, and evaluated from various sources believed to be reliable. Although Haro Environmental's conclusions, opinions, and recommendations are based, in part, on such information, Haro Environmental's services did not include the verification of the information's accuracy or authenticity. Should such information prove to be inaccurate or unreliable, Haro Environmental reserves the right to amend or revise its conclusions, opinions and/or recommendations.

**Reconnaissance.** Haro Environmental performed a reconnaissance of the project area that is the subject of this assessment to document current conditions. No known areas were inaccessible at the time of our reconnaissance.

**Limitations.** Haro Environmental does not guarantee that the project area is free of hazardous or potentially hazardous materials or conditions, or that latent or undiscovered conditions will not become evident in the future. This assessment has been prepared in accordance with currently accepted industry standards, and no other warranties, representations, or certifications are made. Unless stated otherwise herein, this report is intended for and restricted to the sole use by SWCA and the County of Fresno. Any other use, interpretation, or reliance upon this assessment is at the sole risk of the user, and Haro Environmental shall have no liability for such unauthorized use, interpretation, or reliance.

**Qualifications of Environmental Professionals.** Mr. Elliot Haro representing Haro Environmental performed this ISA. Mr. Haro is an environmental consultant who has performed over 100 ISAs for a variety of clients. Mr. Timothy Nelligan reviewed this report. Mr. Nelligan is a California State Licensed Professional Engineer with over 15 years of site assessment experience. Messrs. Haro's and Nelligan's resumes are provided in Appendix F.

**Reliance.** This ISA report has been prepared for the exclusive use and reliance by SWCA and the County of Fresno. Use or reliance by any other party is prohibited without the written authorization of SWCA, the County of Fresno and Haro Environmental.

**Scope Limitations and ASTM Exceptions.** This ISA did not include any inquiries with respect to non-scope ASTM considerations including, but not limited to, asbestos-containing materials, radon gas, lead-based paint, lead in drinking water, mold, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality or electromagnetic fields, subsurface or other invasive assessments, business environmental risk evaluations or other services not particularly identified and discussed herein.

Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested may not be received by the issuance date of the report. In the event information obtained from sources mentioned previously alters the findings stated in this report, an addendum letter will be forwarded to SWCA and the County of Fresno under separate cover providing Haro Environmental's findings and conclusions. Additional ISA limitations include:

- Four data gaps since 1940 of greater than 5 years was identified in the historical records reviewed and included the years from 1937 to 1946, from 1950 to 1957, from 1965 to 1970, and from 1970 to 1975. These data gaps are considered insignificant because the project area use appears to be similar during the data gap.

This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the current utilization of the project area, information derived from the most recent reconnaissance, and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.



## 8.0 REFERENCES

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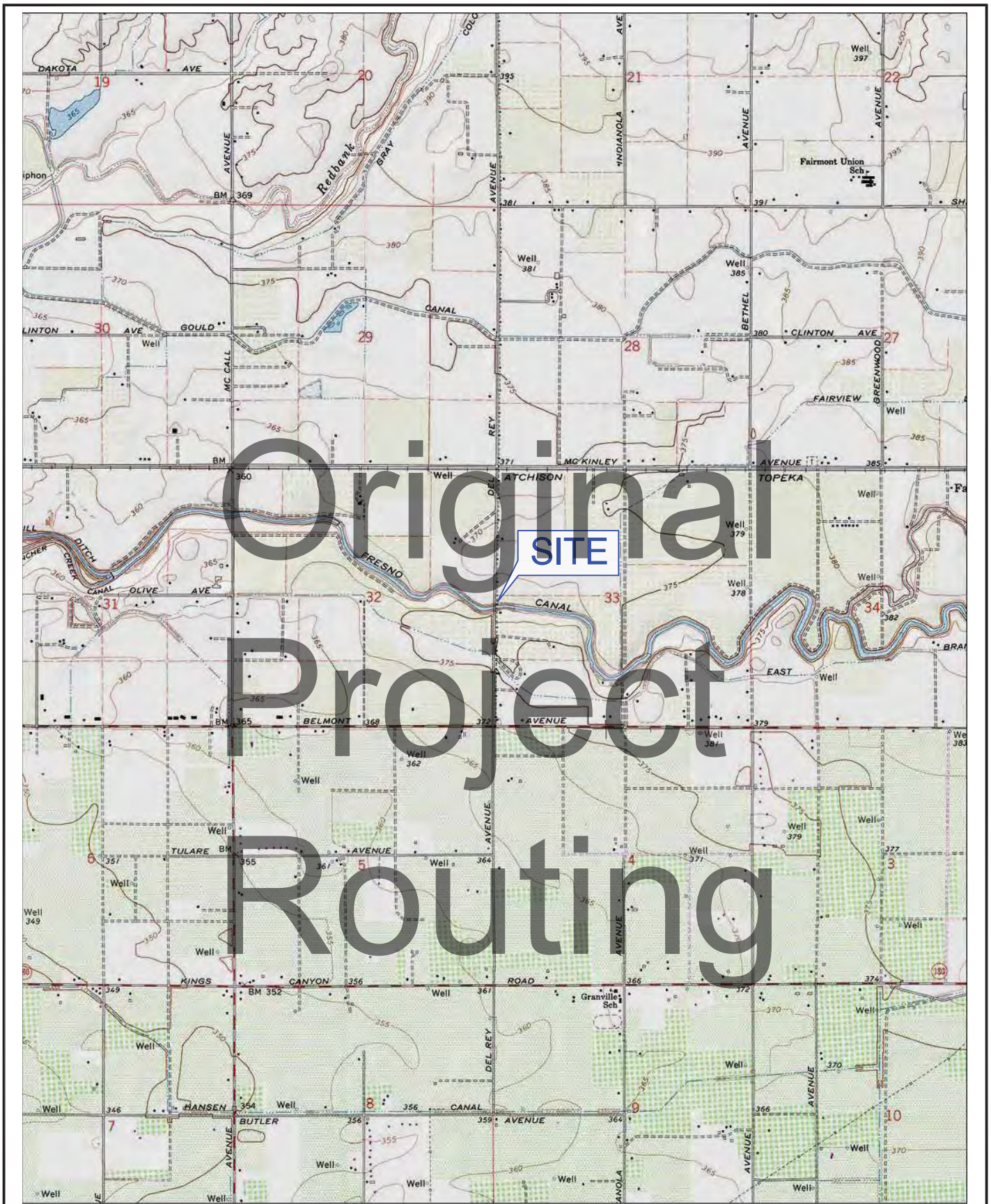
# Original Project Routing

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**PLATES**

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Original  
Project  
Routing



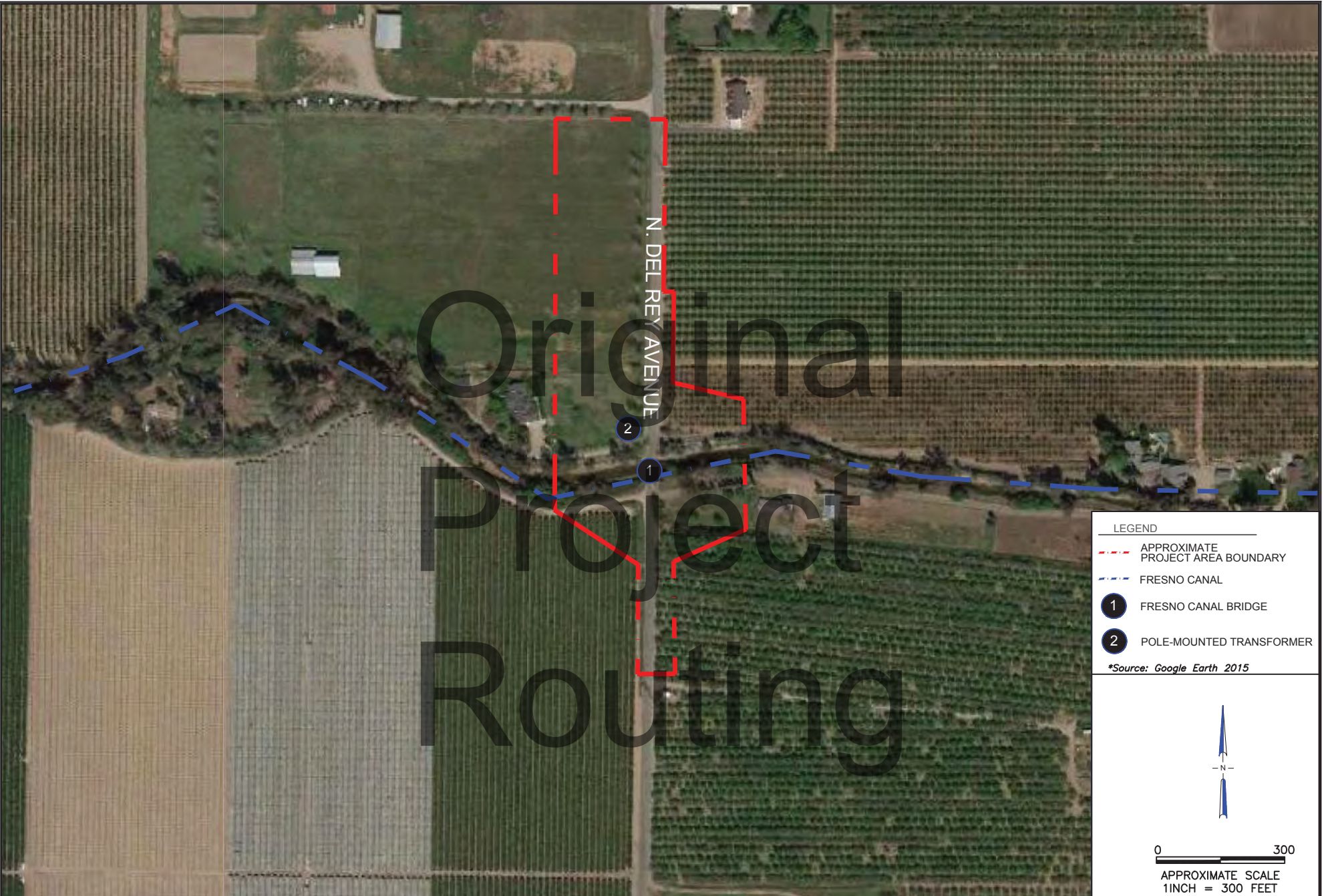
Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

**HARO ENVIRONMENTAL**  
 1065 Higuera St. Suite 301  
 San Luis Obispo, CA 93401  
 Phone: 805 204 4483  
 Fax: 805 831 6081

FILE NAME: *SITE VICINITY MAP.DWG*

**SITE VICINITY MAP**  
 Fresno Canal Bridge  
 Fresno County, California

PLATE:	<b>1</b>
SHEET:	of
REVISION NO:	<b>0</b>
DATE:	<b>10/15</b>



**LEGEND**

- - - APPROXIMATE PROJECT AREA BOUNDARY
- - - FRESNO CANAL
- 1 FRESNO CANAL BRIDGE
- 2 POLE-MOUNTED TRANSFORMER

\*Source: Google Earth 2015

APPROXIMATE SCALE  
1 INCH = 300 FEET

1065 Higuera Street, Suite 301  
 San Luis Obispo, California 93401  
 Phone: 805.204.4483  
 Fax: 805.832.6081

SALU MAP.dwg

**SITE AND ADJACENT LAND USE MAP**

Fresno Canal Bridge  
 Fresno County, California

PLATE:	2
REVISION NO:	
DATE:	11/15

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**APPENDIX A**

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**REGULATORY RECORDS DOCUMENTATION**

**Original  
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**Fresno Canal Bridge**

1440 N Dey Rey

Sanger, CA 93657

Inquiry Number: 4430687.3

October 06, 2015

# Original

# Project

Certified Sanborn® Map Report

# Routing



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

10/06/15

**Site Name:**

Fresno Canal Bridge  
1440 N Dey Rey  
Sanger, CA 93657

**Client Name:**

Haro Environmental, Inc.  
PO Box 7002  
Los Osos, CA 93412



EDR Inquiry # 4430687.3

Contact: Elliot Haro

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Haro Environmental, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn).

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:

**Site Name:** Fresno Canal Bridge  
**Address:** 1440 N Dey Rey  
**City, State, Zip:** Sanger, CA 93657  
**Cross Street:**  
**P.O. #** NA  
**Project:** NA  
**Certification #** 567D-4B8A-AA4A



Sanborn® Library search results  
Certification # 567D-4B8A-AA4A

### UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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**Fresno Canal Bridge**

1440 N Dey Rey

Sanger, CA 93657

Inquiry Number: 4430687.4

October 06, 2015

# Original

# Project

EDR Historical Topographic Map Report

# Routing



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

# Original Project Routing

*Thank you for your business.*

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

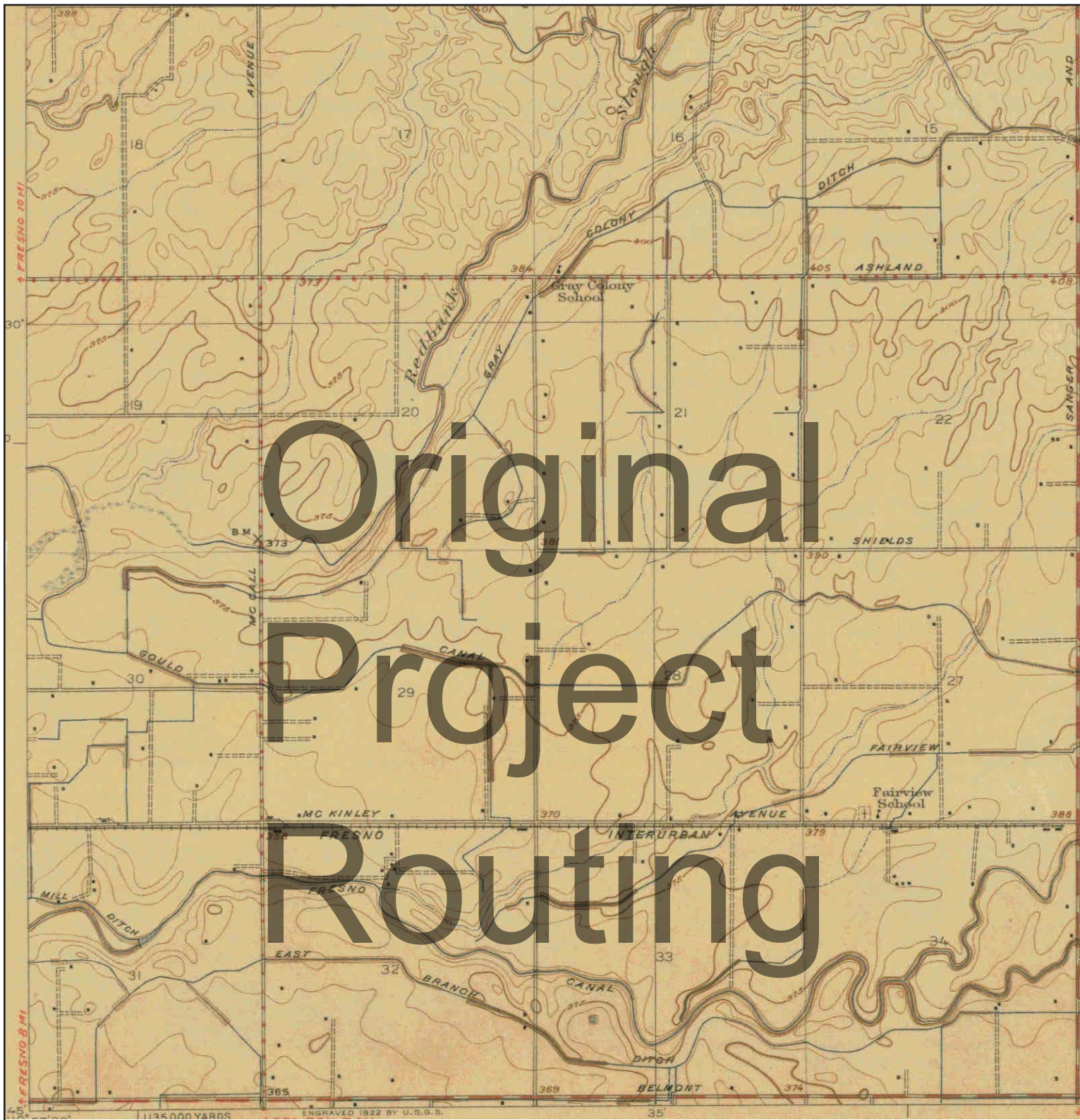
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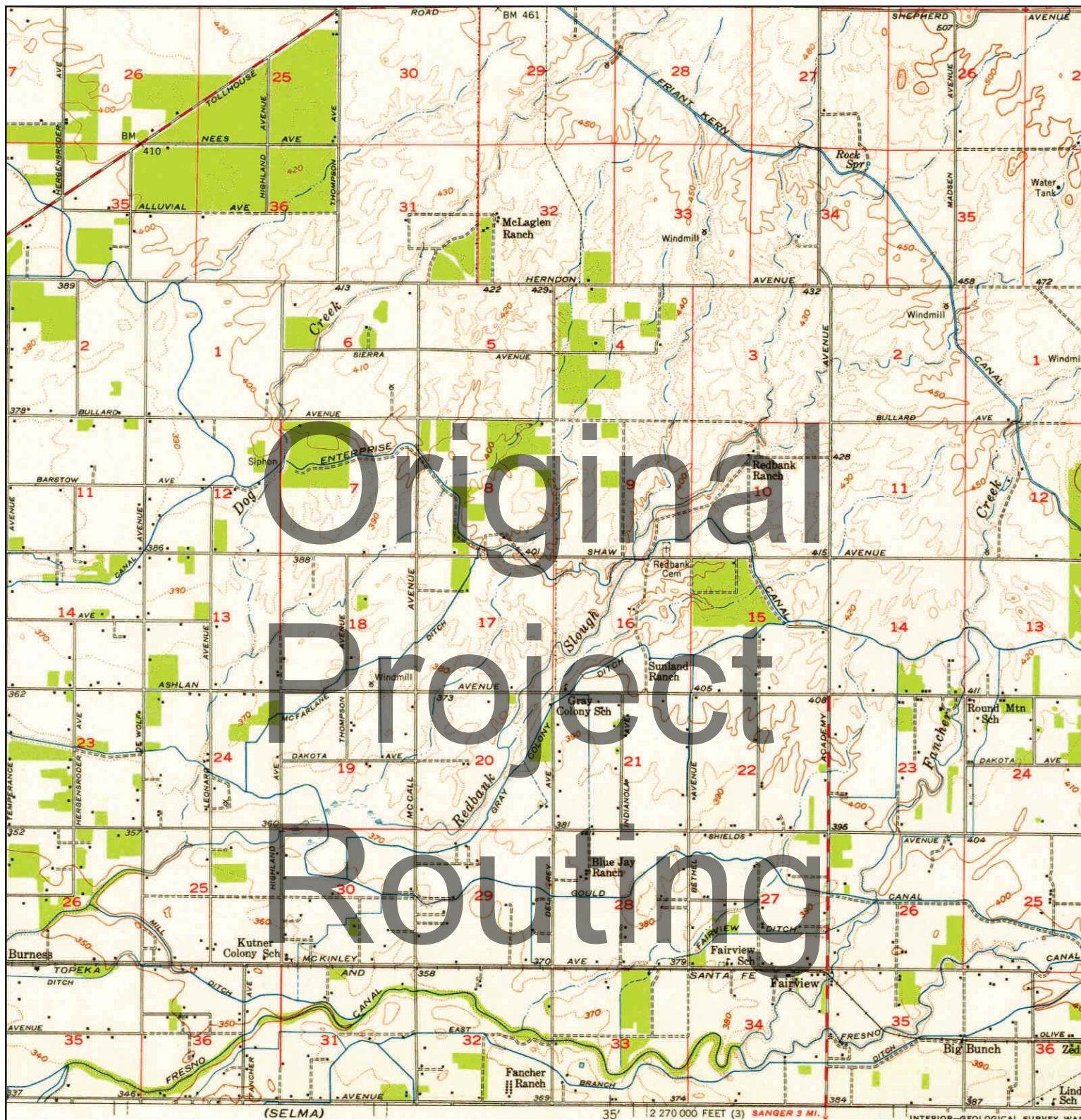
# Historical Topographic Map




Original  
Project  
Routing

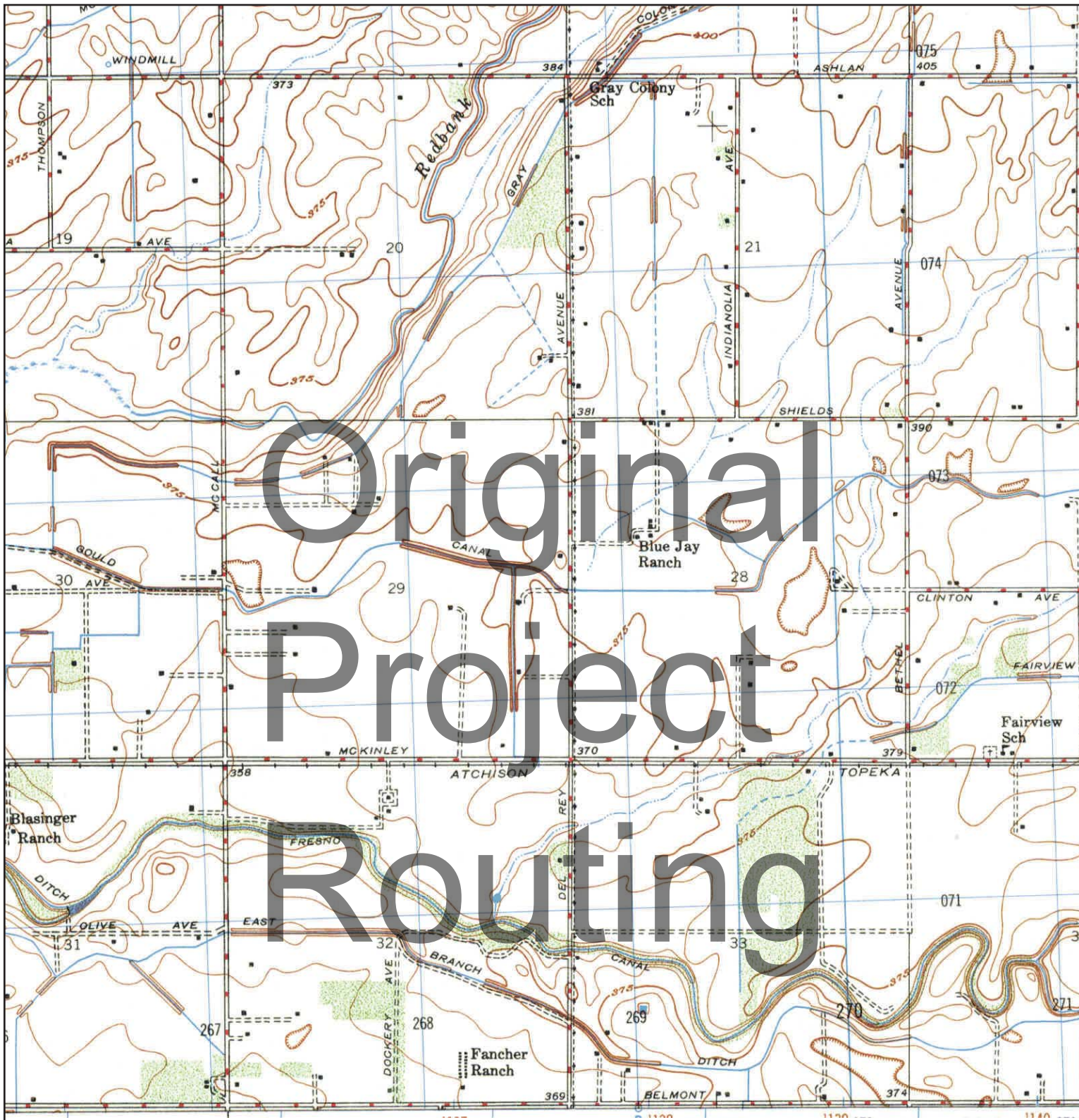
	<b>TARGET QUAD</b>	<b>SITE NAME:</b> Fresno Canal Bridge	<b>CLIENT:</b> Haro Environmental, Inc.
	<b>NAME:</b> ROUND MOUNTAIN	<b>ADDRESS:</b> 1440 N Dey Rey	<b>CONTACT:</b> Elliot Haro
	<b>MAP YEAR:</b> 1922	Sanger, CA 93657	<b>INQUIRY#:</b> 4430687.4
	<b>SERIES:</b> 7.5	<b>LAT/LONG:</b> 36.7568 / -119.5919	<b>RESEARCH DATE:</b> 10/06/2015
	<b>SCALE:</b> 1:31680		


# Historical Topographic Map



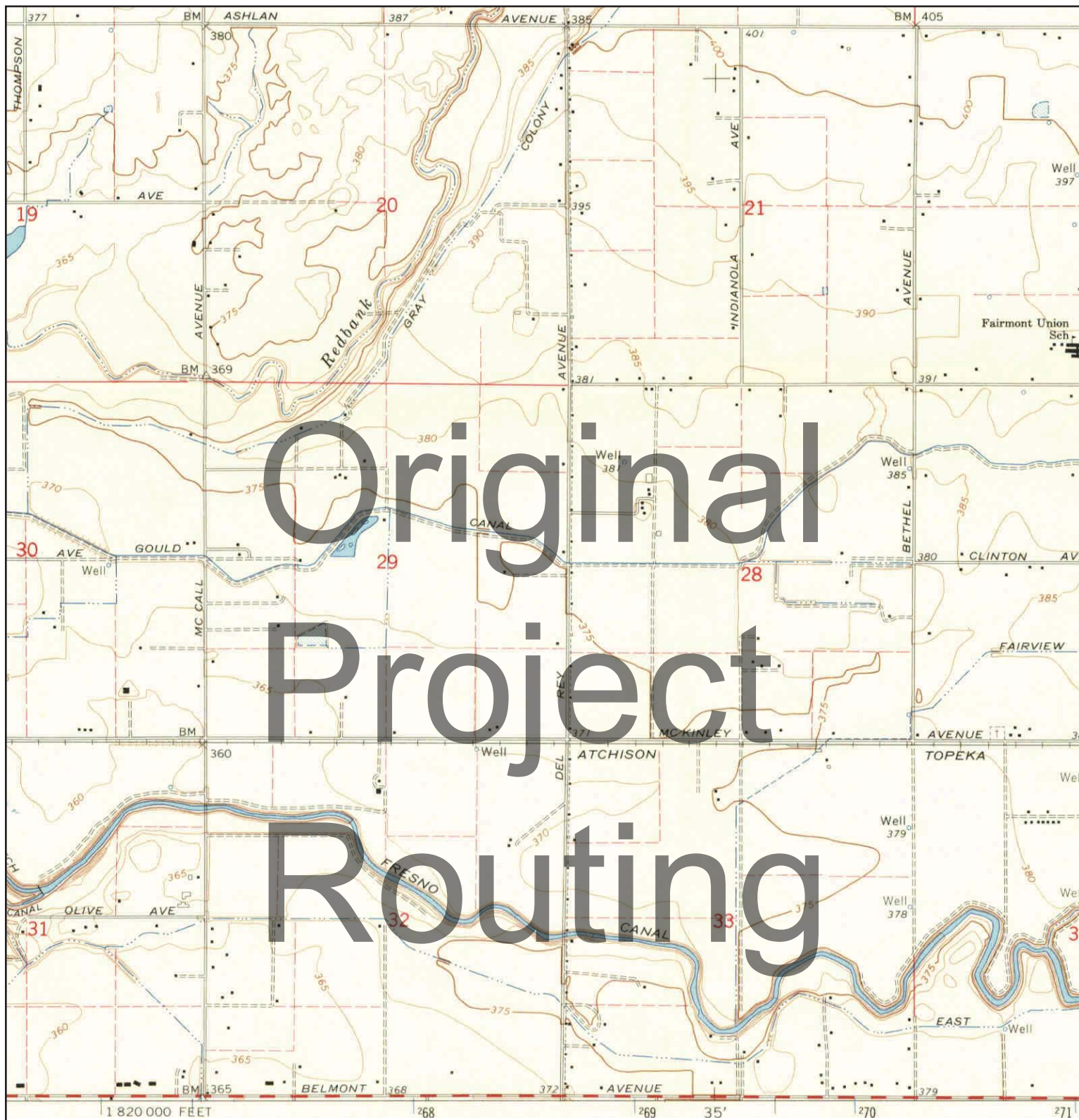
	<b>TARGET QUAD</b> NAME: CLOVIS MAP YEAR: 1946	SITE NAME: Fresno Canal Bridge ADDRESS: 1440 N Dey Rey Sanger, CA 93657 LAT/LONG: 36.7568 / -119.5919	CLIENT: Haro Environmental, Inc. CONTACT: Elliot Haro INQUIRY#: 4430687.4 RESEARCH DATE: 10/06/2015
	SERIES: 15 SCALE: 1:62500		

# Historical Topographic Map



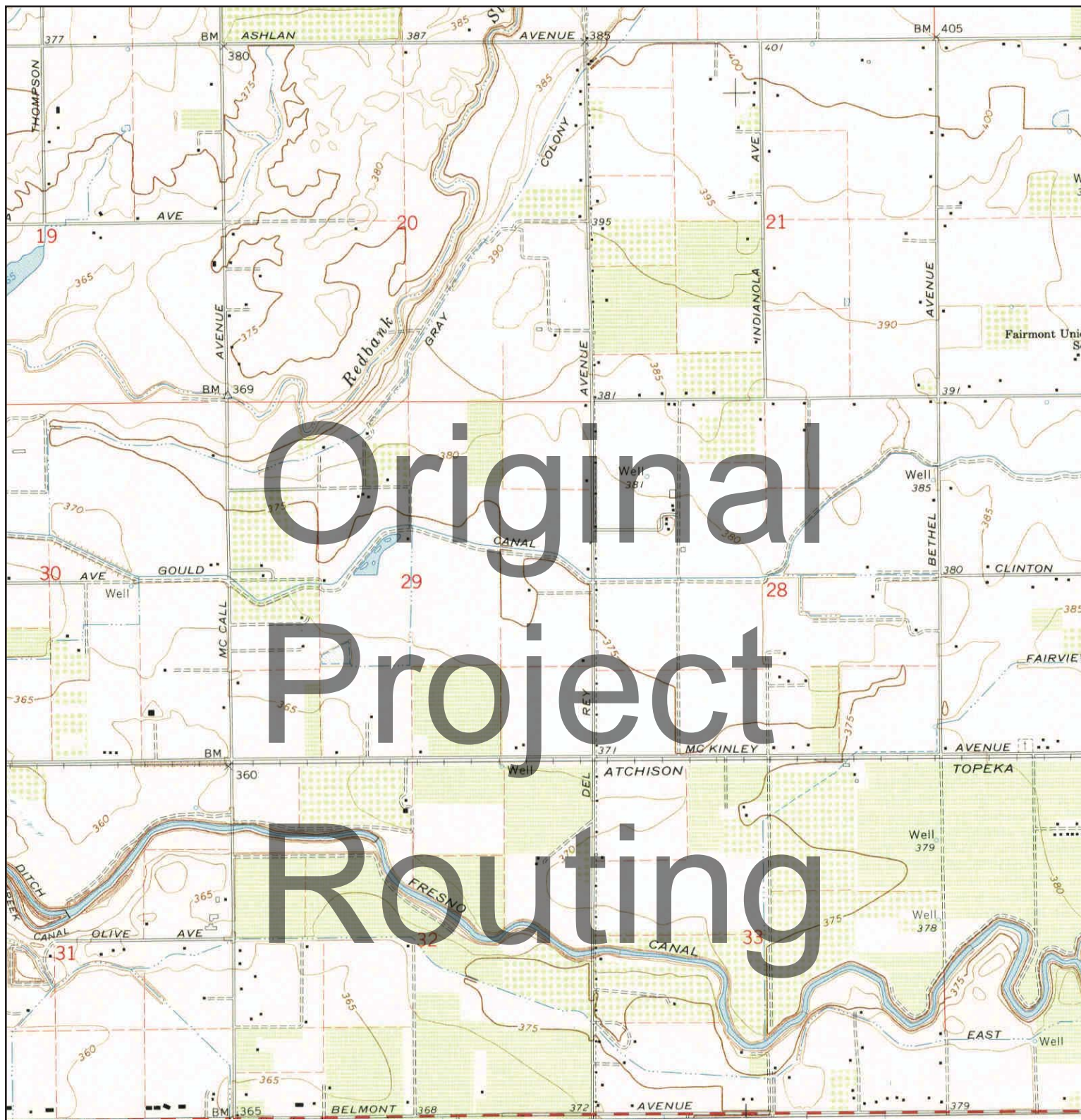
<p>N</p> 	<p><b>TARGET QUAD</b></p> <p>NAME: ROUND MOUNTAIN</p> <p>MAP YEAR: 1948</p>	<p>SITE NAME: Fresno Canal Bridge</p> <p>ADDRESS: 1440 N Dey Rey Sanger, CA 93657</p> <p>LAT/LONG: 36.7568 / -119.5919</p>	<p>CLIENT: Haro Environmental, Inc.</p> <p>CONTACT: Elliot Haro</p> <p>INQUIRY#: 4430687.4</p> <p>RESEARCH DATE: 10/06/2015</p>
	<p>SERIES: 7.5</p> <p>SCALE: 1:25000</p>		

# Historical Topographic Map



	<b>TARGET QUAD</b>	<b>SITE NAME:</b> Fresno Canal Bridge	<b>CLIENT:</b> Haro Environmental, Inc.
	NAME: ROUND MOUNTAIN	ADDRESS: 1440 N Dey Rey Sanger, CA 93657	CONTACT: Elliot Haro
	MAP YEAR: 1964	LAT/LONG: 36.7568 / -119.5919	INQUIRY#: 4430687.4
	SERIES: 7.5		RESEARCH DATE: 10/06/2015
	SCALE: 1:24000		

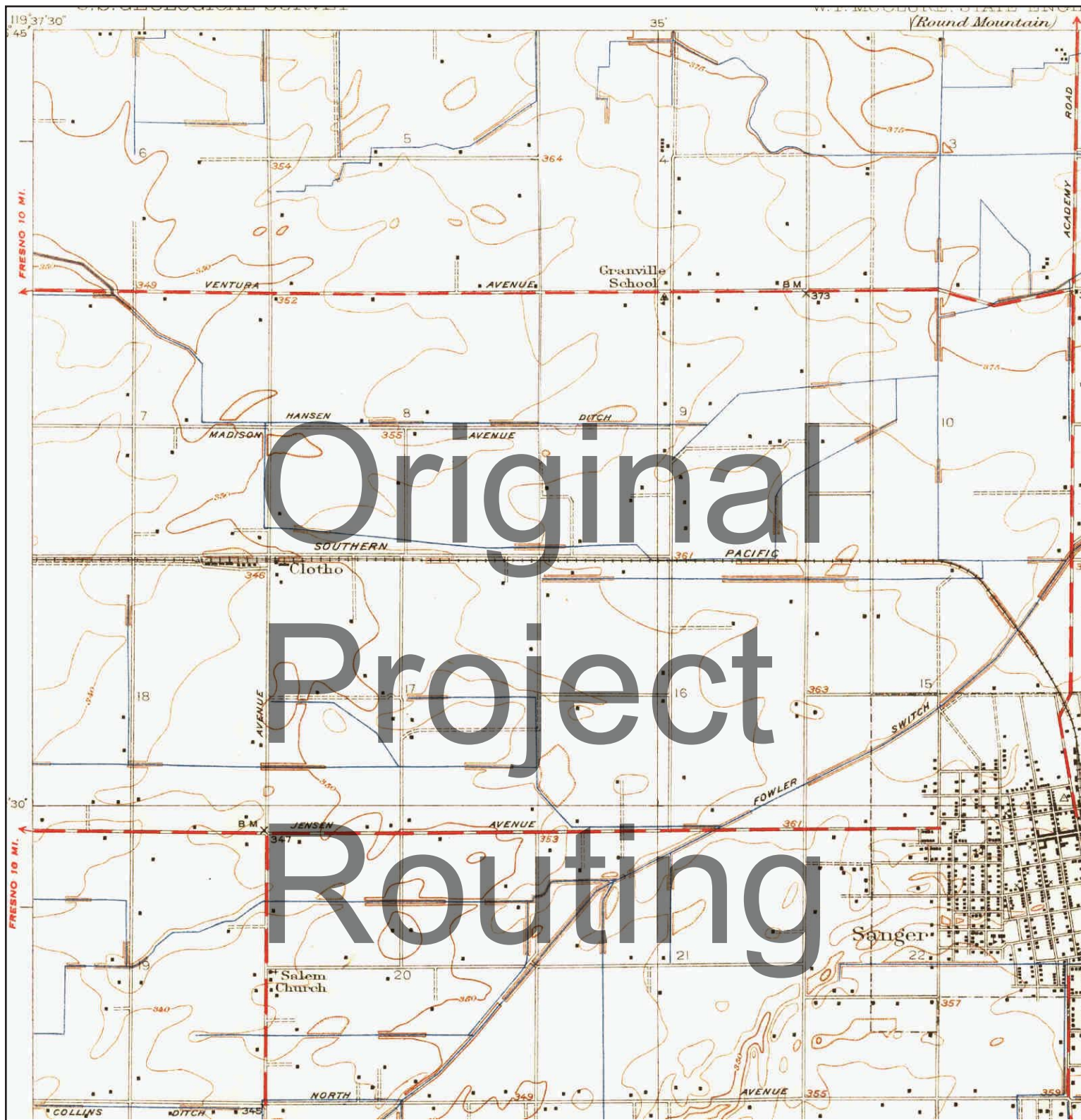
# Historical Topographic Map




Original  
Project  
Routing

	<b>TARGET QUAD</b>	<b>SITE NAME:</b> Fresno Canal Bridge	<b>CLIENT:</b> Haro Environmental, Inc.
	NAME: ROUND MOUNTAIN	<b>ADDRESS:</b> 1440 N Dey Rey	<b>CONTACT:</b> Elliot Haro
	MAP YEAR: 1978	Sanger, CA 93657	<b>INQUIRY#:</b> 4430687.4
	PHOTOINSPECTED FROM : 1964	<b>LAT/LONG:</b> 36.7568 / -119.5919	<b>RESEARCH DATE:</b> 10/06/2015
	SERIES: 7.5		
	SCALE: 1:24000		

# Historical Topographic Map

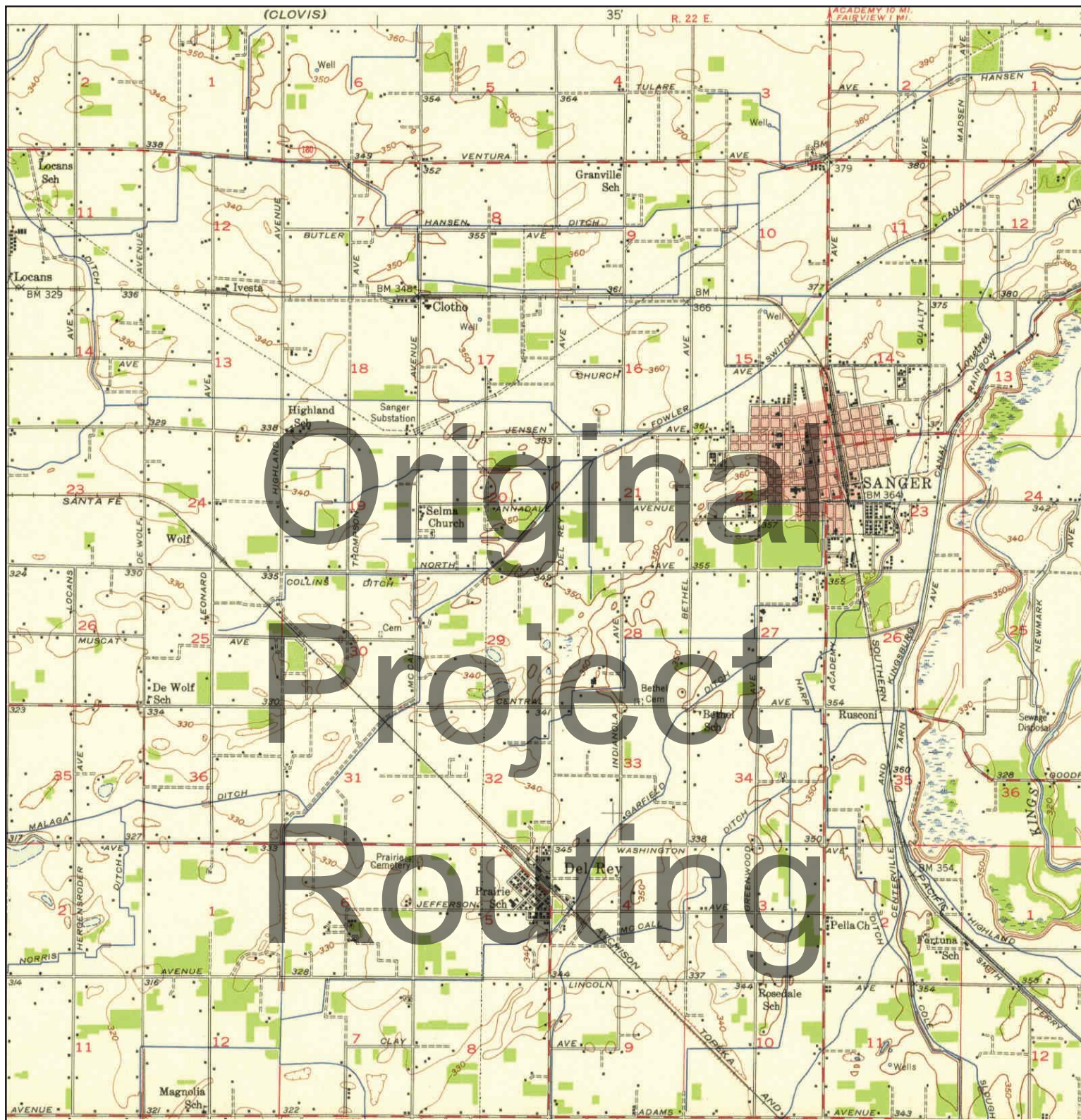



Original  
Project  
Routing

	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: SANGER	Fresno Canal Bridge	Haro Environmental, Inc.
	MAP YEAR: 1923	ADDRESS: 1440 N Dey Rey Sanger, CA 93657	CONTACT: Elliot Haro
	SERIES: 7.5	LAT/LONG: 36.7568 / -119.5919	INQUIRY#: 4430687.4
SCALE: 1:31680		RESEARCH DATE: 10/06/2015	

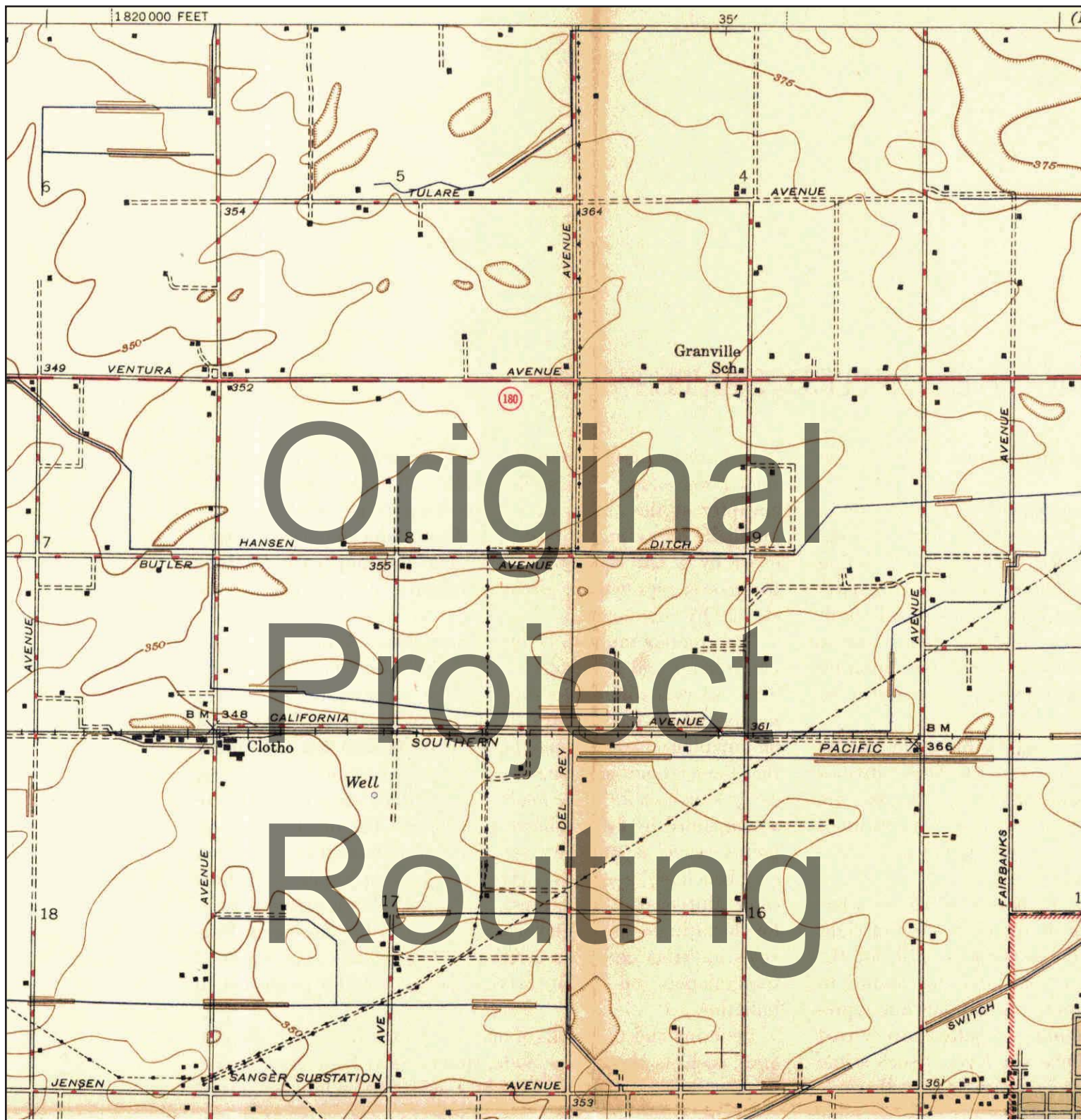


# Historical Topographic Map



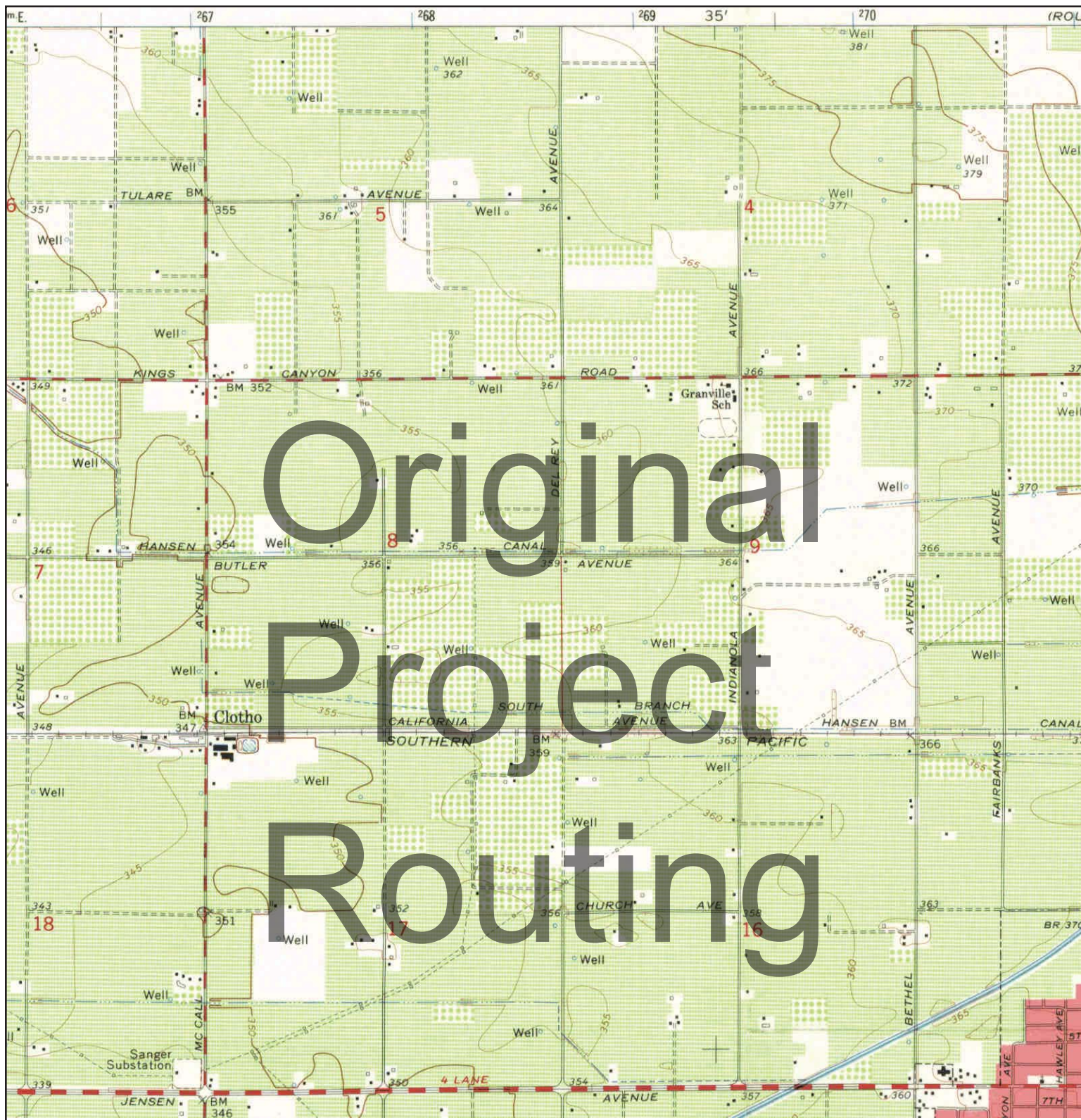
<p>N</p> 	<b>ADJOINING QUAD</b>	<b>SITE NAME:</b> Fresno Canal Bridge	<b>CLIENT:</b> Haro Environmental, Inc.
	NAME: SELMA	ADDRESS: 1440 N Dey Rey	CONTACT: Elliot Haro
	MAP YEAR: 1946	Sanger, CA 93657	INQUIRY#: 4430687.4
	SERIES: 15	LAT/LONG: 36.7568 / -119.5919	RESEARCH DATE: 10/06/2015
	SCALE: 1:62500		

# Historical Topographic Map



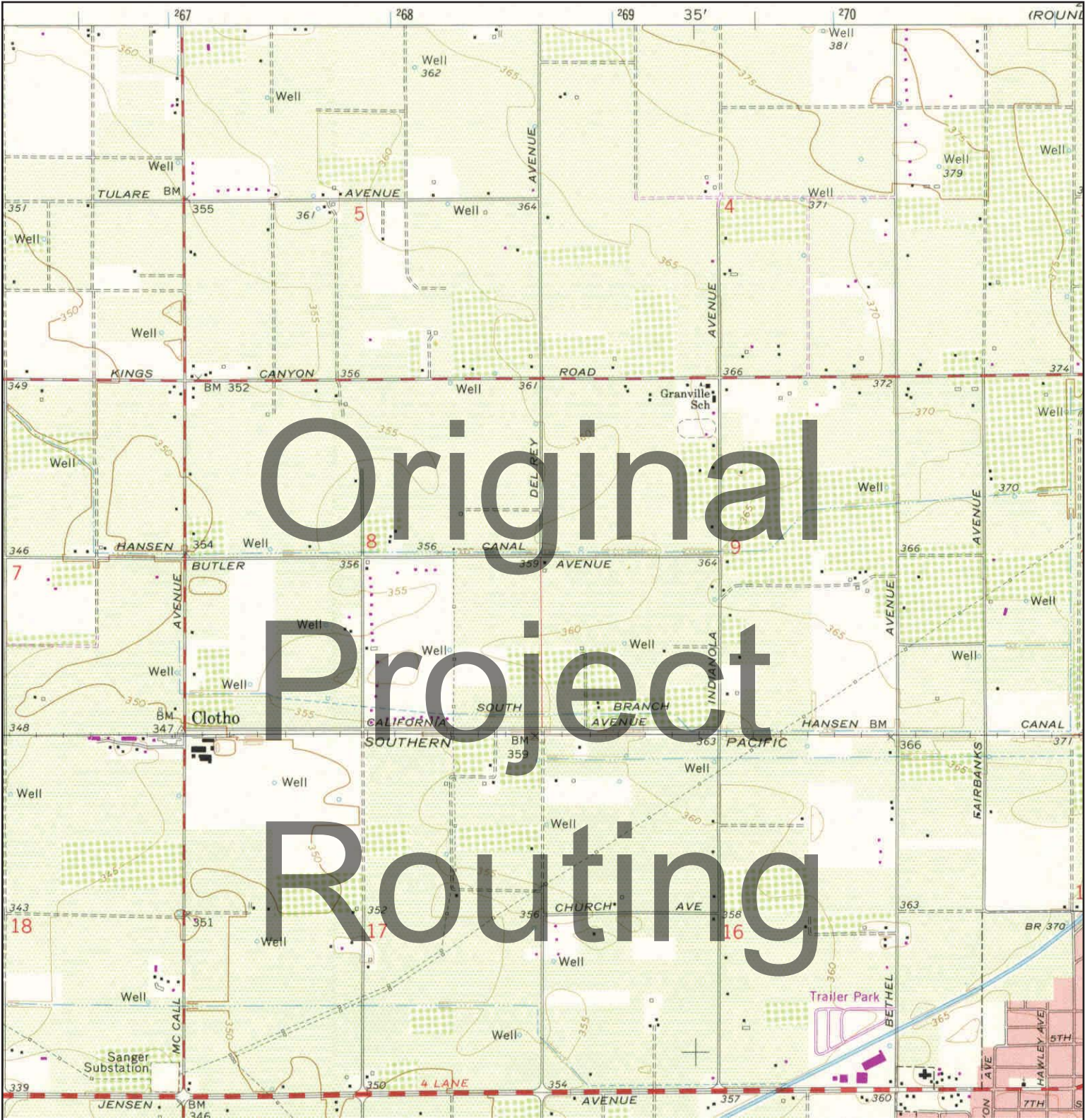
<p>N</p>	<b>ADJOINING QUAD</b>			
	NAME: SANGER	SITE NAME: Fresno Canal Bridge		CLIENT: Haro Environmental, Inc.
	MAP YEAR: 1947	ADDRESS: 1440 N Dey Rey Sanger, CA 93657		CONTACT: Elliot Haro
	SERIES: 7.5	LAT/LONG: 36.7568 / -119.5919		INQUIRY#: 4430687.4
SCALE: 1:24000		RESEARCH DATE: 10/06/2015		

# Historical Topographic Map



	<b>ADJOINING QUAD</b>						
	NAME:	SANGER		SITE NAME:	Fresno Canal Bridge	CLIENT:	Haro Environmental, Inc.
	MAP YEAR:	1965		ADDRESS:	1440 N Dey Rey Sanger, CA 93657	CONTACT:	Elliot Haro
	SERIES:	7.5		LAT/LONG:	36.7568 / -119.5919	INQUIRY#:	4430687.4
	SCALE:	1:24000		RESEARCH DATE:	10/06/2015		

# Historical Topographic Map



Original  
Project  
Routing

<p>N ↑</p>	<b>ADJOINING QUAD</b>		<p>SITE NAME: Fresno Canal Bridge ADDRESS: 1440 N Dey Rey Sanger, CA 93657 LAT/LONG: 36.7568 / -119.5919</p>	<p>CLIENT: Haro Environmental, Inc. CONTACT: Elliot Haro INQUIRY#: 4430687.4 RESEARCH DATE: 10/06/2015</p>
	NAME: SANGER			
	MAP YEAR: 1981			
	PHOTOREVISED FROM :1965			
	SERIES: 7.5			
	SCALE: 1:24000			



**Fresno Canal Bridge**

1440 N Dey Rey

Sanger, CA 93657

Inquiry Number: 4430687.9

October 08, 2015

# Original

# Project

The EDR Aerial Photo Decade Package

# Routing



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# EDR Aerial Photo Decade Package

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.

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Original  
Project  
Routing

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**Date EDR Searched Historical Sources:**

Aerial Photography October 08, 2015

**Target Property:**

1440 N Dey Rey

Sanger, CA 93657

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
1937	Aerial Photograph. Scale: 1"=500'	Flight Year: 1937	USGS
1946	Aerial Photograph. Scale: 1"=500'	Flight Year: 1946	USGS
1950	Aerial Photograph. Scale: 1"=500'	Flight Year: 1950	USGS
1957	Aerial Photograph. Scale: 1"=500'	Flight Year: 1957	Cartwright
1962	Aerial Photograph. Scale: 1"=500'	Flight Year: 1962	USGS
1970	Aerial Photograph. Scale: 1"=500'	Flight Year: 1970	Cartwright
1984	Aerial Photograph. Scale: 1"=500'	Flight Year: 1984	USGS
1987	Aerial Photograph. Scale: 1"=500'	Flight Year: 1987	USGS
1998	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1998	USGS/DOQQ
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	USDA/NAIP
2006	Aerial Photograph. Scale: 1"=500'	Flight Year: 2006	USDA/NAIP
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	USDA/NAIP
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	USDA/NAIP
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	USDA/NAIP



# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1937

 = 500'







# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1946

| = 500'





# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1950

| = 500'





# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1957

|—————| = 500'





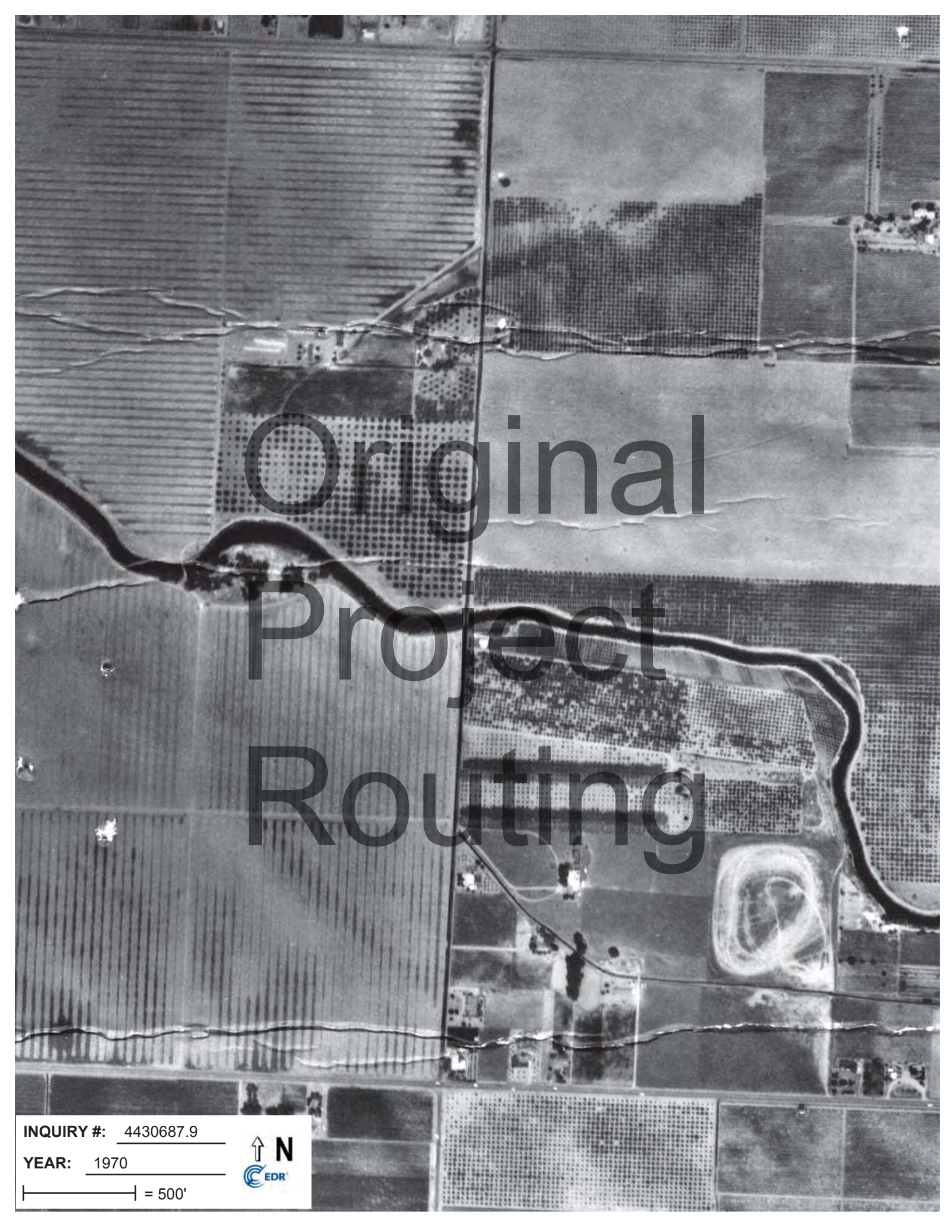
# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1962

— = 500'





# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1970

— = 500'





# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1984

 = 500'



# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1987

— = 500'



# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 1998

— = 500'





# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 2005

— = 500'



An aerial photograph showing a rural landscape with a grid of agricultural fields. A winding waterway or canal runs through the center, with a small cluster of buildings and trees along its path. The text 'Original Project Routing' is overlaid in a large, semi-transparent font.

# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 2006

| = 500'



# Original Project Routing

INQUIRY #: 4430687.9


YEAR: 2009

 = 500'



# Original Project Routing

INQUIRY #: 4430687.9  
YEAR: 2010  
|—————| = 500'



# Original Project Routing

INQUIRY #: 4430687.9

YEAR: 2012

| = 500'



**Fresno Canal Bridge**

1440 N Dey Rey  
Sanger, CA 93657

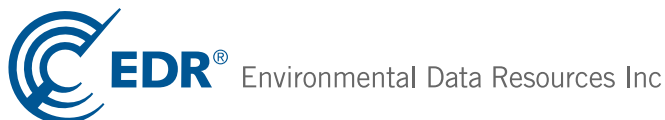
Inquiry Number: 4430687.2s  
October 06, 2015

# Original

# Project

The EDR Radius Map™ Report with GeoCheck®

# Routing



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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Original  
Project  
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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) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

1440 N DEY REY  
SANGER, CA 93657

#### COORDINATES

Latitude (North): 36.7568000 - 36° 45' 24.48"  
Longitude (West): 119.5919000 - 119° 35' 30.84"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 268622.3  
UTM Y (Meters): 4070824.5  
Elevation: 363 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5603242 ROUND MOUNTAIN, CA  
Version Date: 2012

South Map: 5603212 SANGER, CA  
Version Date: 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20120630  
Source: USDA



MAPPED SITES SUMMARY

Target Property Address:  
1440 N DEY REY  
SANGER, CA 93657

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	VICTOR MARTINEZ	1683 N DEL REY	SWEEPS UST, HIST UST	Higher	367, 0.070, South

# Original Project Routing

## 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  
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System

#### ***Federal CERCLIS NFRAP site List***

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

#### ***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-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

#### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System  
US ENG CONTROLS..... Engineering Controls Sites List

## EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

### **Federal ERNS list**

ERNS..... Emergency Response Notification System

### **State- and tribal - equivalent NPL**

RESPONSE..... State Response Sites

### **State- and tribal - equivalent CERCLIS**

ENVIROSTOR..... EnviroStor Database

### **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

SLIC..... Statewide SLIC Cases

### **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**

VCP..... Voluntary Cleanup Program Properties

INDIAN VCP..... Voluntary Cleanup Priority Listing

### **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

ODI..... Open Dump Inventory

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

## EXECUTIVE SUMMARY

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL.....	National Clandestine Laboratory Register
HIST Cal-Sites.....	Historical Calsites Database
SCH.....	School Property Evaluation Program
CDL.....	Clandestine Drug Labs
Toxic Pits.....	Toxic Pits Cleanup Act Sites
US CDL.....	Clandestine Drug Labs

### **Local Lists of Registered Storage Tanks**

CA FID UST.....	Facility Inventory Database
-----------------	-----------------------------

### **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
DOT OPS.....	Incident and Accident Data

## EXECUTIVE SUMMARY

CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
FINDS.....	Facility Index System/Facility Registry System
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	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
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat.....	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry 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.

## EXECUTIVE SUMMARY

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Local Lists of Registered Storage Tanks**

SWEEPS UST: 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.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VICTOR MARTINEZ</b> Status: A Tank Status: A Comp Number: 58023	<b>1683 N DEL REY</b>	<b>S 0 - 1/8 (0.070 mi.)</b>	<b>1</b>	<b>8</b>

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>VICTOR MARTINEZ</b> Facility Id: 00000058023	<b>1683 N DEL REY</b>	<b>S 0 - 1/8 (0.070 mi.)</b>	<b>1</b>	<b>8</b>

Original  
Project  
Routing

## EXECUTIVE SUMMARY

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

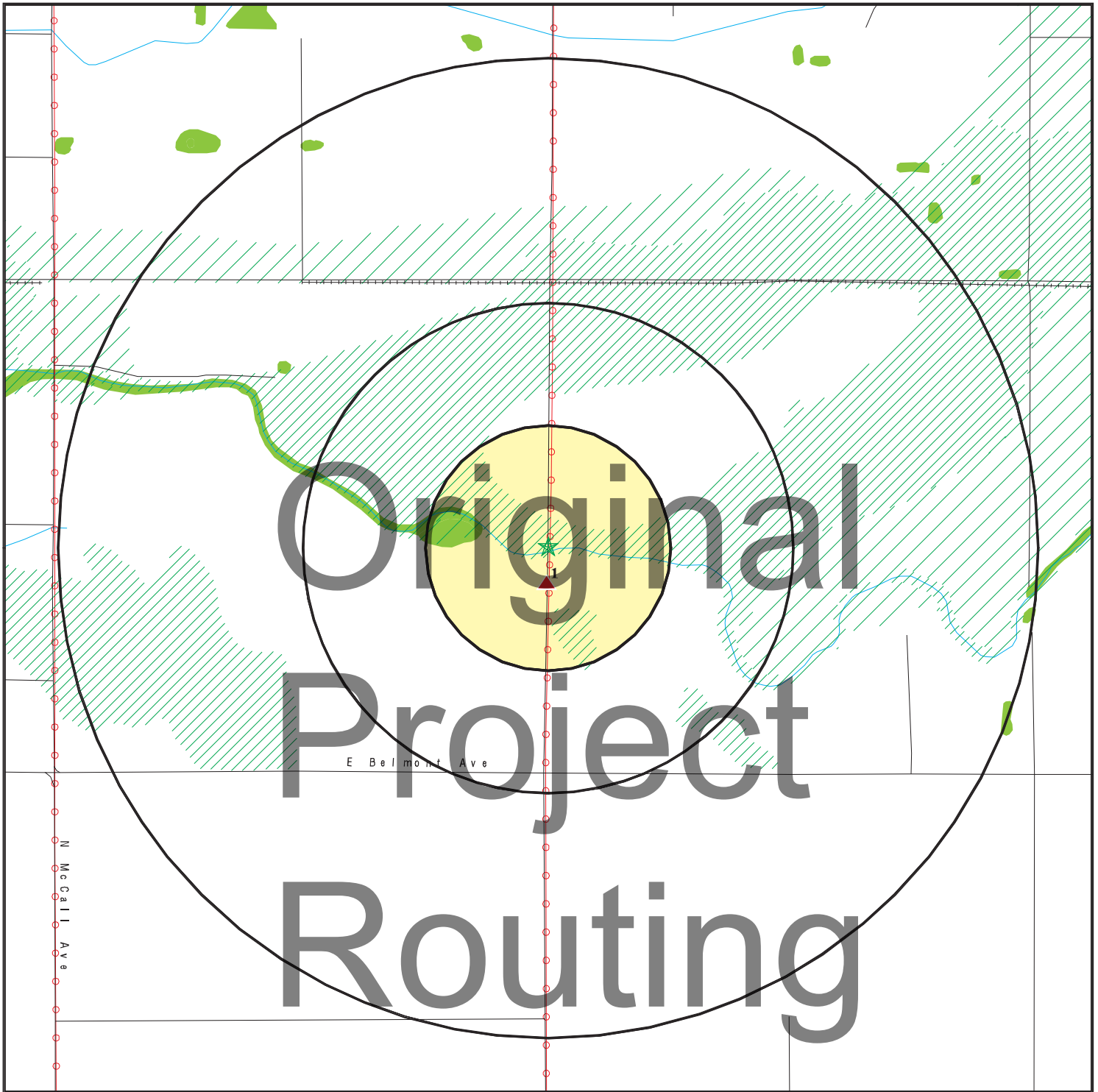
Site Name

Database(s)

CDL

# Original Project Routing

OVERVIEW MAP - 4430687.2S



- ★ 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
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- National Wetland Inventory
- Areas of Concern

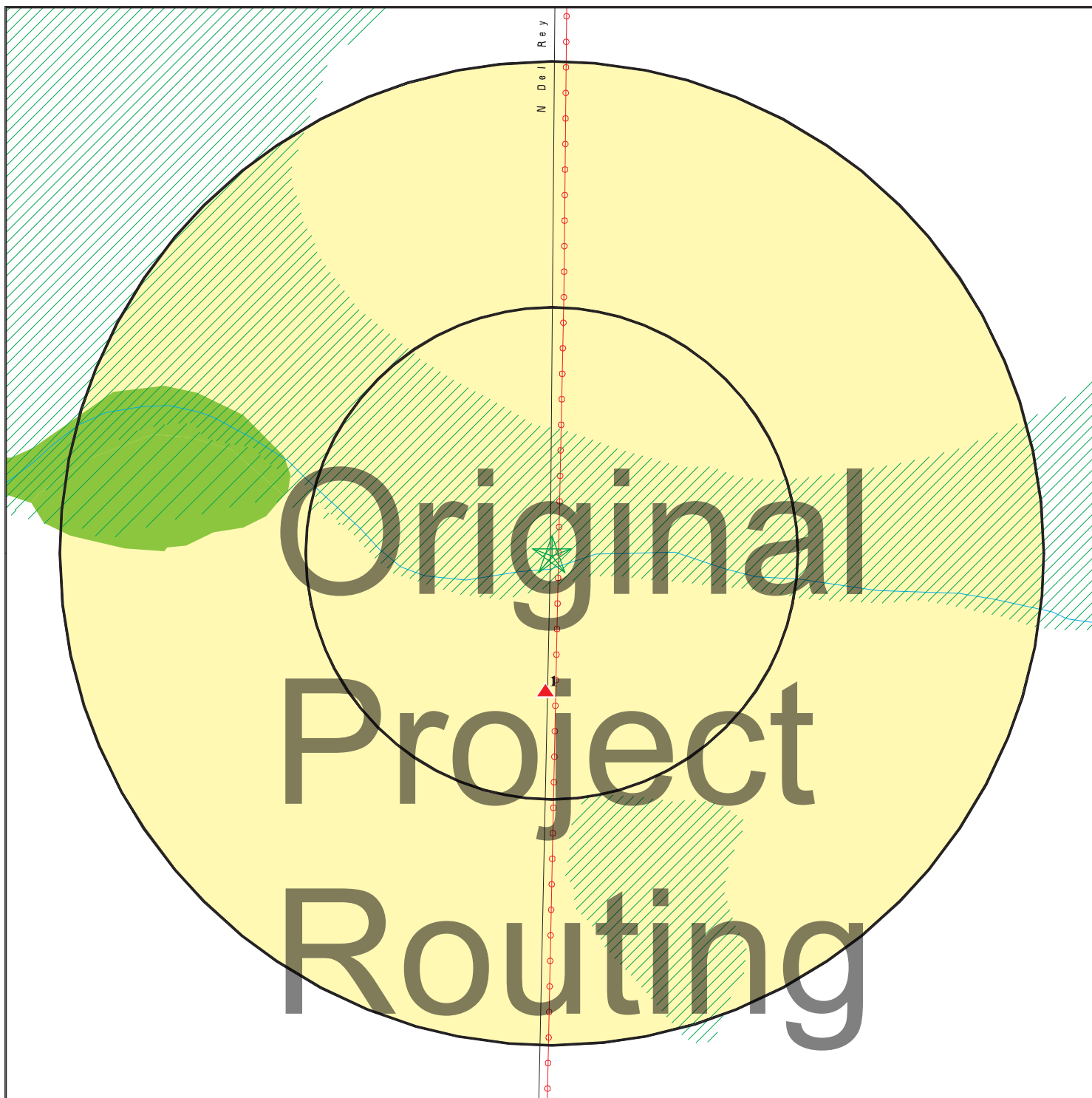
This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Fresno Canal Bridge  
 ADDRESS: 1440 N Dey Rey  
 Sanger CA 93657  
 LAT/LONG: 36.7568 / 119.5919

CLIENT: Haro Environmental, Inc.  
 CONTACT: Elliot Haro  
 INQUIRY #: 4430687.2s  
 DATE: October 06, 2015 4:24 pm



DETAIL MAP - 4430687.2S



- ★ 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
- ☒ 100-year flood zone
- ☒ 500-year flood zone
- ☒ National Wetland Inventory
- ☒ 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: Fresno Canal Bridge  
 ADDRESS: 1440 N Dey Rey  
 Sanger CA 93657  
 LAT/LONG: 36.7568 / 119.5919

CLIENT: Haro Environmental, Inc.  
 CONTACT: Elliot Haro  
 INQUIRY #: 4430687.2s  
 DATE: October 06, 2015 4:27 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
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
CERCLIS	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST	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
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		0	0	NR	NR	NR	0
<b>Local Land Records</b>								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	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
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

1  
South  
< 1/8  
0.070 mi.  
367 ft.

**VICTOR MARTINEZ**  
**1683 N DEL REY**  
**SANGER, CA 93657**

**SWEEPS UST**    **U001590746**  
**HIST UST**      **N/A**

**Relative:**  
**Higher**

SWEEPS UST:

**Actual:**  
**376 ft.**

Status: Active  
Comp Number: 58023  
Number: 9  
Board Of Equalization: Not reported  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 10-000-058023-000001  
Tank Status: A  
Capacity: Not reported  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: 3

Status: Active  
Comp Number: 58023  
Number: 9  
Board Of Equalization: Not reported  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 10-000-058023-000002  
Tank Status: A  
Capacity: Not reported  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 58023  
Number: 9  
Board Of Equalization: Not reported  
Referral Date: 07-01-85  
Action Date: Not reported  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 10-000-058023-000003  
Tank Status: A  
Capacity: Not reported  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Original  
Project  
Routing

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VICTOR MARTINEZ (Continued)**

**U001590746**

HIST UST:

Region: STATE  
Facility ID: 00000058023  
Facility Type: Other  
Other Type: FARM  
Contact Name: Not reported  
Telephone: 2092515206  
Owner Name: VICTOR MARTINEZ  
Owner Address: 1683 N. DEL REY AVE.  
Owner City,St,Zip: SANGER, CA 93657  
Total Tanks: 0003

Tank Num: 001  
Container Num: 1  
Year Installed: Not reported  
Tank Capacity: 00000000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Container Construction Thickness: Not reported  
Leak Detection: None

Tank Num: 002  
Container Num: 3  
Year Installed: Not reported  
Tank Capacity: 00000000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Container Construction Thickness: Not reported  
Leak Detection: None

Tank Num: 003  
Container Num: 2  
Year Installed: Not reported  
Tank Capacity: 00000000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Container Construction Thickness: Not reported  
Leak Detection: None

Original  
Project  
Routing

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
SANGER	S108723828		DEL REY RD, 1/4 MILE S OF NORT	93657	CDL

# Original Project Routing



# 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: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	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: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	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.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **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: 03/26/2015	Source: EPA
Date Data Arrived at EDR: 04/08/2015	Telephone: N/A
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 75	Next Scheduled EDR Contact: 10/19/2015
	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: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: 703-603-8704
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 07/10/2015
Number of Days to Update: 64	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/29/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

## **Federal CERCLIS NFRAP site List**

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 05/29/2015
Number of Days to Update: 94	Next Scheduled EDR Contact: 09/07/2015
	Data Release Frequency: Quarterly

## **Federal RCRA CORRACTS facilities list**

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Quarterly

### **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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Quarterly

### **RCRA-CESQG: RCRA - 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). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## *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: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/30/2015
	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: 06/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2015	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 68	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Varies

### US INST CONTROL: Sites with Institutional Controls

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: 06/09/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/26/2015	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 68	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: Varies

## *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: 06/22/2015	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-267-2180
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 06/26/2015
Number of Days to Update: 82	Next Scheduled EDR Contact: 10/12/2015
	Data Release Frequency: Annually

## *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: 08/03/2015	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/04/2015	Telephone: 916-323-3400
Date Made Active in Reports: 09/03/2015	Last EDR Contact: 08/04/2015
Number of Days to Update: 30	Next Scheduled EDR Contact: 11/16/2015
	Data Release Frequency: Quarterly

## *State- and tribal - equivalent CERCLIS*

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 08/03/2015  
Date Data Arrived at EDR: 08/04/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 30

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/04/2015  
Next Scheduled EDR Contact: 11/16/2015  
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: 08/17/2015  
Date Data Arrived at EDR: 08/18/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 16

Source: Department of Resources Recycling and Recovery  
Telephone: 916-341-6320  
Last EDR Contact: 08/18/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Quarterly

## **State and tribal leaking storage tank lists**

### 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 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 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: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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 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 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 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 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: Quarterly

## 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: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: see region list  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Quarterly

## INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 10

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Semi-Annually

## INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 03/17/2015  
Date Data Arrived at EDR: 05/01/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 52

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## 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: 04/30/2015  
Date Data Arrived at EDR: 05/29/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 24

Source: EPA, Region 5  
Telephone: 312-886-7439  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
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: 02/03/2015  
Date Data Arrived at EDR: 04/30/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 53

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015  
Date Data Arrived at EDR: 02/12/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 29

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 07/31/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

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: 04/30/2015	Source: EPA Region 8
Date Data Arrived at EDR: 05/05/2015	Telephone: 303-312-6271
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 48	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015	Source: EPA Region 7
Date Data Arrived at EDR: 04/28/2015	Telephone: 913-551-7003
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

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: 06/15/2015	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/17/2015	Telephone: 866-480-1028
Date Made Active in Reports: 07/14/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Varies

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	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	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	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

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.



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: Semi-Annually

## 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: Varies

## 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: Semi-Annually

## 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: Semi-Annually

## 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: Semi-Annually

## 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: Annually

## 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: 01/01/2010  
Date Data Arrived at EDR: 02/16/2010  
Date Made Active in Reports: 04/12/2010  
Number of Days to Update: 55

Source: FEMA  
Telephone: 202-646-5797  
Last EDR Contact: 07/10/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Varies

### UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 07/06/2015  
Number of Days to Update: 19

Source: SWRCB  
Telephone: 916-341-5851  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
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: 08/01/2009  
Date Data Arrived at EDR: 09/10/2009  
Date Made Active in Reports: 10/01/2009  
Number of Days to Update: 21

Source: California Environmental Protection Agency  
Telephone: 916-327-5092  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Quarterly

### 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: 03/17/2015  
Date Data Arrived at EDR: 05/01/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 52

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Semi-Annually

### 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).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/23/2014  
Date Data Arrived at EDR: 11/25/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 65

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
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: 04/30/2015  
Date Data Arrived at EDR: 05/05/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 48

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Quarterly

## 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: 12/14/2014  
Date Data Arrived at EDR: 02/13/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 28

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Quarterly

## 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: 05/06/2015  
Date Data Arrived at EDR: 05/19/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 34

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Quarterly

## 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: 02/03/2015  
Date Data Arrived at EDR: 04/30/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 53

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/09/2015  
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: 09/30/2014  
Date Data Arrived at EDR: 03/03/2015  
Date Made Active in Reports: 03/13/2015  
Number of Days to Update: 10

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Semi-Annually

## 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).

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/30/2015  
Date Data Arrived at EDR: 05/26/2015  
Date Made Active in Reports: 06/22/2015  
Number of Days to Update: 27

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## ***State and tribal voluntary cleanup sites***

### **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  
Date Data Arrived at EDR: 04/22/2008  
Date Made Active in Reports: 05/19/2008  
Number of Days to Update: 27

Source: EPA, Region 7  
Telephone: 913-551-7365  
Last EDR Contact: 04/20/2009  
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: 08/03/2015  
Date Data Arrived at EDR: 08/04/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 30

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/04/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Quarterly

### **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: 09/29/2014  
Date Data Arrived at EDR: 10/01/2014  
Date Made Active in Reports: 11/06/2014  
Number of Days to Update: 36

Source: EPA, Region 1  
Telephone: 617-918-1102  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

## ***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: 06/08/2015  
Date Data Arrived at EDR: 06/09/2015  
Date Made Active in Reports: 07/10/2015  
Number of Days to Update: 31

Source: State Water Resources Control Board  
Telephone: 916-323-7905  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Varies

## **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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/22/2015  
Date Data Arrived at EDR: 06/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 70

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 06/24/2015  
Next Scheduled EDR Contact: 10/05/2015  
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.

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: 08/04/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: No Update Planned

### SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 47

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Quarterly

### HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/26/2015  
Date Data Arrived at EDR: 05/28/2015  
Date Made Active in Reports: 06/05/2015  
Number of Days to Update: 8

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 08/12/2015  
Next Scheduled EDR Contact: 11/30/2015  
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: 05/01/2015  
Next Scheduled EDR Contact: 08/17/2015  
Data Release Frequency: Varies

### 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: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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

## Local Lists of Hazardous waste / Contaminated Sites

### US HIST CDL: National Clandestine Laboratory Register

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: 06/01/2015  
Date Data Arrived at EDR: 06/02/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 106

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/31/2015  
Next Scheduled EDR Contact: 12/14/2015  
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  
Date Data Arrived at EDR: 08/03/2006  
Date Made Active in Reports: 08/24/2006  
Number of Days to Update: 21

Source: Department of Toxic Substance Control  
Telephone: 916-323-3400  
Last EDR Contact: 02/23/2009  
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: 08/03/2015  
Date Data Arrived at EDR: 08/04/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 30

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/04/2015  
Next Scheduled EDR Contact: 11/16/2015  
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: 12/31/2014  
Date Data Arrived at EDR: 03/10/2015  
Date Made Active in Reports: 03/18/2015  
Number of Days to Update: 8

Source: Department of Toxic Substances Control  
Telephone: 916-255-6504  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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.

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: 05/15/2015  
Date Data Arrived at EDR: 06/02/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 106

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 08/31/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Quarterly

## 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: 09/23/2009  
Date Data Arrived at EDR: 09/23/2009  
Date Made Active in Reports: 10/01/2009  
Number of Days to Update: 8

Source: Department of Public Health  
Telephone: 707-463-4466  
Last EDR Contact: 06/01/2015  
Next Scheduled EDR Contact: 09/14/2015  
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

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

## 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: 06/11/2015  
Date Data Arrived at EDR: 06/16/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 28

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/21/2015  
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: 02/18/2014  
Date Data Arrived at EDR: 03/18/2014  
Date Made Active in Reports: 04/24/2014  
Number of Days to Update: 37

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

### DEED: Deed Restriction Listing

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: 06/08/2015  
Date Data Arrived at EDR: 06/09/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 35

Source: DTSC and SWRCB  
Telephone: 916-323-3400  
Last EDR Contact: 06/09/2015  
Next Scheduled EDR Contact: 09/21/2015  
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: 06/24/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 68

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Annually

### 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).



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 07/28/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 6

Source: Office of Emergency Services  
Telephone: 916-845-8400  
Last EDR Contact: 07/28/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 27

Source: State Water Quality Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Quarterly

## MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 27

Source: State Water Resources Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Quarterly

## 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  
Date Data Arrived at EDR: 01/03/2013  
Date Made Active in Reports: 02/22/2013  
Number of Days to Update: 50

Source: FirstSearch  
Telephone: N/A  
Last EDR Contact: 01/03/2013  
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: 06/09/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 82

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

### 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: 06/06/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 07/08/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 07/14/2015
Number of Days to Update: 62	Next Scheduled EDR Contact: 10/28/2015
	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: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 07/14/2015
Number of Days to Update: 339	Next Scheduled EDR Contact: 10/28/2015
	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.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 05/21/2015
Number of Days to Update: 54	Next Scheduled EDR Contact: 08/31/2015
	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: 06/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/02/2015	Telephone: 202-566-1917
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 106	Next Scheduled EDR Contact: 11/30/2015
	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: 08/04/2015
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/23/2015
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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: 04/22/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2015	Telephone: 703-308-4044
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 05/14/2015
Number of Days to Update: 6	Next Scheduled EDR Contact: 08/24/2015
	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: 12/31/2012	Source: EPA
Date Data Arrived at EDR: 01/15/2015	Telephone: 202-260-5521
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 06/25/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/05/2015
	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.

Date of Government Version: 12/31/2013	Source: EPA
Date Data Arrived at EDR: 02/12/2015	Telephone: 202-566-0250
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 01/29/2015
Number of Days to Update: 110	Next Scheduled EDR Contact: 06/08/2015
	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: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 07/22/2015
Number of Days to Update: 77	Next Scheduled EDR Contact: 11/09/2015
	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: 11/25/2013	Source: EPA
Date Data Arrived at EDR: 12/12/2013	Telephone: 703-416-0223
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 06/12/2015
Number of Days to Update: 74	Next Scheduled EDR Contact: 09/21/2015
	Data Release Frequency: Annually

### RMP: Risk Management Plans

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 02/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/13/2015	Telephone: 202-564-8600
Date Made Active in Reports: 03/25/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 11/09/2015
	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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-8023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 05/14/2015
Number of Days to Update: 3	Next Scheduled EDR Contact: 08/24/2015
	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: 07/01/2014	Source: EPA
Date Data Arrived at EDR: 10/15/2014	Telephone: 202-566-0500
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 07/17/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/28/2015
	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: 01/23/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/06/2015	Telephone: 202-564-5088
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 07/09/2015
Number of Days to Update: 31	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667  
Last EDR Contact: 05/20/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Quarterly

### 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  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA  
Telephone: 202-566-1667  
Last EDR Contact: 05/20/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Quarterly

### 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: 03/31/2015  
Date Data Arrived at EDR: 04/09/2015  
Date Made Active in Reports: 06/11/2015  
Number of Days to Update: 63

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7469  
Last EDR Contact: 06/04/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Quarterly

### COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 08/07/2009  
Date Made Active in Reports: 10/22/2009  
Number of Days to Update: 76

Source: Department of Energy  
Telephone: 202-586-8749  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/28/2015  
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: 07/01/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 10/20/2014  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: N/A  
Last EDR Contact: 06/12/2015  
Next Scheduled EDR Contact: 09/21/2015  
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: 02/01/2011  
Date Data Arrived at EDR: 10/19/2011  
Date Made Active in Reports: 01/10/2012  
Number of Days to Update: 83

Source: Environmental Protection Agency  
Telephone: 202-566-0517  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/09/2015  
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.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/07/2015  
Date Data Arrived at EDR: 07/09/2015  
Date Made Active in Reports: 09/16/2015  
Number of Days to Update: 69

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 07/09/2015  
Next Scheduled EDR Contact: 10/19/2015  
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  
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: 12/17/2007  
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.

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: 07/31/2012  
Date Data Arrived at EDR: 08/07/2012  
Date Made Active in Reports: 09/18/2012  
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 08/04/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Varies

### 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: 12/31/2014  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/02/2015  
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/12/2015  
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: 12/31/2013  
Date Data Arrived at EDR: 02/24/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 08/28/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Biennially

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 07/14/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Semi-Annually

## 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.

Date of Government Version: 09/14/2010  
Date Data Arrived at EDR: 10/07/2011  
Date Made Active in Reports: 03/01/2012  
Number of Days to Update: 146

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 05/26/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014  
Date Data Arrived at EDR: 11/26/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 64

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 07/07/2015  
Next Scheduled EDR Contact: 10/19/2015  
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: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 07/22/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 40

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/22/2015  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/14/2015  
Date Data Arrived at EDR: 06/03/2015  
Date Made Active in Reports: 09/02/2015  
Number of Days to Update: 91

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 09/01/2015  
Next Scheduled EDR Contact: 12/14/2015  
Data Release Frequency: Semi-Annually

## 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: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/14/2015  
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: 06/05/2015  
Next Scheduled EDR Contact: 09/14/2015  
Data Release Frequency: Varies

## 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: 01/18/2015  
Date Data Arrived at EDR: 02/27/2015  
Date Made Active in Reports: 03/25/2015  
Number of Days to Update: 26

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 06/10/2015  
Next Scheduled EDR Contact: 09/21/2015  
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  
Date Data Arrived at EDR: 07/27/1994  
Date Made Active in Reports: 08/02/1994  
Number of Days to Update: 6

Source: Department of Health Services  
Telephone: 916-255-2118  
Last EDR Contact: 05/31/1994  
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).



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/24/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 18

Source: CAL EPA/Office of Emergency Information  
Telephone: 916-323-3400  
Last EDR Contact: 06/26/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Quarterly

## 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.

Date of Government Version: 08/10/2015  
Date Data Arrived at EDR: 08/27/2015  
Date Made Active in Reports: 10/01/2015  
Number of Days to Update: 35

Source: Department of Toxic Substance Control  
Telephone: 916-327-4498  
Last EDR Contact: 09/03/2015  
Next Scheduled EDR Contact: 12/21/2015  
Data Release Frequency: Annually

## EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2012  
Date Data Arrived at EDR: 03/25/2014  
Date Made Active in Reports: 04/28/2014  
Number of Days to Update: 34

Source: California Air Resources Board  
Telephone: 916-322-2990  
Last EDR Contact: 06/25/2015  
Next Scheduled EDR Contact: 10/05/2015  
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: 08/24/2015  
Date Data Arrived at EDR: 08/26/2015  
Date Made Active in Reports: 10/01/2015  
Number of Days to Update: 36

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 08/24/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information  
Date of Government Version: 08/03/2015  
Date Data Arrived at EDR: 08/06/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 28

Source: Department of Toxic Substances Control  
Telephone: 916-255-3628  
Last EDR Contact: 07/24/2015  
Next Scheduled EDR Contact: 11/09/2015  
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: 08/17/2015  
Date Data Arrived at EDR: 08/18/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 16

Source: California Integrated Waste Management Board  
Telephone: 916-341-6066  
Last EDR Contact: 08/14/2015  
Next Scheduled EDR Contact: 11/30/2015  
Data Release Frequency: Varies

## 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 10/15/2014  
Date Made Active in Reports: 11/19/2014  
Number of Days to Update: 35

Source: California Environmental Protection Agency  
Telephone: 916-255-1136  
Last EDR Contact: 07/17/2015  
Next Scheduled EDR Contact: 10/28/2015  
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  
Date Data Arrived at EDR: 01/22/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 76

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 01/22/2009  
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: 08/24/2015  
Date Data Arrived at EDR: 08/26/2015  
Date Made Active in Reports: 10/01/2015  
Number of Days to Update: 36

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 08/26/2015  
Next Scheduled EDR Contact: 12/07/2015  
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: 07/13/2015  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 20

Source: Department of Toxic Substances Control  
Telephone: 916-440-7145  
Last EDR Contact: 07/14/2015  
Next Scheduled EDR Contact: 10/28/2015  
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: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 27

Source: Department of Conservation  
Telephone: 916-322-1080  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Varies

## 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: 05/07/2015  
Date Data Arrived at EDR: 06/09/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 35

Source: Department of Public Health  
Telephone: 916-558-1784  
Last EDR Contact: 06/09/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Varies

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/17/2015  
Date Data Arrived at EDR: 08/18/2015  
Date Made Active in Reports: 09/11/2015  
Number of Days to Update: 24

Source: State Water Resources Control Board  
Telephone: 916-445-9379  
Last EDR Contact: 08/18/2015  
Next Scheduled EDR Contact: 11/30/2015  
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: 06/07/2015  
Date Data Arrived at EDR: 06/10/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 34

Source: Department of Pesticide Regulation  
Telephone: 916-445-4038  
Last EDR Contact: 06/10/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Quarterly

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 06/15/2015  
Date Data Arrived at EDR: 06/17/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 27

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 09/28/2015  
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: 08/04/2015  
Date Data Arrived at EDR: 08/25/2015  
Date Made Active in Reports: 10/05/2015  
Number of Days to Update: 41

Source: State Water Resources Control Board  
Telephone: 916-445-3846  
Last EDR Contact: 10/05/2015  
Next Scheduled EDR Contact: 01/04/2016  
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: 11/19/2014  
Date Data Arrived at EDR: 12/15/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 45

Source: Department of Conservation  
Telephone: 916-445-2408  
Last EDR Contact: 06/19/2015  
Next Scheduled EDR Contact: 09/28/2015  
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 board's review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 04/15/2015  
Date Data Arrived at EDR: 04/17/2015  
Date Made Active in Reports: 06/23/2015  
Number of Days to Update: 67

Source: RWQCB, Central Valley Region  
Telephone: 559-445-5577  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 05/20/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Quarterly

## 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: 06/22/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

## 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.

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 US Hist Auto Stat: EDR Exclusive Historic Gas 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 US Hist Cleaners: EDR Exclusive Historic Dry 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.

# 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: 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

## COUNTY RECORDS

### ALAMEDA COUNTY:

#### 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: 07/21/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 08/05/2015  
Number of Days to Update: 12

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 08/10/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/21/2015  
Date Data Arrived at EDR: 07/22/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 12

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

### Cupa Facility List

Date of Government Version: 06/05/2015  
Date Data Arrived at EDR: 06/09/2015  
Date Made Active in Reports: 07/10/2015  
Number of Days to Update: 31

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Varies

## BUTTE COUNTY:

## CUPA Facility Listing

### Cupa facility list.

Date of Government Version: 11/20/2014  
Date Data Arrived at EDR: 11/24/2014  
Date Made Active in Reports: 01/07/2015  
Number of Days to Update: 44

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/28/2015  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

## CUPA Facility Listing

### Cupa Facility Listing

Date of Government Version: 07/15/2015  
Date Data Arrived at EDR: 07/17/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 17

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

## CUPA Facility List

### Cupa facility list.

Date of Government Version: 06/11/2014  
Date Data Arrived at EDR: 06/13/2014  
Date Made Active in Reports: 07/07/2014  
Number of Days to Update: 24

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 08/10/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Varies

## CONTRA COSTA COUNTY:

## Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/24/2015  
Date Data Arrived at EDR: 08/25/2015  
Date Made Active in Reports: 10/01/2015  
Number of Days to Update: 37

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 08/03/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

Original  
Project  
Routing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa Facility list

Date of Government Version: 05/20/2015  
Date Data Arrived at EDR: 08/03/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 31

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 05/26/2015  
Date Data Arrived at EDR: 05/29/2015  
Date Made Active in Reports: 06/05/2015  
Number of Days to Update: 7

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 08/03/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Varies

## FRESNO COUNTY:

### 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: 07/13/2015  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 20

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 07/06/2015  
Next Scheduled EDR Contact: 10/19/2015  
Data Release Frequency: Semi-Annually

## HUMBOLDT COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 08/04/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 27

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 08/24/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Varies

## IMPERIAL COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 08/11/2015  
Date Data Arrived at EDR: 08/14/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 20

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## INYO COUNTY:

Original  
Project  
Routing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013  
Date Data Arrived at EDR: 09/11/2013  
Date Made Active in Reports: 10/14/2013  
Number of Days to Update: 33

Source: Inyo County Environmental Health Services  
Telephone: 760-878-0238  
Last EDR Contact: 05/21/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## KERN COUNTY:

### Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 05/19/2015  
Date Data Arrived at EDR: 06/18/2015  
Date Made Active in Reports: 07/22/2015  
Number of Days to Update: 34

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Quarterly

## KINGS COUNTY:

### 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: 08/25/2015  
Date Data Arrived at EDR: 08/27/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 34

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 08/24/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 08/11/2015  
Date Data Arrived at EDR: 08/14/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 20

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Varies

## LOS ANGELES COUNTY:

### San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

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: EPA Region 9  
Telephone: 415-972-3178  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: No Update Planned

Original  
Project  
Routing



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014	Source: Department of Public Works
Date Data Arrived at EDR: 01/30/2015	Telephone: 626-458-3517
Date Made Active in Reports: 03/04/2015	Last EDR Contact: 07/10/2015
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Semi-Annually

## List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/20/2015	Source: La County Department of Public Works
Date Data Arrived at EDR: 07/21/2015	Telephone: 818-458-5185
Date Made Active in Reports: 08/03/2015	Last EDR Contact: 07/21/2015
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Varies

## City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2015	Source: Engineering & Construction Division
Date Data Arrived at EDR: 07/27/2015	Telephone: 213-473-7869
Date Made Active in Reports: 08/10/2015	Last EDR Contact: 07/20/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015	Source: Community Health Services
Date Data Arrived at EDR: 01/29/2015	Telephone: 323-890-7806
Date Made Active in Reports: 03/10/2015	Last EDR Contact: 07/15/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/02/2015	Telephone: 310-524-2236
Date Made Active in Reports: 04/13/2015	Last EDR Contact: 07/17/2015
Number of Days to Update: 11	Next Scheduled EDR Contact: 11/02/2015
	Data Release Frequency: Semi-Annually

## City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/03/2015	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 05/26/2015	Telephone: 562-570-2563
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 07/27/2015
Number of Days to Update: 16	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Annually

## City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/03/2015	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 06/04/2015	Telephone: 310-618-2973
Date Made Active in Reports: 07/06/2015	Last EDR Contact: 06/04/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/28/2015
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 05/28/2015  
Date Data Arrived at EDR: 05/29/2015  
Date Made Active in Reports: 06/15/2015  
Number of Days to Update: 17

Source: Madera County Environmental Health  
Telephone: 559-675-7823  
Last EDR Contact: 05/22/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 10/08/2014  
Date Data Arrived at EDR: 10/22/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 54

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 07/06/2015  
Next Scheduled EDR Contact: 10/19/2015  
Data Release Frequency: Semi-Annually

## MERCED COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 05/22/2015  
Date Data Arrived at EDR: 05/26/2015  
Date Made Active in Reports: 06/05/2015  
Number of Days to Update: 10

Source: Merced County Environmental Health  
Telephone: 209-381-1094  
Last EDR Contact: 05/22/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## MONO COUNTY:

### CUPA Facility List

CUPA Facility List

Date of Government Version: 06/01/2015  
Date Data Arrived at EDR: 06/03/2015  
Date Made Active in Reports: 07/06/2015  
Number of Days to Update: 33

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 06/01/2015  
Next Scheduled EDR Contact: 09/14/2015  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/30/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 07/16/2015  
Number of Days to Update: 9

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 05/26/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## NAPA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011  
Date Data Arrived at EDR: 12/06/2011  
Date Made Active in Reports: 02/07/2012  
Number of Days to Update: 63

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 06/01/2015  
Next Scheduled EDR Contact: 09/14/2015  
Data Release Frequency: No Update Planned

## Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008  
Date Data Arrived at EDR: 01/16/2008  
Date Made Active in Reports: 02/08/2008  
Number of Days to Update: 23

Source: Napa County Department of Environmental Management  
Telephone: 707-253-4269  
Last EDR Contact: 06/01/2015  
Next Scheduled EDR Contact: 09/14/2015  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 06/03/2015  
Date Data Arrived at EDR: 06/04/2015  
Date Made Active in Reports: 07/22/2015  
Number of Days to Update: 48

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Varies

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2015  
Date Data Arrived at EDR: 08/10/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 24

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/06/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/03/2015  
Date Data Arrived at EDR: 08/10/2015  
Date Made Active in Reports: 09/11/2015  
Number of Days to Update: 32

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 05/06/2015  
Next Scheduled EDR Contact: 08/24/2015  
Data Release Frequency: Quarterly

### List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2015  
Date Data Arrived at EDR: 08/11/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 23

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 08/11/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Quarterly

## PLACER COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/01/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 08/05/2015  
Number of Days to Update: 29

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

### Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/15/2015  
Date Data Arrived at EDR: 07/17/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 17

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/15/2015  
Date Data Arrived at EDR: 07/17/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 17

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

### Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/07/2015  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 10

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 10/19/2015  
Data Release Frequency: Quarterly

### 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: 05/07/2015  
Date Data Arrived at EDR: 07/27/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 7

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 10/19/2015  
Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

### Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 7

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 08/10/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

### 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: 09/23/2013  
Date Data Arrived at EDR: 09/24/2013  
Date Made Active in Reports: 10/17/2013  
Number of Days to Update: 23

Source: Hazardous Materials Management Division  
Telephone: 619-338-2268  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2014  
Date Data Arrived at EDR: 11/21/2014  
Date Made Active in Reports: 12/29/2014  
Number of Days to Update: 38

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 07/22/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

### 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: 06/03/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### 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: 08/06/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Quarterly

### Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010  
Date Data Arrived at EDR: 03/10/2011  
Date Made Active in Reports: 03/15/2011  
Number of Days to Update: 5

Source: Department of Public Health  
Telephone: 415-252-3920  
Last EDR Contact: 08/06/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 07/06/2015  
Number of Days to Update: 10

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 06/17/2015  
Next Scheduled EDR Contact: 10/05/2015  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/25/2015  
Date Data Arrived at EDR: 08/27/2015  
Date Made Active in Reports: 09/30/2015  
Number of Days to Update: 34

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 08/24/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Varies

## SAN MATEO COUNTY:

### Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/20/2015  
Date Data Arrived at EDR: 07/22/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 12

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 06/15/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Annually

### Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/10/2015  
Date Data Arrived at EDR: 06/16/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 06/10/2015  
Next Scheduled EDR Contact: 06/29/2015  
Data Release Frequency: Semi-Annually

## SANTA BARBARA COUNTY:

### 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: 05/22/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## SANTA CLARA COUNTY:

### Cupa Facility List

Cupa facility list

Original  
Project  
Routing

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/10/2015  
Date Data Arrived at EDR: 06/16/2015  
Date Made Active in Reports: 07/10/2015  
Number of Days to Update: 24

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## 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

## 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: 06/01/2015  
Next Scheduled EDR Contact: 09/14/2015  
Data Release Frequency: Annually

## Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/10/2015  
Date Data Arrived at EDR: 08/14/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 20

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 08/07/2015  
Next Scheduled EDR Contact: 11/23/2015  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA Facility List

CUPA facility listing.

Date of Government Version: 08/25/2015  
Date Data Arrived at EDR: 08/26/2015  
Date Made Active in Reports: 10/01/2015  
Number of Days to Update: 36

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 08/24/2015  
Next Scheduled EDR Contact: 12/07/2015  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/12/2015  
Date Data Arrived at EDR: 06/16/2015  
Date Made Active in Reports: 07/10/2015  
Number of Days to Update: 24

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 05/26/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Varies

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015  
Date Data Arrived at EDR: 06/24/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 20

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 06/10/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Quarterly

## Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015  
Date Data Arrived at EDR: 06/30/2015  
Date Made Active in Reports: 07/07/2015  
Number of Days to Update: 7

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 06/10/2015  
Next Scheduled EDR Contact: 09/28/2015  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Cupa Facility List

Cupa Facility list

Date of Government Version: 06/22/2015  
Date Data Arrived at EDR: 06/26/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 18

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Varies

### Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2015  
Date Data Arrived at EDR: 07/07/2015  
Date Made Active in Reports: 07/14/2015  
Number of Days to Update: 7

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 06/22/2015  
Next Scheduled EDR Contact: 10/12/2015  
Data Release Frequency: Quarterly

## SUTTER COUNTY:

### Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 06/05/2015  
Date Data Arrived at EDR: 06/09/2015  
Date Made Active in Reports: 07/06/2015  
Number of Days to Update: 27

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 06/05/2015  
Next Scheduled EDR Contact: 09/21/2015  
Data Release Frequency: Semi-Annually

## TUOLUMNE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 07/13/2015  
Date Data Arrived at EDR: 07/28/2015  
Date Made Active in Reports: 08/03/2015  
Number of Days to Update: 6

Source: Division of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 07/24/2015  
Next Scheduled EDR Contact: 11/09/2015  
Data Release Frequency: Varies

## VENTURA COUNTY:



# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 07/27/2015	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 08/17/2015	Telephone: 805-654-2813
Date Made Active in Reports: 09/03/2015	Last EDR Contact: 08/12/2015
Number of Days to Update: 17	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Quarterly

## 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: 06/26/2015
Number of Days to Update: 49	Next Scheduled EDR Contact: 10/19/2015
	Data Release Frequency: Annually

## 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: 08/12/2015
Number of Days to Update: 37	Next Scheduled EDR Contact: 11/30/2015
	Data Release Frequency: Quarterly

## 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: 07/27/2015	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 07/29/2015	Telephone: 805-654-2813
Date Made Active in Reports: 09/03/2015	Last EDR Contact: 07/27/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 11/09/2015
	Data Release Frequency: Quarterly

## Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/27/2015	Source: Environmental Health Division
Date Data Arrived at EDR: 06/17/2015	Telephone: 805-654-2813
Date Made Active in Reports: 07/06/2015	Last EDR Contact: 06/17/2015
Number of Days to Update: 19	Next Scheduled EDR Contact: 09/28/2015
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 07/08/2015	Source: Yolo County Department of Health
Date Data Arrived at EDR: 07/13/2015	Telephone: 530-666-8646
Date Made Active in Reports: 07/22/2015	Last EDR Contact: 07/06/2015
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/05/2015
	Data Release Frequency: Annually

## YUBA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 08/04/2015  
Date Data Arrived at EDR: 08/07/2015  
Date Made Active in Reports: 09/03/2015  
Number of Days to Update: 27

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 07/31/2015  
Next Scheduled EDR Contact: 11/16/2015  
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: 07/30/2013  
Date Data Arrived at EDR: 08/19/2013  
Date Made Active in Reports: 10/03/2013  
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 05/18/2015  
Next Scheduled EDR Contact: 08/31/2015  
Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 07/17/2015  
Date Made Active in Reports: 08/12/2015  
Number of Days to Update: 26

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 07/13/2015  
Next Scheduled EDR Contact: 10/28/2015  
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: 08/01/2015  
Date Data Arrived at EDR: 08/06/2015  
Date Made Active in Reports: 08/24/2015  
Number of Days to Update: 18

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 08/06/2015  
Next Scheduled EDR Contact: 11/16/2015  
Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/24/2015  
Date Made Active in Reports: 08/18/2015  
Number of Days to Update: 25

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 07/20/2015  
Next Scheduled EDR Contact: 11/02/2015  
Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 06/19/2015  
Date Made Active in Reports: 07/15/2015  
Number of Days to Update: 26

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 05/26/2015  
Next Scheduled EDR Contact: 09/07/2015  
Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014

Date Data Arrived at EDR: 03/19/2015

Date Made Active in Reports: 04/07/2015

Number of Days to Update: 19

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/11/2015

Next Scheduled EDR Contact: 09/28/2015

Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: PennWell Corporation

Telephone: 281-546-1505

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 PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

### Electric Power Transmission Line Data

Source: PennWell Corporation

Telephone: 800-823-6277

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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.

### 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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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.

Current USGS 7.5 Minute Topographic Map  
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# Original Project Routing

## GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

FRESNO CANAL BRIDGE  
1440 N DEY REY  
SANGER, CA 93657

### TARGET PROPERTY COORDINATES

Latitude (North): 36.7568 - 36° 45' 24.48"  
Longitude (West): 119.5919 - 119° 35' 30.84"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 268622.3  
UTM Y (Meters): 4070824.5  
Elevation: 363 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map: 5603242 ROUND MOUNTAIN, CA  
Version Date: 2012  
South Map: 5603212 SANGER, 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 principal 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).

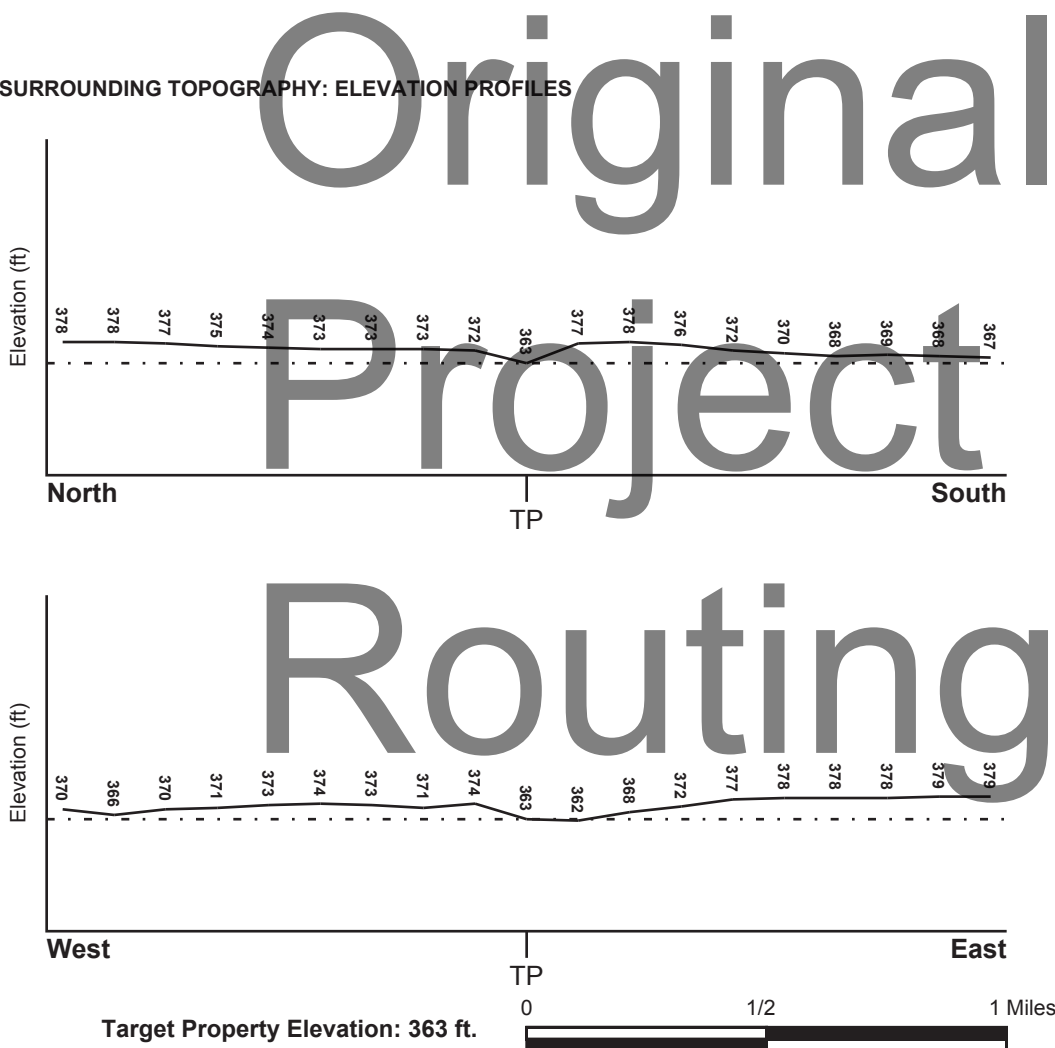
## TOPOGRAPHIC INFORMATION

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 North

## 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>Target Property County</u> FRESNO, CA	<u>FEMA Flood Electronic Data</u> YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	06019C - FEMA DFIRM Flood data
Additional Panels in search area:	Not Reported

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u> ROUND MOUNTAIN	<u>NWI Electronic Data Coverage</u> 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 (*decoded above as Era, System & Series*)

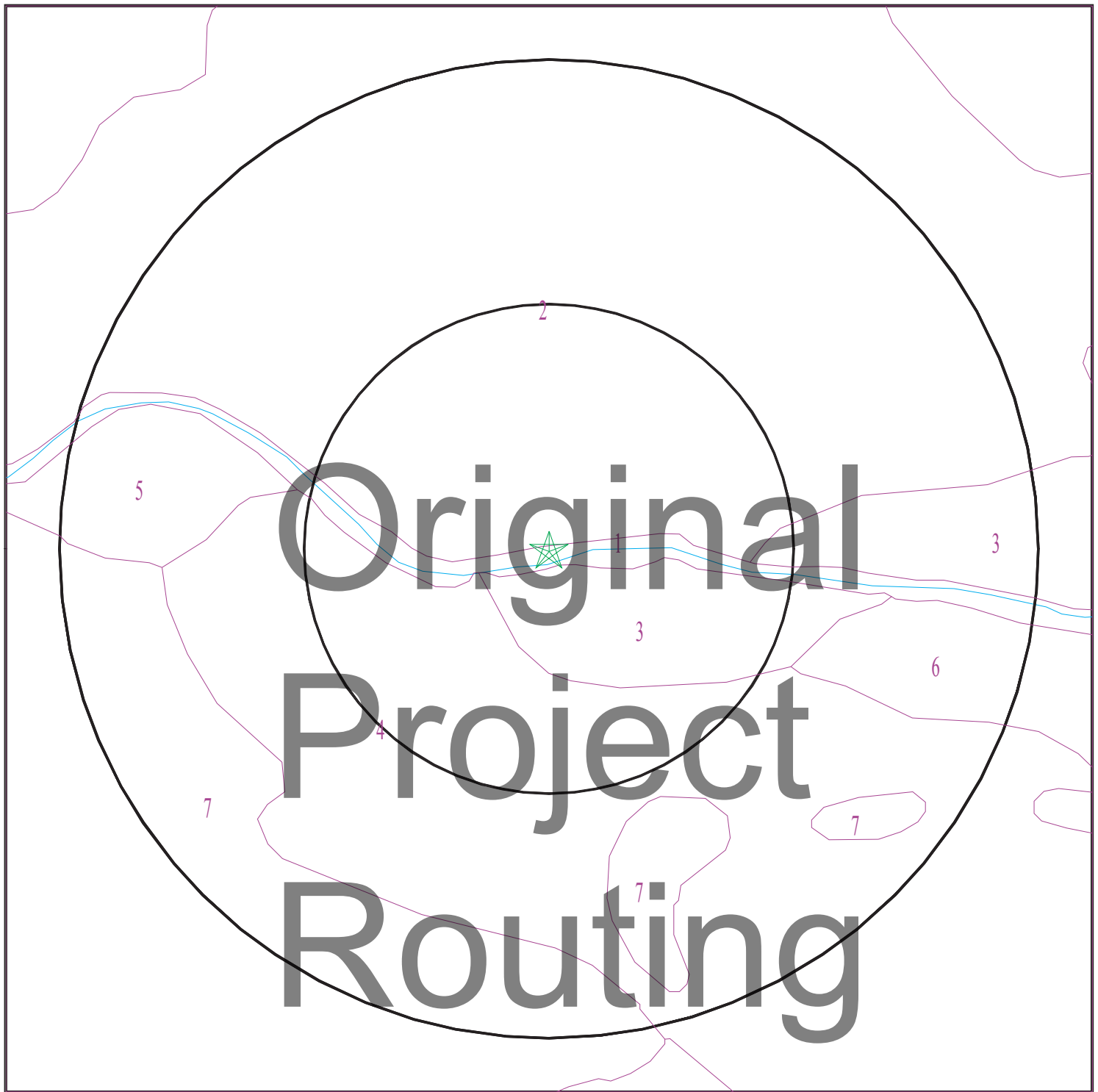
#### GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

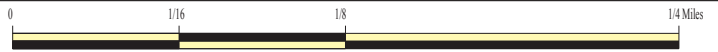
Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

Original  
Project  
Routing





- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Fresno Canal Bridge  
ADDRESS: 1440 N Dey Rey  
Sanger CA 93657  
LAT/LONG: 36.7568 / 119.5919

CLIENT: Haro Environmental, Inc.  
CONTACT: Elliot Haro  
INQUIRY #: 4430687.2s  
DATE: October 06, 2015 4:27 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: Water

Soil Surface Texture:  
Hydrologic Group: Not reported

Soil Drainage Class:  
Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

#### Soil Map ID: 2

Soil Component Name: ATWATER

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	24 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.1
2	24 inches	42 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.1
3	42 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.6

**Soil Map ID: 3**

Soil Component Name:

GREENFIELD

Soil Surface Texture:

sandy loam

Hydrologic Group:

Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:

Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min:

> 0 inches

Depth to Watertable Min:

> 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	16 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	16 inches	38 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
3	38 inches	59 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1

**Soil Map ID: 4**

Soil Component Name:

DELHI

Soil Surface Texture:

sand

Hydrologic Group:

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:

Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min:

> 0 inches

Depth to Watertable Min:

> 0 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

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	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	7 inches	25 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
3	25 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1

**Soil Map ID: 5**

Soil Component Name: GRANGEVILLE

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

**GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

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	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 42 Min: 14	Max: 7.8 Min: 6.6
2	7 inches	59 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6

**Soil Map ID: 6**

Soil Component Name: HANFORD

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

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	16 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	16 inches	72 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.3 Min: 6.1

**Soil Map ID: 7**

Soil Component Name: DELHI

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

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	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	7 inches	25 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 141 Min: 42	Max: 7.3 Min: 6.1

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
3	25 inches	59 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	Not reported	Max: 141 Min: 42	Max: 7.3 Min: 6.1

### 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>
1	USGS40000177258	1/4 - 1/2 Mile SE
2	USGS40000177273	1/4 - 1/2 Mile WSW
A5	USGS40000177388	1/2 - 1 Mile NNE
8	USGS40000178857	1/2 - 1 Mile SE
9	USGS40000177427	1/2 - 1 Mile NW
10	USGS40000177252	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>
No PWS System Found		

Note: PWS System location is not always the same as well location.



## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
3	CADW60000009560	1/4 - 1/2 Mile SE
4	CADW60000009559	1/2 - 1 Mile WNW
A6	CADW60000026934	1/2 - 1 Mile NNE
7	CADW60000034635	1/2 - 1 Mile SE

# Original Project Routing

PHYSICAL SETTING SOURCE MAP - 4430687.2s



- 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: Fresno Canal Bridge  
 ADDRESS: 1440 N Dey Rey  
 Sanger CA 93657  
 LAT/LONG: 36.7568 / 119.5919

CLIENT: Haro Environmental, Inc.  
 CONTACT: Elliot Haro  
 INQUIRY #: 4430687.2s  
 DATE: October 06, 2015 4:27 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**1**  
**SE**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000177258**

Org. Identifier:	USGS-CA	Drainagearea value:	Not Reported
Formal name:	USGS California Water Science Center	Contrib drainagearea:	Not Reported
Monloc Identifier:	USGS-364514119351501	Latitude:	36.7538392
Monloc name:	013S022E33M001M	Sourcemap scale:	24000
Monloc type:	Well	Horiz Acc measure units:	minutes
Monloc desc:	Not Reported	Vert measure val:	380.00
Huc code:	18030012	Vertacc measure val:	5
Drainagearea Units:	Not Reported	Countrycode:	US
Contrib drainagearea units:	Not Reported	Welldepth:	180
Longitude:	-119.5884677	Wellholedepth:	Not Reported
Horiz Acc measure:	1		
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83		
Vert measure units:	feet		
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29		
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1959		
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
-----	-----	-----
1963-10-23	35.05	

**2**  
**WSW**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS      USGS40000177273**

Org. Identifier:	USGS-CA	Drainagearea value:	Not Reported
Formal name:	USGS California Water Science Center	Contrib drainagearea:	Not Reported
Monloc Identifier:	USGS-364518119355501	Latitude:	36.7549502
Monloc name:	013S022E32K001M	Sourcemap scale:	24000
Monloc type:	Well	Horiz Acc measure units:	minutes
Monloc desc:	Not Reported	Vert measure val:	370.00
Huc code:	18030012	Vertacc measure val:	5
Drainagearea Units:	Not Reported	Countrycode:	US
Contrib drainagearea units:	Not Reported		
Longitude:	-119.5995794		
Horiz Acc measure:	1		
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83		
Vert measure units:	feet		
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29		
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type: Not Reported  
Construction date: 19501102  
Welldepth units: ft  
Wellholeddepth units: ft  
Welldepth: 128  
Wellholeddepth: 140

Ground-water levels, Number of Measurements: 0

**3**  
**SE**  
**1/4 - 1/2 Mile**  
**Higher**

CA WELLS CADW60000009560

Objectid: 9560  
Latitude: 36.7522  
Longitude: -119.5854  
Site code: 367522N1195854W001  
State well numbe: 13S22E33P001M  
Local well name: "  
Well use id: 6  
Well use descrip: Unknown  
County id: 10  
County name: Fresno  
Basin code: '5-22.08'  
Basin desc: Kings  
Dwr region id: 80237  
Dwr region: South Central Region Office  
Site id: CADW60000009560

Original  
Project  
Routing

**4**  
**WNW**  
**1/2 - 1 Mile**  
**Higher**

CA WELLS CADW60000009559

Objectid: 9559  
Latitude: 36.76  
Longitude: -119.6  
Site code: 367644N1195963W001  
State well numbe: 13S22E32B001M  
Local well name: 'KRCD083'  
Well use id: 3  
Well use descrip: Irrigation  
County id: 10  
County name: Fresno  
Basin code: '5-22.08'  
Basin desc: Kings  
Dwr region id: 80237  
Dwr region: South Central Region Office  
Site id: CADW60000009559

**A5**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

FED USGS USGS40000177388

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-364550119351101		
Monloc name:	013S022E33C001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.7638392
Longitude:	-119.5873567	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	375.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19500724	Welldepth:	90
Welldepth units:	ft	Wellholedepth:	106
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-10-23	20.38	

**A6**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

Objectid:	26934
Latitude:	36.7644
Longitude:	-119.5871
Site code:	367644N1195871W001
State well numbe:	13S22E33C001M
Local well name:	"
Well use id:	6
Well use descrip:	Unknown
County id:	10
County name:	Fresno
Basin code:	'5-22.08'
Basin desc:	Kings
Dwr region id:	80237
Dwr region:	South Central Region Office
Site id:	CADW60000026934

CA WELLS

CADW60000026934

**7**  
**SE**  
**1/2 - 1 Mile**  
**Lower**

CA WELLS

CADW60000034635

**GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS**

Objectid: 34635  
 Latitude: 36.75  
 Longitude: -119.5832  
 Site code: 367500N1195832W001  
 State well numbe: 14S22E04C001M  
 Local well name: "  
 Well use id: 6  
 Well use descrip: Unknown  
 County id: 10  
 County name: Fresno  
 Basin code: '5-22.08'  
 Basin desc: Kings  
 Dwr region id: 80237  
 Dwr region: South Central Region Office  
 Site id: CADW60000034635

**8  
SE  
1/2 - 1 Mile  
Higher**

FED USGS

USGS40000178857

Org. Identifier: USGS-CA  
 Formal name: USGS California Water Science Center  
 Monloc Identifier: USGS-365157119341201  
 Monloc name: 012S022E28A001M  
 Monloc type: Well  
 Monloc desc: Not Reported  
 Huc code: 18030012  
 Drainagearea Units: Not Reported  
 Contrib drainagearea units: Not Reported  
 Longitude: -119.582634  
 Horiz Acc measure: 1  
 Horiz Collection method: Interpolated from map  
 Horiz coord refsys: NAD83  
 Vert measure units: feet  
 Vert accmeasure units: feet  
 Vertcollection method: Interpolated from topographic map  
 Vert coord refsys: NGVD29  
 Aquifername: Central Valley aquifer system  
 Formation type: Not Reported  
 Aquifer type: Not Reported  
 Construction date: Not Reported  
 Welldepth units: Not Reported  
 Wellholeddepth units: Not Reported

Drainagearea value: Not Reported  
 Contrib drainagearea: Not Reported  
 Latitude: 36.7471725  
 Sourcemap scale: 24000  
 Horiz Acc measure units: minutes  
 Vert measure val: 476.00  
 Vertacc measure val: 1  
 Countrycode: US  
 Welldepth: Not Reported  
 Wellholeddepth: Not Reported

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-10-22	20.46	

**9  
NW  
1/2 - 1 Mile  
Higher**

FED USGS

USGS40000177427

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-364557119361001		
Monloc name:	013S022E29P001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.7657836
Longitude:	-119.6037465	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	365.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported		
Welldepth units:	Not Reported	Welldepth:	Not Reported
Wellholeddepth units:	Not Reported	Wellholeddepth:	Not Reported

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1963-10-23	15.08	

**10  
ESE  
1/2 - 1 Mile  
Higher**

FED USGS

USGS40000177252

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-364512119342601		
Monloc name:	013S022E33R001M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18030012	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	36.7532836
Longitude:	-119.5748559	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	375
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Central Valley aquifer system		
Formation type:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	150
Construction date:	19790110	Wellholedepth:	150
Welldepth units:	ft		
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

# Original Project Routing



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93657	13	0

Federal EPA Radon Zone for FRESNO County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93657

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.575 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	1.600 pCi/L	100%	0%	0%

Original  
Project  
Routing

# 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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

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.

## HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> 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 Services

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 Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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.

### STATE RECORDS

#### 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.

## OTHER STATE DATABASE INFORMATION

#### California Oil and Gas Well Locations

Source: Department of Conservation

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### RADON

#### State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208

Radon Database for California

#### 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 IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### 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.

### STREET AND ADDRESS INFORMATION

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# Original Project Routing

**Fresno Canal Bridge**

1440 N Dey Rey  
Sanger, CA 93657

Inquiry Number: 4430687.5  
October 09, 2015

# Original

# Project

The EDR-City Directory Image Report

# Routing

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### SECTION

Executive Summary

Findings

City Directory Images

Original  
*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.  
Project

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## EXECUTIVE SUMMARY

### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2013	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information Services
2008	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information Services
2003	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information Services
1999	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information Services
1995	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information Services
1992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cole Information Services
1990	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1985	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1980	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1975	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

### RECORD SOURCES

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## FINDINGS

### TARGET PROPERTY STREET

1440 N Dey Rey  
Sanger, CA 93657

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

### N DEL REY AVE

2013	pg A1	Cole Information Services
2008	pg A2	Cole Information Services
2003	pg A3	Cole Information Services
1999	pg A4	Cole Information Services
1995	pg A5	Cole Information Services
1992	pg A6	Cole Information Services
1990	pg A7	Haines Criss-Cross Directory
1985	pg A8	Haines Criss-Cross Directory
1980	pg A9	Haines Criss-Cross Directory
1975	pg A10	Haines Criss-Cross Directory
1975	pg A11	Haines Criss-Cross Directory

Original  
Project  
Routing



## FINDINGS

### CROSS STREETS

No Cross Streets Identified

# Original Project Routing

Original  
**City Directory Images**  
Project  
Routing

**N DEL REY AVE 2013**

1088 SCOTT SEELY  
1142 MARK SIMONIAN  
1200 DAVID STRUFFERT  
1202 OCCUPANT UNKNOWN  
1302 IRENE KIMES  
1410 MARION WINN  
1412 BRENT SEVERSON  
1418 GARFIELD SPENCER  
1440 PETER PAINTER  
1580 ANTONIO QUINTANILLA  
1622 DEWAYNE PEYTON  
1623 JENNIFER HOEY  
1683 JOAN GEURTZE  
KATHY PETTIT  
MYER GERSTER  
1691 PATRICK JOHNSON  
1720 LISAMARIE ALVAREZ  
1722 MARY DUNKEL  
2245 CASIMIRO PEREZ  
2257 LLOYD HIBNER  
2283 KARLA CHAVEZ  
2315 GISELA BIGBEE  
2336 LEEANN SILVA  
2353 MARTHA VANG  
2449 GEORGE JOHNSON  
2468 OCCUPANT UNKNOWN  
2470 DAVID NEWSON  
2499 OCCUPANT UNKNOWN  
2510 UE VANG  
2511 TIMOTHY SMITH  
2545 ALAN FRY  
2546 OCCUPANT UNKNOWN  
2547 JOE RIVERA  
2561 OCCUPANT UNKNOWN  
2565 JEFFREY THIESEN

Original  
Project  
Routing



-

**N DEL REY AVE 2008**

- 1088 SCOTT SEELY
- 1142 MARK SIMONIAN
- 1200 DAVID STRUFFERT
- 1202 SHANNON MOSELEY
- 1410 MARION WINN
- 1412 BRENT SEVERSON
- 1440 BLAIR RICHARDSON
- 1551 GREGORY KELLEY
- 1622 DEWAYNE PEYTON
- 1623 JENNIFER HOEY
- 1683 PADDOCK TACK SHOP
- WAYNE PETTIT
- 1691 OCCUPANT UNKNOWN
- 1720 LISAMARIE ALVAREZ
- 1722 MARY DUNKEL
- MARY DUNKEL
- 2257 LLOYD HIBNER
- 2283 HERBERTO MORA
- JOSE LARA
- 2315 THOMAS BIGBEE
- 2336 SUSANA GOMEZ
- 2351 LUE VANG
- 2353 BAO VANG
- 2374 CHRISTINA SENGRATH
- 2449 OCCUPANT UNKNOWN
- 2468 OCCUPANT UNKNOWN
- 2470 DAVID NEWSON
- 2499 DAVID SAVONE
- 2511 TIMOTHY SMITH
- 2545 ALAN FRY
- 2546 REVKOU VANG
- 2547 WILLIAM THOMAS
- 2561 MAE SATTERBERG
- 2565 JEFFREY THIESEN

Original  
Project  
Routing



-

**N DEL REY AVE 2003**

- 1088 BRYAN ALBERTA TRANSPORTATION
- 1142 MARK SIMONIAN
- 1200 DAVID STRUFFERT
- 1202 KAREN MOSELEY
- 1302 ANNETTE CLIFTON
- 1410 JUSTIN CAUDEL
- 1412 HAROLD SUMMERS
- 1440 CRAIG CRUMP
- 1622 DEWAYNE PEYTON
- 1623 MICHAEL AAROE
- 1683 VERDE VIEW FARM
- WAYNE PETTIT
- 1691 OCCUPANT UNKNOWN
- 1720 BRANDON SUMMERS
- 1722 MARY DUNKEL
- ROSE HASTINGS
- 2255 STANLEY AXLER
- 2257 LLOYD HIBNER
- 2283 GUADALUPE BENAVIDES
- LARRY TSO
- M LARA
- 2315 THOMAS BIGBEE
- 2351 MAI HER
- 2353 OCCUPANT UNKNOWN
- 2374 SAI PHANHKOMH
- 2449 HELEN JOHNSON
- 2468 DAVID NEWSOM
- 2499 JUDITH NISHI
- 2510 YOUA VANG
- 2511 TIMOTHY SMITH
- 2545 ALAN FRY
- 2546 FUE VANG
- 2547 OCCUPANT UNKNOWN
- 2561 OCCUPANT UNKNOWN
- 2565 JEFFREY THIESEN

Original  
Project  
Routing

**N DEL REY AVE 1999**

1088 SCOTT SEELY  
 1142 MARK SIMONIAN  
 1200 DAVID STRUFFERT  
 1410 ROB PARRISH  
 1412 BRENT SEVERSON  
 1440 BLAIR RICHARDSON  
 1622 DEWAYNE PEYTON  
 1623 JENNIFER HOEY  
 1683 ALLISON PETTIT  
 JOAN GEURTZE  
 1720 LISAMARIE ALVAREZ  
 1722 MARY DUNKEL  
 2257 LLOYD HIBNER  
 2283 JOSE LARA  
 2315 THOMAS BIGBEE  
 2351 LUE VANG  
 2353 MAI HER  
 2374 SIPHA PHANHKOMH  
 2470 DAVID NEWSON  
 2510 UE VANG  
 2511 TIMOTHY SMITH  
 2545 ALAN FRY  
 2546 PANG XIONG  
 2565 JEFFREY THIESEN

Original  
 Project  
 Routing

**N DEL REY AVE 1995**

1136 YAMAMURA, HELEN  
1156 YAMAMURA, FRANK N  
1302 RAMIREZ, SIMON O  
1550 PIUS, BONNIE F  
1551 OCCUPANT UNKNOWNN  
1589 HERMAN, LELAND  
2255 AXLER, STANLEY  
2257 HIBNER, LLOYD D  
2315 BIGBEE, THOMAS  
2351 OCCUPANT UNKNOWNN  
2374 COOKINGHAM, KEVIN  
2449 JOHNSON, GEORGE R  
2499 SPEED, ALTON G  
2547 MEADE, KATHRYN L

# Original Project Routing



-

**N DEL REY AVE 1992**

1088 GARABEDIAN, VON  
1302 RAMIREZ, SIMON O  
1589 HERMAN, LELAND  
1622 PEYTON, DEWAYNE  
1623 GUYS DRYWALL SV INC  
2255 AXLER, STANLEY  
2315 BIGBEE, THOMAS  
2374 COOKINGHAM, KEVIN  
2449 JOHNSON, GEORGE R  
2499 SPEED, ALTON G

# Original Project Routing



## N DEL REY AVE 1990

DEL REY AV N 93657  
SANGER

343	FRANZ Arthur	255-6085
432	REDFERN Larry	251-9241
760	PARVANIAN Paul	255-6032
1088	GARABEDIAN Sheila	453-1481
	GARABEDIAN Von	453-1481
1142	XXXX	00
1200	HUDECEK Harvey	252-3173
1202	MOSELEY Henry	252-2415 6
1302	RAMIREZ Simon O	255-7480
1412	XXXX	00
2255	AXLER Gladys Marie	291-2414
	AXLER Stanley	291-2414
2283	XXXX	00
2315	BIGBEE Thos	294-8087 7
2351	XXXX	00
2353	XXXX	00
2449	JOHNSON George R	292-4812
2499	SPEED Alton G	292-4835
2511	XXXX	00
2569	*BUCHHOLZ G FLOORING	292-8441 5
2630	XXXX	00
2659	XXXX	00
2693	XXXX	00
2717	LO Kou	292-6733 8
2721	GOLDBERG Haskell	291-2460
2723	XXXX	00
2732	XXXX	00
2737	XXXX	00
2807	GIORDANO M	292-2795 2
2871	JOHNSON Ted	291-5227
	JOHNSON Virginia	291-5227
2951	XXXX	00
2959	PARKER John E	292-2742 4
2961	XXXX	00
3036	NELSON Aaron O	291-3653
3098	CARTER Charles H	291-3604
3165	XXXX	00
3232	ANDERSON Robert J	291-8034 8
3274	XXXX	00
3469	LEE Clarence R	292-8369
3474	KIRSCHNER L Stan	291-3477
3535	XXXX	00
3548	BARTHULI W D	291-5336
3601	XXXX	00
3681	ROGERS Calvin J	292-4329
3703	XXXX	00
3736	XXXX	00
3737	XXXX	00
3740	GORE Harold	291-3700
3759	MILLER Rodney M	875-5096 8
3780	ILIFF Michael J	291-8057 1
3816	XXXX	00
3843	OLSEN Norman	291-6390
3850	NOLAN Lee	291-0824
3875	CHAPMAN James W	291-2449
3893	LACEFIELD Donald	294-7433 8
	LOFLIN Dawn	294-8615 8
3914	HOLLABAUGH John G	291-6391
★	1 BUS	57 RES
		0 NEW

Original Project Routing

## N DEL REY AVE 1985

DEL REY AV N 93657 SANGER			
343	FRANZ ARTHUR	255-8085	
432	REDFERN LARRY	251-9241	
760	PARVANIAN PAUL	255-8032	
1088	GARABEDIAN VON	453-1481	2
1142	XXXX	00	
1200	HUDECEK HARVEY	252-3173	9
1202	XXXX	00	
1302	RAMIREZ SIMON O	255-7480	
1440	XXXX	00	
1622	DEWAYNES GARAGE	251-9084	1
2255	AXLER GLADYS MARIE	291-2414	
	AXLER STANLEY	291-2414	7
2283	XXXX	00	
2315	XXXX	00	
2353	XXXX	00	
2449	JOHNSON GEO R	875-5171	0
	JOHNSON GEORGE R	292-4812	9
2499	SPEED ALTON G	292-4335	7
2511	MULLINGS C V	291-0345	7
2569	BUCHHOLZ G FLOORING	292-8441	+5
2630	SANCHEZ CORNELIO L	292-8207	4
2659	XXXX	00	
2693	HUGHES GARY	292-2634	+5
2721	GOLDBERG HASKELL	291-2460	
2723	BECK LUWANA	294-1289	+5
2732	XXXX	00	
2737	RIPPEE B J INVSTGTR	229-8106	4
2807	GIORDANO M	292-2795	2
2871	JOHNSON TED	291-5227	
2951	XXXX	00	
2959	PARKER JOHN E	292-2745	4
2961	RUTHERFORD ROSS	292-4757	7
3036	NELSON AMON O	291-3653	
3098	CARTER CHARLES H	291-3604	
	HATCHER TERRY	292-7064	3
3165	ANDERSON ROBERT J	291-8034	9
3274	RUNDEL ROB	291-2512	+5
3469	LEE CLARENCE R	292-6389	9
3474	KIRSCHNER L STAN	291-3477	
3535	XXXX	00	
3548	BARTHOLI W D	291-5336	
3601	PERRY ERNEST J	291-3767	
3681	ROGERS CALVIN J	292-4329	8
3703	XXXX	00	
3736	XXXX	00	
3737	XXXX	00	
3740	GORE HAROLD	291-3700	9
	GORE HAROLD	875-5391	9
3759	SANACORE BENNIE	875-5096	
3780	ILIFF MICHAEL J	291-8057	1
3816	PHILLIPS BRUCE S	292-2621	1
3843	OLSEN NORMAN	291-6390	0
3850	NOLAN LEE	291-0824	9
	NOLAN LEE	875-6392	0
3875	CHAPMAN JAMES W	291-2449	
3893	CARTER BENNY	291-2430	6
	CARTER LEE	291-3966	
3914	HOLLABAUGH JOHN G	291-6391	
	★ 3 BUS	55 RES	4 NEW

Original Project Routing

N DEL REY AVE 1980

1088	LABIAK GREGORY	255-7429	5
1142	CAMPBELL MURRAY	255-0562	+0
1200	HUDECEK HARVEY	252-3173	9
1202	XXXX	00	
1302	RAMIREZ SIMON O	255-7480	
1440	EMANUELS STEPHEN	251-2654	9
1622	PEYTON DEWAYNE	255-4761	9
2255	AXLER GLADYS MARIE	291-2414	7
	AXLER STANLEY	291-2414	7
2283	HARPER MAX	291-0128	7
2315	RHOADS MICHAEL	292-7992	9
2351	MARTIN HENRY P	292-5218	+0
2353	XXXX	00	
2449	JOHNSON GEO R	875-5171	+0
	JOHNSON GEORGE R	292-4812	9
2499	SPEED ALTON G	292-4836	7
2511	MOLLINGS C V	291-0345	7
2630	XXXX	00	
2719	PORTER RONALD L	291-6364	4
2721	GOLDBERG HASKELL	291-2460	3
2807	ESSKEW FRANK	292-5949	9
2871	JOHNSON TED	291-5227	5
2951	SMITH VERNON C	291-6038	8
2969	PARKER DAVID L	292-4403	6
2961	RUTHERFORD ROSS	292-7757	7
3036	NELSON AARON P	291-3653	
3098	CARTER CHARLES H	291-3604	
3165	ANDERSON ROBERT J	291-8034	9
3469	LEE CLARENCE R	292-8369	9
3474	KIRSCHNER L STAN	291-3477	
3536	XXXX	00	
3541	BARTHULL W D	291-5336	
3611	PERRY ERNEST J	291-3767	3
3681	ROGERS CALVIN J	292-4329	8
3703	XXXX	00	
3736	WATERS GUY	291-2689	
3737	FISHER J L	291-2687	
3740	GORE HAROLD	875-5391	9
	GORE HAROLD	291-3700	9
3759	SANACORE BENNIE	875-5096	
3843	OLSEN NORMAN	291-6390	+0
3850	NOLAN LEE	875-6392	+0
	NOLAN LEE	291-0824	9
3875	CHAPMAN JAMES W	291-2449	3
3893	CARTER BENNY	291-2430	6
	CARTER LEE	291-3966	
3914	HOLLABUAGH JOHN G	291-6391	
	* 0 BUS	51 RES	5 NEW

Original  
Project  
Routing

## N DEL REY AVE 1975

1088	LABIAK GREGORY	255-7429+5
1142	SAUNDERS GERALD	255-7774
1200	GORE HAROLD	875-5391
	GORE HAROLD	255-6078
1202	MOSELEY K J	255-1173 4
1302	RAMIREZ SIMON O	255-7480
1683	MARTINEZ IRIS	251-5206+5
2255	AXLER GLADYS MARIE	255-7276
	AXLER STANLEY	255-7276
2283	HARPER MAX	255-3791 3
2449	JOHNSON GEO R	875-5171
	JOHNSON GEO R	255-7254
2499	SPEED ALTON G	255-7993
2511	MULLINGS C V	255-4638 4
2630	COON FRED I	875-5065
	SHIPMAN RONALD	291-4033
2719	PORTER RONALD L	291-6364 4
2721	GOLDBERG RONALD	291-2460 3
2807	XXXX	00
2871	JOHNSON TED	291-5227+5
2959	DICK K B	291-3895 4

Original  
Project  
Routing

N DEL REY AVE 1975

N DEL REY AV N		93657 CONT..
2961	GRASMICK EDW C	291-2770 3
3036	NELSON AARON O	291-3653
3098	CARTER CHARLES H	291-3604
3165	GILBERT ROBT S	291-2454
3469	KILLIAN ROLAND R	291-5927 3
3474	KIRSCHNER L STAN	291-3477
3535	XXXX	00
3548	BARTHULI W D	291-5336
3601	PERRY ERNEST J	291-3767 3
3681	QUIGLEY JACK	291-4015+5
3703	XXXX	00
3736	WATERS GUY	291-2689
3737	FISHER J L	291-2687
3759	SANACORE BENNIE	875-5096
3843	RICKERT STEVEN	291-9927 4
3850	NOLAN LEE BUKHOE SV	291-3709 3
	NOLAN LEE	875-6392 3
3875	CHAPMAN JAS W	291-2449 3
3893	CARTER LEE	291-3966
3914	HOLLABUAGH JOHN G	291-6391
*	1 BUS	44 RES 4 NEW

Original Project Routing

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**APPENDIX B**

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**INTERVIEW DOCUMENTATION**

**Original  
Project  
Routing**

EXHIBIT 6-A PRELIMINARY ENVIRONMENTAL STUDY (PES)

<b>Federal Project No.:</b> <u>BRLO-5942(249)</u> <i>(Federal Program Prefix-Project No., Agreement No.)</i>	<b>Final Design:</b> <u>February 2017</u> <i>(Expected Start Date)</i>
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<b>To:</b> <u>James Perrault</u> <i>(District Local Assistance Engineer)</i>  <u>Caltrans District 6</u> <i>(District)</i> <u>855 M Street, Suite 200</u> <u>Fresno, CA 93721</u> <i>(Address)</i>  <u>James.Perrault@dot.ca.gov</u> <i>(Email Address)</i>	<b>From:</b> <u>County of Fresno</u> <i>(Local Agency)</i> <u>Erin Haagenson, Senior Staff Analyst</u> <u>(559) 600-4528 / Alexis Rutherford, Staff Analyst</u> <u>(559) 600-4530</u> <i>(Project Manager's Name and Telephone No.)</i> <u>2220 Tulare Street, 6<sup>th</sup> Floor</u> <u>Fresno, CA 93721</u> <i>(Address)</i>  <u>ehaagenson@co.fresno.ca.us or</u> <u>arutherford@co.fresno.ca.us</u> <i>(Email Address)</i>
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Is this Project "ON" the State Highway System?  Yes  No **IF YES, STOP HERE** and contact the District Local Assistance Engineer regarding the completion of other environmental documentation.

<b>Federal State Transportation Improvement Program (FSTIP)</b> <a href="http://www.dot.ca.gov/hq/transprog/fedpgr.htm">http://www.dot.ca.gov/hq/transprog/fedpgr.htm</a> <a href="http://www.dot.ca.gov/hq/transprog/oftmp.htm">http://www.dot.ca.gov/hq/transprog/oftmp.htm</a>	<u>See Attachment A</u> <i>(Currently Adopted Plan Date)</i>	<u>See Attachment A</u> <i>(Page No. ___ attach to this form)</i>
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Programming for FSTIP:	Preliminary Engineering	Right of Way	Construction
	40,000		
Prior	\$ 209,000	17/18	\$ 50,000
<i>(Fiscal Year)</i>	<i>(Dollars)</i>	<i>(Fiscal Year)</i>	<i>(Dollars)</i>
		18/19	\$ 1,394,000
		<i>(Fiscal Year)</i>	<i>(Dollars)</i>

**Project Description as Shown in RTP and FSTIP:** BRIDGE NO. 42C0496, N DEL REY AVE, OVER FRESNO CANAL, 0.5 MI SOUTH OF MCKINLEY. Replace existing timber one lane bridge with two lane bridge. Toll credits programmed for PE, ROW, & CON. (42C0496 is a two lane bridge. The County requested a correction to the FTIP on the 2015 Federal Highway Bridge Program Survey submitted in October 2015 to correct the mistake.)

**Detailed Project Description:** *(Describe the following, as applicable: purpose and need, project location and limits, required right of way acquisition, proposed facilities, staging areas, disposal and borrow sites, construction activities, and construction access.)*  
 See project Notes  
*(Continue description on "Notes" sheet, last page of this Exhibit, if necessary)*

**Preliminary Design Information:**  
 Does the project involve any of the following? Please check the appropriate boxes and delineate on an attached map, plan, or layout including any additional pertinent information.

<table style="width:100%;"> <tr><td><input checked="" type="checkbox"/> Yes</td><td><input type="checkbox"/> No</td></tr> <tr><td><input checked="" type="checkbox"/> Widen existing roadway</td><td><input type="checkbox"/> Increase number of through lanes</td></tr> <tr><td><input type="checkbox"/> New alignment</td><td><input checked="" type="checkbox"/> Capacity increasing—other (e.g., channelization)</td></tr> <tr><td><input type="checkbox"/> Realignment</td><td><input checked="" type="checkbox"/> Ramp or street closure</td></tr> <tr><td><input checked="" type="checkbox"/> Bridge work</td><td><input type="checkbox"/> Vegetation removal</td></tr> <tr><td><input checked="" type="checkbox"/> Tree removal</td><td></td></tr> </table>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Widen existing roadway	<input type="checkbox"/> Increase number of through lanes	<input type="checkbox"/> New alignment	<input checked="" type="checkbox"/> Capacity increasing—other (e.g., channelization)	<input type="checkbox"/> Realignment	<input checked="" type="checkbox"/> Ramp or street closure	<input checked="" type="checkbox"/> Bridge work	<input type="checkbox"/> Vegetation removal	<input checked="" type="checkbox"/> Tree removal		<table style="width:100%;"> <tr><td><input checked="" type="checkbox"/> Yes</td><td><input type="checkbox"/> No</td></tr> <tr><td><input checked="" type="checkbox"/> Ground disturbance</td><td><input checked="" type="checkbox"/> Road cut/fill</td></tr> <tr><td><input checked="" type="checkbox"/> Excavation: anticipated maximum depth ??max</td><td><input type="checkbox"/> Drainage/culverts</td></tr> <tr><td><input type="checkbox"/> Flooding protection</td><td><input checked="" type="checkbox"/> Stream channel work</td></tr> <tr><td><input checked="" type="checkbox"/> Pile driving</td><td><input type="checkbox"/> Demolition</td></tr> </table>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Ground disturbance	<input checked="" type="checkbox"/> Road cut/fill	<input checked="" type="checkbox"/> Excavation: anticipated maximum depth ??max	<input type="checkbox"/> Drainage/culverts	<input type="checkbox"/> Flooding protection	<input checked="" type="checkbox"/> Stream channel work	<input checked="" type="checkbox"/> Pile driving	<input type="checkbox"/> Demolition	<table style="width:100%;"> <tr><td><input checked="" type="checkbox"/> Yes</td><td><input type="checkbox"/> No</td></tr> <tr><td><input checked="" type="checkbox"/> Easements</td><td><input type="checkbox"/> Equipment staging</td></tr> <tr><td><input checked="" type="checkbox"/> Temporary access road/detour</td><td><input type="checkbox"/> Utility relocation</td></tr> <tr><td><input checked="" type="checkbox"/> Right of way acquisition (if yes, attach map with APN)</td><td><input type="checkbox"/> Disposal/borrow sites</td></tr> <tr><td><input type="checkbox"/> Part of larger adjacent project</td><td><input type="checkbox"/> Railroad</td></tr> </table>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Easements	<input type="checkbox"/> Equipment staging	<input checked="" type="checkbox"/> Temporary access road/detour	<input type="checkbox"/> Utility relocation	<input checked="" type="checkbox"/> Right of way acquisition (if yes, attach map with APN)	<input type="checkbox"/> Disposal/borrow sites	<input type="checkbox"/> Part of larger adjacent project	<input type="checkbox"/> Railroad
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No																																	
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<input type="checkbox"/> Part of larger adjacent project	<input type="checkbox"/> Railroad																																	

**Required Attachments:**

- Regional map                       Project location map                       Project footprint map (existing/proposed right of way)  
 Engineering drawings (existing and proposed cross sections), if available    Borrow/disposal site location map, if applicable  
 (Note: all maps (except project location map and regional maps) should be consistent with the project description (minimum scale: 1" = 200').)  
 Notes to support the conclusions of this checklist/project description continuation page (attached)

Examine the project for potential effects on the environment, direct or indirect and answer the following questions. The "construction area," as specified below, includes all areas of ground disturbance associated with the project, including staging and stockpiling areas and temporary access roads.

Each answer must be briefly documented on the "Notes" pages at the end of the PES Form.

A. Potential Environmental Effects	Yes	To Be Determined	No
<b>General</b>			
1. Will the project require future construction to fully utilize the design capabilities included in the proposed project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will the project generate public controversy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Noise</b>			
3. Is the project a Type I project as defined in 23 CFR 772.5(h): "construction on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Does the project have the potential for adverse construction-related noise impact (such as related to pile driving)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Air Quality</b>			
5. Is the project in a NAAQS non-attainment or maintenance area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the project exempt from the requirement that a conformity determination be made? (If "Yes," state which conformity exemption in 40 CFR 93.126, Table 2 applies): <u>Widening narrow pavements or reconstructing bridges (no additional travel lanes).</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the project exempt from regional conformity? (If "Yes," state which conformity exemption in 40 CFR 93.127, Table 3 applies): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. If project is not exempt from regional conformity, (If "No" on Question #7) Is project in a metropolitan non-attainment/maintenance area? <input type="checkbox"/> Is project in an isolated rural non-attainment area? <input type="checkbox"/> Is project in a CO, PM10 and/or PM2.5 non-attainment/maintenance area? <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Hazardous Materials/Hazardous Waste</b>			
9. Is there potential for hazardous materials (including underground or aboveground tanks, etc.) or hazardous waste (including oil/water separators, waste oil, asbestos-containing material, lead-based paint, ADL, etc.) within or immediately adjacent to the construction area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Water Quality/Resources</b>			
10. Does the project have the potential to impact water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the project within a designated sole-source aquifer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Coastal Zone</b>			
12. Is the project within the State Coastal Zone, San Francisco Bay, or Suisun Marsh?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Floodplain</b>			
13. Is the construction area located within a regulatory floodway or within the base floodplain (100-year elevation of a watercourse or lake)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Wild and Scenic Rivers</b>			
14. Is the project within or immediately adjacent to a Wild and Scenic River System?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



**Biological Resources**

- 15. Is there a potential for federally listed threatened or endangered species, or their critical habitat or essential fish habitat to occur within or adjacent to the construction area?
- 16. Does the project have the potential to directly or indirectly affect migratory birds, or their nests or eggs (such as vegetation removal, box culvert replacement/repair, bridge work, etc.)?
- 17. Is there a potential for wetlands to occur within or adjacent to the construction area?
- 18. Is there a potential for agricultural wetlands to occur within or adjacent to the construction area?
- 19. Is there a potential for the introduction or spread of invasive plant species?

**Sections 4(f) and 6(f)**

- 20. Are there any historic sites or publicly owned public parks, recreation areas, wildlife or waterfowl refuges (Section 4[f]) within or immediately adjacent to the construction area?
- 21. Does the project have the potential to affect properties acquired or improved with Land and Water Conservation Fund Act (Section 6[f]) funds?

**Visual Resources**

- 22. Does the project have the potential to affect any visual or scenic resources?

**Relocation Impacts**

- 23. Will the project require the relocation of residential or business properties?

**Land Use, Community, and Farmland Impacts**

- 24. Will the project require any right of way, including partial or full takes? Consider construction easements and utility relocations.
- 25. Is the project inconsistent with plans and goals adopted by the community?
- 26. Does the project have the potential to divide or disrupt neighborhoods/communities?
- 27. Does the project have the potential to disproportionately affect low-income and minority populations?
- 28. Will the project require the relocation of public utilities?
- 29. Will the project affect access to properties or roadways?
- 30. Will the project involve changes in access control to the State Highway System (SHS)?
- 31. Will the project involve the use of a temporary road, detour, or ramp closure?
- 32. Will the project reduce available parking?
- 33. Will the project construction encroach on state or federal lands?
- 34. Will the project convert any farmland to a different use or impact any farmlands?

**Cultural Resources**

- 35. Is there National Register listed, or potentially eligible historic properties, or archaeological resources within or immediately adjacent to the construction area?  
*(Note: Caltrans PQS answers question #35 )*
- 36. Is the project adjacent to, or would it encroach on Tribal land?

For Sections B, C, and D, check appropriate box to indicate required technical studies, coordination, permits, or approvals.

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input type="checkbox"/> <b>Traffic</b> <i>Check one:</i>		
<input type="checkbox"/> Traffic Study	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> <b>Noise</b> <i>Check as applicable:</i>		

<input type="checkbox"/> Traffic Related		
<input checked="" type="checkbox"/> Construction Related		
<b>Check one:</b>		
<input type="checkbox"/> Noise Study Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> NADR	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Discussion in ED Only	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input checked="" type="checkbox"/> <b>Air Quality</b>		
<b>Check as applicable:</b>		
<input checked="" type="checkbox"/> Traffic Related		
<input checked="" type="checkbox"/> Construction Related		
<b>Check one:</b>		
<input type="checkbox"/> Air Quality Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Discussion in ED Only	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
	<input type="checkbox"/> FHWA	<input type="checkbox"/> Conformity Finding (23 USC 327 CEs, EAs, EISs)
	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Conformity Finding (23 USC 326 CEs)
	<input type="checkbox"/> Regional Agency	<input type="checkbox"/> PM10/PM2.5 Interagency Consultation
<input checked="" type="checkbox"/> <b>Hazardous Materials/ Hazardous Waste</b>		
<b>Check as applicable:</b>		
<input checked="" type="checkbox"/> Initial Site Assessment (Phase 1)	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input type="checkbox"/> Preliminary Site Assessment (Phase 2)	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
	<input type="checkbox"/> Cal EPA DTSC	<input type="checkbox"/> Review Database
	<input type="checkbox"/> Local Agency	<input type="checkbox"/> Review Database
<input checked="" type="checkbox"/> <b>Water Quality/Resources</b>		
<b>Check as applicable:</b>		
<input type="checkbox"/> Water Quality Assess. Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Technical Memorandum	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> <b>Sole-Source Aquifer (Districts 5, 6 and 11)</b>	<input type="checkbox"/> EPA (S.F. Regional Office)	<input type="checkbox"/> Approval of Analysis in ED
<input type="checkbox"/> <b>Coastal Zone</b>	<input type="checkbox"/> CCC	<input type="checkbox"/> Coastal Zone Consistency Determination

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input type="checkbox"/> Floodplain		
<p><i>Check as applicable:</i></p> <input type="checkbox"/> Location Hydraulic Study <input type="checkbox"/> Floodplain Evaluation Report <input type="checkbox"/> Summary Floodplain Encroachment Report	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> FHWA	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Approval <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Only Practicable Alternative Finding <input type="checkbox"/> Approves significant encroachments and concurs in Only Practicable Alternative Findings
<input type="checkbox"/> Wild and Scenic Rivers	<input type="checkbox"/> River Managing Agency	<input type="checkbox"/> Wild and Scenic Rivers Determination
<p><input checked="" type="checkbox"/> Biological Resources</p> <p><i>Check as applicable:</i></p> <input checked="" type="checkbox"/> NES, Minimal Impact <input type="checkbox"/> NES <input type="checkbox"/> BA <input type="checkbox"/> EFH Evaluation <input type="checkbox"/> Bio-Acoustic Evaluation <input type="checkbox"/> Technical Memorandum	<input checked="" type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> USFWS <input type="checkbox"/> NOAA Fisheries <input type="checkbox"/> NOAA Fisheries <input type="checkbox"/> NOAA Fisheries <input type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Approves for Consultation <input type="checkbox"/> Section 7 Informal/Formal Consultation <input type="checkbox"/> MSA Consultation <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<p><input type="checkbox"/> Wetlands</p> <p><i>Check as applicable:</i></p> <input type="checkbox"/> WD and Assessment	<input type="checkbox"/> Caltrans <input type="checkbox"/> ACOE <input type="checkbox"/> NRCS <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Wetland Verification <input type="checkbox"/> Agricultural Wetland Verification <input type="checkbox"/> Wetlands Only Practicable Alternative Finding
<p><input type="checkbox"/> Invasive Plants</p> <input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<p><input type="checkbox"/> Section 4(f)</p> <p><i>Check as applicable:</i></p> <input type="checkbox"/> De minimis <input type="checkbox"/> Programmatic 4(f) Evaluation Type: _____ <input type="checkbox"/> Individual 4(f) Evaluation	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Agency with Jurisdiction <input type="checkbox"/> SHPO <input type="checkbox"/> DOI <input type="checkbox"/> HUD <input type="checkbox"/> USDA	<input type="checkbox"/> Determine Temporary Occupancy <input type="checkbox"/> De minimis finding <input type="checkbox"/> Approval <input type="checkbox"/> Approval

Original Project Routing

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input type="checkbox"/> Section 6(f)	<input type="checkbox"/> Agency with Jurisdiction <input type="checkbox"/> NPS  <input type="checkbox"/> NPS	<input type="checkbox"/> Determines Consistency with Long-Term Management Plan  <input type="checkbox"/> Approves Conversion
<input type="checkbox"/> Visual Resources <input type="checkbox"/> Technical Memorandum <input type="checkbox"/> Minor VIA <input type="checkbox"/> Moderate VIA <input type="checkbox"/> Advance/Complex VIA	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<input type="checkbox"/> Relocation Impacts <i>Check one:</i> <input type="checkbox"/> Relocation Impact Memo <input type="checkbox"/> Relocation Impact Study <input type="checkbox"/> Relocation Impact Report	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<input type="checkbox"/> Land Use and Community Impacts <i>Check one:</i> <input type="checkbox"/> CIA <input type="checkbox"/> Technical Memorandum <input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<input type="checkbox"/> Construction/Encroachment on State Lands <i>Check as applicable:</i> <input type="checkbox"/> SLC Jurisdiction <input type="checkbox"/> Caltrans Jurisdiction <input type="checkbox"/> SP Jurisdiction	<input type="checkbox"/> SLC <input type="checkbox"/> Caltrans <input type="checkbox"/> SP	<input type="checkbox"/> SLC Lease <input type="checkbox"/> Encroachment Permit <input type="checkbox"/> Encroachment Permit
<input type="checkbox"/> Construction/Encroachment on Federal Lands	<input type="checkbox"/> Federal Agency with Jurisdiction	<input type="checkbox"/> Encroachment Permit
<input type="checkbox"/> Construction/Encroachment On Indian Trust Lands	<input type="checkbox"/> Bureau of Indian Affairs	<input type="checkbox"/> Right of Way Permit
<input checked="" type="checkbox"/> Farmlands <i>Check one:</i> <input type="checkbox"/> CIA <input type="checkbox"/> Technical Memorandum <input checked="" type="checkbox"/> Discussion in ED Only <i>Check as applicable:</i> <input type="checkbox"/> Form AD 1006 <input type="checkbox"/> Conversion to Non-Agri Use	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input checked="" type="checkbox"/> Caltrans  <input type="checkbox"/> NRCS <input type="checkbox"/> CDOC <input type="checkbox"/> ACOE	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input checked="" type="checkbox"/> Approval  <input type="checkbox"/> Approves Conversion <input type="checkbox"/> Approves Conversion

Original Project Routing

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/ Approvals
<input type="checkbox"/> <b>Cultural Resources</b> (PQS completes this section) <i>Check as applicable:</i>		
<input type="checkbox"/> APE Map	<input type="checkbox"/> Caltrans PQS <input type="checkbox"/> Caltrans PQS and DLAE	<input type="checkbox"/> Screened Undertaking <input type="checkbox"/> Approves APE Map
<input type="checkbox"/> HPSR <input type="checkbox"/> ASR <input type="checkbox"/> HRER	<input type="checkbox"/> Local Preservation Groups and/or Native American Tribes <input type="checkbox"/> Caltrans	<input type="checkbox"/> Provides Comments Regarding Concerns with Project <input type="checkbox"/> Approves for Consultation
<input type="checkbox"/> Finding of Effect Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Concurs on No Effect, No Adverse Effect with Standard Conditions
<input type="checkbox"/> MOA	<input type="checkbox"/> SHPO <input type="checkbox"/> Caltrans	<input type="checkbox"/> Letter of Concurrence on Eligibility, No Adverse Effect without Standard <input type="checkbox"/> Approves MOA
	<input type="checkbox"/> SHPO <input type="checkbox"/> ACHP (if requested)	<input type="checkbox"/> Approves MOA <input type="checkbox"/> Approves MOA
<input checked="" type="checkbox"/> <b>Permits</b> Copies of permits and a list of mitigation commitments are mandatory submittals following NEPA approval.	<input checked="" type="checkbox"/> ACOE	<input checked="" type="checkbox"/> Section 404 Nationwide Permit
	<input type="checkbox"/> ACOE	<input type="checkbox"/> Section 404 Individual Permit
	<input type="checkbox"/> Caltrans/ACOE/EPA	<input type="checkbox"/> NEPA/404 Integration MOU
	<input type="checkbox"/> USFWS <input type="checkbox"/> NOAA Fisheries	
	<input type="checkbox"/> ACOE <input type="checkbox"/> USCG	<input type="checkbox"/> Rivers and Harbors Act Section 10 Permit <input type="checkbox"/> USCG Bridge Permit
	<input checked="" type="checkbox"/> RWQCB <input checked="" type="checkbox"/> CDFG	<input checked="" type="checkbox"/> Section 401 Water Quality Certification <input checked="" type="checkbox"/> Section 1602 Streambed Alteration Agreement
	<input checked="" type="checkbox"/> RWQCB	<input checked="" type="checkbox"/> NPDES Permit
	<input type="checkbox"/> CCC <input type="checkbox"/> Local Agency <input type="checkbox"/> BCDC	<input type="checkbox"/> Coastal Zone Permit <input type="checkbox"/> BCDC Permit

Notes: Additional studies may be required for other federal agencies.

ACHP	=	Advisory Council on Historic Preservation	HRER	=	Historical Resources Evaluation Report
ACOE	=	U.S. Army Corps of Engineers	HUD	=	U.S. Housing and Urban Development
ADL	=	Aerially Deposited Lead	MOA	=	Memorandum of Agreement
APE	=	Area of Potential Effect	MSA	=	Magnuson-Stevens Fishery Conservation and Management Act
APN	=	Assessor Parcel Number	NEPA	=	National Environmental Policy Act
ASR	=	Archaeological Survey Report	NADR	=	Noise Abatement Decision Report
BA	=	Biological Assessment	NES	=	Natural Environment Study
BCDC	=	Bay Conservation and Development Commission	NHPA	=	National Historic Preservation Act
BE	=	Biological Evaluation	NOAA	=	National Oceanic and Atmospheric Administration
BO	=	Biological Opinion	NMFS	=	National Marine Fisheries Service
Cal EPA	=	California Environmental Protection Agency	NPDES	=	National Pollutant Discharge Elimination System
CCC	=	California Coastal Commission	NPS	=	National Park Service
CDFG	=	California Department of Fish and Game	NRCS	=	Natural Resources Conservation Service
CDOC	=	California Department of Conservation	PM10	=	Particulate Matter 10 Microns in Diameter or Less
CE	=	Categorical Exclusion	PM2.5	=	Particulate Matter 2.5 Microns in Diameter or Less
CIA	=	Community Impact Assessment	PMP	=	Project Management Plan
CWA	=	Clean Water Act	PQS	=	Professionally Qualified Staff
DLAE	=	District Local Assistance Engineer	ROD	=	Record of Decision
DOI	=	U.S. Department of Interior	RTIP	=	Regional Transportation Improvement Program
DTSC	=	Department of Toxic Substances Control	RTP	=	Regional Transportation Plan
EA	=	Environmental Assessment	RWQCB	=	Regional Water Quality Control Board
ED	=	Environmental Document	SER	=	Standard Environmental Reference
EFH	=	Essential Fish Habitat	SEP	=	Senior Environmental Planner
EIS	=	Environmental Impact Statement	SHPO	=	State Historic Preservation Officer
EPA	=	U.S. Environmental Protection Agency	SLC	=	State Lands Commission
FEMA	=	Federal Emergency Management Agency	SP	=	State Parks
FHWA	=	Federal Highway Administration	TIP	=	Transportation Improvement Program
FONSI	=	Finding of No Significant Impacted	USCG	=	U.S. Coast Guard
FTIP	=	Federal Transportation Improvement Program	USDA	=	U.S. Department of Agriculture
HPSR	=	Historic Property Survey Report	USFWS	=	U.S. Fish and Wildlife Service
			WD	=	Wetland Delineation

Original  
Project  
Routing







**Preliminary Environmental Investigation  
Notes to Support the Conclusions of the PES Form  
(May Also Include Continuation of Detailed Project Description)**

**Brief Explanation of How Project Complies, or Will Comply with Applicable Federal Mandate (Part A):**

The proposed project consists of replacing the functionally obsolete Fresno Canal Bridge on N. Del Rey Avenue, 0.5 miles south of McKinley (See Attachment B for mapping, photos and schematic drawings of the project). The existing 2-lane timber bridge would be replaced with a new 2-lane concrete bridge that meets current standards. The replacement would address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments. Since widening a timber structure is not allowable, a replacement is the only option.

Further investigation is needed to determine the bridge type; however, the County has prepared a project footprint drawing establishing the maximum extent of the project (See Attachment C). Potential bridge designs, access road and residential driveway realignments, channel work, approach work, potential permanent and temporary right of way needs and the contractor's access way to the channel would be accomplished within the proposed footprint. It is anticipated construction activities would commence in the non-irrigation/dry season after the nesting season. It is anticipated the bridge would be closed during construction requiring a 3.7-mile detour. Right of way needs are under investigation; however acquisition is anticipated. There are overhead utilities within the project limits. Utility relocation is anticipated. Further investigation required.

The existing bridge is 71' long 23.6' wide and was built in 1939 and widened in 1967. The proposed bridge will be approximately 80' long and 36' wide to accommodate two 12' wide travel lanes and 6' wide shoulders. Approach work is expected to extend up to 180' on either side of the bridge; however, the project footprint extends beyond this limit to include all possibilities. It is anticipated the driveways/access roads on all four corners would require realignment to accommodate approach railing. Private driveway gates and fences would require relocation.

1. The proposed project would not require future construction to fully utilize the design capabilities.
2. It is anticipated the bridge would be closed during construction requiring a 3.7-mile detour. This would allow a shorter construction period. The existing ADT is 1200. The access road/residential driveways adjacent to the canal would require realignment to accommodate approach railing. The property owners would be compensated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended and other Caltrans guidance as appropriate. Public controversy from the general public is not anticipated.
3. The proposed bridge replacement project is not a Type 1 project as defined in 23 CFR 772.5(h).
4. The project would involve temporary construction noise related to pile driving, structure demolition, excavation and channel work and other related activities. There are two residences within 300 feet of the proposed bridge replacement. Construction activities are exempt from the requirements of Fresno County's Noise Control Ordinance provided such activities do not take place before six a.m. or after nine p.m. on any day except Saturday or Sunday, or before seven a.m. or after five p.m. on Saturday or Sunday. The project would be constructed in accordance with Fresno County's Noise Control Ordinance and Caltrans specifications.
5. Fresno County is listed in the Table of Conformity Areas.
6. The proposed project type is listed in 40 CFR, Part 93, Section 93.126 Table 2.0 Exempt Projects as "Widening narrow pavements or reconstructing bridges (no additional travel lanes)."
7. According to the Transportation Air Quality Conformity Findings Checklist, the project is exempt from all project-level conformity requirements (40 CFR 93.126) and all air quality conformity requirements have been met.
8. See #7.

9. An Initial Site Assessment is included as Attachment D.
10. The proposed project would replace the Fresno Canal Bridge on N. Del Rey Avenue. Further investigation is needed to determine the bridge type. The bridge could span the entire channel or require work in the channel. The project could require a 1602 Streambed Alteration Agreement from DFW, Section 404 Nationwide Permit from the ACOE, a Section 401 Water Quality Certification and an NPDES Permit from the RWQCB.
11. The proposed project is within the Fresno Sole Source Aquifer. However, the project does not involve a well or sewage disposal and would not result in a threat of aquifer contamination or a hazard to public health. The project will be processed as a CE and is therefore exempt from a project-by-project review by the EPA.
12. The proposed project is not within the State Coastal Zone.
13. The project is not located within a DWR floodplain or Flood Zone A according to FEMA FIRM Map No. 06019C1615H (See Attachment E). The bridge is on a controlled channel. For those reasons, the floodplain forms are not required.
14. The project is not within ¼ mile of a Wild and Scenic River System according the National Wild and Scenic Rivers website.
15. The U.S. Fish and Wildlife species list for the Round Mountain Quad and GIS mapping of CNDDDB data points are provided as Attachment F.
16. Trees and other vegetation will be removed during construction. Swallow and Migratory Bird Contract Provisions would be included in the construction specifications.
17. Impacts to wetlands are not anticipated (See Attachment G).
18. Impacts to agricultural wetlands are not anticipated.
19. Any required hydroseeding would be conducted per Caltrans requirements.
20. The surrounding land is privately owned.
21. No.
22. Impacts to visual resources are not anticipated. The project scored a 10 on the Visual Impact Assessment Guide. (See Attachment H).
23. The proposed project would not require relocation of a residence or business.
24. Further investigation is required; however acquisition is anticipated. The project footprint identified in Attachment C includes potential permanent and temporary right of way needs. See Attachment I for Assessor Parcel Maps.
25. The project is consistent with community plans and goals.
26. The project does not have the potential to divide or disrupt neighborhoods or communities.
27. The project would not disproportionately affect low-income or minority populations.
28. Relocation of AT&T and PG&E facilities is anticipated. There are overhead utilities within the project limits. Further investigation is required.
29. It is anticipated the bridge will be closed during construction and will require a 3.7-mile detour.

30. Access control to the State Highway System would not change.
31. It is anticipated the bridge will be closed during construction and will require a 3.7-mile detour.
32. The project would not affect available parking.
33. The project would not encroach on state or federal lands.
34. Further investigation required. Driveway and access road realignments could require the removal of a negligible amount of farmland (See Attachment B for schematic drawings of the potential impacts caused by the realignments). Preparation of a Farmland Conversion Form is not anticipated.
35. To be screened by Caltrans PQS.
36. The project is not adjacent to and will not encroach on Tribal Land.

**Distribution** 1) Original - DLAE, 2) Local Agency Project Manager, 3) DLA Environmental Coordinator  
4) Senior Environmental Planner (or designee), 5) District PQS

Updated: 05/15/08

# Original Project Routing

Fresno Council of Governments  
 2015 Federal Transportation Improvement Program  
 Fresno County Region

Lead Agency: Fresno County

**FRE130083**

**AMENDMENT: 14-02**

Project Title: Replace Bridge No. 42C0496-N Del Rey over Fresno Canal

Project Description: BRIDGE NO. 42C0496, N DEL REY AVE, OVER FRESNO CANAL, 0.5 MI SOUTH OF MCKINLEY. Replace existing timber one lane bridge with two lane bridge. Toll credits programmed for PE, ROW, & CON.

CALTRANS\_FED\_ID:5942  
 (249),  
 CTIPS\_ID:5942(249)

Sys: Local Rt: TCM: No Model #: C1N

Exempt Category: Safety - Non capacity widening or bridge reconstruction.

Cost Difference: \$0

Est Total Cost: \$1,693,000

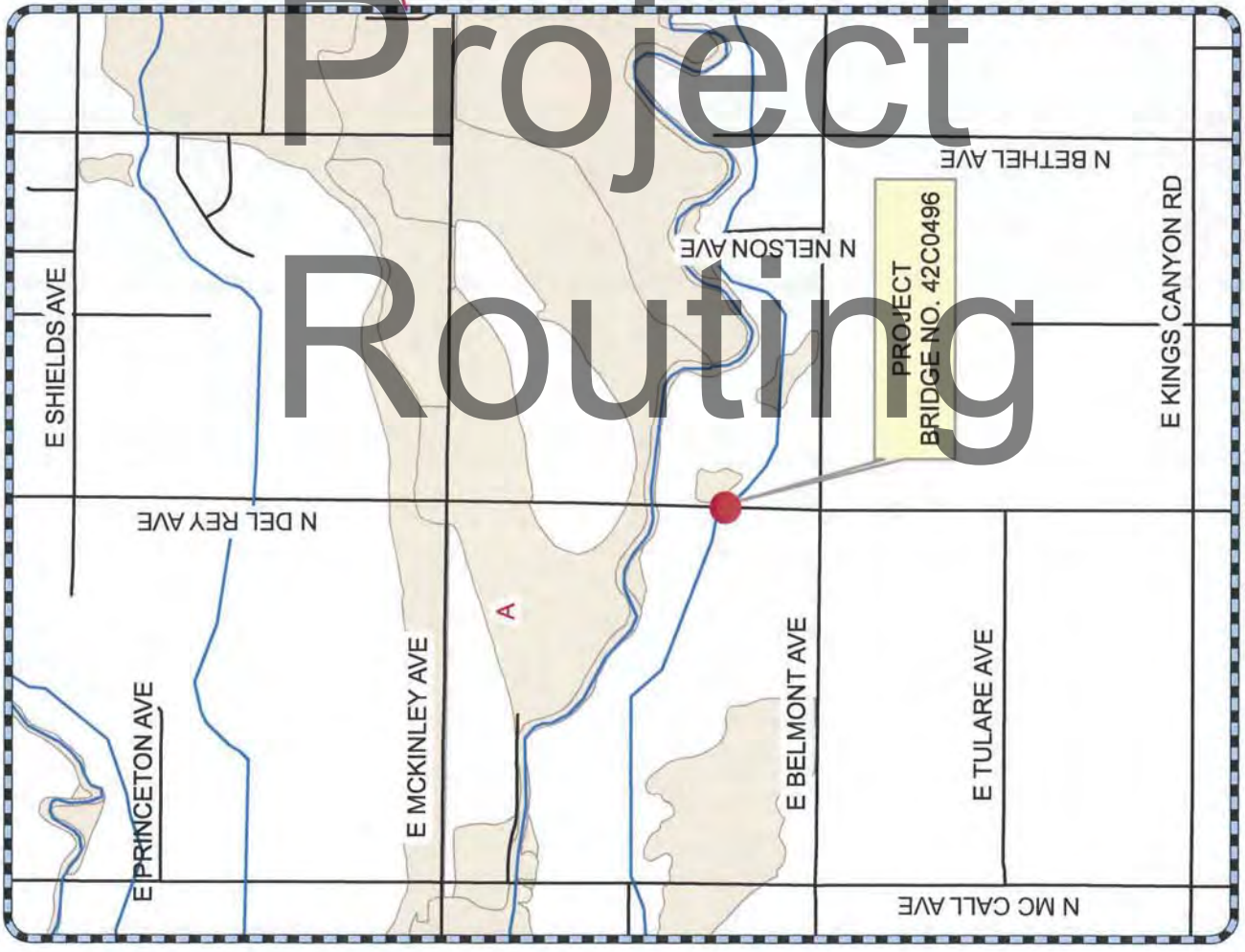
Open to Traffic:

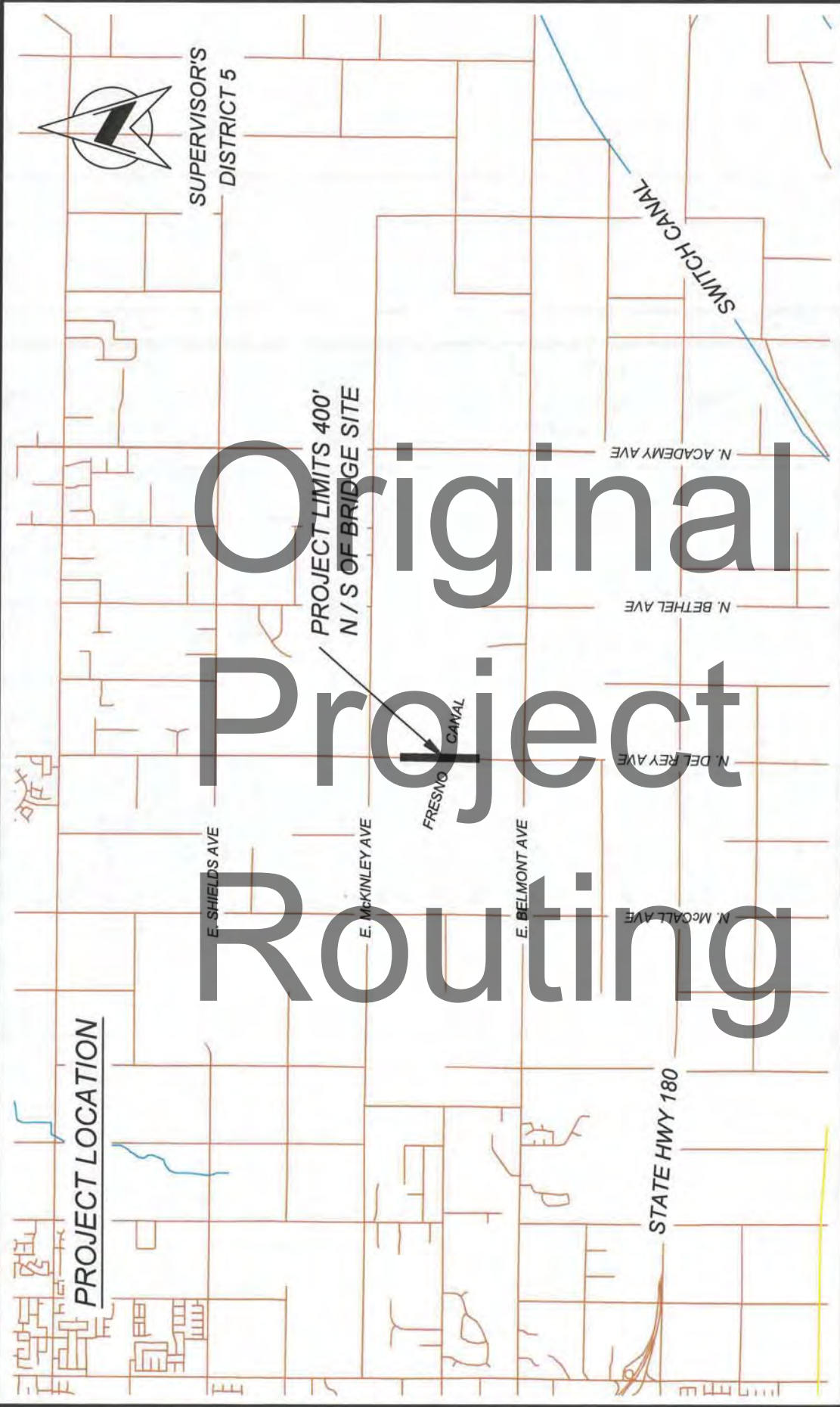
Phase	14/15	15/16	16/17	17/18	18/19	BEYOND	TOTAL
PE	\$40,000	\$209,000					\$249,000
RW				\$50,000			\$50,000
CON	\$40,000	\$209,000		\$50,000	\$1,394,000		\$1,394,000
TOTAL	\$40,000	\$209,000		\$50,000	\$1,394,000		\$1,693,000
TOTAL PE	\$0	\$209,000	\$0	\$0	\$0	\$0	\$249,000
TOTAL RW	\$0	\$0	\$0	\$50,000	\$0	\$0	\$50,000
TOTAL CON	\$0	\$0	\$0	\$0	\$1,394,000	\$0	\$1,394,000
TOTAL TOTAL	\$40,000	\$209,000	\$0	\$50,000	\$1,394,000	\$0	\$1,693,000

Original Project Routing

**LOCATION MAP**


FRESNO CANAL BRIDGE REPLACEMENT  
ON N DEL REY AVE  
BRIDGE NO. 42C0496





PROJECT LOCATION

SUPERVISOR'S  
DISTRICT 5

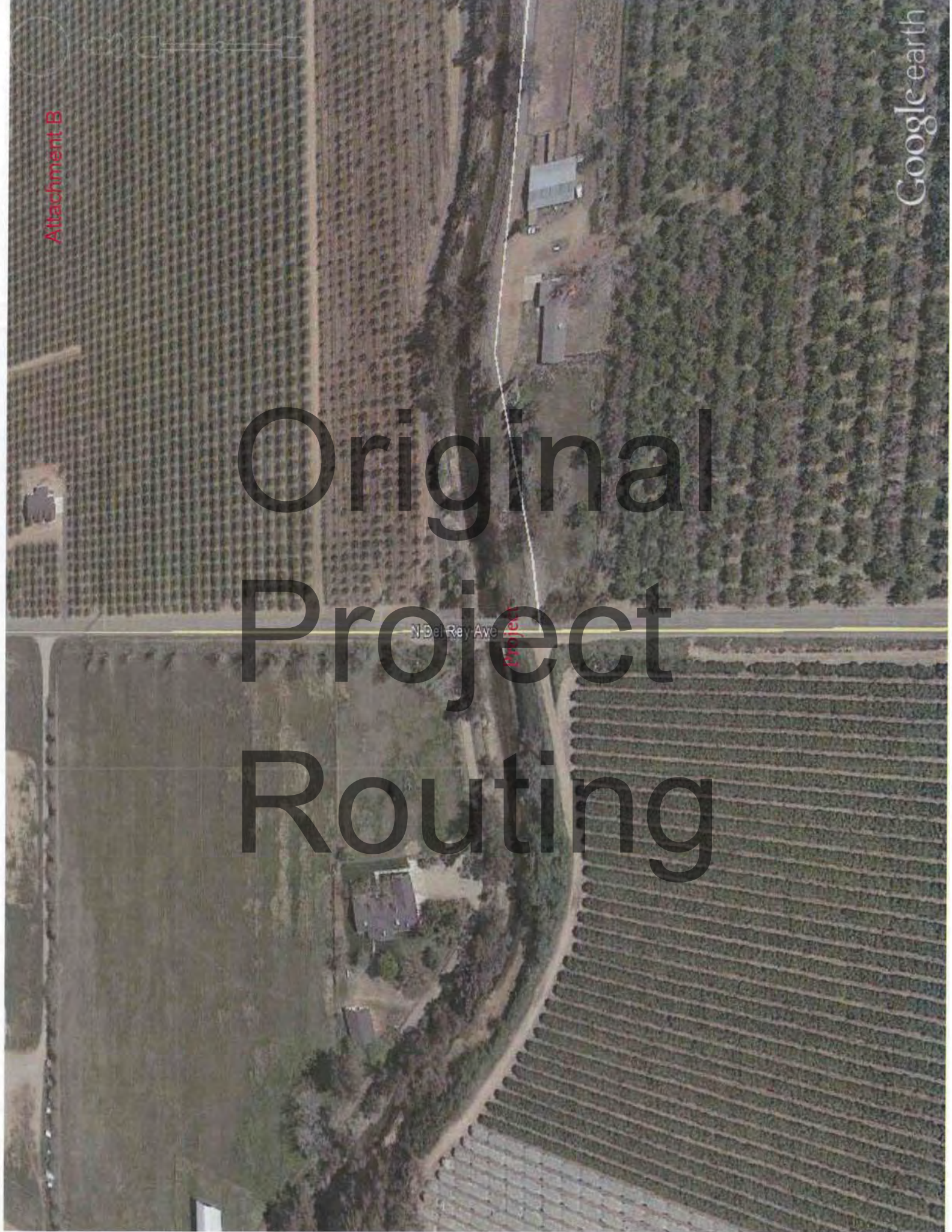
DESIGNED		M.Y.S.	DATE	SCALE	
DRAWN		J.M.	01/14	NONE	
<b>BRIDGE NO. 42C0496 / 08-039</b>					
			DEPARTMENT OF PUBLIC WORKS AND PLANNING <b>FRESNO CANAL BRIDGE          REPLACEMENT ON DEL REY AVE</b>		



# Original Project Routing

N Del Rey Ave

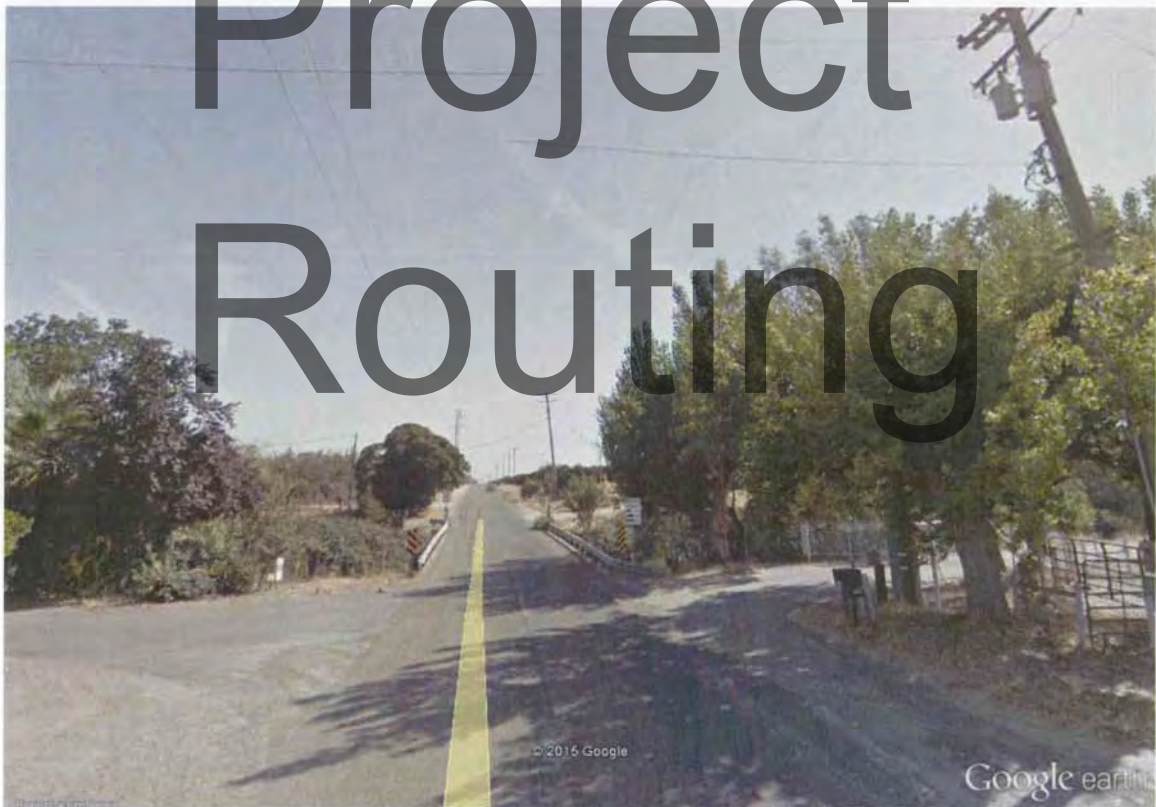
1000



Attachment B  
Photos



Looking north at bridge on Del Rey Avenue (toward McKinley Avenue)



Looking south at bridge on Del Rey Avenue (toward Belmont Avenue)

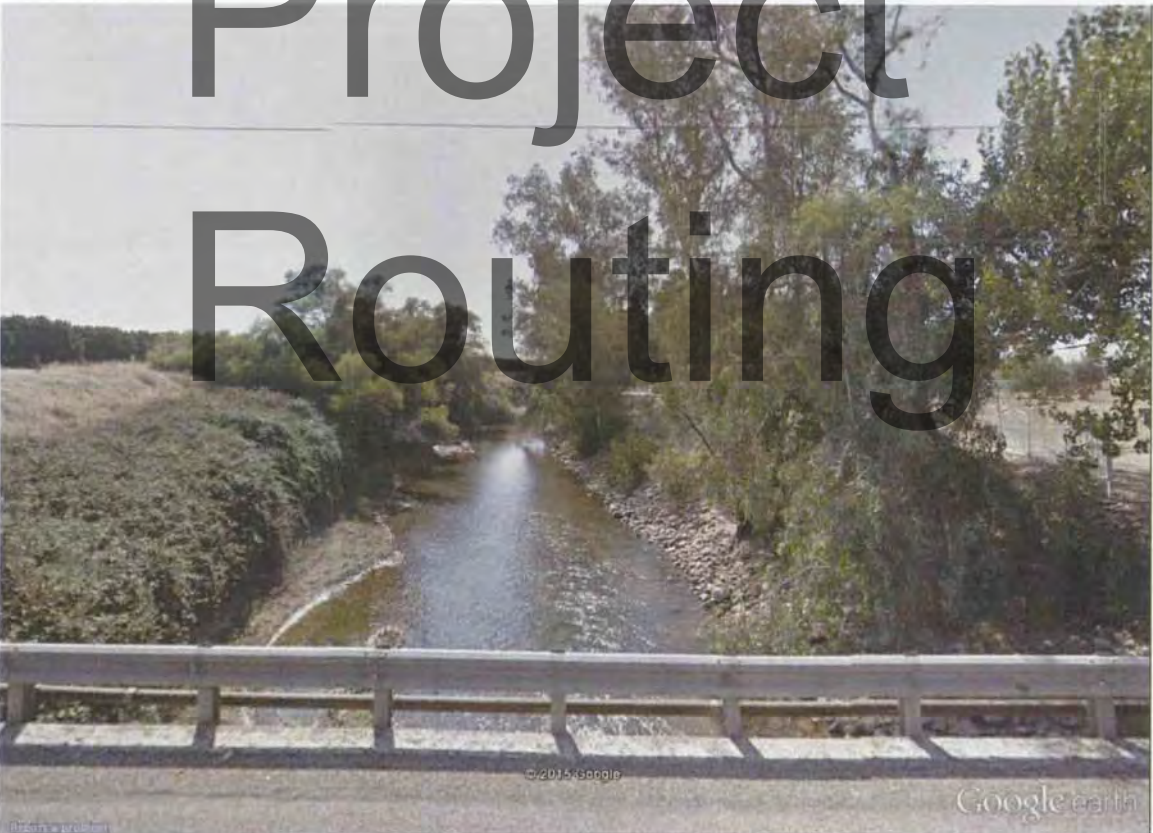
# Original Project Routing



Attachment B  
Photos



Looking east at Fresno Canal



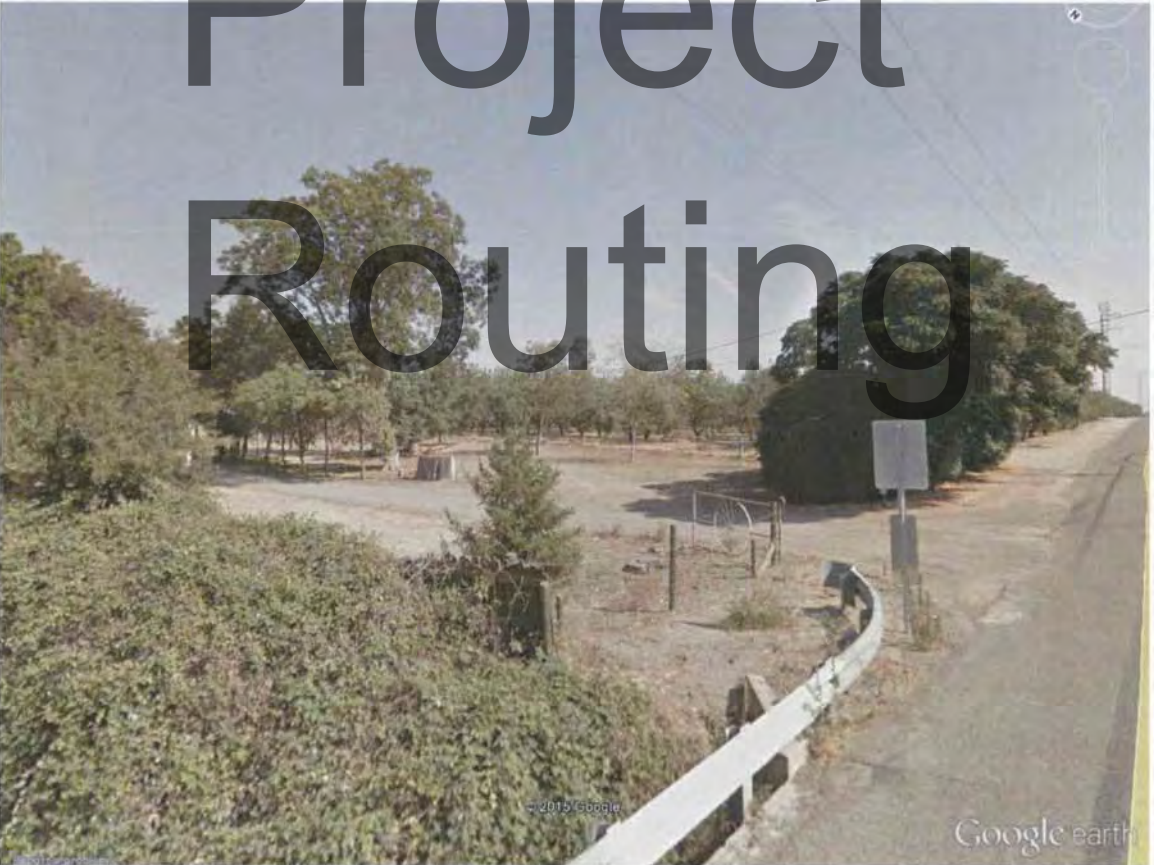
Looking west at Fresno Canal

# Original Project Routing

Attachment B  
Photos



Driveway on northeast corner of Fresno Canal



Driveway on southeast corner of Fresno Canal

# Original Project Routing

**Attachment B  
Photos**



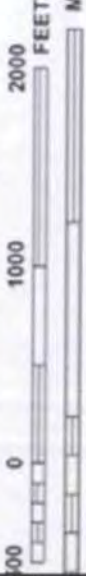
**Driveway on northwest corner of Fresno Canal**



**Access road on southwest corner of Fresno Canal**

**Original  
Project  
Routing**

MAP SCALE 1" = 1000'



**NFIP**  
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1615H

**FIRM**

**FLOOD INSURANCE RATE MAP**

FRESNO COUNTY,  
CALIFORNIA  
AND INCORPORATED AREAS

PANEL 1615 OF 3525

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY:  
FRESNO COUNTY

SUBJECT PANEL SIZE:  
56629 SQ. FT.

Note to User: The Map Number shown below should be used when making map orders. The Community Number shown above should be used in insurance applications for the subject community.

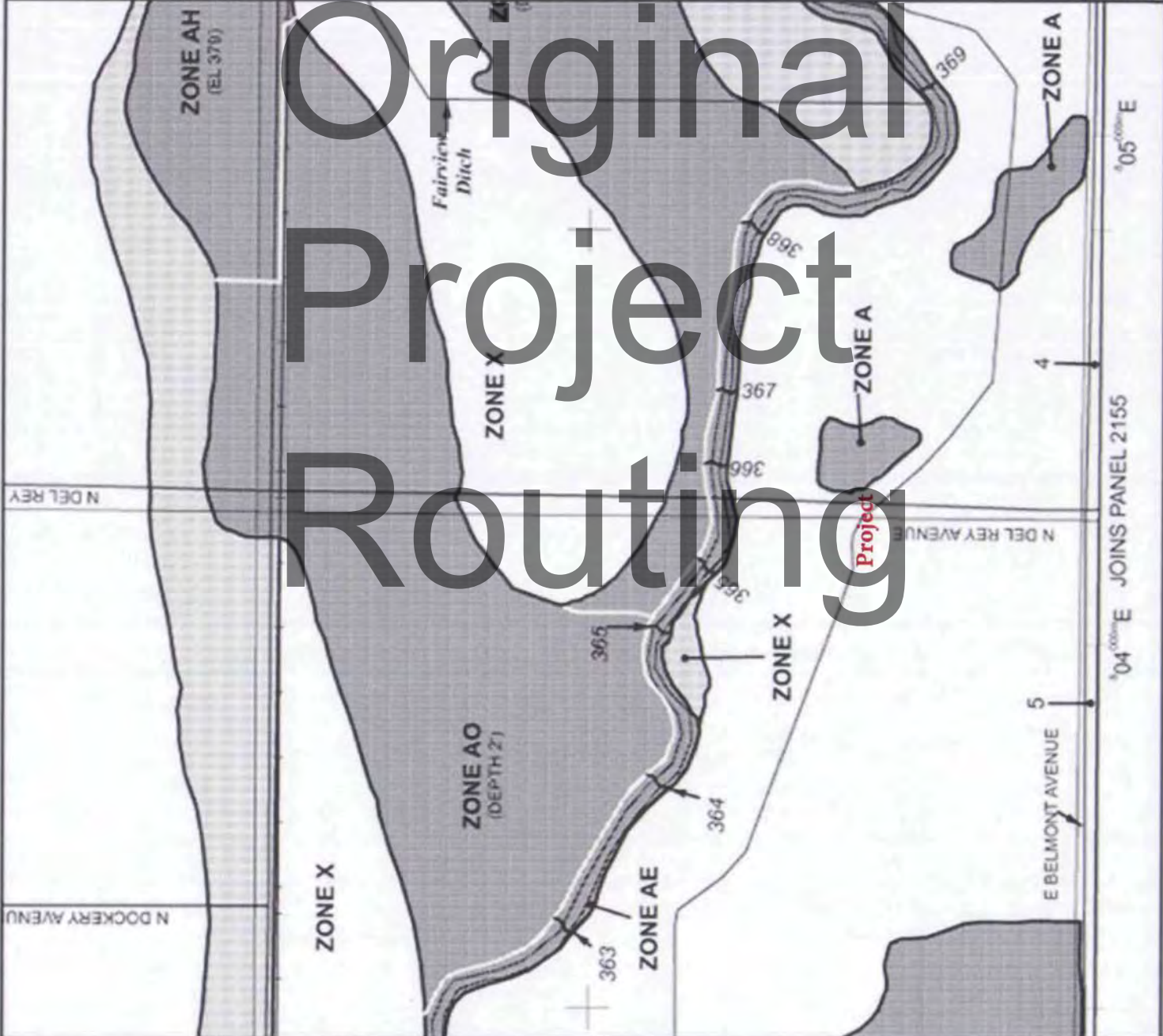


MAP NUMBER  
06019C1615H

MAP REVISED  
FEBRUARY 18, 2009

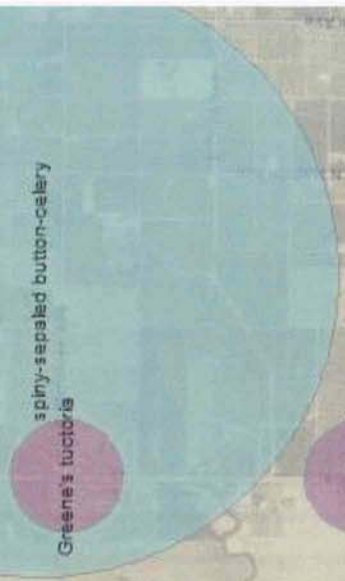
Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



Attachment F  
CNDDDB Occurrences

# Original Project Routing



**U.S. Fish & Wildlife Service**  
**Sacramento Fish & Wildlife Office**  
**Federal Endangered and Threatened Species that Occur in**  
**or may be Affected by Projects in the**  
**ROUND MOUNTAIN (378D)**  
**U.S.G.S. 7 1/2 Minute Quad**

Report Date: September 16, 2014

Listed Species

Invertebrates

Branchinecta conservatio  
Conservancy fairy shrimp (E)

Branchinecta lynchi  
vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus  
valley elderberry longhorn beetle (T)

Fish

Hypomesus transpacificus  
delta smelt (T)

Amphibians

Ambystoma californiense  
California tiger salamander, central population (T)

Rana draytonii  
California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila  
blunt-nosed leopard lizard (E)

Thamnophis gigas  
giant garter snake (T)

Mammals

Dipodomys nitratoides exilis

Fresno kangaroo rat (E)

*Vulpes macrotis mutica*  
San Joaquin kit fox (E)

#### Plants

*Castilleja campestris* ssp. *succulenta*  
Critical habitat, succulent (=fleshy) owl's-clover (X)  
succulent (=fleshy) owl's-clover (T)

*Pseudobahia peirsonii*  
San Joaquin adobe sunburst (T)

*Tuctoria greenei*  
Greene's tuctoria (=Orcutt grass) (E)

---

#### Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species



# U.S. Fish and Wildlife Service National Wetlands Inventory

Fresno Canal  
Bridge at Del Rey  
Avenue

Sep 15, 2014



## Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

## Riparian

- Herbaceous
- Forested/Shrub

## Riparian Status

- Digital Data

# Original Project Routing

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currency of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

**User Remarks:**  
BRLO-5942(249)



## Questionnaire to Determine Visual Impact Assessment (VIA) Level

Use the following questions and subsequent score as a guide to help determine the appropriate level of VIA documentation. This questionnaire assists the VIA preparer (i.e. Landscape Architect) in estimating the probable visual impacts of a proposed project on the environment and in understanding the degree and breadth of the possible visual issues. The goal is to develop a suitable document strategy that is thorough, concise and defensible.

Enter the project name and consider each of the ten questions below. Select the response that most closely applies to the proposed project and corresponding number on the right side of the table. Points are automatically computed at the bottom of the table and the total score should be matched to one of the five groups of scores at the end of the questionnaire that include recommended levels of VIA study and associated annotated outlines (i.e., minor, moderate, advanced/complex).

This scoring system should be used as a preliminary guide and should not be used as a substitute for objective analysis on the part of the preparer. Although the total score may recommend a certain level of VIA document, circumstances associated with any one of the ten question-areas may indicate the need to elevate the VIA to a greater level of detail. For projects done by others on the State Highway System, the District Landscape Architect should be consulted when scoping the VIA level and provide concurrence on the level of analysis used.

### Calculate VIA Level Score

<b>PROJECT NAME:</b> Fresno Canal Bridge Replacement on Del Rey Avenue	
<b>CHANGE TO VISUAL ENVIRONMENT</b>	
<p><b>1. Will the project result in a noticeable change in the physical characteristics of the existing environment?</b></p> <p><i>Consider all project components and construction impacts - both permanent and temporary, including landform changes, structures, noise barriers, vegetation removal, railing, signage, and contractor activities.</i></p>	Low Level of Change (1 point) ▼
<p><b>2. Will the project complement or contrast with the visual character desired by the community?</b></p> <p>Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community? Do you anticipate that the change will be viewed by the public as positive or negative? Research planning documents, or talk with local planners and community representatives to understand the type of visual environment local residents envision for their community.</p>	High Compatibility (1 point) ▼
<p><b>3. What level of local concern is there for the types of project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed?</b></p> <p>Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.</p>	Negligible Project Features (0 points) ▼
<p><b>4. Will the project require redesign or realignment to minimize adverse change or will mitigation, such as landscape or architectural treatment, likely be necessary?</b></p> <p>Consider the type of changes caused by the project, i.e., can undesirable views be screened or will desirable views be permanently obscured so a redesign should be considered?</p>	No Mitigation Likely (0 points) ▼
<p><b>5. Will this project, when seen collectively with other projects, result in an aggregate adverse change (cumulative impacts) in overall visual quality or character?</b></p> <p>Identify any projects (both Caltrans and local) in the area that have been constructed in recent years and those currently planned for future construction. The window of time and the extent of area</p>	Cumulative Impacts Unlikely to Occur (1 point) ▼

Original  
Project  
Routing

<p>applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's perception.</p>	
<p><b>VIEWER SENSITIVITY</b></p>	
<p><b>1. What is the potential that the project proposal will be controversial within the community, or opposed by any organized group?</b></p> <p>This can be researched initially by talking with Caltrans and local agency management and staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.</p>	<p>Low Potential (1 point) ▼</p>
<p><b>2. How sensitive are potential viewer-groups likely to be regarding visible changes proposed by the project?</b></p> <p>Consider among other factors the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other Caltrans staff, local agencies and community representatives familiar with the affected community's sentiments and demonstrated concerns.</p>	<p>Low Sensitivity (1 point) ▼</p>
<p><b>3. To what degree does the project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies or standards?</b></p> <p>Although the State is not always required to comply with local planning ordinances, these documents are critical in understanding the importance that communities place on aesthetic issues. The Caltrans Environmental Planning branch may have copies of the planning documents that pertain to the project. If not, this information can be obtained by contacting the local planning department. Also, many local and state planning documents can be found online at the California Land Use Planning Network.</p>	<p>High Compatibility (1 point) ▼</p>
<p><b>4. Are permits going to be required by outside regulatory agencies (i.e., Federal, State, or local)?</b></p> <p>Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements - which are defined by the permitted, may be determined by talking with the project Environmental Planner and Project Engineer. Note: coordinate with the Caltrans representative responsible for obtaining the permit prior to communicating directly with any permitting agency.</p>	<p>Maybe (2 points) ▼</p>
<p><b>5. Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts?</b></p> <p>Consider the proposed project features, possible visual impacts, and probable mitigation recommendations.</p>	<p>No (1 point) ▼</p>
<p>Calculate Total</p>	
<p>It is recommended that you print a copy of these calculations for the project file.</p>	
<p><b>PROJECT SCORE: 9</b></p>	

Original  
Project  
Routing

### Select An Outline Based Upon Project Score

The total score will indicate the recommended VIA level for the project. In addition to considering circumstances relating to any one of the ten questions-areas that would justify elevating the VIA level, also consider any other project factors that would have an effect on level selection.

#### SCORE 6-9

No noticeable visual changes to the environment are proposed and no further analysis is required. Print out a copy of this completed

questionnaire for your project file or Preliminary Environmental Study (PES).

**SCORE 10-14**

Negligible visual changes to the environment are proposed. A brief Memorandum (see sample) addressing visual issues providing a rationale why a technical study is not required.

**SCORE 15-19**

Noticeable visual changes to the environment are proposed. An abbreviated VIA is appropriate in this case. The assessment would briefly describe project features, impacts and any avoidance and minimization measures. Visual simulations would be optional. Go to the Directions for using and accessing the Minor VIA Annotated Outline.

**SCORE 20-24**

Noticeable visual changes to the environment are proposed. A fully developed VIA is appropriate. This technical study will likely receive public review. Go to the Directions for using and accessing the Moderate VIA Annotated Outline.

**SCORE 25-30**

Noticeable visual changes to the environment are proposed. A fully developed VIA is appropriate that includes photo simulations. It is appropriate to alert the Project Development Team to the potential for highly adverse impacts and to consider project alternatives to avoid those impacts. Go to the Directions for using and accessing the Advanced/Complex VIA Annotated Outline.

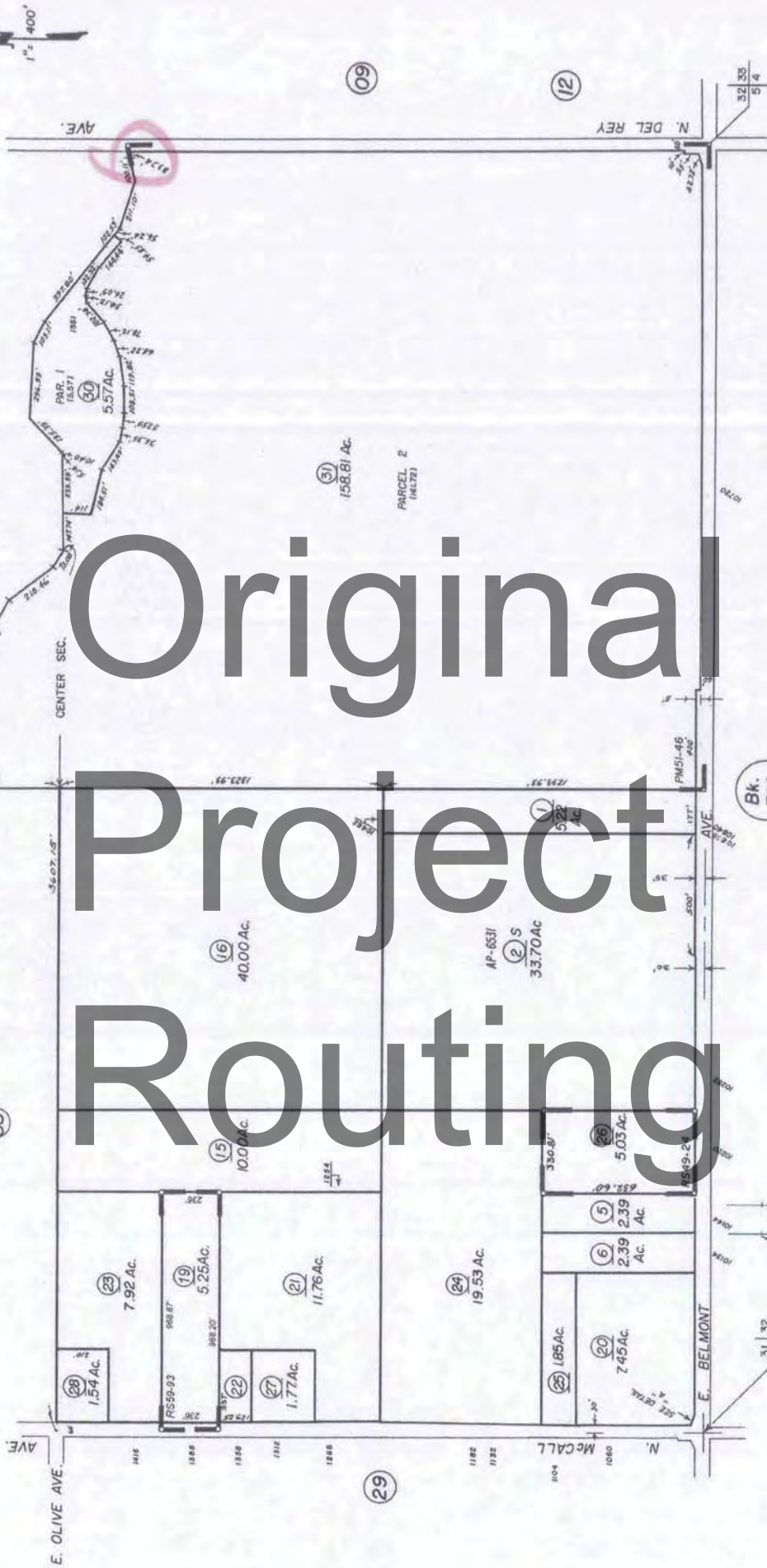
# Original Project Routing

POR. SEC. 32, T. 13S., R. 22E. M.D.B.&M.

Tax Area  
71-023  
78-021

309-30

NOTE —  
This map is for Assessment purposes only.  
It is not to be construed as portraying legal  
ownership or divisions of land for purposes  
of zoning or subdivision law.



Bk. 314

Agricultural Preserve  
Parcel Map No. 7357 - Bk. 51, Pg. 46  
Record of Survey - Bk. 49, Pg. 24  
Record of Survey - Bk. 59, Pg. 93

Assessor's Map Bk. 309 - Pg. 30  
County of Fresno, Calif.

NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

SUBDIVIDED LAND & POR. SEC. 32, T.19S., R.22E., M.D.B.&M.

Tax Rate Area  
71-023  
76-021

309-33

NOTE ---  
This map is for Assessment purposes only.  
It is not to be construed as portraying  
legal ownership or divisions of land for  
purposes of zoning or subdivision law.



Assessor's Map Bk. 309 - Pg. 33  
County of Fresno, Calif.

NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

Parcel Map No. 2230-F - Bk. 15, Pg. 48  
Parcel Map No. 7601 - Bk. 57, Pgs. 9 & 10  
Record of Survey - Bk. 37, Pg. 44  
Parcel Map No. 7693 - Bk. 58, Pgs. 66-67

SUBDIVIDED LAND IN POR. SEC. 33, T.13 S., R.22 E., M.D.B. & M.

Tax Rate Area  
71-023

309-09

NOTE  
This map is for Assessment purposes only. It is not to be construed as portraing legal ownership or divisions of land for purposes of zoning or subdivision law.



14



Agricultural Preserve  
Parcel Map No. 2731 - Bk. 18, Pg. 30  
Parcel Map No. 7565 - Bk. 55, Pgs. 79 - 80  
Record of Survey - Bk. 10, Pg. 21  
Record of Survey - Bk. 38, Pg. 72  
Record of Survey - Bk. 58, Pg. 56

NOTE - Assessor's Block Numbers Shown in Ellipses.  
Assessor's Parcel Numbers Shown in Circles.

Bk. 314

Assessor's Map Bk. 309 - Pg. 09  
County of Fresno, Calif.

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**APPENDIX C**

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**PHOTO LOG**

**Original  
Project  
Routing**



**Photo #1** View of the Fresno Canal Bridge, facing south.



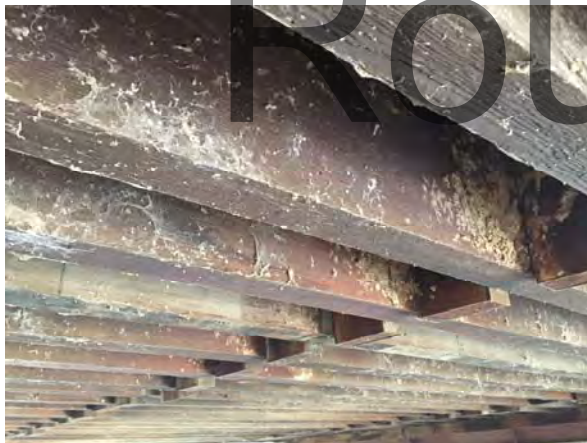
**Photo #2** View of the east side of the Fresno Canal Bridge, facing northwest.



**Photo #3** View of the west side of the Fresno Canal Bridge, facing south.



**Photo #4** View of the underside of the Fresno Canal Bridge, facing south.



**Photo #5** View below Fresno Canal Bridge.



**Photo #6** View of an electrical transformer north of the Fresno Canal Bridge and west of N. Del Rey Avenue, facing northwest.



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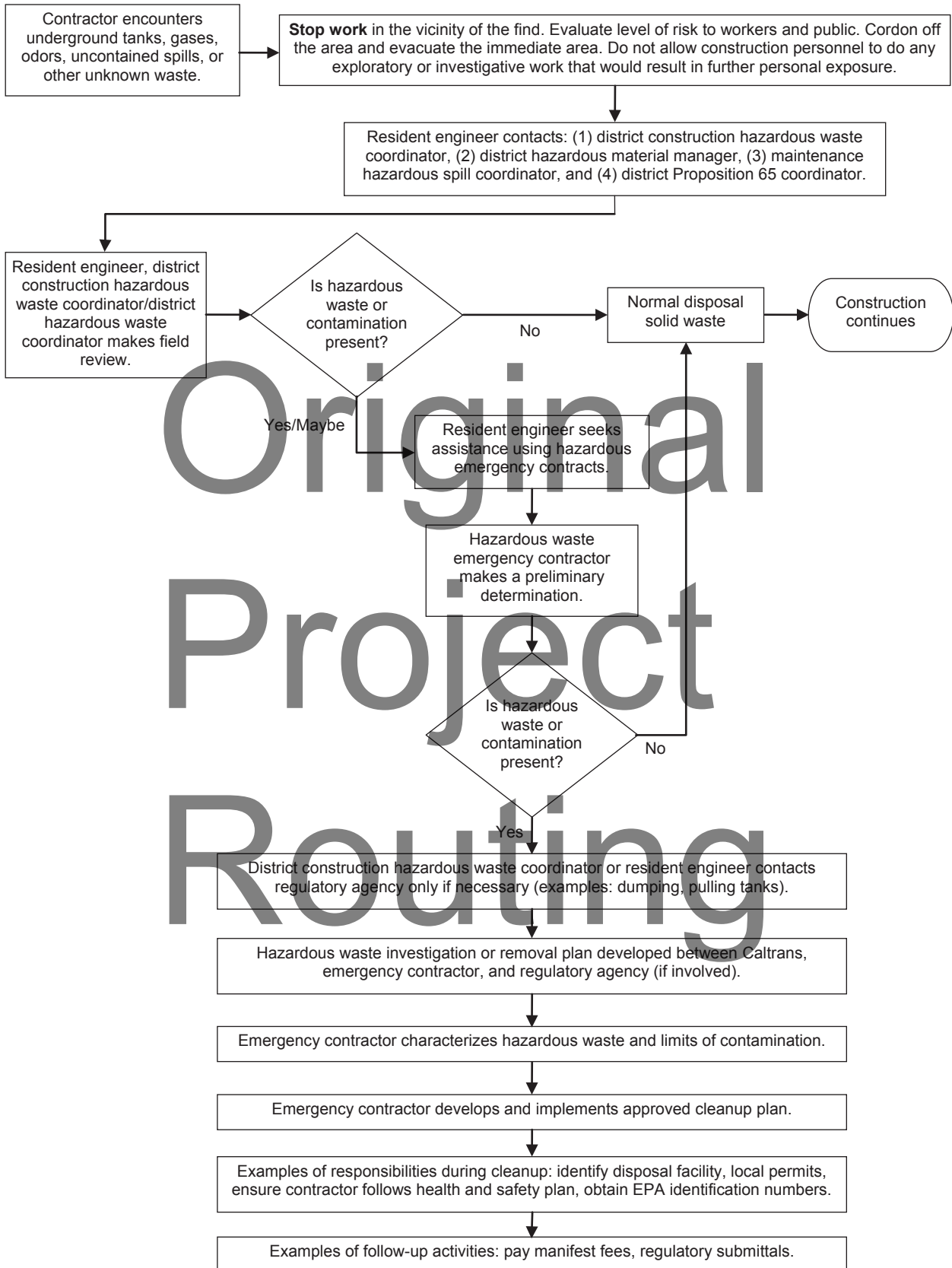
**APPENDIX D**

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**CALTRANS UNKNOWN HAZARDS PROCEDURES**

**Original  
Project  
Routing**

**Figure 7-1.1. Unknown Hazards Procedure**



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**APPENDIX E**

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**QUALIFICATIONS**

**Original  
Project  
Routing**



## **ELLIOT R. HARO**

Principal Scientist

Mr. Haro is the founding principal of Haro Environmental, Inc. With over 14 years of experience in the environmental field, Mr. Haro has directed, managed and performed environmental site assessments and remediation activities. Mr. Haro's project management experience includes proposal and cost estimate preparation for site assessments and remediation projects, design of soil and groundwater remediation systems, in-house staff and subcontractor coordination, technical report preparation, and permit acquisition. Mr. Haro has managed and performed numerous Phase I and Phase II Environmental Site Assessments (ESAs) as well as site investigation and remediation field activities including air, soil, groundwater, and surface water sampling, groundwater monitoring well installations, and remediation system operations and maintenance. He has prepared various environmental reports including site assessment reports, feasibility studies, remedial/corrective action plans, remedial work plans and health-based risk evaluations. Mr. Haro is familiar with the regulatory process and has consulted with both local and regional agencies on Client's behalf for work plan approvals and modifications. Mr. Haro's technical expertise includes evaluation, design and implementation of innovative in-situ groundwater treatment technologies including enhanced bioremediation and in-situ chemical oxidation.

## **EXPERTISE**

- Phase I and II Environmental Site Assessments
- Soil and Groundwater Investigations
- Soil and Groundwater Remediation
- Project Management
- Remediation Technology Evaluation
- Site Characterization
- Remediation System Operations and Maintenance
- Health Risk Evaluations
- Feasibility Studies
- Data Analysis and Management
- Construction Oversight
- Permitting – Environmental and Construction

## **WORK HISTORY**

- |                                     |                 |
|-------------------------------------|-----------------|
| • Haro Environmental, Inc.          | 2013 to Present |
| • Equipoise Corporation             | 2007 to 2013    |
| • Rincon Consultants, Inc.,         | 2004 to 2007    |
| • TN & Associates                   | 2003 to 2004    |
| • Environmental Biotechnology Inst. | 2002 to 2004    |
| • Creek Environmental Laboratory    | 1999 to 2002    |

**EDUCATION AND CERTIFICATIONS**

- Registered Environmental Assessor I (REA I), California, No. 30228 (Former; DTSC discontinued the REA program effective July1, 2012)
- M.S., Agriculture – Soil Science Specialization, California Polytechnic State University, San Luis Obispo, CA
- B.S., Soil Science, California Polytechnic State University, San Luis Obispo, CA
- OSHA and EPA 40-hour safety training and 8-hour hazardous materials refresher courses

**PROJECT DESCRIPTIONS**

**Retail Service Station Portfolio, Various Locations, CA**

- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• Groundwater Monitoring and Sampling Management</li> <li>• In-Situ Bioremediation</li> <li>• Permitting</li> <li>• Regulatory Agency Negotiations</li> <li>• Quarterly Reporting</li> </ul> | <ul style="list-style-type: none"> <li>• Target compounds: Hydrocarbons and MTBE</li> <li>• Interim Remedial Action Plans</li> <li>• Remedial and Corrective Action Plans</li> </ul> | <ul style="list-style-type: none"> <li>• Health and Safety</li> <li>• Remediation System Design</li> <li>• Multiphase and Dual Phase Extraction Systems</li> </ul> |
|---|--|--|

Managed project activities for monitoring and cleanup of multiple gas station facilities throughout Northern, Central and Southern California. Evaluated in-situ and ex-situ treatment options for source zone reduction and off-site containment of contaminants. Performed and managed operations and maintenance activities on remediation systems and prepared quarterly remediation reports. Prepared quarterly groundwater monitoring reports for agency submittal and approval. Prepared corrective actions plans and remedial action plans for implementation of mobile high vacuum dual phase extraction, multi-phase extraction, and dual-phase extraction systems. Designed and permitted innovative groundwater remediation approaches including enhanced aerobic bioremediation using ORC®. Negotiated with overseeing agencies for acceptance of proposed remedial actions.

**Phase I Environmental Site Assessment, Remediation Engineering Evaluation, & Indoor Air Quality Assessment, Former Aircraft Manufacturing Facility, Playa Vista, CA**

- |  |  |   |
|--|--|---|
| <ul style="list-style-type: none"> <li>• Phase I ESA</li> <li>• Remediation System Performance Evaluation</li> </ul> | <ul style="list-style-type: none"> <li>• Historic Chlorinated VOC and Hydrocarbon Use</li> </ul> | <ul style="list-style-type: none"> <li>• 550,000 Square Feet of Building Space</li> </ul> |
|--|--|---|

Performed a Phase I ESA for an approximately 38-acre site developed with 8 historic structures totaling approximately 550,000 square feet. Historic aircraft manufacturing resulted in chlorinated VOCs and petroleum hydrocarbon impacts to soil and groundwater. Identified recognized environmental conditions (RECs) at 11 source areas. Consulted client on extent of environmental liabilities and potential

environmental costs. Evaluated the performance of the on-site dual-phase extraction system targeting identified source areas. Developed potential life-cycle costs for the existing remediation system, and costs for remediation of metals contaminated soil. Performed an indoor air survey to assess potential impacts from the historic aircraft manufacturing operations on indoor air quality. Indoor air study results were compared to published regulatory thresholds and calculated site-specific health risks.

**Soil and Groundwater Remediation of Chlorinated Solvents using Chemical Oxidation, Former Aerospace Manufacturing Facility, Newbury Park, CA**

- Groundwater Monitoring and Sampling Management
- In-Situ Chemical Oxidation using Potassium Permanganate
- Injection and Monitoring Well Installations
- Quarterly WDR Reporting
- Target compounds: Chlorinated VOCs
- Health and Safety Plan Preparation
- Lead Agency Negotiations

Managed in-situ chemical oxidation injections for remediation of soil and groundwater impacted with the chlorinated solvents TCE and PCE. Negotiated with the lead agency (LARWQCB) for revised Waste Discharge Requirements (WDR) and amendments to the original work plan. Developed and implemented a site-specific health and safety plan to protect the health and safety of workers and the environment from accidental exposure to the chemical oxidant. Oversaw the installation of 35 injection wells and 14 dual-nested monitoring wells, and the injection of approximately 12,000 pounds of potassium permanganate. Conducted performance evaluation sampling per WDR requirements, and prepared and submitted quarterly WDR monitoring reports to the regulatory agency.

**Soil and Groundwater Remediation of Chlorinated Solvents, Soil Source Zone Removal and In-Situ Bioremediation, Former Industrial Facility, Los Angeles, CA.**

- Groundwater Monitoring and Sampling Management
- Large Diameter Auger Excavation
- Enhanced Anaerobic Bioremediation
- Soil Vapor Survey
- Injection and Monitoring Well Installations
- Quarterly WDR Reporting
- Target compounds: Chlorinated VOCs
- Health and Safety Plan Preparation
- Lead Agency Negotiations

Managed soil and groundwater investigation and remediation activities for a site with soil and perched groundwater water zone with chlorinated hydrocarbons present. A Remedial Action Plan (RAP) was developed and approved by the LARWQCB to remediate soil and groundwater at the site. Because site constraints precluded the use of conventional excavation approaches without extensive shoring requirements, soil remediation activities included the design and implementation of source area soil removal using large diameter augers. Groundwater remediation activities included acquisition of a Waste Discharge Requirement (WDR) permit from the LARWQCB for injection of HRC® into the perched zone, injection design, and implementation of an Enhanced Anaerobic Biodegradation approach to stimulate by injecting HRC®.

**RCRA Facility Closure, Former Hazardous Waste Handling Facility, Wilmington, CA**

- Lead Agency: DTSC
- RCRA Hazardous Waste Permit Closure
- Port of Los Angeles Permitting
- Health and Safety Plan Preparation
- DTSC Approval of Work Plan Updates and Modifications

Managed work plan modification/updating and permitting for a closure of a RCRA hazardous waste permit under DTSC oversight. This former hazardous waste handling facility was the subject of an enforcement action by the lead regulatory agency and resulted in the conviction of the former operator. The chemicals associated with the facility included VOCs and petroleum hydrocarbons. Negotiated with DTSC for work plan modification resulting in a reduction of \$70,000 in the sampling costs.

**Feasibility Study, Former Aerospace Testing Facility, CA**

- Chlorinated VOCs
- Emergent Compounds 1,4-dioxane and NDMA
- In-Situ and Ex-Situ Treatment Options
- Conforming to Lead Agency Requirements

Provided technical assistance for preparation of a feasibility study for remediation of a 2,800-acre former test site facility being closed after 50 years of stored operations. The feasibility study in part addressed the emergent chemicals 1,4-dioxane and N-nitrosodimethylamine (NDMA). These chemicals are somewhat recalcitrant in the environment and are the subject of research at many DOD-sponsored projects. Evaluated innovative remedial alternatives including enhanced aerobic bioremediation and in-situ chemical oxidation. Prepared a bench-scale work plan and reported the findings evaluating sodium persulfate and propane to reduce NDMA concentrations in groundwater.

**Former Oil Field Sumps Assessment and Remediation, Santa Maria Valley, CA**

- Sump Assessment and Remediation
- Remediation construction
- Target compounds: Metals, volatile and semi-volatile organics, hydrocarbons,
- Soil Excavation
- Health and Safety Plan Preparation

Project manager for sump assessment and remediation activities for multiple land leases within the Santa Maria Valley. Former oil field features were identified by reviewing historic maps and aerial photographs. The lateral and vertical limits of identified features were assessed in the field using direct push technology. Non-hazardous sump material was excavated and transported to a local landfill for reuse. Confirmation samples were collected and based on the results, closure reports were prepared and submitted to the lead oversight agency (County Santa Barbara Fire Prevention Division).

**Operations and Maintenance, Ex-situ Bioremediation, San Luis Obispo, CA**

- Groundwater monitoring well installation
- Groundwater sampling
- Remediation construction
- Vapor extraction system O&M
- Soil Excavation
- Field safety coordinator

**Feasibility Study and Remedial Action Plan, Thousand Oaks, CA**

- Project Coordinator
- Overseed field activities
- Permitting
- Conducted dual phase extraction events
- Managed and performed O & M

**Site Investigations, Multiple Clients**

- Overseed well installation
- Overseed boring installation
- Remediation construction
- Perform Monitoring and Optimization.
- Soil and Soil Vapor Sampling
- Risk Analysis
- Managed Subcontractors
- Construction

**Publications**

Roth, A. E., Lingle, E. L., Haro, E. R., Stark, J. M., Unkefer, P. J. and Kitts, C. L. 2005. *Sample Preservation Method and Storage Time Can Affect 16S rRNA Terminal Restriction Fragment Patterns Made From Soil DNA.* Soil Biology and Biochemistry.

Original  
Project  
Routing



**TIMOTHY E. NELLIGAN**

Principal Engineer

Mr. Nelligan has professional experience in the areas of environmental compliance, permitting, and remedial design engineering. He has conducted remedial investigations (RIs), feasibility studies (FSs), remedial design/remedial action (RD/RA), corrective action plans (CAPs) at several California State and Federal Superfund site, oil refineries, and other industrial facilities. He has also prepared Storm Water Pollution Prevention Plans (SWPPPs), Spill Prevention Containment and Countermeasures (SPCCs), Hazardous Materials Business Plans (HMBPs), and Wastewater Surcharge Statements. Mr. Nelligan has conducted various field activities including air, soil, groundwater, and surface water sampling; well design, installation, and development; and vapor extraction tests. He has designed, installed, operated, and conducted performance monitoring of in-situ and above ground soil-vapor extraction systems, and groundwater extraction and treatment systems. Mr. Nelligan has assisted in the design and implementation of innovative in situ technologies such as dual phase (air and groundwater) extraction, enhanced bioremediation using HRC and chemical oxidation systems using sodium permanganate to remediate sites. He has also designed vapor control systems for use in production facilities and assisted in managing a major coke disposal and lead fixation project.

**EXPERTISE**

- Project Management
- Soil and Groundwater Investigations
- Data Analysis and Management
- Remediation Technology Evaluation
- Engineering Design
- Construction Oversight
- Operation and Maintenance
- Cost Analysis
- Soil and Groundwater Remediation - Petroleum Hydrocarbons
- Soil and Groundwater Remediation - Metals
- Soil and Groundwater Remediation - Chlorinated Hydrocarbons
- Major Project Oversight
- Permitting - Environmental and Construction
- Feasibility Study/RAP Preparation

**WORK HISTORY**

- |                                    |                 |
|------------------------------------|-----------------|
| • Haro Environmental, Inc.         | 2013 to Present |
| • Katahdin Environmental           | 2007 to Present |
| • Equipoise Corporation            | 1999 to 2007    |
| • Harding Lawson Associates        | 1998 to 1999    |
| • Chemical Data Management Systems | 1997 to 1998    |

**EDUCATION AND CERTIFICATIONS**

- Registered Professional Engineer, California 2005, No. C68666
- B.S., Civil and Environmental Engineering, California Polytechnic State University, San Luis Obispo, 1998
- OSHA and EPA 40-hour safety training and 8-hour hazardous materials refresher courses

**PROJECT DESCRIPTIONS**

**Superfund Site, Pesticide Reformulator, Bakersfield, CA**

- Design Engineer
- Design Treatment System
- 250,000 Gal Wastewater and 4,000 Gal Sludge
- Oversee Treatment of Tank Contents
- Pesticides, Metals, and Semi-volatiles
- Lead Agency: US EPA

**Soil remediation and FHP recovery system operation, Marine Terminal, Los Angeles Harbor, CA.**

- Project Engineer
- Free Hydrocarbon Product (FHP)
- Petroleum Hydrocarbons/ BTEX in soil and groundwater
- MTBE in groundwater
- Lead in soil
- SVE with Offgas Treatment
- Thermal Oxidation of Offgas
- FHP Recovery with Pneumatic Pumps in 40 wells
- On-Site Soil Fixation of Lead
- Lead Agency: RWQCB – Los Angeles
- SCAQMD Compliance
- Recovered over 355,200 gallons of FHP to date.

**Soil and Groundwater Remediation of Solvents. Excavation and InSitu BioRemediation, Former Dean Alco Site, Los Angeles, CA**

- TCE and 1,1,1-TCA Source Area
- Soil Remediation through Excavation using Large Diameter Augers
- Source Area Tank Removal
- Perched Groundwater Remediation using HRC
- Implementation of InSitu BioRemediation Monitoring Program
- Permitting – Waste Discharge Requirement, Grading Permit, UST Removal Permit
- Lead Agency: RWQCB – Santa Ana
- SCAQMD Compliance
- UST Closure – LA Fire Department
- Assistant Project Manager

**Coke Removal and Groundwater Extraction System O&M, Oil Refinery, Torrance, CA –**

- Assistant Program Manager
- Free Hydrocarbon Product (FHP)
- Petroleum Hydrocarbons/ BTEX in groundwater
- MTBE in groundwater
- Coke Material in Soil
- Offsite Disposal of 60,000 tons of Coke Material
- Groundwater Extraction of 1200 gallons per minute
- FHP Recovery with Pneumatic Pumps
- Lead Agency: RWQCB – Los Angeles
- SCAQMD Compliance
- Groundwater treatment using Envirex - Fluidized Bed Reactor

**Groundwater Remediation Using In-Situ Chemical Oxidation, Dry Cleaning Facility, Washington**

- PCE in formation water
- Formation – Fractured Bedrock
- MTBE in groundwater
- Sodium Permanganate Injections
- Feasibility Study
- Remedial Action Plan
- Lead Agency – Department of Ecology, WA

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**POTENTIAL WATERS OF THE UNITED STATES  
FRESNO CANAL AT DEL REY AVENUE  
FRESNO COUNTY, CALIFORNIA**



***BRLO-5942(249)***

David Hartesveldt, President and Senior Plant/Wetland Ecologist  
Wendy Fisher, Plant/Wetland Ecologist, Senior Project Manager

Prepared for:

Alexis Rutherford  
County of Fresno  
2220 Tulare Street, 7<sup>th</sup> Floor  
Fresno, CA 93721

October 2016

File No. 2050-01

## EXECUTIVE SUMMARY

Live Oak Associates, Inc. (LOA) conducted an investigation of potential waters of the United States associated with the Fresno Canal where it passes beneath Del Rey Avenue, approximately 0.5 mile south of McKinley Avenue in Fresno County, California. Fresno County proposes to replace a bridge crossing the canal at this location. An approximately 510 linear foot segment of Fresno Canal has been included in the Area of Potential Affect (APE) for bridge replacement project.

The APE consists of the bridge itself, road approaches approximately 400 feet north and 400 feet south of the bridge easement, the Fresno Canal approximately 230 feet up- and 220 feet downstream of the 60 foot bridge right of way, and a potential 4.3 acre staging area northwest of the bridge. A small portion of the adjacent irrigated pasture, nectarine, almond, and citrus orchards may also be impacted. Waters of the U.S. generally include navigable waters, interstate drainages, impoundments of jurisdictional waters, tributaries to navigable and interstate waters, and wetlands adjacent to such waters. The discharge of fill into or the construction of structures within such waters is regulated by the U.S. Army Corps of Engineers.

LOA plant/wetland ecologist Wendy Fisher examined the entire project site for possible waters of the United States and gathered vegetation, soils and hydrology data at three sampling locations within and adjacent to such waters on June 19, 2016. The bed and lower bank of the Fresno Canal below ordinary high water (OHW) would likely be considered a tributary water of the United States. This area constitutes approximately 29,176 square feet (0.67 acre) of the project site.

The rationale for considering an engineered canal such as the Fresno Canal as a water of the U.S. is its apparent hydrologic connection to the San Joaquin River, a traditional navigable water of the U.S. The Fresno Canal functions as an irrigation canal, receiving water from the Kings River and Friant-Kern Canal and delivering it to various agricultural fields. It can, however, also deliver water to the San Joaquin River via the Biola Spillway. However this only

happens in the wettest winters having the most extreme rainfall events, when it becomes necessary to divert flood flows from populated areas of Fresno County.

No other portion of the project site would be considered a Water of the United States. The upper canal banks, ruderal and ornamental road shoulders, irrigated pastures, and orchards generally supported non-native upland vegetation. Hydrologic features that might be considered waters of the U.S. were absent from all other ruderal and agricultural areas of the project site. Areas meeting the technical criteria of jurisdictional wetlands were entirely absent from the project site.

# Original Project Routing

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# Original Project Routing

## 1.0 INTRODUCTION

Live Oak Associates, Inc. (LOA) conducted an investigation of possible waters of the United States (also referred to as “jurisdictional waters”) within a 510 linear foot reach of the Fresno Canal (hereafter referred to as the project site) where it passes beneath Del Rey Avenue in June of 2016. This reach of canal is the location of a bridge replacement project, which could result in the placement of fill or structures within jurisdictional waters of the canal. The bridge to be replaced, Bridge No. 42C0496, is located approximately four miles north to northwest of the City of Sanger, CA along the eastern side of the San Joaquin Valley in Fresno County. It can be found 0.5 miles south of McKinley Avenue, where North Del Rey Avenue crosses the Fresno Canal (Figure 1). The bridge can also be located on the *Round Mountain* U.S. Geological Survey (USGS) 7.5 minute quadrangle straddling sections 32 and 33 in Township 13 South, Range 22 East (Figure 2).

Access to the Project Site is granted from DeWolf Avenue exit north of State Route 180 East. Turn Right on Belmont Avenue and head east for 3 miles. Turn left on Del Rey Avenue and the bridge over the Fresno Canal is in 0.5 miles.

### 1.1 REGULATORY DEFINITION OF WATERS OF THE U.S.

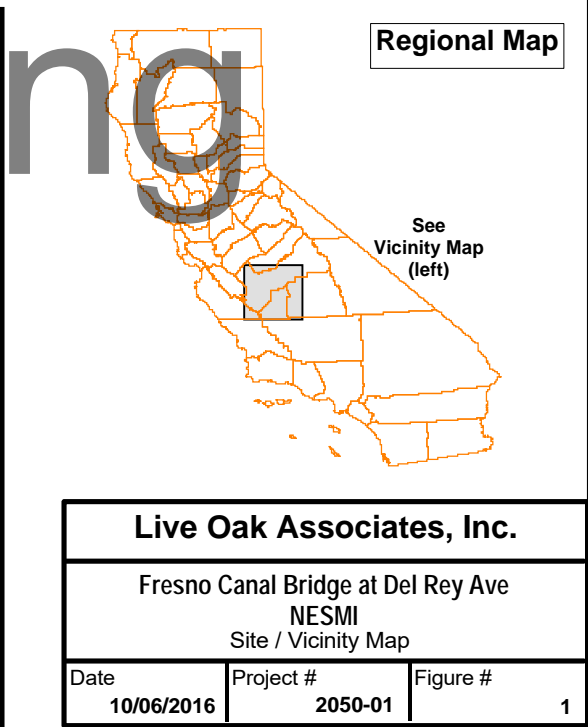
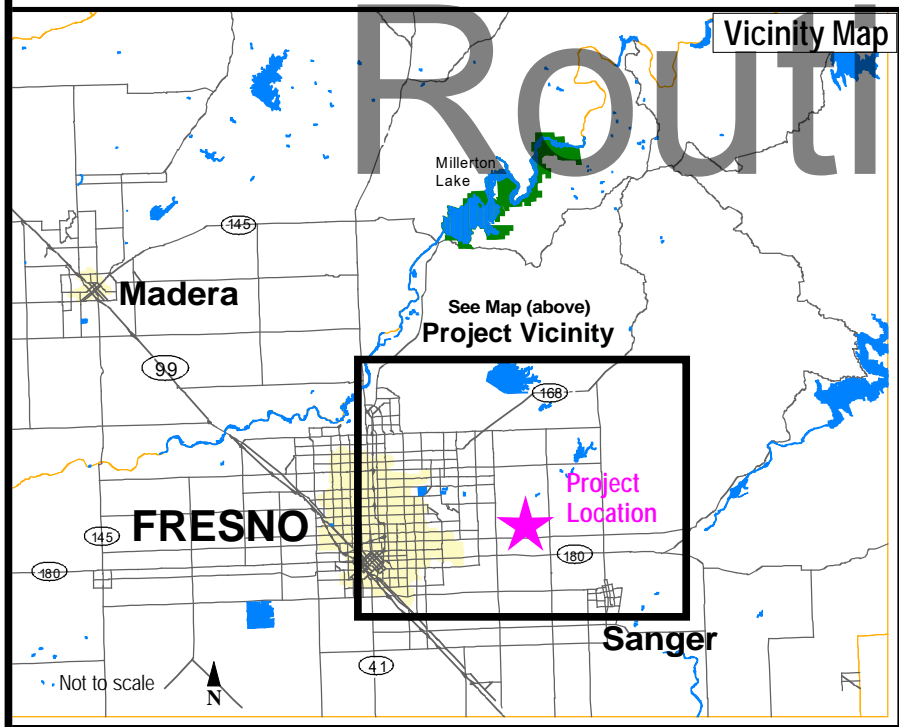
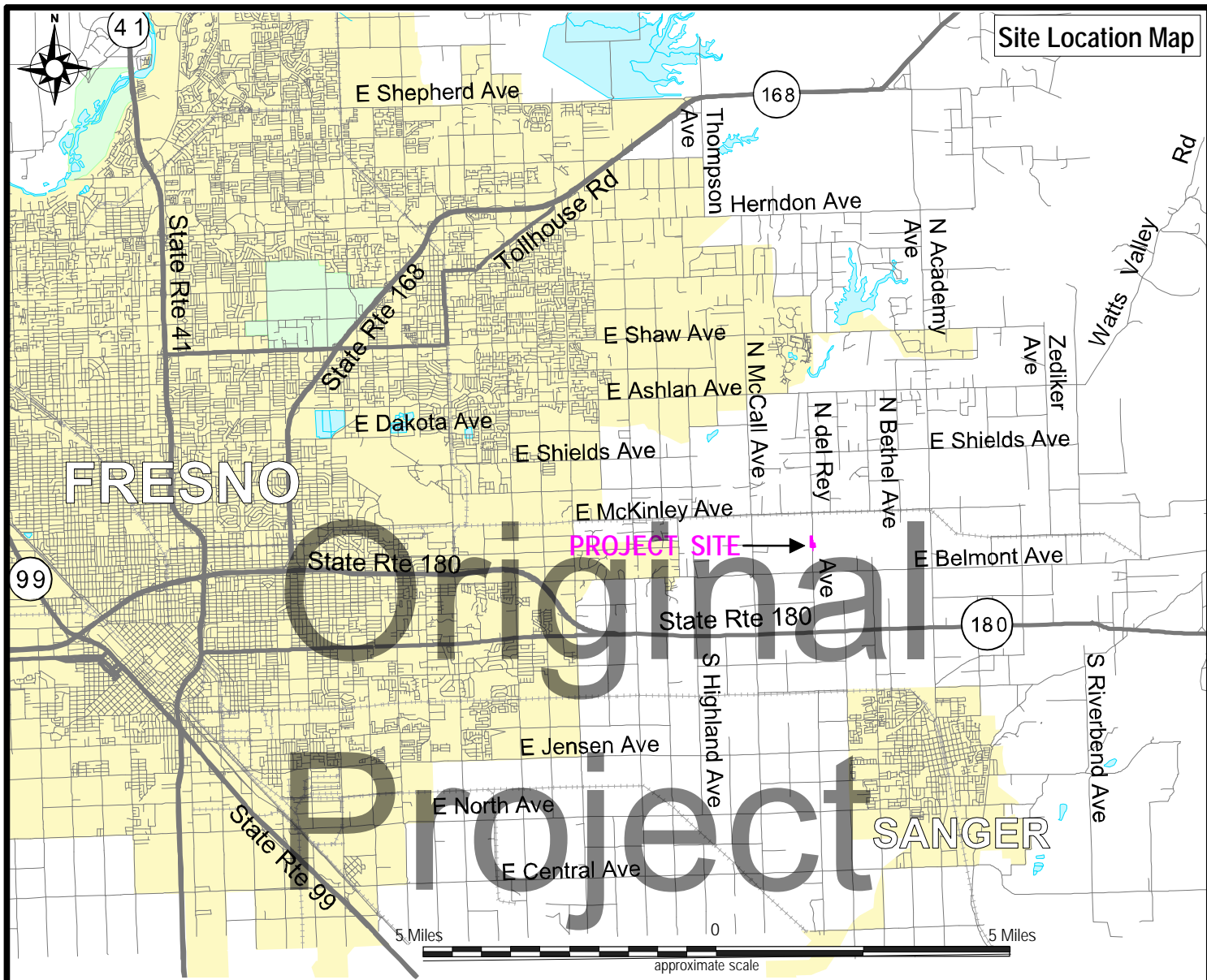
Section 404 of the federal Clean Water Act (CWA) regulates the discharge of dredged or fill material into “navigable waters” (33 U.S.C. §1344). The CWA defines “navigable waters” as “the waters of the United States, including the territorial seas” (33 U.S.C. §1362(7)). By regulation (33 CFR § 328.3(a) (3)), the U.S. Army Corps of Engineers (USACE) has defined “waters of the United States” to include some non-navigable waters as well as long as they are hydrologically connected to navigable waters. Therefore, waters of the United States include the following:



(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

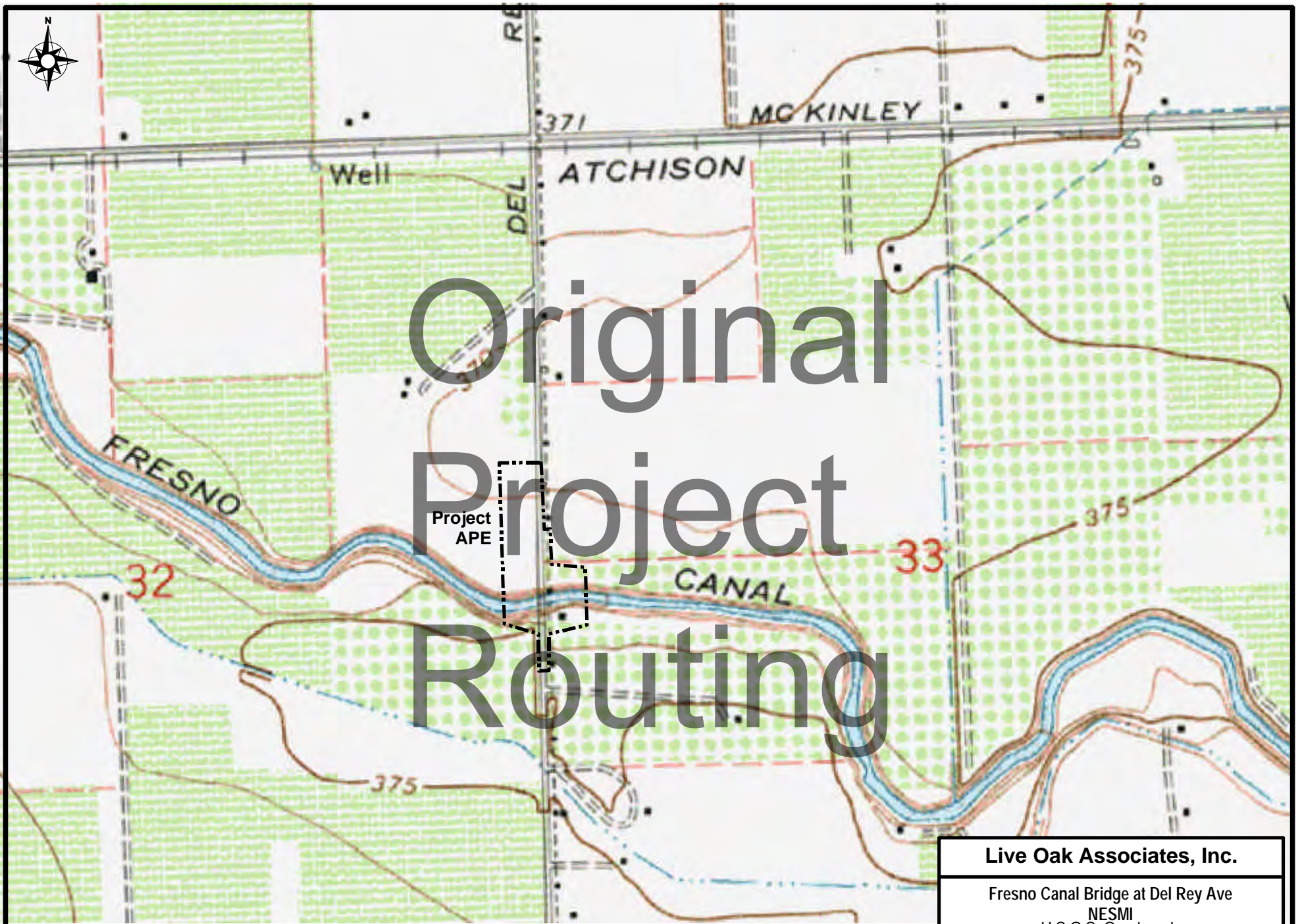
# Original Project Routing



<b>Live Oak Associates, Inc.</b>		
Fresno Canal Bridge at Del Rey Ave NESMI Site / Vicinity Map		
Date	Project #	Figure #
10/06/2016	2050-01	1



# Original Project Routing



From USGS  
Round Mountain 7.5' Quadrangle 1964

approximate scale

<b>Live Oak Associates, Inc.</b>		
Fresno Canal Bridge at Del Rey Ave NESMI U.S.G.S. Quadrangle		
Date	Project #	Figure #
10/06/2016	2050-01	2

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section (33 CFR § 328.3(a) (3)).

“Waters of the United States” are subject to the jurisdiction of the USACE and per provisions of Section 404 of the CWA the discharge of fill into such waters requires a federal permit issued by the USACE. Therefore, one objective of this report is to determine if possible waters of the United States are located within the project site such that the discharge of fill into them would necessitate a Department of the Army (DA) permit.

## 1.2 FEDERAL COURT DECISIONS AFFECTING THE DEFINITIONS OF WATERS OF THE UNITED STATES

Waters of the U.S. are subject to the jurisdiction and permit requirements of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. A number of federal court cases help define the extent of federal jurisdiction over rivers, their tributaries, their impoundments, and adjacent wetlands.

The court rulings and subsequent guidance provided by the EPA and USACE discussed above are germane to the delineation of jurisdictional waters summarized in this report. They are presently the basis for determining the jurisdictional status of drainage features and wetlands of the project site.

### 1.2.1 SWANCC Decision

In January of 2001, the U.S. Supreme Court ruled in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision) that “non-navigable, isolated, intrastate” waters could not be claimed as jurisdictional by the USACE on the basis of their use by migratory birds. Although the Court did not specifically address the meaning of the word “isolated”, it upheld the jurisdictional status of “adjacent” wetlands (and other waters), which are by definition wetlands that are “bordering, contiguous, or neighboring” other jurisdictional waters. Therefore, the term “isolated wetland” has implicitly been defined as ‘wetlands that are not bordering, contiguous, or neighboring’ other jurisdictional waters. This definition does not, however, address the degree of proximity necessary to establish that one wetland (or other water) is “adjacent” to a known jurisdictional water. As established by the Supreme Court in the *United States v. Riverside Bayview Homes, Inc.* in 1985, “wetlands separated from other waters by man-made dikes or barriers, natural river berms, beach dunes, and the like are ‘adjacent wetlands’”.

### 1.2.2 Consolidated Carabell/Rapanos Decision

In June of 2006 the U.S. Supreme Court ruled in the consolidated cases of *June Carabell v. U.S. Army Corps of Engineers* and *John Rapanos v. United States* that wetlands are waters of the United States “if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’” When, in contrast, wetland’s effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term ‘navigable waters.’

On June 5, 2007, the Environmental Protection Agency (EPA) and the USACE jointly issued guidance in interpreting the Carabell/Rapanos cases as they apply to the extent of federal jurisdiction covered by Section 404 of the Clean Water Act. The key points of this guidance are that the EPA and the USACE: 1) will assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries of traditional navigable waters, and wetlands that directly abut such tributaries; 2) will decide jurisdiction over relatively impermanent non-navigable tributaries of navigable waters, impermanent wetlands adjacent to such tributaries, and impermanent wetlands adjacent to but not directly abutting such tributaries, based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water; and 3) will not assert jurisdiction over swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) or ditches excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. For relatively impermanent non-navigable waters tributary to navigable waters and relatively impermanent wetlands adjacent to such waters, the EPA and USACE will apply a significant nexus analysis that will “assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.”

### **1.2.3 Headwaters, Inc. vs. Talent Irrigation District**

The Ninth Circuit Court of Appeals ruled that irrigation infrastructure that discharges flow into downstream waters of the United States may itself be considered a water of the United States. Waters of the Fresno Canal, therefore, may be considered waters of the U.S. if those waters can be and from time to time are discharged into downstream waters of the U.S.

### **1.3 STATE OF CALIFORNIA JURISDICTION OVER AQUATIC FEATURES**

The State of California also asserts jurisdiction over drainages and wetlands of the project site. The limits of jurisdiction vary slightly from those of the USACE. The California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB) are the two state regulatory agencies responsible for implementing state regulations that identify and protect waters of the state.

According to Section 1602 of the California Fish and Wildlife Code, public and private entities may not substantially divert or obstruct the natural flow of any river, stream, or lake within the state. This section of Fish and Wildlife Code establishes the State's interest in regulating construction activities in the "bed, channel, or bank" of a natural drainage or stream. A "stream" subject to the jurisdiction of the CDFG has been defined as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life" (California Code of Regulations, Title 14).

Since its inception, the RWQCB has had regulatory authority over activities affecting water quality in rivers, streams, lakes, and wetlands of the State. Shortly after the U.S. Supreme Court rendered its SWANCC Decision, the State Water Resources Control Board notified the Regional Boards that isolated waters, including wetlands, were subject to the jurisdiction of the State of California per provisions of the Porter-Cologne Water Quality Control Act. The Regional Boards, therefore, now assert jurisdiction over some isolated wetlands disclaimed as jurisdictional by the USACE.

## 2.0 METHODS

LOA plant/wetland ecologist Wendy Fisher conducted a survey for jurisdictional waters on June 19, 2016 on foot in order to maximize visual coverage of the entire project area. The field investigator used aerial photography and a United States Geologic Survey (USGS) topographic map to guide the survey efforts. The boundaries of likely jurisdictional waters were delineated using a Trimble Geo XT GPS unit to collect data points corresponding to those boundaries. LOA prepared the map depicting likely jurisdictional waters using GPS data collected in the field that was overlaid on a recent aerial photograph of the project site from Google Earth.

The surveys were consistent with guidelines found in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987), *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (USACE 2001), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). These surveys have been described in more detail below.

### 2.1 SURVEY METHODS FOR AREAS MEETING THE TECHNICAL CRITERIA OF JURISDICTIONAL WETLANDS

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas” (Environmental Laboratory 1987). The diagnostic environmental characteristics of wetlands include hydrophytic vegetation, hydric soils and a hydrology characterized by an aquic or peraquic moisture regime. Accordingly, LOA surveyed the site for wetland indicator plants, positive indicators of hydric soils and wetland hydrology.

Two representative sampling locations were selected within the project site to assess and collect vegetation, hydrology and soils information. This information was entered onto standard data sheets patterned after those used by U.S. Army Corps of Engineers (USACE) for the Arid West Region. The data sheet for each numbered sampling location



can be found in Appendix A. The numbered sampling locations have been identified on the map depicting the areas meeting the technical criteria of jurisdictional wetlands. Color photographs, presented in Appendix B, were taken at sampling locations of the project site.

Plants observed within a 5-10 foot radius of each sampling location were identified to species using *The Jepson Manual: Vascular Higher Plants of California, Second Edition* (Baldwin et al, 2012). The wetland indicator status of each species was obtained from the *1987 Wetland Plant List, California* (Reed 1988). A complete list of vascular plants identified on the project site during 2016 surveys can be found in Appendix C.

Wetland indicator species are so designated according to their frequency of occurrence in wetlands.

OBLIGATE (OBL)	Probability to occur in wetland is >99%
FACULTATIVE WETLAND (FACW)	Probability to occur in wetland is between 67-99%
FACULTATIVE (FAC)	Probability to occur in wetland is between 33 to 67%
FACULTATIVE UPLAND (FACU)	Probability to occur in wetland is between 1 to <33%
UPLAND (UPL)	Probability to occur in wetland is <1%

Hydrophytic vegetation is considered present when more than 50% of the dominant species at a given location are composed of obligate, facultative wetland and facultative plant species. However, the Arid West Supplemental Guidelines also incorporate an alternate prevalence index to be calculated in determining the presence of wetland vegetation if the dominance test is not met.

Each sampling location was also examined for positive indicators of wetland hydrology and hydric soils. Evidence of wetland hydrology may consist of primary indicators such as surface water, watermarks, drift lines, sediment deposits, etc. Secondary indicators of wetland hydrology include drainage patterns in wetlands, watermarks (Riverine), drift lines (Riverine), sediment deposits (Riverine), etc. In accordance with USACE guidelines, a soil pit 10” to 12” in depth was dug at all sampling locations. The soils

excavated from each pit were also examined for low chromas, gleying, mottling, concretions, sulfidic odors, etc.

## **2.2 SURVEY METHODS FOR TRIBUTARY WATERS**

In the absence of adjacent wetlands, the limit of jurisdiction in navigable rivers and their tributaries, whether inter- or intrastate, extends to “ordinary high water” (OHW). OHW refers to “that line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas”.

The term “channel” as used in this report refers to a drainage feature with a bed and defined bank. Where drainage channels are present on a given site, it is customary to walk the channel and take width measurements at a standard interval. Width measurements represent the canal width between OHW marks on opposing banks.

LOA biologist Wendy Fisher visually inspected the site for physical characteristics of OHW in order to determine the extent of possible jurisdiction. The limits of likely federal jurisdiction (OHW) were delineated using traditional measuring devices and methods, including a Trimble Geo XT GPS unit to 1 meter accuracy.

For the bridge replacement project site, the field investigator visually inspected the site for physical characteristics of OHW, such as the accumulation of leaf litter, debris, and sediment, in order to determine the extent of possible jurisdiction. The location of OHW was plotted using data collected with the Trimble GPS unit.

## 3.0 RESULTS

### 3.1 SETTING

The project site consisted of the asphalt surfaces of the bridge deck and the timber piling and base of the bridge, North Del Rey Avenue road approaches, as well as the dirt shoulders of North Del Rey Avenue, levee road intersections, approximately 510 linear feet of the Fresno Canal, portions of the adjacent orchards, irrigated pasture, and ornamental landscaped driveway entrances. Transmission lines and towers line the eastern road margin travelling north to south within the Project Site.

Climatic and topographic features of the project site are typical of those found in California's Central Valley. With the exception of the canal itself, the project site is relatively flat. The elevation of the project site is approximately 370 feet National Geodetic Vertical Datum (NGVD) (see Figure 2). The project site, like most of California, has a Mediterranean climate with cool moist winters and hot dry summers. Precipitation falls in the form of rain between October and May, with the heaviest amounts in December, January, February, and March. Annual precipitation is approximately 11.5 inches.

Soils of the site included Atwater sandy loam, 0-3 % slopes, Delhi Sand, 0-3% slopes, Delhi loamy sand, 0-3% slopes, Greenfield sandy loam, 0-3% slopes, and Hanford sandy loam. Only the Delhi series (when occurring in depressions) is considered hydric by the NRCS (NRCS 2016) (Table 1 and Figure 3). These well drained soils are formed in alluvium derived from granitic and related rock sources.

<b>TABLE 1. SOILS OF THE PROJECT SITE (NRCS 2016).</b> <i>Fresno County, California</i>				
<b>Soil Series/Soil</b>	<b>Map Unit Symbol</b>	<b>Parent Material</b>	<b>Drainage Class</b>	<b>Hydric</b>
<b>Atwater Series</b> Atwater sandy loam, 0-3% slopes	ArA	Alluvium derived from granite	Well Drained	No
<b>Delhi Series</b> Delhi sand, 0-3% slopes Delhi loamy sand, 0-3% slopes	DeA DhA	Wind modified material weathered from granite	Somewhat Excessively Drained	Yes, in Depressions
<b>Greenfield Series</b> Greenfield sandy loam, 0-3% slopes	GtA	Alluvium derived from granite and mixed rock sources	Well Drained	No
<b>Hanford Series</b> Hanford sandy loam, 3-8% slopes	Hc	Alluvium derived from granite	Well drained	No

### 3.2 POTENTIAL WATERS OF THE UNITED STATES

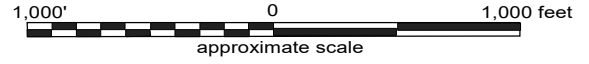
Potential jurisdictional waters identified within the project site were limited to areas of the Fresno Canal below ordinary high water on opposing channel banks. These waters comprising approximately 0.67 acre of the project site would be considered “tributary waters”, because as will be discussed in greater detail later in this report, they can and sometimes do discharge to the San Joaquin River, a traditional navigable water. Figure 4 shows all potential jurisdictional waters identified during the field survey.

The bottom and lower sides of the canal below ordinary high water were inundated during the site survey. No aquatic or emergent vegetation was observed as high flows prevented vegetation from rooting. Surface water (inundation) in the canal was the primary indicator of wetland hydrology. Water marks, sediment deposits, drift deposits, and drainage patterns were secondary indicators providing further evidence of the limits of OHW. A soil pit was not dug due to the inundation of the canal.

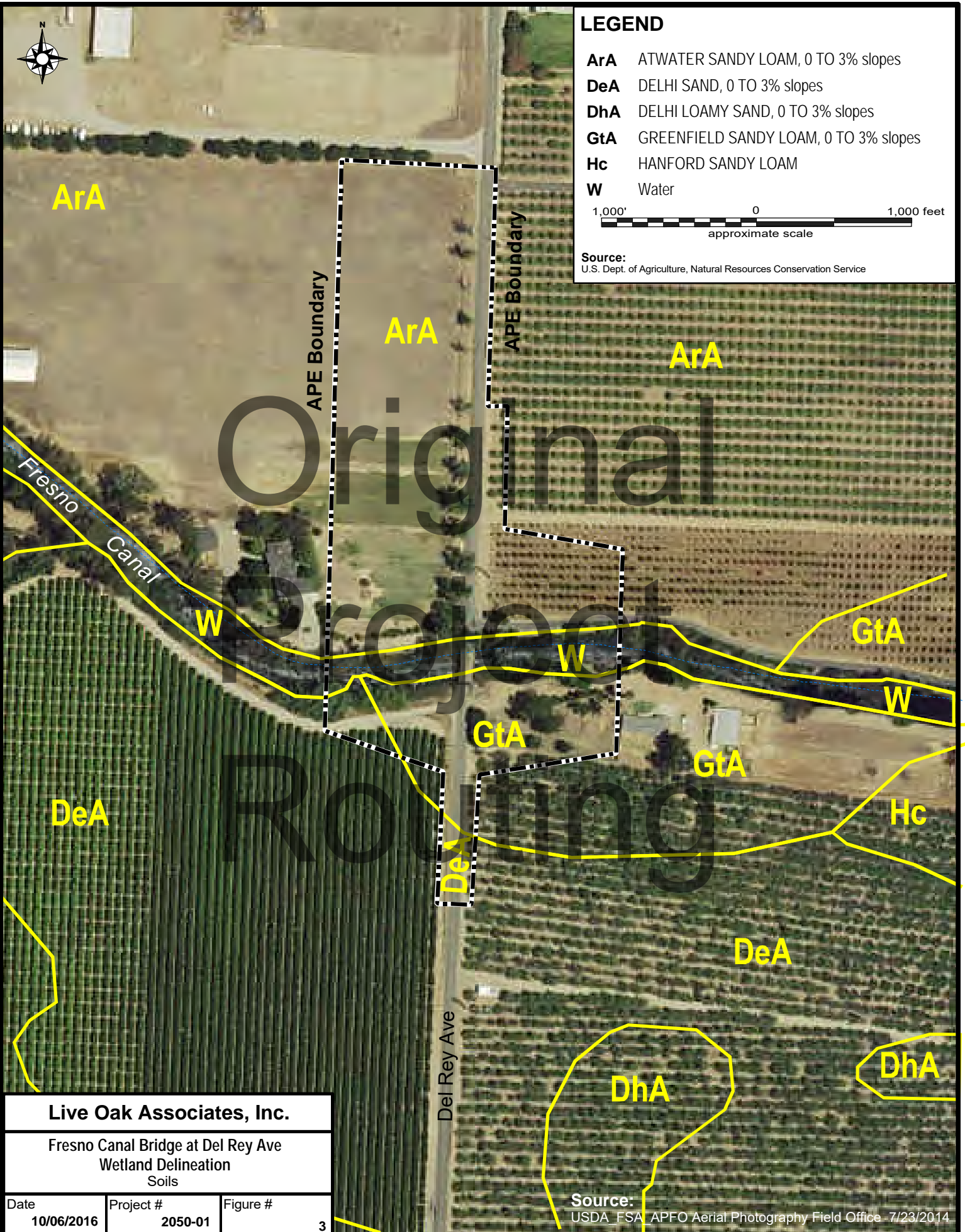


**LEGEND**

- ArA** ATWATER SANDY LOAM, 0 TO 3% slopes
- DeA** DELHI SAND, 0 TO 3% slopes
- DhA** DELHI LOAMY SAND, 0 TO 3% slopes
- GtA** GREENFIELD SANDY LOAM, 0 TO 3% slopes
- Hc** HANFORD SANDY LOAM
- W** Water



**Source:**  
U.S. Dept. of Agriculture, Natural Resources Conservation Service



<b>Live Oak Associates, Inc.</b>		
Fresno Canal Bridge at Del Rey Ave Wetland Delineation Soils		
Date	Project #	Figure #
10/06/2016	2050-01	3

**Source:**  
USDA FSA APFO Aerial Photography Field Office - 7/23/2014



**LEGEND**

Jurisdictional waters (not meeting the technical criteria for wetlands)

- Fresno Canal, Tributary Water (29,176 SF / 0.67 Ac. 521 LF)

Other Features

- Project APE Boundary (Approx. 9.3 Ac.)
- Sample Points



268,643 m E  
4,071,283 m N

APE Boundary

North Del Rey Avenue

APE Boundary

Fresno Canal

SP1  
SP2

Fresno Canal  
Tributary Water  
29,176 SF, 521 LF

268,611 m E  
4,070,886 m N



Source: Aerial photograph courtesy of Google Earth Pro, Photo Date 4/25/2011  
Universal Transverse Mercator Coordinate System Zone 11, NAD83 / NAVD 1988

Approximate Scale  
1" = 100'

<b>Live Oak Associates, Inc.</b>		
Fresno Canal Bridge at Del Rey Ave Potential Waters of the U.S.		
Date	Project #	Figure #
10/06/2016	2050-01	4

### 3.3 UPLAND AREAS

Upland areas included riparian above ordinary high water, ruderal (disturbed)/ornamental, orchard, and irrigated pasture. These areas did not meet the technical criteria of jurisdictional wetlands. In all upland areas, the vegetation was dominated by non-wetland species, and therefore the technical criterion for hydrophytic vegetation was not met on the upper banks of the channel. Evidence of wetland hydrology, such as water-stained leaves, saturated or inundated soils, and a drainage pattern in wetlands, was lacking in upland areas of the site.

#### 3.3.1 Riparian

Riparian areas included the upper channel banks of the Fresno Canal above ordinary high water. A mix of native and non-native woody vegetation observed growing sporadically in areas of the upper channel banks above ordinary high water included Fremont cottonwood seedlings (*Populus fremontii*)(FACW), Himalayan blackberry (*Rubus armeniacus*)(FACU), red gum (*Eucalyptus camaldulensis*)(UPL), red willow (*Salix laevigata*)(FACW), and almond (*Prunus dulcis*) (UPL). Stinging nettle (*Urtica dioica*) (FAC) and scouring rush (*Equisetum hyemale*) (FACW) were occasionally observed. A soil pit could not be dug in the upper channel banks due to the dense riparian vegetation, extremely steep slope and resulting lack of stability to dig a pit (see sample point #2, Appendix A).

#### 3.3.2 Ruderal/Ornamental

Ruderal/ornamental land uses included paved road, road shoulders and driveway surfaces along both east and west sides of Del Rey Avenue, adjacent road shoulders, and some planted ornamental trees adjacent to these hardscapes. The ruderal roadside west of Del Rey Avenue and north of the canal bordering irrigated pasture were lined with dead and dying mature Fremont's cottonwood trees and a few small almonds. Residential driveways along both west and east sides Del Rey Avenue were planted with non-native

ornamentals, including china berry (*Melia azedarach*)(UPL), mulberry (*Morus alba*) (UPL), coast redwood (*Sequoia sempervirens*) (UPL), cultivated plum (*Prunus domestica*) (UPL), red gum Eucalyptus (UPL), almond, pittosporum (*Pittosporum* sp.), and lily-of-the-Nile (*Agapanthus* sp.)(UPL). Roadside ruderal areas beneath the ornamental trees and shrubs contained non-native grasses and forbs ripgut (*Bromus diandrus*) (UPL), prickly lettuce (*Lactuca serriola*) (FACU), yellow star thistle (*Centaurea solstitialis*) (UPL), and red brome (*Bromus madritensis*) (UPL).

### **3.3.3 Orchard**

Small portions of the BSA consisted of orchard (nectarine, almond, and citrus orchards). Few weedy alien plants were found in the sparse understory due to perpetual maintenance and clearing. That observed included sporadic wild oats (*Avena fatua*) (UPL), Canada horseweed (*Erigeron canadensis*) (FACU), and prickly lettuce.

### **3.3.4 Irrigated Pasture**

Irrigated pasture was present in areas east of ruderal road shoulder and Del Rey Avenue and north of the Fresno Canal. Horses were grazing at the time of the field survey. Much of the pasture was grazed heavily and therefore vegetation was short, trampled and unidentifiable. What was discernable included dominated by black mustard (*Brassica nigra*) (UPL), Bermuda grass (*Cynodon dactylon*) (FAC), and wild oats.



#### 4.0 DISCUSSION

The Fresno Irrigation District (FID) has engineered the flood control infrastructure of the cities of Fresno and Clovis such that stormwater can now be diverted to the San Joaquin River through the Biola Spillway during major winter storm events (Daniel Rourke, Fresno Metropolitan Flood Control District (FMFCD), pers. comm.). FID and the FMFCD together manage the diversion of flows based on frequency and amount of rainfall, and the capacity of water control structures upstream. The USACE has asserted jurisdiction over tributary waters including canals that from time to time discharge flows into the San Joaquin River. Doing so for the Fresno Canal would be consistent with practices of the USACE for other projects in the area, and would seem to be consistent with existing case law, including particularly *Headwaters, Inc. v. Talent Irrigation District*.

Original  
Project  
Routing

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**APPENDIX A: WETLAND DATA SHEETS**

# Original Project Routing

**WETLAND DETERMINATION DATA FORM – Arid West Region (DRAFT)**

Project/Site: Del Rey Ave Bridge City/County: Fresno Co. Sampling Date: 6.19.16  
 Applicant/Owner: Fresno County State: CA Sampling Point: 1  
 Investigator(s): Wendy Fisher Section, Township, Range: S32, T13S, R22E  
 Landform (hillside, terrace, fan, etc.): Channel bottom Local relief (concave, convex, none): concave Slope (%): \_\_\_\_\_  
 Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_, Soil , or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____ <u>Water of US</u>
--	---

Remarks: Inundated flowing portion of the channel

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Strata	Dominance Test worksheet:
1. <u>Populus fremontii - OW</u>	<u>50</u>	<u>y</u>	<u>FACW</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species <input checked="" type="checkbox"/> x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: (A) _____ (B) _____ Prevalence Index = B/A = _____
Total Cover: _____				
<b>Sapling/Shrub Stratum</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				
<b>Herb Stratum</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
Total Cover: _____				
<b>Woody Vine Stratum</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				
% Bare Ground in Herb Stratum <u>Water 50</u> % Cover of Biotic Crust _____				

Remarks: \_\_\_\_\_



**WETLAND DETERMINATION DATA FORM – Arid West Region (DRAFT)**

Project/Site: Del Ray Ave Bridge City/County: Fresno Co. Sampling Date: June 19, 16  
 Applicant/Owner: Fresno County State: CA Sampling Point: 2  
 Investigator(s): Wendy Fisher Section, Township, Range: S 32, T 13S, R 22E  
 Landform (hillside, terrace, fan, etc.): Manmade Canal Local relief (concave, convex, none): Steep Sideslope Slope (%): 15-20%  
 Subregion (LRR): \_\_\_\_\_ Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_ Soil \_\_\_\_\_ or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No   
 Are Vegetation \_\_\_\_\_ Soil  or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
--	--

Remarks:  
Fresno Canal, Steep embankment approx 2' above water 15' northeast of bridge

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Populus fremontii</u>	<u>45</u>	<u>y</u>	<u>NA</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>15</u> x 2 = <u>30</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>35</u> x 5 = <u>175</u> Column Totals: <u>55</u> (A) <u>255</u> (B) Prevalence Index = B/A = <u>4.63</u>
Total Cover: _____				
<b>Sapling/Shrub Stratum</b>				
1. <u>Prunus dulcis</u>	<u>5</u>	<u>n</u>	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Total Cover: _____				
<b>Herb Stratum</b>				
1. <u>Equisetum hyemale</u>	<u>15</u>	<u>n</u>	<u>FACW</u>	
2. <u>Bromus diandrus</u>	<u>30</u>	<u>y</u>	<u>UPL</u>	
3. <u>Melilotus indicus</u>	<u>5</u>	<u>n</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
Total Cover: <u>100</u>				
<b>Woody Vine Stratum</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: _____				
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>				
Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>				
Remarks:				



**APPENDIX B: SELECTED PHOTOGRAPHS OF THE PROJECT SITE**

# Original Project Routing





Photograph #1 (above). Looking northeast at the Del Rey Avenue bridge over the Fresno Canal. Sample points #1 and #2 were taken in the left portion of the photo. Photo #2 (below). Looking north from southeast of the bridge.





Photograph #3 (above). Looking southwest from the bridge. Photograph #4 (below). Looking east from the bridge.



# Project

# Outing

**APPENDIX C: VASCULAR PLANTS OF THE FRESNO CANAL PROJECT  
SITE**

# Original Project Routing

## APPENDIX A: VASCULAR PLANTS OF THE PROJECT SITE

The vascular plant species listed below were observed on the project site during a site survey conducted by Live Oak Associates, Inc. along the Fresno Canal at the Del Rey Avenue crossing on June 19, 2016. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate  
 FACW - Facultative Wetland  
 FAC - Facultative  
 FACU - Facultative Upland  
 UPL - Upland  
 NR - No review  
 NA - No agreement  
 NI - No investigation

<b>AMARYLLIDACEAE – Amaryllis Family</b>		
<i>Agapanthus</i> sp.	Lily-of-the-Nile	UPL
<b>ARECACEAE – Palm Family</b>		
<i>Washingtonia filifera</i>	Washington Fan Palm	UPL
<b>ASTERACEAE – Sunflower Family</b>		
<i>Amaranthus palmeri</i>	Careless Weed	FACU
<i>Centaurea solstitialis</i>	Yellow Star Thistle	UPL
<i>Erigeron canadensis</i>	Canada Horseweed	FACU
<i>Lactuca serriola</i>	Prickly Lettuce	FACU
<i>Helianthus annuus</i>	Common Sunflower	FACU
<i>Hypochaeris glabra</i>	Smooth Cat's Ear	UPL
<i>Pseudognaphalium luteoalbum</i>	Jersey Cudweed	FACW
<b>BORAGINACEAE – Borage Family</b>		
<i>Amsinckia</i> sp.	Fiddleneck	UPL
<b>BRASSICACEAE – Mustard Family</b>		
<i>Brassica nigra</i>	Black Mustard	UPL
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	FACU
<i>Raphanus sativa</i>	Wild Radish	UPL
<b>CARYOPHYLLACEAE – Carnation Family</b>		
<i>Spergularia rubra</i>	Red Sandspurry	FAC
<b>CHENOPODIACEAE – Goosefoot Family</b>		
<i>Chenopodium album</i>	Common Lambsquarters	FACU
<b>CUPRESSACEAE – Cypress Family</b>		
<i>Sequoia sempervirens</i>	Coast Redwood	UPL
<b>CYPERACEAE – Umbrella Sedge Family</b>		
<i>Cyperus eragrostis</i>	Umbrella Sedge	FACW
<b>EQUISETACEAE – Horsetail Family</b>		
<i>Equisetum hyemale</i>	Scouring Rush	FACW
<b>FABACEAE – Legume Family</b>		

<i>Acmispon americanus</i>	Spanish Clover	UPL
<i>Medicago polymorpha</i>	Toothed Medic	FACU
<i>Melilotus indicus</i>	Sweet Indian Clover	FACU
<b>GERANIACEAE – Geranium Family</b>		
<i>Erodium botrys</i>	Broad Leaf Filaree	FACU
<i>Erodium cicutarium</i>	Redstem Filaree	UPL
<b>JUNCACEAE – Rush Family</b>		
<i>Juncus balticus</i>	Pacific Rush	FACW
<b>LAMIACEAE – Mint Family</b>		
<i>Marrubium vulgare</i>	Common Horehound	UPL
<b>MALVACEAE – Mallow Family</b>		
<i>Malva nicaaensis</i>	Bull Mallow	-
<b>MELIACEAE – China Berry Family</b>		
<i>Melia azedarach</i>	China Berry	UPL
<b>MORACEAE – Mulberry Family</b>		
<i>Morus alba</i>	Mulberry	UPL
<b>MYRTACEAE – Myrtle Family</b>		
<i>Eucalyptus camaldulensis</i>	Red Gum Eucalyptus	UPL
<b>ONAGRACEAE – Fuschia Family</b>		
<i>Epilobium brachycarpum</i>	Willow Herb	UPL
<b>PITTOSPORUM – Pittosporum Family</b>		
<i>Pittosporum sp.</i>	Pittosporum	UPL
<b>POACEAE – Grass Family</b>		
<i>Avena fatua</i>	Wild Oats	UPL
<i>Bromus diandrus</i>	Ripgut Brome	UPL
<i>Bromus hordeaceus</i>	Soft Chess	FACU
<i>Bromus rubens</i>	Red Brome	UPL
<i>Cynodon dactylon</i>	Bermuda Grass	FAC
<i>Hordeum murinum ssp. leporinum</i>	Barnyard Barley	FACU
<i>Vulpia myuros</i>	Six-weeks Brome Grass	
<b>POLYGONACEAE – Smartweed Family</b>		
<i>Polygonum aviculare</i>	Prostrate Knotweed	FACW
<b>ROSACEAE - Rose Family</b>		
<i>Prunus domestica</i>	Cultivated Plum	UPL
<i>Prunus dulcis</i>	Almond	UPL
<i>Rubus armeniacus</i>	Himalayan Blackberry	FACU
<b>RUTACEAE – Orange Family</b>		
<i>Citrus x sinensis</i>	Sweet Orange	UPL
<b>SALICACEAE – Willow Family</b>		
<i>Populus fremontii</i>	Fremont’s Cottonwood	FACW
<i>Salix laevigata</i>	Red Willow	FACW
<b>SOLONACEAE - Nightshade Family</b>		
<i>Datura stramineum</i>	Jimson Weed	UPL
<b>TILIACEAE – Basswood Family</b>		
<i>Tilia americana</i>	American Basswood	UPL

**URTICACEAE – Nettle Family**

*Urtica dioica*

Stinging Nettle

FAC

**VISCACEAE – Mistletoe Family**

*Phoradendron* sp.

Willow Mistletoe

UPL

**ZYGOPHYLLACEAE – Puncture Vine Family**

*Tribulus terrestris*

Puncture Vine

UPL

# Original Project Routing

**APPENDIX D: SOILS INFORMATION**

# Original Project Routing

LOCATION ATWATER  
Established Series  
Rev. RCH  
01/2003

CA

## ATWATER SERIES

The Atwater series consists of very deep, well drained soils formed in granitic alluvium. The mean annual precipitation is about 15 inches, and the mean annual temperature is about 61 degrees F.

**TAXONOMIC CLASS:** Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

**TYPICAL PEDON:** Atwater loamy sand - cultivated (Colors are for dry soil unless otherwise noted).

**Ap**--0 to 12 inches; pale brown (10YR 6/3) loamy sand, dark brown (10YR 4/3) moist nearly single grain; soft, very friable; porous; low in organic matter; slightly acid; gradual smooth boundary. (8 to 16 inches thick)

**A3**--12 to 24 inches; very similar to surface horizon but contains only about half as much organic matter; clear smooth boundary. (6 to 12 inches thick)

**B2t**--24 to 39 inches; pale brown (10YR 6/3) sandy loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; hard, friable; thin patchy dark brown (10YR 3/3) moist clay films; neutral; gradual smooth boundary. (12 to 20 inches thick)

**C**--39 to 60 inches; yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable; neutral.

**TYPE LOCATION:** Madera County, California. NE 1/4 of SE 1/4, section 7, T. 10 S., R. 18 E.

**RANGE IN CHARACTERISTICS:** The soils have ochric epipedons, argillic horizons and soil temperature is greater than 59 degrees F. The solum ranges in thickness from 26 to 48 inches. The soils are dry for 60 consecutive days in all parts between 10 and 40 inches. The mean soil temperature is greater than 59 degrees F. The soils are formed in dunes of uniformly sorted material containing a minimum of coarse and very coarse particles. They have mixed mineralogy.

The A horizon ranges in color (10YR hue) from pale brown to grayish brown, values of 5 or 6, chromas of 2 or 3; in texture from loamy sand to coarse sandy loam; and in reaction from slightly acid to neutral.



The B2t horizon ranges in color (7.5YR and 10YR hues) from yellowish brown, brown to pale brown, values of 4 to 6, chromas of 3 or 4; in texture from sandy loam to heavy sandy loam; in reaction from slightly acid to neutral.

The C horizons are light yellowish brown or yellowish brown sandy loam to loamy sand and may be underlain by unrelated, weakly indurated sediments or reddish brown silica-cemented hardpans. Depths to these unrelated substrata are usually greater than 40 inches but vary because of land leveling and shaping.

**COMPETING SERIES:** These include in the same family, the [Dinuba](#) and [Greenfield](#). The Dinuba soils have grayish brown A1 horizons, calcareous B horizon overlying unrelated, calcareous silty substratum at depths less than 40 inches. The Greenfield soils, developed in alluvium, are stratified and lack the uniform particle-size distribution. Soils in the same subgroup but in a fine loamy family include the [Borden](#) series. Similar soils are [Hanford](#) which lack argillic horizons and [Delhi](#) which are sandy throughout.

**GEOGRAPHIC SETTING:** The Atwater soils occur on gently undulating to rolling dunes formed from granitic alluvium. They occur at elevations of less than 500 feet, in a semiarid, mesothermal climate with mean annual rainfall of 9 to 20 inches, with hot, dry summers and cool, moist winters. Mean annual temperature is about 61 degrees F, average January temperature about 44 degrees F, and average July temperature about 78 degrees F. Frost-free season averages about 250 to 280 days.

**GEOGRAPHICALLY ASSOCIATED SOILS:** These include the [Delhi](#), [Rocklin](#), [San Joaquin](#) and [Whitney](#). Delhi has no argillic horizons. Rocklin, San Joaquin and Whitney soils are formed on old terrace deposits.

**DRAINAGE AND PERMEABILITY:** Well drained with moderately rapid permeability and slow runoff.

**USE AND VEGETATION:** Used mainly for production of truck crops, grapes, tree fruits, nuts, grain, and alfalfa. Vegetation consists of annual grasses, weeds, and low-growing shrubs.

**DISTRIBUTION AND EXTENT:** East side of San Joaquin Valley, California. The soils are moderately extensive, comprising 89,000 acres in Fresno, Merced and Madera Counties.

**MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:** Davis, California

**SERIES ESTABLISHED:** Merced Area, California, 1944. Source of name is town of Atwater, Merced County, California.

**REMARKS:** The soils were formerly classified in the (minimal) Noncalcic Brown group. The activity class was added to the classification in January of 2003. Competing series were not checked at that time. – ET

Last revised by the state on 7/66.

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National Cooperative Soil Survey  
U.S.A.

LOCATION DELHI CA  
Established Series  
Rev. RCH-LCL-CAF  
05/2006

## DELHI SERIES

The Delhi series consists of very deep, somewhat excessively drained soils. They formed in wind modified material weathered from granitic rock sources. Delhi soils are on floodplains, alluvial fans and terraces. Slopes are 0 to 15 percent. The mean annual precipitation is about 13 inches and the mean annual temperature is about 62 degrees F.

**TAXONOMIC CLASS:** Mixed, thermic Typic Xeropsammets

**TYPICAL PEDON:** Delhi sand - annual grasses, grazed (Colors are for dry soil unless otherwise stated.)

**C1**--0 to 21 inches; pale brown (10YR 6/3) sand, brown (10YR 5/3) moist; single grained; loose; slightly acid (pH 6.5); gradual smooth boundary. (10 to 30 inches thick)

**C2**--21 to 40 inches; pale brown (10YR 6/3) sand, brown (10YR 5/3) moist; slightly lighter color than horizon above; loose; slightly acid (pH 6.5); gradual smooth boundary. (16 to 25 inches thick)

**C3**--40 to 70 inches; light yellowish brown (10YR 6/4) sand, yellowish brown (10YR 5/4) moist; loose; strongly acid (pH 5.5).

**TYPE LOCATION:** Merced County, California; south side of Bloss Avenue, 100 yards west of Highway 99, south of Delhi; section 22, T.6 S., R.11 E.

**RANGE IN CHARACTERISTICS:** Delhi soils have short undulating slopes of 0 to 15 percent and lack stratification. The mean annual soil temperature at a depth of 20 inches is 60 to 66 degrees F and the soil temperature usually is not below 47 degrees F at any time. The average January soil temperature is about 50 degrees F and the average July temperature is 75 to 85 degrees F. The soil between depths of about 12 to 35 inches is continuously dry from late April or May until late October or early December and is continuously moist in some or all parts all the

rest of the year. Very coarse sand is 0 to 5 percent and combined coarse and very coarse sand is 35 percent or less.

The C horizon is 10YR 5/3, 5/4, 6/4, 6/3, 6/2, 6/1, 7/1, 7/2, 7/3 or 7/4. Moist colors are 10YR 4/2, 4/3, 4/4, 5/4, 5/3, 5/2, 5/1, 6/1, 6/2, 6/3 or 6/4. Usually there is little change in color with depth, but in some pedons the upper part of the profile is slightly darker than the lower part and an A horizon can be identified. The upper part is sand, fine sand, loamy fine sand or loamy sand. The lower part is sand or loamy sand. The clay content ranges from 0 to 5 percent. The soil is slightly acid to slightly alkaline.

When an A horizon is present, it has dry color of 10YR 6/2, 6/3, 5/2, 5/3, 5/4 or 4/3. Moist color is 10YR 4/3 or 4/2. Clay content is 0 to 5 percent and textures are fine sand or loamy sand. Organic matter content is less than 1 percent. Reaction is slightly acid to slightly alkaline.

**COMPETING SERIES:** These are the [Abaft](#), [Arnold](#), [Briones](#), [Calhi](#), [Corralitos](#), [Monoridge](#), [Monvero](#), and [Tujunga](#) series. Abaft soils have mean summer and mean winter soil temperatures that differ by more than 25 to 35 degrees F. Arnold soils have complex slopes of 9 to 60 percent and have a paralithic contact at depths of 40 to 60 inches. Briones soils have a paralithic contact at depths of 20 to 40 inches. Calhi soils are calcareous below a depth of 10 inches. Corralitos soils are moderately acid, stratified, and the average January and average July soil temperatures differ by 20 degrees F. or less. Tujunga are stratified soils on smooth slopes with some gravel and have 35 percent or more coarse and very coarse sand.

**GEOGRAPHIC SETTING:** Delhi soils are on 0 to 15 percent slopes at elevations of 25 to 1,400 feet. They formed in wind modified alluvium derived from granitic rock sources on floodplains, alluvial fans and terraces. The climate is dry subhumid with cool moist winters and hot dry summers. Mean annual precipitation, all in the form of rain, is 10 to 16 inches. Average annual temperature is 59 to 65 degrees F, average January temperature is 45 to 50 degrees F, and average July temperature is 75 to 80 degrees F. The frost-free period is 225 to 310 days.

**GEOGRAPHICALLY ASSOCIATED SOILS:** These are the competing [Tujunga](#) and the [Dello](#), [Hanford](#), [Grangeville](#), [Hilmar](#) and [Snelling](#) soils. Dello soils are saturated with water during part of the year and are mottled within a depth of 20 inches. Hanford soils have a coarse-loamy textural control section. Grangeville soils are seasonally saturated with water and have a mollic epipedon. Hilmar soils have contrasting loamy texture within the 10 to 40 inch section. Snelling soils have an argillic horizon.

**DRAINAGE AND PERMEABILITY:** Somewhat excessively drained; negligible to slow runoff; rapid permeability.

**USE AND VEGETATION:** Used for growing grapes, peaches, truck crops, alfalfa and for homesites. Principal native plants are buckwheat and a few shrubs and trees. Typical vegetation is annual grasses and forbs.

**DISTRIBUTION AND EXTENT:** East side of San Joaquin Valley, central valley and intermountain valleys in the western part of southern California. The series is extensive in MLRA-17.

**MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:** Davis, California

**SERIES ESTABLISHED:** Tulare County (Visalia Area), California, 1935.

**REMARKS:** NSSL pedon S79CA-047-000 (type location)

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National Cooperative Soil Survey  
U.S.A.

LOCATION GREENFIELD CA

Established Series  
Rev. LCL/GWH/RWK  
04/2015

## GREENFIELD SERIES

The Greenfield series consists of deep, well drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Greenfield soils are on alluvial fans and terraces and have slopes of 0 to 30 percent. The mean annual precipitation is about 15 inches and the mean annual air temperature is about 62 degrees F.

**TAXONOMIC CLASS:** Coarse-loamy, mixed, active, thermic Typic Haploxeralfs

**TYPICAL PEDON:** Greenfield coarse sandy loam, annual grass pasture. (Colors are for dry soil unless otherwise noted.)

**A1**--0 to 23 inches; pale brown (10YR 6/3) coarse sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; slightly acid (pH 6.3); gradual smooth boundary. (8 to 30 inches thick)

**B1**--23 to 37 inches; light yellowish brown (10YR 6/4) sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; slightly hard, very friable, slightly sticky and nonplastic; thin patchy clay film; neutral (pH 6.6); gradual smooth boundary. (10 to 20 inches thick)

**B2t**--37 to 51 inches; light yellowish brown (10YR 6/4) fine sandy loam, dark yellowish brown

(10YR 4/4) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; thin patchy clay films; neutral (pH 6.8); gradual smooth boundary. (10 to 20 inches thick)

C--51 to 72 inches; brownish yellow (10YR 6/6) and yellow (10YR 7/6) stratified loamy sand, sandy loam, and fine sandy loam; yellowish brown (10YR 5/6) moist; massive; soft, very friable; neutral (pH 7.0).

**TYPE LOCATION:** Madera County, California; SW1/4 NW1/4 section 18, T.10S., R.18E.

**RANGE IN CHARACTERISTICS:** The mean annual soil temperature is 59 to 65 degrees F. and the soil temperature is not below 47 degrees F. at any time for more than a few days all of the time from late April or May until November or early December and usually is moist in some or all parts of the moisture control section all the rest of the year. Rock fragments range from less than 1 to 25 percent in the A and B horizons. Coarse and very coarse sand average more than 20 percent.

The A horizon is pale brown, light brownish gray, grayish brown, brown, light yellowish brown, dark yellowish brown, yellowish brown, pinkish gray or light brown (10YR 6/2, 6/3, 6/4, 5/2, 5/3, 5/4, 4/3, 4/4; 7.5YR 5/2, 5/4, 6/2, 6/4). It is loamy sand, sandy loam, fine sandy loam or gravelly equivalents of each. This horizon contains less than 1 percent organic matter in all parts. It is slightly acid to mildly alkaline. The lower boundary is gradual or clear.

The B2t horizon is pale brown, brown, light brown, light gray, light yellowish brown, yellowish brown, dark yellowish brown, grayish brown, reddish yellow, pink or brownish yellow (10YR 6/1, 6/3, 5/3, 6/4, 6/6, 5/4, 5/6, 5/8, 4/4, 4/6, 7/4, 7/6, 5/2; 7.5YR 5/2, 5/4, 4/2, 4/4, 6/4, 6/6, or 7/4). It is heavy sandy loam, heavy fine sandy loam, or gravelly equivalents of each and has 3 to 6 percent more clay than the A horizon. This horizon is slightly acid to mildly alkaline.

The C horizon is light yellowish brown, very pale brown, yellowish brown, pale brown, light brownish yellow (10YR 6/4, 5/4, 5/6, 5/8, 6/3, 6/2, 6/6, 6/8, 7/3, 7/4, 4/2, 4/4) or brown (7.5YR 4/4, 4/2). It is loamy sand, coarse sandy loam, sandy loam, fine sandy loam or gravelly equivalents of each. This horizon is neutral to moderately alkaline. Some pedons have silica cementation or contrasting soil material or more than 35 percent gravel, all below 40 inches.

**COMPETING SERIES:** These are the [Atwater](#) and [Dinuba](#) series in the same family and the [Hanford](#), [Oakdale](#), [Ramona](#), and [Snelling](#) series. Atwater soils average less than 20 percent coarse and very coarse sand, and are essentially gravel free. Dinuba soils are calcareous between depths of 20 to 40 inches and have silty unrelated sediments below the argillic horizon. Hanford soils lack an argillic horizon. Oakdale soils have a moist value of 3 and more than 1.2 percent organic matter to a depth of more than 4 inches. Ramona and Snelling soils have more than 18 percent clay in the argillic horizon.

**GEOGRAPHIC SETTING:** Greenfield soils are on fans and terraces at elevations of 100 to 3,500 feet. Slopes range from 0 to 30 percent. The soils formed in moderately coarse and coarse textured alluvium or some wind deposited material derived from granitic and mixed sources. The

climate is dry subhumid mesothermal with hot, dry summers and cool, moist winters. The mean annual precipitation is 9 to 20 inches. The mean annual temperature is 60 to 64 degrees F.; the average January temperature is 42 to 46 degrees F.; and the average July temperature is 76 to 80 degrees F. The frost free season averages about 200 to 325 days.

**GEOGRAPHICALLY ASSOCIATED SOILS:** These are the competing [Hanford](#), [Ramona](#) and [Snelling](#) soils and the [Arlington](#), [Docas](#), [Garey](#), [Lockwood](#), and [San Joaquin](#) soils. Arlington and San Joaquin soils have duripans at depths of less than 40 inches. Docas soils lack argillic horizons. Garey soils have an argillic horizon consisting of lamellae and intervening sandy layers without clay bridges. Lockwood soils have a mollic epipedon.

**DRAINAGE AND PERMEABILITY:** Well drained; slow to medium runoff; moderately rapid permeability.

**USE AND VEGETATION:** Used for the production of a wide variety of irrigated field, forage and fruit crops and also for growing dryland grain and pasture. Vegetation on uncultivated areas consists of annual grass, forbs, some shrubs and scattered oak trees.

**DISTRIBUTION AND EXTENT:** Interior and coastal valleys of central and southern California. The soils are extensive.

**MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:** PHOENIX, ARIZONA

**SERIES ESTABLISHED:** Monterey County (Salinas Area), California, 1924.

**REMARKS:** The activity class was added to the classification in January of 2003. Competing series were not checked at that time. - ET

Responsibility for this series was transferred from Davis to Phoenix 4/2015. The last revision to the series was 1/2003. ET

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National Cooperative Soil Survey  
U.S.A.

LOCATION HANFORD

CA

Established Series

Rev. LCL/ARW/JJJ/CAF

10/1999

## HANFORD SERIES

The Hanford series consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite. Hanford soils are on stream bottoms, floodplains and alluvial fans and have slopes of 0 to 15 percent. The mean annual precipitation is about 12 inches and the mean annual air temperature is about 63 degrees F.

**TAXONOMIC CLASS:** Coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents

**TYPICAL PEDON:** Hanford fine sandy loam, pasture. (Colors are for dry soil unless otherwise noted.)

**A1**--0 to 12 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; weak fine granular structure; slightly hard, very friable, nonsticky and nonplastic; many fine roots in the upper few inches; many fine interstitial pores; slightly acid; gradual smooth boundary. (6 to 14 inches thick)

**C1**--12 to 36 inches; pale brown (10YR 6/3) fine sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common fine interstitial pores; neutral; diffuse boundary. (10 to 24 inches thick)

**C2**--36 to 60 inches; light yellowish brown (10YR 6/4) fine sandy loam and sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; slightly alkaline.

**TYPE LOCATION:** Madera County, California; SW1/4 NW1/4 section 30, T. 10 S., R. 18 E.

**RANGE IN CHARACTERISTICS:** The mean annual soil temperature at a depth of 20 inches is about 59 to 68 degrees F., and the soil temperature is not below 47 degrees F. for any significant period. Soil between the depths of about 8 to 24 inches usually is dry all of the time from late April or May until November or early December and usually is moist in some or all parts of this section all the rest of the year. The 10 to 40 inch control section averages sandy loam, coarse sandy loam, fine sandy loam or gravelly equivalents of each. The coarse fragments range from 0 to 35 percent. The particle size control section has little or no stratification. Clay content usually averages 6 to 18 percent. Organic matter is less than 1 percent and decreases regularly with increasing depth. Below a depth of 40 inches some pedons have marked stratification. The soils are medium acid to slightly alkaline and usually become more alkaline with depth. Secondary free carbonates do not occur above a depth of 40 inches. In some cases carbonates have been added to the soil by farmers which results in slight effervescence in the surface layers.

The A horizon is pale brown or light brownish gray (10YR 5/2, 5/3, 6/3, 6/2).

The C horizon is very pale brown, pale brown or light yellowish brown (10YR 5/3, 6/3, 6/4, 7/3, 7/4).

**COMPETING SERIES:** These are the [Honcut](#), [Pollasky](#) and [Saugus](#) series. Honcut soils have more silt or clay in the 10 to 40 inch particle-size control section, lower available water holding capacity, and/or redder hues. Pollasky soils are underlain by unrelated moderately consolidated sandy sediments at depths of less than 40 inches. Saugus soils have a paralithic contact at depths of more than 40 inches.

**GEOGRAPHIC SETTING:** The Hanford soils are on stream bottoms, floodplains and alluvial fans at elevations of 150 to 3,500 feet. Slopes range from 0 to 15 percent. The soils formed in deep, moderately coarse textured alluvium dominantly from granite and other quartz bearing rocks of similar texture. The climate is dry subhumid mesothermal with hot, dry summers and cool, moist winters. The mean annual precipitation is 9 to 20 inches. The mean annual temperature is 62 to 65 degrees F.; the mean January temperature is about 45 degrees F.; and the mean July temperature is about 81 degrees F. The frost free season is 200 to 280 days.

**GEOGRAPHICALLY ASSOCIATED SOILS:** These are the [Elder](#), [Dinuba](#), [Ramona](#), and [Tujunga](#) soils. Elder soils have mollic epipedons. Dinuba and Ramona soils have argillic horizons and Tujunga soils are sand or loamy sand throughout the 10 to 40 inch control section.

**DRAINAGE AND PERMEABILITY:** Well drained; negligible to low runoff; moderately rapid permeability.

**USE AND VEGETATION:** Hanford soils are used for growing a wide range of fruits, vegetables, and general farm crops. They are also used for urban development and dairies. Vegetation in uncultivated areas is mainly annual grasses and associated herbaceous plants.

**DISTRIBUTION AND EXTENT:** Widely distributed in the San Joaquin Valley and in the valleys of central and southern California. The soils are extensive. MLRA 17

**MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE:** Davis, California

**SERIES ESTABLISHED:** Kings County (Hanford Area), California, 1901.



**BRLO-5942(249) – Replace Bridge #42C0496  
NES (MI) Del Rey Ave. over Fresno Canal**

**Natural Environment Study**  
(Minimal Impacts)

Del Rey Avenue over Fresno Canal, 0.5 miles south of McKinley Avenue


Bridge No. 42C0496


Fresno County, California

October 2016

STATE OF CALIFORNIA  
Department of Transportation

Prepared By: Wendy C. Fisher  
Senior Project Manager and Senior Ecologist  
559-642-4880  
Live Oak Associates, Inc.  
Oakhurst Office

Recommended  
for Approval By:  Date: 11/3/16  
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(559) 445-6314  
District 6  
Environmental Analysis, Planning & Local Programs

Approved By:  Date: 11/3/2016  
Shane Gunn, Branch Chief  
(559) 445-6310  
District 6  
Environmental Analysis, Planning & Local Programs



# 1. Summary

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The County of Fresno proposes to replace the two lane timber bridge along N. Del Rey Avenue over the Fresno Canal located approximately 0.5 miles south of McKinley Avenue with a new two lane bridge with minor grading at the bridge abutments.

Live Oak Associates, Inc. (LOA) conducted an investigation of the biological resources contained within the proposed project impact area, which generally consist of the bridge, road approaches, and adjacent levee roads. For the purposes of this document, the project impact area is referred to as Biological Study Area or BSA.

Sensitive biological resources, including special-status species or evidence thereof, were absent from the BSA. The BSA was located near trees and shrubs that could be utilized for nesting by raptors and migratory birds and colonial nesting birds were observed nesting under the bridge. Various bat species may also use the bridge for roosting and/or breeding. Incorporation of avoidance and minimization measures would ensure that the project has low or negligible effects on sensitive biological resources.

The project could affect a small portion of the Fresno Canal, a potential water of the United States.

## 2. Introduction

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The County of Fresno proposes to replace the timber bridge at North Del Rey Avenue over the Fresno Canal, located approximately 0.5 miles south of McKinley Avenue in Fresno County, California. Caltrans will serve as the lead agency under the National Environmental Policy Act.

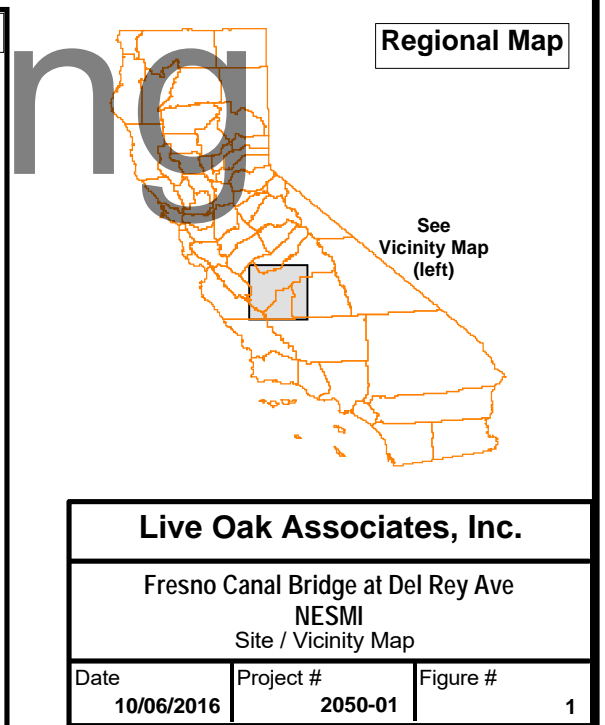
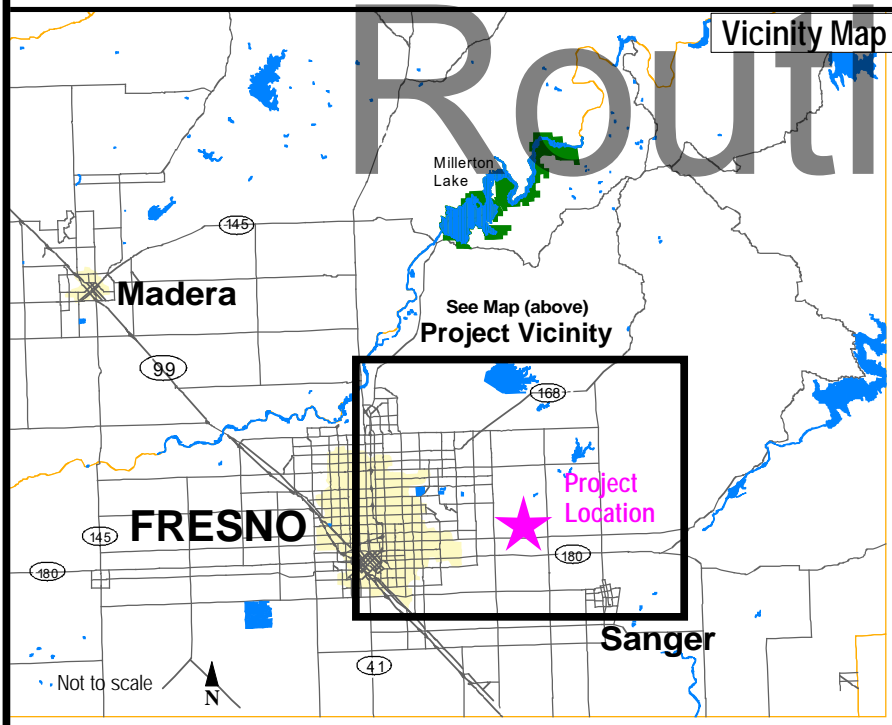
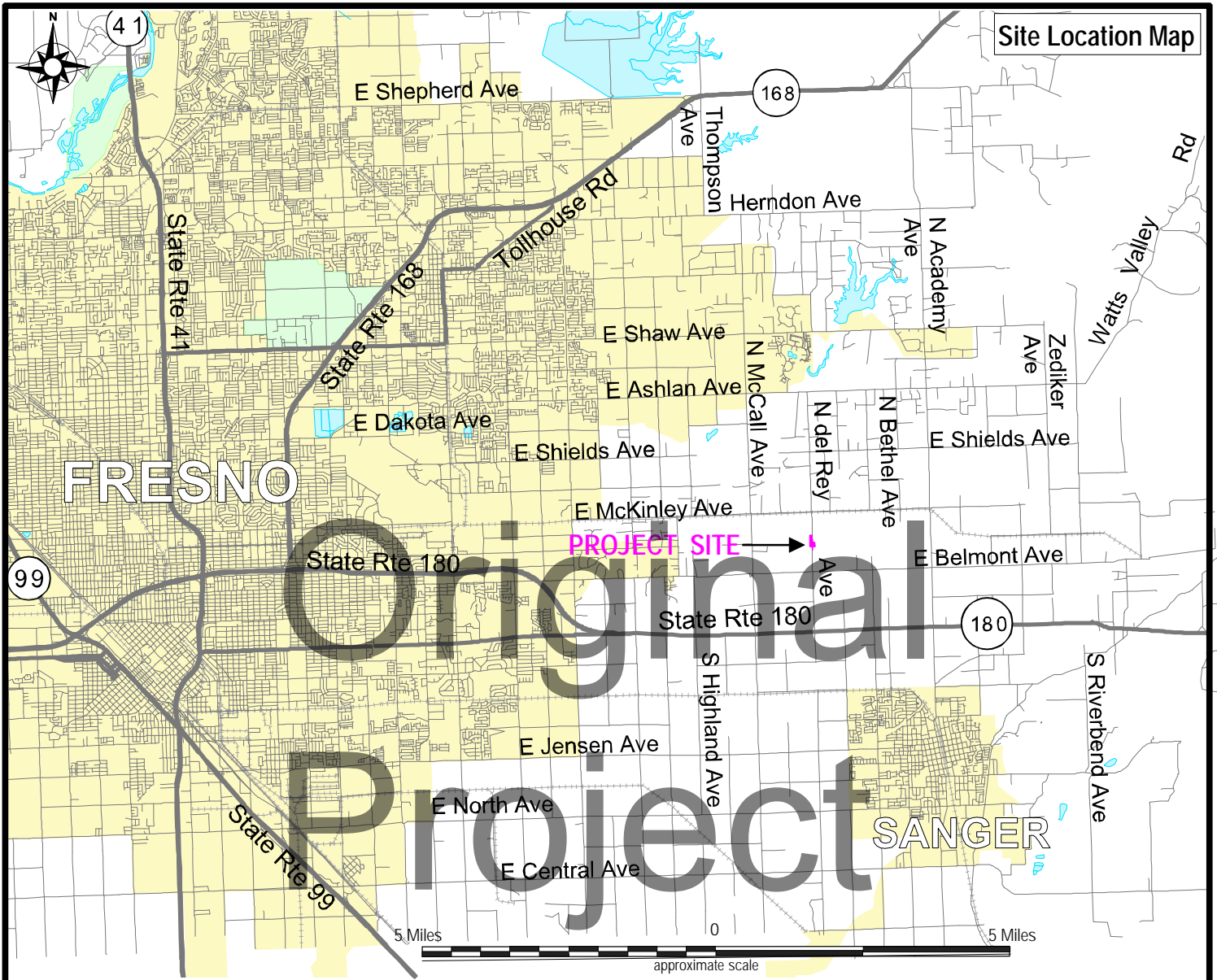
### 2.1 Project Location

Bridge No. 42C0496 is located approximately four miles north to northwest of the City of Sanger, CA along the eastern side of the San Joaquin Valley. It can be found 0.5 miles south of McKinley Avenue, where N. Del Rey Avenue crosses the Fresno Canal (Figure 1). The bridge can also be located on the *Round Mountain* U.S. Geological Survey (USGS) 7.5 minute quadrangle between sections 32 and 33 in Township 13 South, Range 22 East (Figure 2).

### 2.2 Project Description

The proposed project consists of the replacement of the structurally deficient timber 2-lane bridge with a 2-lane concrete bridge that meets current standards. The replacement will address deficiencies such as a narrow deck width, substandard barrier rails and approach guardrails as well as scour and erosion at the abutments.

The Area of Potential Affect (APE) consists of 9.3 acres, including approximately 510 linear feet of the Fresno Canal. The APE includes road approaches approximately 400 feet north and 400 feet south of the bridge



<b>Live Oak Associates, Inc.</b>		
Fresno Canal Bridge at Del Rey Ave NESMI Site / Vicinity Map		
Date	Project #	Figure #
10/06/2016	2050-01	1



# Original Project Routing

Project  
APE

1/2 mile 0 1/2 mile

From USGS  
Round Mountain 7.5' Quadrangle 1964

approximate scale

**Live Oak Associates, Inc.**

Fresno Canal Bridge at Del Rey Ave  
NESMI  
U.S.G.S. Quadrangle

Date	Project #	Figure #
10/06/2016	2050-01	2

easement, the Fresno Canal approximately 230 feet up- and 220 feet downstream of the 60 foot bridge right of way, and a potential 4.3 acre staging area northwest of the bridge. Potential bridge design alternatives, permanent and temporary right of way needs, and the contractor's access way to the channel would be accomplished within the proposed footprint. A minor realignment of the bridge could be required. The bridge will clear span the channel; however work will occur in the channel to remove the existing bridge and to place scour protection. Likely the bridge would be closed during construction, requiring a 3.7 mile detour. Right-of-way needs are under investigation; however acquisition is anticipated. The overhead utilities will likely need to be relocated. A potential staging area of approximately 4.3 acres has been identified, although staging is expected to occur on the roadway. It is anticipated that construction activities would occur in the non-irrigation/dry season outside of the nesting season.

The existing bridge (71 feet long and 23.6 feet wide) was built in 1939 and widened in 1967. The proposed bridge will be approximately 73 feet long and 38.83 feet wide to accommodate two 12 foot wide travel lanes and 6 foot wide shoulders. Approach work is expected to extend up to 400 feet on either side of the bridge. All four driveway access roads will be realigned to accommodate the approach railing. Private driveway gates and fences would require relocation. Trees and other vegetation will be removed on both approaches.

### 3. Study Methods

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The Area of Potential Affect (APE) consists of the bridge itself, road approaches approximately 400 feet north and 400 feet south of the bridge easement, the Fresno Canal approximately 230 feet up- and 220 feet downstream of the 60 foot bridge right of way, and a potential 4.3 acre staging area northwest of the bridge. A small portion of the adjacent irrigated pasture, nectarine, almond, and citrus orchards may also be impacted. For the purposes of this investigation, the project impact area is referred to as the Biological Study Area (BSA).

A list of special-status species occurring, or potentially occurring, in the USGS quadrangle (*Round Mountain*) and the eight surrounding USGS quadrangles (*Academy, Clovis, Friant, Humphreys Station, Malaga, Piedra, Sanger, and Wahtoke*) was generated using the U.S. Fish and Wildlife Service (USFWS) Endangered Species List Generator (USFWS 2016) and the *California Natural Diversity Data Base* (CNDDB) (CDFW 2016) (Appendices A and B, respectively). LOA assessed the potential of each of these special-status species to occur within the BSA of the proposed project, based on habitat requirements, local occurrence records, and suitability of on-site habitats.

LOA biologist Wendy Fisher conducted a reconnaissance-level field survey of the BSA on June 19, 2016. Ms. Fisher examined the BSA for sensitive or protected biological resources, including use or potential use of the BSA by special-status species, and potential waters of the U.S. Principal land uses and habitats of the BSA and surrounding lands were noted, and all plant and animal species observed were documented (Appendices C and D).

## 4. Environmental Setting

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### 4.1 Description of the Existing Biological and Physical Conditions

The BSA consisted of the asphalt surfaces of the bridge deck and the timber piling and base of the bridge, North Del Rey Avenue road approaches, as well as the dirt shoulders of North Del Rey Avenue, an approximately 510 linear foot stretch of the Fresno Canal, and portions of the adjacent orchards, irrigated pasture, and ornamental landscaped driveways (Figure 2). Soils of the site included Atwater sandy loam, 0-3 % slopes, Delhi Sand, 0-3% slopes, Delhi loamy sand, 0-3% slopes, Greenfield sandy loam, 0-3% slopes, and Hanford sandy loam. Only the Delhi series (when occurring in depressions) is considered hydric by the NRCS. The elevation of the site is 370 feet (National Geodetic Vertical Datum).

Biotic habitats/land uses within the BSA include the Fresno Canal below ordinary high water, riparian above ordinary high water, ruderal (disturbed)/ornamental, orchard, and irrigated pasture. Surrounding lands included various orchards, other developed agricultural lands, residences, and the Fresno Canal.

A mix of native and non-native woody vegetation observed growing sporadically in areas of the upper channel banks above ordinary high water included Fremont cottonwood seedlings (*Populus fremontii*), Himalayan blackberry (*Rubus armeniacus*), red gum (*Eucalyptus camaldulensis*), red willow (*Salix laevigata*), and almond (*Prunus dulcis*). Stinging nettle (*Urtica dioica*) and scouring rush (*Equisetum hyemale*) were occasionally observed.

Ruderal/ornamental land uses included paved road, road shoulders and driveway surfaces along both east and west sides of Del Rey Avenue, adjacent road shoulders, and some planted ornamental trees adjacent to these hardscapes. The ruderal roadside west of Del Rey Avenue and north of the canal bordering irrigated pasture were lined with dead and dying mature Fremont's cottonwood trees and a few small almonds. Residential driveways along both west and east sides Del Rey Avenue were planted with non-native ornamentals, including china berry (*Melia azedarach*), mulberry (*Morus alba*), coast redwood (*Sequoia sempervirens*), cultivated plum (*Prunus domestica*), red gum Eucalyptus, almond, pittosporum (*Pittosporum* sp.), and lily-of-the-Nile (*Agapanthus* sp.). Roadside ruderal areas beneath the ornamental trees and shrubs contained non-native grasses and forbs ripgut (*Bromus diandrus*), prickly lettuce (*Lactuca serriola*), yellow star thistle (*Centaurea solstitialis*), and red brome (*Bromus madritensis*).

Small portions of the BSA consisted of orchard (nectarine, almond, and citrus orchards). Few weedy alien plants were found in the sparse understory due to perpetual maintenance and clearing. That observed included sporadic wild oats (*Avena fatua*), Canada horseweed (*Erigeron canadensis*), and prickly lettuce.

Irrigated pasture was present in areas east of ruderal road shoulder and Del Rey Avenue and north of the Fresno Canal. Horses were grazing at the time of the field survey. Much of the pasture was grazed heavily and therefore most of the vegetation was short, trampled and

unidentifiable. What was discernable included black mustard (*Brassica nigra*), Bermuda grass (*Cynodon dactylon*), and wild oats.

## **4.2 Regional Species and Habitats of Concern**

Special-status plant and animal species of the BSA and vicinity, and their potential for occurrence in the BSA, have been identified on Figure 3 and in Table 1. Sources of information for this table included the CNDDDB (CDFW 2016), the USFWS Endangered Species List Generator (USFWS 2016), *California's Wildlife, Volumes I, II, and III* (Zeiner et. al 1988-1990), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2016).

# Original Project Routing

**LEGEND**

- Special status species observation

**Sources:**  
California Dep. of Fish & Wildlife Natural Diversity Database  
U.S. Fish & Wildlife Service

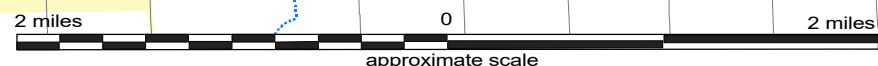


Five Kilometer (3.1 mile) radius

San Joaquin adobe sunburst

FRESNO

Original  
Project  
Routing



<b>Live Oak Associates, Inc.</b>		
Fresno Canal Bridge at Del Rey Ave NESMI Special-status Species		
Date	Project #	Figure #
10/06/2016	2050-01	3

Sanger

western yellow-billed cuckoo

spiny-sepaled button-celery

Greene's tuctoria

Greene's tuctoria

180

E Clinton Ave

N Highland Ave

E Ashlan Ave

N McCall Ave

N del Rey Ave

N Indianola Ave

N Bethel Ave

E Shields Ave

N Academy Ave

Ave

Mill Ditch

Fancher Cr

E Belmont Ave

Fresno Canal

Gould Cnl

E McKinley Ave

Fancher Cr

Burlington Northern Santa Fe R

N Highland Ave

N Bethel Ave

E Tulare Ave

S Academy Ave

E Butler Ave

E California Ave



**TABLE 1. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE VICINITY OF THE NORTH DEL REY AVENUE BRIDGE REPLACEMENT**

**Plants Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts (CDFW 2016, USFWS 2016, and CNPS 2016)**

Species	Status	Habitat	Occurrence in the BSA
Succulent Owl's Clover ( <i>Castilleja campestris</i> var. <i>succulenta</i> )	FT, CE, CNPS 1B.2	Vernal pools of California's Central Valley. Blooms April-May.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
California Jewelflower ( <i>Caulanthus californicus</i> )	FE, CE, CNPS 1B.1	Chenopod scrub, valley and foothills grassland, Pinyon-Juniper grassland. Blooms Feb-May.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
San Joaquin Orcutt Grass ( <i>Orcuttia inaequalis</i> )	FT, CE, CNPS 1B.1	Vernal pools of California's Central Valley. Requires deep pools with prolonged periods of inundation. Blooms April-September.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Hartweg's Golden Sunburst ( <i>Pseudobahia bahifolia</i> )	FE, CE, CNPS 1B.1	Occurs in grasslands of the western foothills of the Sierra Nevada in volcanic pumice soils between 100 and 200 meters in elevation. Often found in soils of the Rocklin series; blooms March to April.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
San Joaquin Adobe Sunburst ( <i>Pseudobahia peirsonii</i> )	FT, CE, CNPS 1B.1	Occurs in grasslands of the Sierra Nevada foothills 100-900 meters in elevation; heavy clay soils of the Porterville and Centerville series. Blooms March-April.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Keck's Checkerbloom ( <i>Sidalcea keckii</i> )	FE, CNPS 1B.1	Cismontane woodlands and valley and foothill grasslands on rocky clay soils derived from metamorphic rock at elevations between 120 and 425 meters. Blooms April-May.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Greene's Tuctoria ( <i>Tuctoria greenei</i> )	FE, CR, CNPS 1B.1	Occurs in vernal pools of California's Central Valley; blooms May to September	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.

**Plants Listed as Rare, Threatened, or Endangered in California by the California Native Plant Society (2016)**

Species	Status	Habitat	Occurrence in the BSA
Spiny-sealed Button-celery ( <i>Eryngium spinosepalum</i> )	CNPS 1B.2	Vernal pools of Fresno and Tulare Counties at elevations between 80 and 255 meters. Blooms April-May.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Forked Hare-leaf ( <i>Lagophylla dichotoma</i> )	CNPS 1B.1	Valley grassland and foothill woodland between 50 and 900 meters. Blooms April-June.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Madera Leptosiphon ( <i>Leptosiphon serrulatus</i> )	CNPS 1B.2	Non-native grassland, cismontane woodlands, and lower montane coniferous forests at elevations between 300 and 1,300 meters. Blooms April-May.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity. Furthermore, the elevational range of this species is above the BSA.
Orange Lupine ( <i>Lupinus citrinus</i> var. <i>citrinus</i> )	CNPS 1B.2	Chaparral, cismontane woodlands, and lower montane coniferous forests at elevations between 380 and 1,700 meters. Blooms April-July.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity. Furthermore, the elevational range of this species is well above the BSA.

**TABLE 1. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE VICINITY OF THE NORTH DEL REY AVENUE BRIDGE REPLACEMENT**

**PLANTS (Cont'd)**

Species	Status	Habitat	Occurrence in the BSA
Slender-stalked Monkeyflower ( <i>Mimulus gracilipes</i> )	CNPS 1B.2	Chaparral, cismontane woodlands, and lower montane coniferous forests at elevations between 500 and 1300 meters. Blooms April-June.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity. Furthermore, the elevational range of this species is well above the BSA.
Sanford's Arrowhead ( <i>Sagittaria sanfordii</i> )	CNPS 1B.2	Freshwater emergent marsh habitat in drainage ditches and canals of California's central valley at elevations up to 610 meters. Blooms May-October.	<b>Unlikely.</b> The flows within the Fresno Canal are too great to allow rooting emergent vegetation. Habitats required by this species are marginal (at most) in the BSA and immediate vicinity.
Caper-fruited Tropicocarpum ( <i>Tropicocarpum capparideum</i> )	CNPS 1B.1	Valley and foothill grasslands on alkaline clay soils at elevations up to 455 meters. Blooms March-April.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.

**Animals Listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts (CDFW 2016 and USFWS 2016)**

Conservancy Fairy Shrimp ( <i>Branchinecta conservatio</i> )	FE	Occurs in large and turbid vernal pools of the Central Valley.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Vernal Pool Fairy Shrimp ( <i>Branchinecta lynchi</i> )	FT	Primarily found in vernal pools, clear to tea-colored water in grass or mud-bottomed swales, and basalt depression pools.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Vernal Pool Tadpole Shrimp ( <i>Lepidurus packardii</i> )	FE	Primarily found in vernal pools of California's Central Valley.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Valley Elderberry Longhorn Beetle (VELB) ( <i>Desmocerus californicus dimorphus</i> )	FT	Lives in mature elderberry shrubs of the Central Valley and Sierra foothills. Fresno County is one of the southern valley counties that is no longer considered to be within the range of this species.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Delta Smelt ( <i>Hypomesus transpacificus</i> )	FT, CE	Occurs in mixing zones (saltwater-freshwater interface) and migrate upstream to spawn as far as Mossdale, CA on the San Joaquin River.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity and the BSA is out of the historical and known range of this species.
Central Valley Steelhead ( <i>Oncorhynchus mykiss</i> )	FT	Lives in fresh water streams for first 1-2 years, matures in the ocean for 1-4 years, returns to freshwater streams for spawning.	<b>Absent.</b> Habitats for spawning and unobstructed connectivity to the ocean required by this species are absent from the BSA and immediate vicinity.
California Tiger Salamander ( <i>Ambystoma californiense</i> )	FT, CT	Found primarily in annual grasslands; requires vernal pools for breeding and rodent burrows for aestivation. Ninety-five percent aestivate within 0.4 miles from the breeding pond (Trenham and Shaffer 2005), while outliers can aestivate up to 1.3 miles away (Orloff 2011).	<b>Absent.</b> Habitats required by this species for breeding and aestivating are absent from the BSA and up to 1.3 miles outside of the BSA.

**TABLE 1. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE VICINITY OF THE NORTH DEL REY AVENUE BRIDGE REPLACEMENT**

**ANIMALS (cont'd)**

Species	Status	Habitat	Occurrence in the BSA
California Red-legged Frog ( <i>Rana draytonii</i> )	FT, CSC	Occurs in perennial aquatic habitats such as creeks and ponds with emergent vegetation.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Blunt-Nosed Leopard Lizard ( <i>Gambelia sila</i> )	FE, CE, CFP	Occurs in semiarid grasslands, alkali flats, and washes. Avoids densely vegetated areas. Inhabits the San Joaquin Valley and adjacent valleys and foothills north to southern Merced County.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Giant Garter Snake ( <i>Thamnophis gigas</i> )	FT, CT	Occurs in marshes, sloughs, drainage canals, irrigation ditches, rice fields, and adjacent uplands. Occasionally found in slow-moving creeks. Prefers locations with emergent vegetation for cover and open areas for basking.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	FE, CE	Riparian habitat of southern and central California.	<b>Unlikely.</b> Marginal riparian habitat is within and adjacent to the BSA, however this species has not been documented within the vicinity (CDFW 2016).
Western Yellow-billed Cuckoo ( <i>Coccyzus americanus occidentalis</i> )	FT, CE	Occurs in valley, foothill, and desert riparian habitats in scattered locations in California. Requires extensive gallery riparian forests for nesting.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity and this species has not been observed in the immediate area (eBird 2016).
Swainson's Hawk ( <i>Buteo swainsoni</i> )	CT	Occurs in grasslands and agricultural lands of the Central Valley during the spring and summer.	<b>Possible.</b> Swainson's hawks have been observed to the west and south of the BSA. Trees of the BSA and vicinity provide potential nesting habitat, however the numerous mature orchards in the area of the BSA do not provide suitable foraging habitat for this species.
Fresno Kangaroo Rat ( <i>Dipodomys nitratooides exilis</i> )	FE, CE	Occurs in grassland and chenopod scrub of the San Joaquin Valley the Merced River south to Kings County.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
San Joaquin Kit Fox ( <i>Vulpes macrotis mutica</i> )	FE, CT	Found in desert alkali scrub and annual grasslands; may forage in adjacent agricultural habitats. Use underground dens for thermoregulation, cover, and reproduction. Dens are either self-dug or modified rodent burrows.	<b>Unlikely.</b> The BSA is within the known historic range of the San Joaquin kit fox; however no verified sitings exist east of Highway 99. No burrows of suitable size for kit fox denning were observed at the BSA. Furthermore, foraging opportunities would be very limited given the limited amount of small mammal prey.

**Animal Species Listed as California Species of Special Concern (CDFW 2016)**

Species	Status	Habitat	Occurrence in the BSA
Western Spadefoot ( <i>Spea hammondi</i> )	CSC	Mainly occurs in grasslands of San Joaquin Valley. Vernal pools or other temporary wetlands are required for breeding. Aestivates in underground refugia such as rodent burrows, typically within 365 meters of aquatic habitat.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.

**TABLE 1. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE VICINITY OF THE NORTH DEL REY AVENUE BRIDGE REPLACEMENT**

**Animal Species Listed as California Species of Special Concern (CDFW 2016)**

Species	Status	Habitat	Occurrence in the BSA
Foothill Yellow-Legged Frog ( <i>Rana boylei</i> )	CSC	Frequents rocky streams and rivers with open, sunny banks in forests, chaparral, and woodlands. Occurs from sea level to 2,040 meters elevation.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Western Pond Turtle ( <i>Emys marmorata</i> )	CSC	Occurs in open slow-moving water or ponds with abundant vegetation, and rocks and logs for basking. Nesting occurs in open areas, on a variety of soil types, and up to ¼ mile away from water.	<b>Unlikely.</b> In general, engineered channels such as the Fresno Canal are marginal for this species due to the lack of vegetation and basking structures. Disturbed roadside habitats of the BSA are unlikely to be used by this species for nesting or overland travel.
Short-Eared Owl ( <i>Asio flammeus</i> )	CSC	Transient or occasional breeder in grasslands, marshes, and in some agricultural lands of the San Joaquin Valley.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.
Burrowing Owl ( <i>Athene cunicularia</i> )	CSC	Found in open, dry grasslands, deserts and ruderal areas. Utilizes rodent burrows for roosting and nesting.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity. Rodent and potential nest burrows are absent from the BSA.
Loggerhead Shrike ( <i>Lanius ludovicianus</i> )	CSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	<b>Possible.</b> Riparian trees and shrubs within and bordering the BSA could be used for nesting by this species. Shrikes could forage over the BSA from time to time.
Yellow-Headed Blackbird ( <i>Xanthocephalus xanthocephalus</i> )	CSC	Nests in fresh emergent wetlands with dense vegetation and deep water; forages in emergent wetlands and croplands.	<b>Unlikely.</b> Nesting habitat is absent from the BSA and vicinity. This species would be unlikely to forage over the disturbed roadside habitats of the BSA; however, individuals may pass over the BSA from time to time.
Tricolored Blackbird ( <i>Agelaius tricolor</i> )	CSC	Nests colonially near fresh water in dense cattails or tules, or in thickets of willows or shrubs. Forages in grassland and cropland areas.	<b>Unlikely.</b> Nesting habitat is absent from the BSA and vicinity. This species would be unlikely to forage over the disturbed roadside habitats of the BSA; however, individuals may pass over the BSA from time to time.
Spotted Bat ( <i>Euderma maculatum</i> )	CSC	Typically associated with prominent rocky habitats where it roosts in crevices, but is known to occur in a wide range of habitats.	<b>Unlikely.</b> Roosting habitat for this species is absent from the BSA and immediate vicinity, however individuals could forage over the BSA from time to time.
Western Mastiff Bat ( <i>Eumops perotis californicus</i> )	CSC	Found in open, arid to semi-arid habitats, where it feeds on insects in flight. Roosts most commonly in crevices in cliff faces, but may also use high buildings, trees, and tunnels.	<b>Unlikely.</b> The western mastiff bat does not generally roost on bridges. Possibly, the species could forage over the BSA from time to time.
Ringtail ( <i>Bassariscus astutus</i> )	CP	Year-round resident of riparian and heavily wooded habitats near water. Nests in rock recesses, hollow trees, logs, snags abandoned burrows, or woodrat nests.	<b>Unlikely.</b> The Fresno Canal and adjacent riparian habitat of the BSA is marginal for this species.
American Badger ( <i>Taxidea taxus</i> )	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils.	<b>Absent.</b> Habitats required by this species are absent from the BSA and immediate vicinity.

## Occurrence Terminology:

Present:	Species observed on the site at time of field surveys or during recent past.
Likely:	Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible:	Species not observed on the site, but it could occur there from time to time.
Unlikely:	Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient.
Absent:	Species not observed on the site, and precluded from occurring there because habitat requirements not met.

## STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FPT	Federally Threatened (Proposed)	CFP	California Fully Protected
FC	Federal Candidate	CSC	California Species of Special Concern
CNPS	California Native Plant Society Listing		
1B.1	Seriously (over 80% of occurrences threatened) Rare, Threatened, or Endangered in California and Elsewhere		
1B.2	Moderately (20-80% occurrences threatened) Rare, Threatened, or Endangered in California and Elsewhere		

### 4.2.1 Maternity Bat Roost and Colonial Nesting Bird Habitat

Timber bridges, such as the bridge along North Del Rey Avenue and the Fresno Canal, provide roosting habitat for various bat species (Erickson 2002 and Johnston et al. 2004) and colonial nesting birds. In addition, the presence of water in the Fresno Canal, various orchards and agricultural lands, and riparian trees within and adjacent to the BSA provide foraging opportunities for bats and colonial nesting birds. During the June 2016 survey the water level was at or near the highest level of the Fresno Canal and approximately one to two feet of space was available for bats to access the bridge and cliff swallows were observed flying to their nests under the bridge, however there was not enough space to survey the bridge for roosting bats during daylight hours.

### 4.2.2 Riparian Habitat

As discussed, riparian habitat is located up and downstream of the North Del Rey Avenue Bridge within the BSA, which consisted of dense stands of Himalayan blackberry along the southwest bank, and a mix of native and non-native trees including Fremont's cottonwood, red willow, and redgum Eucalyptus trees (amongst others) along the north and southeast banks. Only a few native riparian trees were present within the BSA. Although riparian habitat is considered an important resource for wildlife, it is limited to small areas along the banks of the canal, and occurs only sporadically along the length of the engineered canal levees.

### 4.2.3 Canal Habitat

The Fresno Canal functions as an irrigation canal, receiving water from the Kings River and Friant-Kern Canal and delivering it to various agricultural fields. The Fresno Irrigation District (FID) has engineered the flood control infrastructure of the cities of Fresno and Clovis such that stormwater can now be diverted to the San Joaquin River through the Biola Spillway during major winter storm events (Daniel Rourke, Fresno Metropolitan Flood Control District (FMFCD), pers. comm.). FID and the FMFCD together manage the diversion of flows based on frequency and amount of rainfall, and the capacity of water control structures upstream. The USACE has asserted jurisdiction over tributary waters including canals that from time to time

discharge flows into the San Joaquin River. Doing so for the Fresno Canal would be consistent with practices of the USACE for other projects in the area, and would seem to be consistent with existing case law, including particularly *Headwaters, Inc. v. Talent Irrigation District*.

### 4.3 Vegetation

As discussed, the BSA consists primarily of asphalt and dirt surfaces associated with bridges, roads, and road shoulders. Irrigated pasture, orchard, ruderal/ornamental and some amount of native and non-native riparian overstory trees could be affected (see above). As noted in Table 1, habitat for locally-occurring special-status plant species is absent from the BSA and these species are considered absent from the BSA and immediate surrounding area.

### 4.4 Animals

As discussed, the BSA consists primarily of asphalt and dirt surfaces associated with bridges, roads, and road shoulders. Avian species observed during the survey included cliff swallows (*Petrochelidon pyrrhonota*) nesting under the bridge, house sparrows (*Passer domesticus*), American crow (*Corvus brachyrhynchos*), and house finch (*Haemorhous mexicanus*). Avian species expected to use habitats within and immediately adjacent to the BSA would include other common species such as barn swallows (*Hirundo rustica*), mourning dove (*Zenaida macroura*), western scrub jays (*Aphelocoma californica*), and California quail (*Callipepla californica*), and other birds commonly observed in orchard habitat, including Eurasian collared-dove (*Streptopelia decaocto*), and rock pigeon (*Columba livia*), among others. Waterbirds such as the great egret (*Ardea alba*) may occasionally hunt in the waterways adjacent to the BSA. Birds using adjacent orchards and agricultural lands may fly over the BSA from time to time, as may foraging raptors such as the red-tailed hawk (*Buteo jamaicensis*) and Swainson's hawk (*Buteo swainsoni*).

Common reptile species at the BSA would include the western fence lizard (*Sceloporus occidentalis*), Pacific gopher snake (*Pituophis catenifer catenifer*), California kingsnake (*Lampropeltis getula californicae*), and western rattlesnake (*Crotalus oreganus*). Small mammals expected to use habitats within and adjacent to the BSA include the California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and Heerman's kangaroo rat (*Dipodomys heermanni*). A number of bat species could be expected to roost underneath the bridge; for example, the big brown bat (*Eptesicus fuscus*), Brazilian free-tailed bat (*Tadarida brasiliensis*), and Yuma myotis (*Myotis yumanensis*); however, no evidence of bat use of the bridge was observed. Mammalian predators that could occasionally occur in the BSA include disturbance-tolerant species such as the raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginianus*). A dead coyote (*Canis latrans*) was observed along the road shoulder within the BSA during the field survey.

Two of the special-status animal species listed in Table 1 merit further discussion because of the implications their potential presence has for project activities. These species include the western pond turtle and Swainson's hawk.

#### 4.4.1 Western Pond Turtle

*Ecology of the species.* The western pond turtle is the only native turtle to California and is designated as a Species of Special Concern by the California Department of Fish and Wildlife (CDFW). They are located throughout California and require slow water aquatic habitat to forage and soft, dry, and friable soils and duff adjacent to this aquatic habitat to nest and over summer. They have been known to inhabit canals and irrigations ditches, like the Fresno Canal.

*Potential to occur onsite.* While western pond turtle may inhabit canals and irrigation ditches, at the time of the June 2016 survey the Fresno Canal was moving too quickly to support pond turtles and the compaction of the soils along the banks of the Fresno Canal were too hard to support nesting or over summering turtles. No basking habitat was observed within or directly adjacent to the canal at the time of the field survey. Therefore, it is unlikely western pond turtle occur onsite.

#### 4.4.2 Swainson's Hawk

*Ecology of the species.* Swainson's hawks are large, long-winged, broad-tailed hawks with a high degree of mate and territorial fidelity. They are breeding season migrants to California, arriving at their nesting sites in March or April. The young hatch sometime between March and July and fledge 4 to 6 weeks later. By October, most birds have left for wintering grounds in South America. In the Central Valley, Swainson's hawks typically nest in large trees along riparian systems, but may also nest in oak groves, or lone, mature trees in agricultural fields or along roadsides. Nest sites are typically located adjacent to suitable foraging habitat. Swainson's hawks forage in large, open fields with abundant prey, including grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Their designation as a California Threatened species is based on population decline due in part to loss of foraging habitat to urban development (CDFG 1994).

*Potential to occur onsite.* Nesting habitat is present within and adjacent to the BSA where mature riparian trees border the Fresno Canal up- and downstream of the BSA. However, Swainson's hawk occurrences are infrequent, at best, along the eastern margin of the San Joaquin Valley. Swainson's hawks would be unlikely to forage within the disturbed roadside habitats of the BSA because of vehicular disturbance and an apparent lack of small mammal prey. Irrigated pastures provide limited habitat due to the active eradication of ground squirrels to protect against broken legs of grazing animals. Furthermore, mature orchards within and adjacent to the BSA are not suitable foraging habitat. However, Swainson's hawks may pass over the BSAs from time to time.

#### 4.4.3 San Joaquin Kit Fox

*Ecology of the species.* By the time the San Joaquin kit fox (SJKF) was listed as federally endangered in 1967 and California threatened in 1971, it had been extirpated from much of its historic range. The smallest North American member of the dog family (Canidae), the kit fox historically occupied the dry plains of the San Joaquin Valley, from San Joaquin County to southern Kern County (Grinnell et al. 1937). Local surveys, research projects, and incidental

sightings indicate that kit fox currently occupy available habitat on the San Joaquin Valley floor and in the surrounding foothills. Core SJKF populations are located in the natural lands of western Kern County, the Carrizo Plain Natural Area in San Luis Obispo County, and the Ciervo-Panoche Natural Area in western Fresno and eastern San Benito Counties (USFWS 1998).

The SJKF prefers habitats of open or low vegetation with loose soils. In the southern and central portion of the Central Valley, kit fox are found in valley sink scrub, valley saltbrush scrub, upper Sonoran subshrub scrub, and annual grassland (USFWS 1998). Kit fox may also be found in grazed grasslands, urban settings, and in areas adjacent to tilled or fallow fields (USFWS 1998). They require underground dens to raise pups, regulate body temperature, and avoid predators and other adverse environmental conditions (Golightly and Ohmart 1984). In the central portion of their range, they usually occupy burrows excavated by small mammals such as California ground squirrels. The SJKF is primarily carnivorous, feeding on black-tailed jackrabbits (*Lepus californicus*), desert cottontails, rodents, insects, reptiles, and some birds.

*Potential to occur onsite.* The San Joaquin kit fox once occurred throughout much of the San Joaquin Valley, but this species favored areas of alkali sink scrub and alkali grassland in the trough of the San Joaquin Valley and Tulare Basin, as well as areas further west. The low foothills of the Sierra Nevada found at the eastern edge of the San Joaquin Valley would be at the margin of their natural range. In fact, there are no published records of observations of kit fox east of Highway 99 in Madera County. The nearest confirmed record of a small kit fox population to the project site is western Madera County approximately 45 miles away.

There are a number of mostly unverified sightings of kit fox in Fresno County from just south of the San Joaquin River south to Piedra. Two of these sightings are highly unlikely, since they appear to be at elevations of 1,000 to 2,000 feet in oak woodland habitat with a known brushy understory. This type of habitat is not known to be used by kit foxes. These two records were likely gray foxes (*Urocyon cinereoargenteus*). The fact that no one has reported any kit fox sightings before or since that 1994 sighting suggests that these individuals, if indeed kit foxes, were transients that had strayed far from known population centers.

It is extremely unlikely that San Joaquin kit foxes would occur at the location of the project site, even as vagrants.

## **5. Project Impacts and Mitigations**

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The North Del Rey Avenue Bridge Replacement project will remove a small number of riparian trees, could impact a very small amount of the Fresno canal, and if implemented during the avian nesting season, has the potential to disturb any raptors, migratory birds, and colonial nesting birds that may be nesting within the BSA or adjacent lands. Also, various bat species may utilize the bridge for roosting and breeding. These impacts, along with associated mitigation measures, are described in more detail below.



## **5.1 Project related impacts to Riparian and Canal Habitat**

**Potential Impacts.** The project will result in the removal of some riparian trees along the north and southeast banks within the BSA. Because the bridge replacement plans have not been finalized, the exact number of native trees removed is not known at this time. However, tree removal will be minimized to the extent possible. Riparian habitat includes a mix of native and non-native species along the length of the engineered canal levees and therefore does not represent a significant riparian corridor. Removal of a few trees immediately adjacent to the existing bridge will eliminate only a small portion of the existing riparian habitat along the Fresno Canal immediately adjacent to the bridge.

The Fresno Canal is an engineered earthen canal lined with rock and riprap, which functions strictly as an irrigation canal. It does not function as suitable habitat for any special status species occurring in the area. The project will line the canal with concrete and rock slope protection at the location of the bridge, resulting in permanent impacts to a small amount of canal bed and levees. However, this will not result in a reduction of the function or value of the canal habitat.

**Mitigation:** Impacts to Riparian and Canal Habitat do not require mitigation. An application for a Streambed Alteration Agreement (Fish and Game Code Section 1602) shall be prepared and submitted to the CDFW prior to project implementation. CDFW may assert jurisdiction and require specific minimization and avoidance measures for the project.

## **5.2 Project-Related Mortality/Disturbance of Nesting Raptors, Migratory Birds, and Colonial Nesting Birds**

**Potential Impacts.** Trees and shrubs are present within and adjacent to the BSA, where several mature trees occur along the margins of the Fresno Canal. Trees, shrubs, and other vegetation suitable for nesting by raptors and migratory birds are present on lands adjacent to the BSA. Certain ground-nesting species such as the killdeer (*Charadrius semipalmatus*) have the potential to nest within the disturbed habitats of the BSA as well. Cliff swallows, a colonial nesting bird, were observed using the bridge for nesting.

### **Mitigation Measures:**

**Mitigation Measure 5.2a (Avoidance).** In order to avoid impacts to nesting raptors, migratory birds, and colonial nesting birds, project activities will occur, where possible, outside the nesting season, or between September 1<sup>st</sup> and January 31<sup>st</sup>. Cliff swallow exclusion methods may be used to prevent nesting under the bridge if the exclusion device (i.e. netting, etc.) is installed outside of the nesting season or if during the nesting season a biologist has completed pre-construction surveys (see *Mitigation Measure 5.2b* below) and determined that there are no eggs or young present in nests under the bridge.

**Mitigation Measure 5.2b (Pre-construction Surveys).** If project activities must commence during the nesting season (February 15 – September 1), a qualified biologist will conduct pre-construction surveys for active raptor and migratory bird nests and colonial nesting birds within 30 days of the onset of these activities. The survey area will include the BSA and a 250-foot buffer area surrounding the BSA, where accessible. If no active nests are found within the survey area, no further mitigation is required.

**Mitigation Measure 5.2c (Establish Buffers).** Should any active nests be discovered during the pre-construction survey, a qualified biologist will determine appropriate construction setback distances based on site conditions and the biology of the affected species. Construction-free buffers will be identified on the ground with flagging, fencing, or by other easily visible means, and will be maintained until the biologist has determined that the young have fledged.

Implementation of the above measures will reduce potential project impacts to nesting raptors, migratory birds, and colonial nesting birds to a low to negligible level, and will ensure that the project is in compliance with state and federal laws protecting such species.

### **5.3 Project-Related Mortality/Disturbance of Bat Roosts**

**Potential Impacts.** Bats are known to breed and roost under timber bridges, like the North Del Rey Avenue bridge over the Fresno Canal. While bats were not observed roosting under this bridge during daylight hours because the water level of the Fresno Canal was too high, bats potentially roosting and/or breeding under the bridge could be impacted by the project..

**Mitigation Measures.** The following measures have been adapted from recommendations in the *California Bat Mitigation Techniques, Solutions, and Effectiveness* (Johnston et al. 2004) and *Bat and Bridges Technical Bulletin – Hitch Hikers Guide to Bat Roosts* (Erickson, G.A. 2002).

**Mitigation Measure 5.3a (Pre-construction Surveys).** A pre-construction survey for roosting bats will be conducted by a qualified biologist within 15 days of the onset of construction, during dusk. The survey area will include the North Del Rey Avenue bridge over the Fresno Canal.

**Mitigation Measure 5.3b (Avoidance of Active Maternity Roosts).** If pre-construction surveys and subsequent project activities are undertaken during the breeding (maternity roosting) season (April 1-August 31) and active roosting bats are located under the North Del Rey Avenue and Fresno Canal bridge, a 100-foot construction setback will be established around the bridge, or alternate avoidance measures will be implemented in consultation with CDFW. The buffer areas will be identified on the ground with flagging, fencing, or by other easily visible means, to prevent construction equipment and workers from entering the setback area. Buffers will remain in place for the duration of the breeding season, unless otherwise arranged with CDFW. After the breeding season, passive relocation of any remaining bats may take place as described below.

**Mitigation Measure 5.3c (Passive Relocation of Resident Bats).** During the non-breeding season (September 1-March 31), resident bats occupying the North Del Rey

Avenue and Fresno Canal bridge may be passively relocated by a qualified biologist or professional pest control specialist. Passive relocation would entail installing one-way doors on the bridge or utilizing other humane exclusion methods where the bats are located and leaving these devices in place for at least 48 hours to ensure bats have vacated the bridge. The areas where the bats were roosting can then be sealed to prevent reentry.

Implementation of the above measures will reduce potential project impacts to roosting bats to a low to negligible level and ensure that the project is in compliance with state laws protecting this species.

## 6. Permits Required

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Permit applications for the following permits: 404 with the U.S. Army Corps of Engineers, 401 with the Regional Water Quality Control Board, and 1602 with the CDFW, will be submitted to the corresponding agency for approval. Permits will be obtained from those agencies asserting jurisdiction over the project, prior to the start of construction.

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# Original Project Routing

# Original Project Routing

**APPENDIX A**

**FEDERALLY ENDANGERED AND THREATENED SPECIES THAT OCCUR IN  
OR MAY BE AFFECTED BY PROJECTS IN THE VICINITY OF THE BSA**

**U.S. FISH AND WILDLIFE SERVICE**

**Original**  
**Project**  
**Routing**

# *IPaC Trust Resources Report*

Generated August 02, 2016 05:21 PM MDT, IPaC v3.0.8

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.





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# Original Project Routing

U.S. Fish & Wildlife Service

# IPaC Trust Resources Report

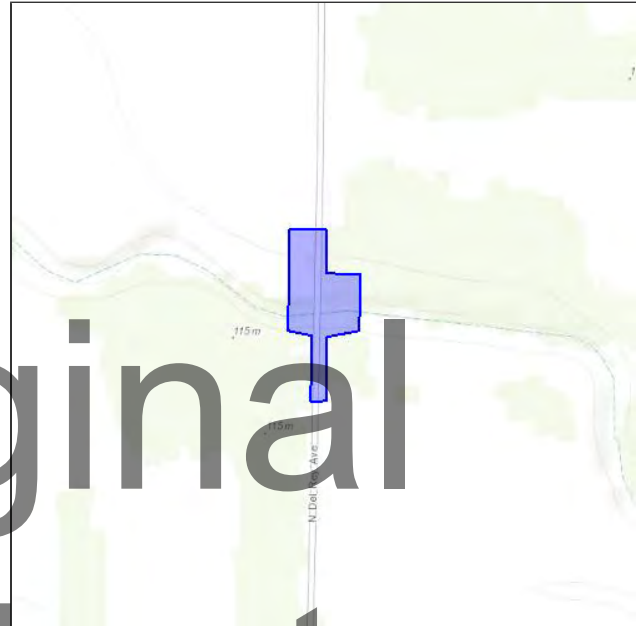


LOCATION

Fresno County, California

IPAC LINK

<https://ecos.fws.gov/ipac/project/S3C4D-LJHFJ-FQHC4-BOCNJ-YYZFDQ>



Original  
Project  
Routing

## U.S. Fish & Wildlife Service Contact Information

Trust resources in this location are managed by:

**Sacramento Fish And Wildlife Office**

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846  
(916) 414-6600

## Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

**This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.**

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[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 either from the Regulatory Documents section in IPaC or from the local field office directly.**

The list of species below are those that may occur or could potentially be affected by activities in this location:

### Amphibians

**California Red-legged Frog** *Rana draytonii* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=D02D](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=D02D)

**California Tiger Salamander** *Ambystoma californiense* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=D01T](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=D01T)

### Birds

**Yellow-billed Cuckoo** *Coccyzus americanus* Threatened

CRITICAL HABITAT

There is **proposed** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=B06R](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B06R)

## Crustaceans

**Conservancy Fairy Shrimp** *Branchinecta conservatio* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=K03D](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03D)

**Vernal Pool Fairy Shrimp** *Branchinecta lynchi* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=K03G](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=K03G)

## Fishes

**Delta Smelt** *Hypomesus transpacificus* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=E070](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E070)

## Flowering Plants

**Fleshy Owl's-clover** *Castilleja campestris* ssp. *succulenta* Threatened

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=Q0CG](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q0CG)

**Greene's Tuctoria** *Tuctoria greenei* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=Q23K](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q23K)

**San Joaquin Adobe Sunburst** *Pseudobahia peirsonii* Threatened

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=Q1K3](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1K3)

## Mammals

**Fresno Kangaroo Rat** *Dipodomys nitratoides exilis* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=A080](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=A080)

**San Joaquin Kit Fox** *Vulpes macrotis mutica* Endangered

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=A006](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=A006)

## Reptiles

**Blunt-nosed Leopard Lizard** *Gambelia silus* Endangered

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=C001](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=C001)

**Giant Garter Snake** *Thamnophis gigas* Threatened

CRITICAL HABITAT

**No critical habitat** has been designated for this species.

[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?sPCODE=C057](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=C057)

## Critical Habitats

There are no critical habitats in this location

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Routing

## Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity that results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish & Wildlife Service.<sup>[1]</sup> There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

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1. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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>
- Conservation measures for birds  
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data  
<http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The following species of migratory birds could potentially be affected by activities in this location:

- Bald Eagle** *Haliaeetus leucocephalus* Bird of conservation concern  
Season: Wintering  
[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=B008](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B008)
- Burrowing Owl** *Athene cunicularia* Bird of conservation concern  
Season: Year-round  
[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=B0NC](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0NC)
- Fox Sparrow** *Passerella iliaca* Bird of conservation concern  
Season: Wintering
- Lewis's Woodpecker** *Melanerpes lewis* Bird of conservation concern  
Season: Wintering  
[http://ecos.fws.gov/tess\\_public/profile/speciesProfile.action?spcode=B0HQ](http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HQ)

<b>Loggerhead Shrike</b> <i>Lanius ludovicianus</i>	Bird of conservation concern
Season: Year-round <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FY</a>	
<b>Long-billed Curlew</b> <i>Numenius americanus</i>	Bird of conservation concern
Season: Wintering <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S</a>	
<b>Nuttall's Woodpecker</b> <i>Picoides nuttallii</i>	Bird of conservation concern
Season: Year-round <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HT</a>	
<b>Oak Titmouse</b> <i>Baeolophus inornatus</i>	Bird of conservation concern
Season: Year-round <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0MJ</a>	
<b>Peregrine Falcon</b> <i>Falco peregrinus</i>	Bird of conservation concern
Season: Wintering <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU</a>	
<b>Short-eared Owl</b> <i>Asio flammeus</i>	Bird of conservation concern
Season: Wintering <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD</a>	
<b>Swainson's Hawk</b> <i>Buteo swainsoni</i>	Bird of conservation concern
Season: Breeding <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B070</a>	
<b>Western Grebe</b> <i>Aechmophorus occidentalis</i>	Bird of conservation concern
Season: Wintering <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EA</a>	
<b>Williamson's Sapsucker</b> <i>Sphyrapicus thyroideus</i>	Bird of conservation concern
Season: Year-round <a href="http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FX">http://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FX</a>	

## Wildlife refuges and fish hatcheries

**There are no refuges or fish hatcheries in this location**

# Original Project Routing



# 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](#).

## 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.

This location overlaps all or part of the following wetlands:

## Riverine

[R4SBCx](#)

A full description for each wetland code can be found at the National Wetlands Inventory website: <http://107.20.228.18/decoders/wetlands.aspx>

**APPENDIX B**

**CALIFORNIA NATURAL DIVERSITY DATA BASE  
SEARCH RESULTS FOR THE BSA AND VICINITY  
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

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Project  
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# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Academy (3611985) OR Clovis (3611976) OR Friant (3611986) OR Humphreys Station (3611984) OR Malaga (3611966) OR Piedra (3611974) OR Round Mountain (3611975) OR Sanger (3611965) OR Wahtoke (3611964))

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	None	G2G3	S1S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus crotchii</i> Crotch bumble bee	IHYM24480	None	None	G3G4	S1S2	
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesoovallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<i>Calicina macula</i> marbled harvestman	ILARAU8060	None	None	G1	S1	
<i>Calicina piedra</i> Piedra harvestman	ILARAU8080	None	None	G1	S1	
<i>Castilleja campestris var. succulenta</i> succulent owl's-clover	PDSCR0D3Z1	Threatened	Endangered	G4?T2	S2	1B.2
<i>Caulanthus californicus</i> California jewelflower	PDBRA31010	Endangered	Endangered	G1	S1	1B.1
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Efferia antiochi</i> Antioch efferian robberfly	IIDIP07010	None	None	G1G2	S1S2	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Eryngium spinosepalum</i> spiny-sepaled button-celery	PDAPI0Z0Y0	None	None	G2	S2	1B.2
<i>Euderma maculatum</i> spotted bat	AMACC07010	None	None	G4	S3	SSC

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# 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
<b>Great Valley Mixed Riparian Forest</b> Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
<b>Imperata brevifolia</b> California satintail	PMPOA3D020	None	None	G3	S3	2B.1
<b>Lagophylla dichotoma</b> forked hare-leaf	PDAST5J070	None	None	G1	S1	1B.1
<b>Leptosiphon serrulatus</b> Madera leptosiphon	PDPLM09130	None	None	G3	S3	1B.2
<b>Linderiella occidentalis</b> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<b>Lupinus citrinus var. citrinus</b> orange lupine	PDFAB2B103	None	None	G2T2	S2	1B.2
<b>Lytta moesta</b> moestan blister beetle	IICOL4C020	None	None	G2	S2	
<b>Lytta molesta</b> molestan blister beetle	IICOL4C030	None	None	G2	S2	
<b>Metapogon hurdi</b> Hurd's metapogon robberfly	IIDIP08010	None	None	G1G3	S1S3	
<b>Mimulus gracilipes</b> slender-stalked monkeyflower	PDSCR1B1C0	None	None	G2	S2	1B.2
<b>Northern Hardpan Vernal Pool</b> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<b>Oravelia pege</b> Dry Creek cliff strider bug	IIHEM14010	None	None	G1	S1	
<b>Orcuttia inaequalis</b> San Joaquin Valley Orcutt grass	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
<b>Pseudobahia bahiifolia</b> Hartweg's golden sunburst	PDAST7P010	Endangered	Endangered	G2	S2	1B.1
<b>Pseudobahia peirsonii</b> San Joaquin adobe sunburst	PDAST7P030	Threatened	Endangered	G1	S1	1B.1
<b>Rana boylei</b> foothill yellow-legged frog	AAABH01050	None	None	G3	S3	SSC
<b>Sagittaria sanfordii</b> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<b>Sidalcea keckii</b> Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
<b>Spea hammondi</b> western spadefoot	AAABF02020	None	None	G3	S3	SSC
<b>Sycamore Alluvial Woodland</b> Sycamore Alluvial Woodland	CTT62100CA	None	None	G1	S1.1	
<b>Taxidea taxus</b> American badger	AMAJF04010	None	None	G5	S3	SSC

Original Project Routing



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>Tropidocarpum capparideum</i> caper-fruited tropidocarpum	PDBRA2R010	None	None	G1	S1	1B.1
<i>Tuctoria greenei</i> Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
<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: 43

# Original Project Routing

## APPENDIX C

### APPENDIX C: VASCULAR PLANTS OF THE FRESNO CANAL BSA

The vascular plant species listed below were observed on the project site during a site survey conducted by Live Oak Associates, Inc. along the Fresno Canal at the Del Rey Avenue crossing on June 19, 2016. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate  
 FACW - Facultative Wetland  
 FAC - Facultative  
 FACU - Facultative Upland  
 UPL - Upland  
 NR - No review  
 NA - No agreement  
 NI - No investigation

<b>AMARYLLIDACEAE – Amaryllis Family</b>		
<i>Agapanthus</i> sp.	Lily-of-the-Nile	UPL
<b>ARECACEAE – Palm Family</b>		
<i>Washingtonia filifera</i>	Washington Fan Palm	UPL
<b>ASTERACEAE – Sunflower Family</b>		
<i>Amaranthus palmeri</i>	Careless Weed	FACU
<i>Centauria solstitialis</i>	Yellow Star Thistle	UPL
<i>Erigeron canadensis</i>	Canada Horseweed	FACU
<i>Lactuca serriola</i>	Prickly Lettuce	FACU
<i>Helianthus annuus</i>	Common Sunflower	FACU
<i>Hypochaeris glabra</i>	Smooth Cat's Ear	UPL
<i>Pseudognaphalium luteoalbum</i>	Jersey Cudweed	FACW
<b>BORAGINACEAE – Borage Family</b>		
<i>Amsinckia</i> sp.	Fiddleneck	UPL
<b>BRASSICACEAE – Mustard Family</b>		
<i>Brassica nigra</i>	Black Mustard	UPL
<i>Capsella bursa-pastoris</i>	Shepherd's Purse	FACU
<i>Raphanus sativa</i>	Wild Radish	UPL
<b>CARYOPHYLLACEAE – Carnation Family</b>		
<i>Spergularia rubra</i>	Red Sandspurry	FAC
<b>CHENOPODIACEAE – Goosefoot Family</b>		
<i>Chenopodium album</i>	Common Lambsquarters	FACU
<b>CUPRESSACEAE – Cypress Family</b>		
<i>Sequoia sempervirens</i>	Coast Redwood	UPL
<b>CYPERACEAE – Umbrella Sedge Family</b>		
<i>Cyperus eragrostis</i>	Umbrella Sedge	FACW
<b>EQUISETACEAE – Horsetail Family</b>		
<i>Equisetum hyemale</i>	Scouring Rush	FACW
<b>FABACEAE – Legume Family</b>		

<i>Acmispon americanus</i>	Spanish Clover	UPL
<i>Medicago polymorpha</i>	Toothed Medic	FACU
<i>Melilotus indicus</i>	Sweet Indian Clover	FACU
<b>GERANIACEAE – Geranium Family</b>		
<i>Erodium botrys</i>	Broad Leaf Filaree	FACU
<i>Erodium cicutarium</i>	Redstem Filaree	UPL
<b>JUNCACEAE – Rush Family</b>		
<i>Juncus balticus</i>	Pacific Rush	FACW
<b>LAMIACEAE – Mint Family</b>		
<i>Marrubium vulgare</i>	Common Horehound	UPL
<b>MALVACEAE – Mallow Family</b>		
<i>Malva nicaeensis</i>	Bull Mallow	-
<b>MELIACEAE – China Berry Family</b>		
<i>Melia azedarach</i>	China Berry	UPL
<b>MORACEAE – Mulberry Family</b>		
<i>Morus alba</i>	Mulberry	UPL
<b>MYRTACEAE – Myrtle Family</b>		
<i>Eucalyptus camaldulensis</i>	Red Gum Eucalyptus	UPL
<b>ONAGRACEAE – Fuschia Family</b>		
<i>Epilobium brachycarpum</i>	Willow Herb	UPL
<b>PITTOSPORUM – Pittosporum Family</b>		
<i>Pittosporum sp.</i>	Pittosporum	UPL
<b>POACEAE – Grass Family</b>		
<i>Avena fatua</i>	Wild Oats	UPL
<i>Bromus diandrus</i>	Ripgut Brome	UPL
<i>Bromus hordeaceus</i>	Soft Chess	FACU
<i>Bromus rubens</i>	Red Brome	UPL
<i>Cynodon dactylon</i>	Bermuda Grass	FAC
<i>Hordeum murinum ssp. leporinum</i>	Barnyard Barley	FACU
<i>Vulpia myuros</i>	Six-weeks Brome Grass	
<b>POLYGONACEAE – Smartweed Family</b>		
<i>Polygonum aviculare</i>	Prostrate Knotweed	FACW
<b>ROSACEAE - Rose Family</b>		
<i>Prunus domestica</i>	Cultivated Plum	UPL
<i>Prunus dulcis</i>	Almond	UPL
<i>Rubus armeniacus</i>	Himalayan Blackberry	FACU
<b>RUTACEAE – Orange Family</b>		
<i>Citrus x sinensis</i>	Sweet Orange	UPL
<b>SALICACEAE – Willow Family</b>		
<i>Populus fremontii</i>	Fremont's Cottonwood	FACW
<i>Salix laevigata</i>	Red Willow	FACW
<b>SOLONACEAE - Nightshade Family</b>		
<i>Datura stramineum</i>	Jimson Weed	UPL
<b>TILIACEAE – Basswood Family</b>		
<i>Tilia americana</i>	American Basswood	UPL
<b>URTICACEAE – Nettle Family</b>		

<i>Urtica dioica</i>	Stinging Nettle	FAC
<b>VISCACEAE – Mistletoe Family</b>		
<i>Phoradendron</i> sp.	Willow Mistletoe	UPL
<b>ZYGOPHYLLACEAE – Puncture Vine Family</b>		
<i>Tribulus terrestris</i>	Puncture Vine	UPL

#### APPENDIX D: TERRESTRIAL VERTEBRATE SPECIES POTENTIALLY OCCURRING WITHIN THE BIOLOGICAL STUDY AREA

The species listed below are those that may reasonably be expected to use the habitats within and adjacent to the Biological Study Area from time to time. The list was not intended to include birds that are vagrants or occasional transients. Terrestrial vertebrate species observed in or adjacent to the site by Live Oak Associates, Inc. during the June 2016 field surveys have been noted with an asterisk.

##### CLASS: AMPHIBIA

##### ORDER: ANURA (Frogs and Toads)

##### FAMILY: BUFONIDAE (True Toads)

Western Toad (*Bufo boreas*)

##### FAMILY: HYLIDAE (Treefrogs and Relatives)

Pacific Chorus Frog (*Pseudacris regilla*)

##### FAMILY: RANIDAE (True Frogs)

American Bullfrog (*Rana catesbeiana*)

##### CLASS: REPTILIA

##### ORDER: SQUAMATA (Lizards and Snakes)

##### SUBORDER: SAURIA (Lizards)

##### FAMILY: PHRYNOSOMATIDAE

Common Side-blotched Lizard (*Uta stansburiana*)

Western Fence Lizard (*Sceloporus occidentalis*)

##### FAMILY: SCINCIDAE (Skinks)

Gilbert Skink (*Eumeces gilberti*)

##### FAMILY: TEIIDAE (Whiptails and Relatives)

Western Whiptail (*Aspidoscelis tigris*)

##### FAMILY: ANGUIDAE (Alligator Lizards and Relatives)

Southern Alligator Lizard (*Elgaria multicarinata*)

##### SUBORDER: SERPENTES (Snakes)

##### FAMILY: COLUBRIDAE (Colubrids)

Racer (*Coluber constrictor*)

Gopher Snake (*Pituophis melanoleucus*)

California Kingsnake (*Lampropeltis getula californiae*)

Common Garter Snake (*Thamnophis sirtalis*)

##### FAMILY: VIPERIDAE (Vipers)



Western Rattlesnake (*Crotalus oreganus*)

**ORDER: TESTUDINES (Turtles)**

**FAMILY: EMYDIDAE (Pond Turtles)**

Western Pond Turtle (*Actinemys marmorata*)

**CLASS: AVES**

**ORDER: PELECANIFORMES (Tropicbirds, Pelecaniformes and Relatives)**

**FAMILY: PHALACROCORACIDAE (Cormorants)**

Double-Crested Cormorant (*Phalacrocorax auritus*)

**ORDER: CICONIIFORMES (Hérons, Storks, Ibises and Relatives)**

**FAMILY: ARDEIDAE (Hérons and Bitterns)**

Green Heron (*Butorides virescens*)

Cattle Egret (*Bubulcus ibis*)

Snowy Egret (*Egretta thule*)

Great Egret (*Ardea alba*)

Great Blue Heron (*Ardea herodias*)

**FAMILY: CATHARTIDAE (New World Vultures)**

Turkey Vulture (*Cathartes aura*)

**ORDER: ANSERIFORMES (Screamers, Ducks and Relatives)**

**FAMILY: ANATIDAE (Swans, Geese and Ducks)**

Canada Goose (*Branta canadensis*)

Mallard (*Anas platyrhynchos*)

**ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)**

**FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)**

White-tailed Kite (*Elanus caeruleus*)

Northern Harrier (*Circus cyaneus*)

Sharp-shinned Hawk (*Accipiter striatus*)

Cooper's Hawk (*Accipiter cooperi*)

Red-shouldered Hawk (*Buteo lineatus*)

Swainson's Hawk (*Buteo swainsoni*)

Red-tailed Hawk (*Buteo jamaicensis*)

**FAMILY: FALCONIDAE (Caracaras and Falcons)**

American Kestrel (*Falco sparverius*)

**ORDER: GALLIFORMES (Megapodes, Curassows, Pheasants, and Relatives)**

**FAMILY: ODONTOPHORIDAE (New World Quail)**

California Quail (*Callipepla californica*)

**ORDER: GRUIFORMES (Cranes, Rails and Relatives)**

**FAMILY: RALLIDAE (Rails, Gallinules, and Coots)**

American Coot (*Fulica Americana*)

**ORDER: CHARADRIIFORMES (Shorebirds, Gulls, and relatives)**

**FAMILY: CHARADRIIDAE (Plovers and relatives)**

Killdeer (*Charadrius vociferus*)

**FAMILY: RECURVIROSTRIDAE (Stilts and Avocets)**

Black-necked Stilt (*Himantopus mexicanus*)

**FAMILY: SCOLOPACIDAE (Sandpipers and Relatives)**

Least Sandpiper (*Calidris minutilla*)

Solitary Sandpiper (*Tringa solitaria*)

Greater Yellow-legs (*Tringa melanoleuca*)

**FAMILY: LARIDAE (Skuas, Gulls, Terns and Skimmers)**

Ring-billed Gull (*Larus delawarensis*)

California Gull (*Larus californicus*)

Herring Gull (*Larus argentatus*)  
 Western Gull (*Larus occidentalis*)  
**ORDER: COLUMBIFORMES (Pigeons and Doves)**  
**FAMILY: COLUMBIDAE (Pigeons and Doves)**  
 Rock Dove (*Columba livia*)  
 Mourning Dove (*Zenaida macroura*)  
 Eurasian Collared-Dove (*Streptopelia decaocto*)  
**ORDER: STRIGIFORMES (Owls)**  
**FAMILY: TYTONIDAE (Barn Owls)**  
 Barn Owl (*Tyto alba*)  
**FAMILY: STRIGIDAE (Typical Owls)**  
 Western Screech Owl (*Otus kennicottii*)  
 Great Horned Owl (*Bubo virginianus*)  
**ORDER: APODIFORMES (Swifts and Hummingbirds)**  
**FAMILY: APODIFORMES (Swifts)**  
 White-throated Swift (*Aeronautes saxatalis*)  
**FAMILY: TROCHILIDAE (Hummingbirds)**  
 Black-chinned Hummingbird (*Archilochus alexandri*)  
 Anna's Hummingbird (*Calypte anna*)  
**ORDER: CORACIIFORMES (Kingfishers and Relatives)**  
**FAMILY: ALCEDINIDAE (Kingfishers)**  
 Belted Kingfisher (*Megaceryle alcyon*)  
**ORDER: PICIFORMES (Woodpeckers and Relatives)**  
**FAMILY: PICIDAE (Woodpeckers and Wrynecks)**  
 Acorn Woodpecker (*Melanerpes formicivorus*)  
 Red-breasted Sapsucker (*Sphyrapicus ruber*)  
 Nuttall's Woodpecker (*Picoides nuttallii*)  
 Downy Woodpecker (*Picoides pubescens*)  
 Northern Flicker (*Colaptes auratus*)  
**ORDER: PASSERIFORMES (Perching Birds)**  
**FAMILY: TYRANNIDAE (Tyrant Flycatchers)**  
 Ash-throated Flycatcher (*Myiarchus cinerascens*)  
 Black Phoebe (*Sayornis nigricans*)  
 Say's Phoebe (*Sayornis saya*)  
 Western Kingbird (*Tyrannus verticalis*)  
**FAMILY: LANIIDAE (Shrikes)**  
 Loggerhead Shrike (*Lanius ludovicianus*)  
**FAMILY: CORVIDAE (Jays, Magpies, and Crows)**  
 Western Scrub Jay (*Aphelocoma coerulescens*)  
 \*American Crow (*Corvus brachyrhynchos*)  
 Yellow-billed Magpie (*Pica nuttalli*)  
 Common Raven (*Corvus corax*)  
**FAMILY: ALAUDIDAE (Larks)**  
 California Horned Lark (*Eremophila alpestris*)  
**FAMILY: HIRUNDINIDAE (Swallows)**  
 Tree Swallow (*Tachycineta bicolor*)  
 Violet-green Swallow (*Tachycineta thalassina*)  
 Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)  
 \*Cliff Swallow (*Petrochelidon pyrrhonota*)  
 Barn Swallow (*Hirundo rustica*)  
**FAMILY: AEGITHALIDAE**

Bushtit (*Psaltriparus minimus*)

**FAMILY: SITTIDAE (Nuthatches)**

Red-breasted Nuthatch (*Sitta canadensis*)

White-breasted Nuthatch (*Sitta carolinensis*)

**FAMILY: TROGLODYTIDAE (Wrens)**

Bewick's Wren (*Thryomanes bewickii*)

House Wren (*Troglodytes aedon*)

Rock Wren (*Salpinctes obsoletus*)

**FAMILY: REGULIDAE (Kinglets)**

Ruby-crowned Kinglet (*Regulus calendula*)

**FAMILY: SYLVIIDAE (Old World Warblers and Gnatcatchers)**

Blue-gray Gnatcatcher (*Polioptila caerulea*)

**FAMILY: TIMALIIDAE (Old World Babblers)**

Wrentit (*Chamaea fasciata*)

**FAMILY: TURDIDAE (Thrushes)**

Western Bluebird (*Sialia mexicana*)

American Robin (*Turdus migratorius*)

**FAMILY: MIMIDAE (Mockingbirds and Thrashers)**

Northern Mockingbird (*Mimus polyglottos*)

**FAMILY: STURNIDAE (Starlings and Allies)**

European Starling (*Sturnus vulgaris*)

**FAMILY: MOTACILLIDAE (Wagtails and Pipits)**

American Pipit (*Anthus rubescens*)

**FAMILY: BOMBYCILLIDAE (Waxwings)**

Cedar Waxwing (*Bombycilla cedrorum*)

**FAMILY: PARULIDAE (Wood Warblers and Relatives)**

Orange-crowned Warbler (*Vermivora celata*)

Black-throated Gray Warbler (*Dendroica nigrescens*)

Yellow Warbler (*Dendroica petechia*)

Yellow-rumped Warbler (*Dendroica coronata*)

**FAMILY: EMBERIZIDAE (Sparrows)**

California Towhee (*Pipilo crissalis*)

Spotted Towhee (*Pipilo maculatus*)

Vesper Sparrow (*Pooecetes gramineus*)

Lark Sparrow (*Chondestes grammacus*)

Savannah Sparrow (*Passerculus sandwichensis*)

Fox Sparrow (*Passerella iliaca*)

Song Sparrow (*Melospiza melodia*)

Lincoln's Sparrow (*Melospiza lincolni*)

Golden-crowned Sparrow (*Zonotrichia atricapilla*)

White-crowned Sparrow (*Zonotrichia leucophrys*)

Dark-eyed Junco (*Junco hyemalis*)

**FAMILY: CARDINALIDAE (Cardinals, Grosbeaks and Allies)**

Black-headed Grosbeak (*Pheucticus melanocephalus*)

Blue Grosbeak (*Guiraca caerulea*)

Lazuli Bunting (*Passerina amoena*)

Indigo Bunting (*Passerina cyanea*)

**FAMILY: ICTERIDAE (Blackbirds, Orioles and Allies)**

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)

Red-winged Blackbird (*Agelaius phoeniceus*)

Tricolored Blackbird (*Agelaius tricolor*)

Western Meadowlark (*Sturnella neglecta*)  
Brewer's Blackbird (*Euphagus cyanocephalus*)  
Brown-headed Cowbird (*Molothrus ater*)  
Hooded Oriole (*Icterus cucullatus*)  
Bullock's Oriole (*Icterus bullocki*)  
Great-tailed Grackle (*Quiscalus mexicanus*)

**FAMILY: FRINGILLIDAE (Finches)**

\*House Finch (*Carpodacus mexicanus*)  
Pine Siskin (*Carduelis pinus*)  
Lesser Goldfinch (*Carduelis psaltria*)  
American Goldfinch (*Carduelis tristis*)

**FAMILY: PASSERIDAE (Old World Sparrows)**

\*House Sparrow (*Passer domesticus*)

**CLASS: MAMMALIA**

**ORDER: DIDELPHIMORPHIA (Marsupials)**

**FAMILY: DIDELPHIDAE (Opossums)**

Virginia Opossum (*Didelphis virginiana*)

**ORDER: INSECTIVORA (Shrews and Moles)**

**FAMILY: TALPIDAE (Moles)**

Broad-footed Mole (*Scapanus latimanus*)

**ORDER: CHIROPTERA (Bats)**

**FAMILY: VESPERTILIONIDAE (Vespertilionid Bats)**

Yuma Myotis (*Myotis yumanensis*)  
California Myotis (*Myotis californicus*)  
Western Pipistrelle (*Pipistrellus hesperus*)  
Big Brown Bat (*Eptesicus fuscus*)  
Hoary Bat (*Lasiurus cinereus*)  
Pale Big-eared Bat (*Corynorhinus townsendii pallescens*)  
Pallid Bat (*Antrozous pallidus*)

**FAMILY: MOLOSSIDAE (Free-tailed Bat)**

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)  
Western Mastiff Bat (*Eumops perotis*)

**ORDER: LAGOMORPHA (Rabbits, Hares, and Pikas)**

**FAMILY: LEPORIDAE (Rabbits and Hares)**

Desert Cottontail (*Sylvilagus audubonii*)  
Black-tailed Hare (*Lepus californicus*)

**ORDER: RODENTIA (Rodents)**

**FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)**

California Ground Squirrel (*Spermophilus beecheyi*)

**FAMILY: GEOMYIDAE (Pocket Gophers)**

Botta's Pocket Gopher (*Thomomys bottae*)

**FAMILY: MURIDAE (Mice, Rats and Voles)**

Western Harvest Mouse (*Reithrodontomys megalotis*)  
Deer Mouse (*Peromyscus maniculatus*)  
Black Rat (*Rattus rattus*)  
Norway Rat (*Rattus norvegicus*)  
House Mouse (*Mus musculus*)  
California Vole (*Microtus californicus*)

**ORDER: CARNIVORA (Carnivores)**

**FAMILY: CANIDAE (Foxes, Wolves, and Relatives)**

\*Coyote (*Canis latrans*)  
Red Fox (*Vulpes vulpes*)  
Gray Fox (*Urocyon cinereoargenteus*)  
**FAMILY: PROCYONIDAE (Raccoons and Relatives)**  
Raccoon (*Procyon lotor*)  
**FAMILY: MEPHITIDAE (Skunks)**  
Striped Skunk (*Mephitis mephitis*)  
**FAMILY: FELIDAE (Cats)**  
Feral Cat (*Felis catus*)

# Original Project Routing

Bridge No 42C-0496 Del Rey Avenue over Fresno Canal, 0.5 MI South of McKinley Ave.

## Water Quality Technical Memorandum


Bridge No 42C0496 Del Rey Avenue over Fresno Canal,  
0.5 MI South of McKinley Ave.  
Fresno County, California  
Federal Project No. BRLO-5942(249)

September 16, 2016

# Original Project

Prepared by: Eric VonBerg, MRP, Senior Project Manager  
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Shane Gunn, Branch Chief  
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District 6  
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## EXECUTIVE SUMMARY

The County of Fresno proposes to replace the two-lane Fresno Canal Bridge on Del Rey Avenue, 0.5 mile south of McKinley Avenue, with a new two-lane bridge that meets current standards. The existing bridge is 71 feet long and 23.6 feet wide.

Caltrans has approved the County's Structure Type Selection Report. The new bridge will be a precast, pre-stressed, concrete box girder bridge, 73 ft. long and 38.83 ft. wide. The County has prepared a project footprint establishing the maximum extent of the project. Permanent and temporary right of way needs are to be accomplished within the proposed footprint.

It is anticipated the road would be closed to through traffic during the construction period. Staging is expected to occur on the roadway. However, additional area is included in the area of potential effect (APE) for potential staging.

Pile driving, structure demolition, excavation and some stream channel work is included in the scope of work. There are two residences located within 300 feet of the proposed project site.

Grading and site preparation involved in construction of the new Fresno Canal Bridge could decrease vegetative cover and increase the potential for soil erosion, and thereby could cause a temporary increase in suspended solids in runoff and local receiving waters. Surfaces disturbed during construction would be paved, lined with rock slope protection, or vegetated under operational conditions and the potential for erosion would be low after construction has been completed. During operation, the improvements made could increase the overall amount of impervious surface in the project area, thereby increasing runoff.

Standard conditions including the preparation of a Storm Water Pollution Prevention Plan (SWPPP), adherence to the Fresno County grading and earthmoving standards (Ordinance Code, Chapter 15.28 Grading and Excavation), preparation of hazardous materials plans, and the implementation of Best Management Practices (BMPs), would ensure that the impacts related to erosion, runoff, and pollutants entering the watercourse would be reduced to less than significant levels.

Original  
Project  
Routing



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## 1.0 INTRODUCTION

The purpose of the Water Quality Technical Memorandum (Memorandum) is to evaluate potential impacts of the proposed project on water quality, fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and provide information, to the extent possible, for the National Pollution Discharge Elimination System (NPDES) permitting process. This Memorandum includes a discussion of the physical setting of the project area, the proposed project, and the regulatory framework with respect to water quality. This Memorandum also provides data on surface water and groundwater resources within the project area and the quality of these waters. Potential water quality issues that could arise from construction are documented and recommendations for BMPs to minimize potential adverse impacts on water quality are proposed.

### 1.1 Project Location and Existing Conditions

The project site is located in an unincorporated area near the center of Fresno County in the Central Valley of California. The site is located in an area dominated by commercial agricultural operations and scattered rural residential development at an elevation of 370 feet above mean sea level (amsl). The project site is located at the Fresno Canal Bridge on Del Rey Avenue, 0.5 mile south of McKinley Avenue, and approximately four miles east of the cities of Fresno and Clovis and 1.4 miles north of State Route (SR) 180. A man-made lake/ski pool is located 0.62 mile southeast of the project site.

The Fresno Canal Bridge was built in 1939 and widened in 1967. The existing bridge is 71 feet long and 23.6 feet wide. The existing bridge is deficient in many areas including having a narrow deck width, substandard barrier rails and approach guardrails, and scour and erosion at the abutments.

Orchards and grazing lands are located adjacent to the bridge. Cottonwood, eucalyptus, Chinese hackberry, and palm and Chinese plumb ornamental trees line both sides of the canal adjacent to the bridge, up and downstream. Thick vegetation is also growing along the canal banks at the bridge including Himalayan blackberry and non-native grasses.

Utilities line both sides of Del Rey Avenue including a high-power transmission line, utility poles, underground communication line, and irrigation facilities. Access roads and driveways are located on each quadrant of the bridge. Hydrologic conditions for the project site, as well as the local and regional hydrology are discussed below.

### 1.2 Project Description

The County of Fresno (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace, in-place, the existing two-lane timber Fresno Canal Bridge (Bridge No. 42C0496). The project is programmed in the Fresno County Regional Transportation Plan and the Federal Transportation Improvement Program, with obligated Highway Bridge Program funding. Fresno County Department of Public Works and Planning is serving as the lead agency for environmental review of the project.

The existing bridge is proposed to be replaced with a new two-lane concrete bridge that meets current standards. The proposed bridge would be 73 feet long and 38.83 feet wide to accommodate two 12-foot wide travel lanes and six-foot wide shoulders, with Caltrans standard concrete barriers on either side. Approach work would extend up to 400 feet on either side of the bridge. The APE includes all bridge and approach work, staging, and contractor access to the channel.

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The bridge replacement would include relocation of the four private driveways on each of the bridge quadrants. Relocation of the driveways would require the removal of trees, relocating gates, and regrading of the driveways/access road to conform back to the existing roadway. Existing utilities within the project limits may also require relocation.

A construction staging area is proposed for the grazing lands northwest of the bridge. The bridge would be closed during the construction phase requiring a 3.7-mile detour. Construction activities within the Fresno Canal channel would occur in the non-irrigation/dry season.

In-channel work will start at the end of the irrigation season and finish before the flood season (September 1st to December 15th). The Fresno Irrigation District, owner and operator of the Fresno Canal, is required to route fish waters in the canal between the irrigation season and flood season in odd numbered years. If flows are present in the year of construction, an in-channel bypass will be provided during construction to dewater the site. The flow requirements of the bypass will be provided by the Fresno Irrigation District. Out-of-channel work is anticipated to occur between August and March.

The project work limits include all areas of potential permanent and temporary impacts where ground disturbance would occur, including temporary construction and staging areas for the project. The total APE for the project is approximately 8.75 acres which includes a potential staging area of approximately 3.5 acres.

## **2.0 REGULATORY SETTING**

Water resource protection in California is governed by a complex network of federal and State regulations, enforced by the State under the supervision of the United States (U.S.) Environmental Protection Agency (EPA). Both federal and State laws have been promulgated to protect surface water quality for use as domestic, agricultural, industrial supply, recreation, freshwater fish and aquatic invertebrate habitat. Federal and State laws have also been developed to protect the quality of groundwater resources to meet drinking water standards and anti-degradation objectives. Although most of the initial regulatory programs focus on point sources of contamination, such as municipal and industrial facilities, recent programs are intended to address non-point sources. Water quality protection regulations relevant to this Project are summarized below.

### **2.1 Federal Laws and Requirements**

#### *Clean Water Act*

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the U.S. from any point source unlawful, unless the discharge is in compliance with a NPDES permit. Waters of the U.S. are generally defined as “waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; territorial seas and tributaries to such waters.” Congress has amended the Federal Water Pollution Control Act, known today as the Clean Water Act (CWA) several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit process. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

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Important CWA sections are as follows:

- Sections 303 and 304 which require states to promulgate water quality standards, criteria, and guidelines. Section 303(d) of the CWA requires states to identify impaired waters and establish the Total Maximum Daily Load (TMDL) of pollutants for those waters to protect water quality for beneficial uses.
- Section 401 which requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the State or regional Water Quality Control Boards showing that the discharge will comply with other provisions of the CWA. All projects that have a federal component and may affect State water quality (including projects that require federal agency approval, such as issuance of a Section 404 permit described below) must also comply with CWA Section 401. Water quality certification requires evaluation of potential impacts in light of water quality standards and CWA Section 404 criteria governing discharge of dredged and fill materials into waters of the U.S. The federal government delegates water pollution control authority under CWA Section 401 to the states and, in California, ultimately to the Regional Water Quality Control Boards (RWQCBs).
- Section 402 establishes the NPDES, a permitting system for the discharge of any pollutant into waters of the U.S. except for dredge or fill material. A NPDES permit sets specific discharge limits for point sources discharging pollutants into waters of the U.S. and establishes monitoring and reporting requirements, as well as special conditions. State-run RWQCB administers this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S., including wetlands. This permit program is administered by the United States Army Corps of Engineers (USACE).

USACE issues two types of 404 permits: Standard and General permits. General permits are broken down into Regional and Nationwide permits (NWP). Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a NWP may be permitted under one of USACE's Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404 (b)(1) Guidelines (Guidelines; Code of Federal Regulations [CFR] 40 Part 230), and whether permit approval is in the public interest. The Guidelines were developed by the U.S. EPA in conjunction with USACE and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. Per the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit

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from the USACE, even if not subject to the Guidelines, must meet general requirements (USACE 33 CFR 320.4).

### *National Flood Insurance Program*

Flood Insurance Rate Maps issued by the Federal Emergency Management Administration (FEMA) divide flood areas into three zones: Zone A for areas of 100-year flood, base flood elevations not determined; Zone B for areas of 500-year flood; and Zone C for areas of minimal flooding. The National Flood Insurance Program 100-year floodplain is considered to be the base flood condition. This is defined as a flood event of a magnitude that would be equaled or exceeded an average of once during a 100-year period. Floodways are defined as stream channels plus adjacent floodplains that must be kept free of encroachment as much as possible so that 100-year floods can be carried without substantial increases (no more than one foot) in flood elevations. Development in these floodplain areas are subject to the standard conditions of approval of the Fresno Metropolitan Flood Control District.

## **2.2 State Laws and Requirements**

### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. It predates the CWA and regulates discharges to waters of the State. Waters of the State include more than waters of the U.S., such as groundwater and surface waters not considered waters of the U.S. Additionally, the Porter-Cologne Act prohibits discharges of “waste”, which has a broader definition than the CWA definition of “pollutant”. Discharges under the Porter-Cologne Act must be regulated by the Waste Discharge Requirements Program, which may regulate a project even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCB are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a specific study area are contained in the applicable RWQCB Basin Plan. For the project area, the Water Quality Control Plan for the Tulare Lake Basin Second Edition (i.e., Basin Plan) contains the applicable standards. The state designates beneficial uses for all water body segments, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the State identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If the state determines that waters are impaired for one or more components and the standards cannot be met through point source controls, the CWA requires the establishment of TMDLs. TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed. The portion of the Fresno Canal included in the project area is not under a current TMDL. Although there is no TMDL, the project would need to comply with the Tulare Lake Basin Plan Second Edition.

### *State Water Resources Control Board and Regional Water Quality Control Boards*

The SWRCB administers water rights, sets water pollution control policy, issues Water Board orders on matter of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQB are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement

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authorities to meet this responsibility. See Section 2.3 for Central Valley Regional Water Quality Control Board (CVRWQCB) requirements.

### ***National Pollution Discharge Elimination System Program, Construction General Permit***

Construction General Permit Order No. 2009-0009-DWQ (as amended by 2010-0014-DWQ and 2012-006-DWQ) (CGP) became effective on July 17, 2012. The CGP regulates stormwater discharges from construction sites which result in a disturbed soil area of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. A project may also be required to comply with the CGP if there is potential for significant water quality impairment resulting from construction activity. For projects subject to the CGP, contractors are required to file a Notice of Intent (NOI) to be covered under the permit and discharges are required to:

- Develop and implement a SWPPP with BMPs that prevent construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving off-site into receiving waters;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the U.S.; and
- Perform inspection of all BMPs.

The CGP separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory stormwater runoff pH and turbidity monitoring, and pre- and post-construction aquatic biological assessments during specified seasonal windows.

One primary factor considered when determining Risk Level is the water quality of receiving water bodies. High risk receiving water bodies are listed on the 303(d) list for water bodies impaired for sediment, have a USEPA approved sediment-related TMDL or have beneficial uses of SPAWN, MIGRATORY and COLD.

Projects that include dewatering must comply with the General Waste Discharge Requirements/NPDES Permit for Dewatering and Other Low Threat Discharges to Surface Waters (Order No. R5-2008-0081 and NPDES Permit No. CAG995001). A NOI must be submitted to the CVRWQCB for approval before dewatering may commence. After dewatering is completed, a Notice of Termination Form must be submitted to the CVRWQCB.

### ***California Department of Fish and Wildlife Lake and Streambed Alteration Program***

The California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Program (Section 1600-1607 of the California Fish and Game Code) requires notification to CDFW prior to beginning any project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least intermittently through a bed or channel with banks that support fish or aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. The streambed alteration agreement includes reasonable conditions necessary to protect those resources and must comply with the CEQA. The entity may proceed with the activity in accordance with the final streambed alteration agreement.

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## 2.3 Local Laws and Requirements

### *Central Valley Regional Water Quality Control Board*

The CVRWQCB Region 5 has two Basin Plans covering the Region: one for the Tulare Lake Basin, and one for the Sacramento River and San Joaquin River Basins. The Region 5 Basin Plans, like those in other regions, were originally adopted in 1975 and have been updated and revised since that time. The Basin plan currently applicable to the proposed Project is the Tulare Lake Basin Plan adopted on August 17, 1995 (second edition) and revised in January 2015 (Central Valley Water Board 2015).

### *Fresno County General Plan*

The Fresno County General Plan Open Space and Conservation Element identifies various procedures for addressing water quality impacts to both ground and surface water. The County's General Plan also seeks to protect wetland and riparian habitat. Specific measures include ground and surface water monitoring programs and require the use of BMPs and other measures designed to protect surface water and groundwater from the adverse effects of construction activities. The County supports the "no-net-loss" of wetland policies of the USACE and SWRCB (Fresno County 2000). The following General Plan policies are applicable the project:

- **Policy OS-A.25:** The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season unless adequately mitigated to avoid sedimentation of creeks and damage to riparian habitat.
- **Policy OS-A.26:** The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff.

## 3.0 ENVIRONMENTAL SETTING

### 3.1 Regional Setting

The project site is located near the center of the County in an area dominated by commercial agricultural operations and scattered rural residential development. The central portion of Fresno County is included within the California Central Valley Ecoregion and is characterized by grass lands that extend approximately 430 miles in central California, paralleling the Sierra Nevada Range to the east and the coastal mountain ranges to the west, and stopping abruptly at the Tehachapi Range in the south. Two major rivers flow from opposite ends of the valley, and form a major confluence at mid-valley to form the extensive Sacramento-San Joaquin Delta that discharges to the San Francisco Bay. This grassland ecoregion is an element of the Temperate Grasslands, Shrub lands, and Savannas biome.

The project area has a Mediterranean climate characterized by cool, wet winters and hot, dry summers. The hottest months of the year are June, July, and August with temperatures ranging from 65.9 degrees Fahrenheit (°F) to 100.5 °F and the coldest month of the year is December with temperatures ranging from 36.2 °F to 57.0 °F. The average total precipitation is 9.66 inches (Western Regional Climate Center 2016).

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### 3.2 Site Topography and Soils

The project site is at an elevation of approximately 370 feet amsl in a substantially flat portion of Fresno County. Review of topographic maps of the area indicates that the surface topography has a gentle slope to the southwest.

The project site is primarily underlain by Greenfield sandy loam (GuA; 0 to 3 percent slopes) and Atwater sandy loam (ArA; 0 to 3 percent slopes), with a small portion of the southwestern portion of the APE underlain by Delhi sand (DeA; 0 to 3 percent slopes). Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value of factor K, the more susceptible the soil is to sheet and rill erosion by water. The project area has a K value range from 0.02 to 0.28, representing soils that have low to moderate erodibility potential.

### 3.3 Regional and Local Hydrology

The project site is located on the Fresno Canal within the South Valley Floor Watershed within the Kings Basin. The Kings Basin is a large groundwater subbasin located in the southern part of the San Joaquin Valley Basin within the Tulare Lake Hydrologic Region of the Central Valley. The Kings River is located approximately 6 miles southeast of the project site and is the major source of surface water in the Kings Basin and the region. The Kings River is a natural river along its upper reaches, while the lower reaches of the river have been re-channeled and include many weirs, diversion structures, and levees. The San Joaquin River is located approximately 14 miles northwest of the project site and is also a source of surface water supply and groundwater recharge in the Kings Basin.

The Kings Basin covers approximately 1,530 square miles with a storage capacity of approximately 93 million acre-feet (AF) to a depth of more than 1,000 feet. The Upper Kings Basin, which includes the northeastern two-thirds of the Kings Basin including the project site, has a total groundwater storage capacity of 35 million AF to an average depth of about 500 feet. The San Joaquin and Kings Rivers are hydraulically connected with the underlying groundwater basin and are major sources of recharge (Kings Basin Water Authority, 2012).

There is an extensive canal network owned and operated by the Fresno Irrigation District within the region and used to convey water to users within those districts. The water is used directly for agricultural, groundwater recharge, irrigation, and municipal purposes in the region. The region has more than 1,200 miles of canals and pipelines to deliver water to agricultural lands and existing recharge facilities. The major canals include the Fresno Canal, Gould Canal, Alta Canal, and Consolidated Canal (Kings Basin Water Authority, 2012).

### 3.4 Water Quality

The Clean Water Act requires States to identify water bodies that are considered impaired, which means the water body does not meet water quality standards. States must then place these water bodies onto a list, referred to as the "Clean Water Act Section 303(d) List of Water Quality Limited Segments." On October 11, 2011, the U.S. EPA issued its final decision regarding the water bodies and pollutants added to California's 303(d) List. This list, referred to as the California 2010 Integrated

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Report, replaces the 2006 California Clean Water Act 303(d) List. The 2010 Integrated Report includes a combined list of Clean Water Act Section 303(d) water bodies that are listed as not meeting water quality standards and Section 305(b) water bodies that identifies water bodies still requiring the development of a Total Maximum Daily Load, those that have a completed Total Maximum Daily Load approved by U.S. EPA, and those that are being addressed by actions other than a Total Maximum Daily Load (SWRCB, 2010). The receiving water body for the project is the Fresno Canal. This water body does not have designated beneficial uses, is not included in the 303(d) list, and is not considered a sediment impaired water body. The lower Kings River from Pine Flat Reservoir to Island Weir and from Island Weir to Stinson and Empire Weirs is listed on the 303(d) list. The San Joaquin River downstream of Friant Dam is also listed on the 303(d) list for several pollutants. The source of most of the pollutants found in the Kings and San Joaquin Rivers are agricultural and include metals/metalloids, pesticides, pathogens, toxicity, and salinity (SWRCB, 2010).

Surface water quality can generally be characterized by surrounding land uses and activities. The project area consists primarily of agricultural lands designated as Exclusive Agricultural 20-acre parcels (AE-20) in the Fresno County General Plan. Therefore, there is the potential that pesticides, herbicides, and fertilizers are currently or have historically been applied to soils, or stored in the vicinity of the project site and could affect the surface water quality in the area.

Additional constituents and non-point-source pollutants that would be expected from residential activities within nearby rural residential uses include oil, grease, metals, pesticides, and herbicides. Water quality degradation from non-point source-pollutants is primarily the result of stormwater runoff carrying pollutants from the land surface to the receiving waters. If stormwater runoff from rural areas contains excessive levels of pollutants (e.g., pesticides, herbicides, hydrocarbons); this can result in adverse effects on aquatic-dependent wildlife and fisheries.

Additional non-point-source pollution in the APE includes pollutants from automobiles traveling on local roadways and creek crossings. Typical water contaminants from these sources include pollutants from tires, oil leaks, brake linings, and catalytic converters.

Based on the age of the bridge and common building materials at the time of renovation, it is likely that any paint used on the bridge is lead-based paint and may also contain excess concentrations of chromium and zinc. In addition, it is possible that asbestos is present in the building materials used to construct the existing bridge.

## **4.0 POTENTIAL PROJECT IMPACTS**

### **4.1 Short Term Impacts During Construction**

Construction activities for the Project would result in temporary disturbance within and adjacent to the Fresno Canal. During bridge construction, direct effects on the canal would include excavation and fill to construct the new bridge abutments and potential debris and dust during demolition of the existing bridge. Earthmoving, excavation, placement of rock and fill, and pile driving needed to construct the new bridge and the new approach roads could result in a temporary increase in sediment loads, turbidity, and siltation in the Fresno Canal. Although all work at the Fresno Canal Bridge would occur in the non-irrigated/dry season, bridge demolition could potentially cause debris and dust to fall into the dry canal degrading water quality once water starts flowing again in the canal. The actual time period for construction will be determined by the SWPPP, as described below. The bridge demolition would be phased in segments and BMPs would be utilized to minimize debris and dust from entering



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the canal/water body. If water is present in the canal during construction, an in-channel bypass would be used to dewater the site. If ponded water is present and dewatering is necessary, water produced from the dewatering operations would be pumped, treated as necessary, and discharged according to project permits and applicable regulations. Discharge from dewatering could result in an adverse effect to water quality if the effluent contains high levels of sediment or chemical pollutants. All discharge would be tested in accordance with the General Water Discharge Requirements and NPDES Permit for Dewatering.

The use of construction equipment and other vehicles could result in accidental spills of oil, grease, gasoline, brake fluid, antifreeze, or other vehicle-related pollutants. Improper handling, storage, or disposal of fuels, materials, and waste or improper cleaning of machinery could cause surface water and groundwater quality degradation. There is potential for some erosion to occur from portions of the project area during construction. Construction activities within the unpaved staging areas may compress soil leading to a reduction in permeability, increase in site runoff, and erosion. North Del Rey Avenue, an existing paved road, will be utilized for access to the construction site, minimizing disturbance and erosion potential by eliminating the need to construct any new access roads. The project would comply with the CGP including preparing and implementing a SWPPP that identifies project-specific erosion, sediment, and stormwater BMPs to protect water quality during project construction.

## **4.2 Long Term Impacts During Operation and Maintenance**

Implementation of the Project would not permanently alter the configuration of the Fresno Canal or substantially modify sources of water pollutants. Agricultural operations and vehicles traveling on North Del Rey Avenue would remain the primary sources of water pollutants at the project area. The project is not expected to significantly alter the number of vehicles traveling on North Del Rey Avenue or other nearby land uses in the watershed. Therefore, there would not be an increase in the load of pollutants. Other long-term water quality impacts could occur from changes in the amount of impervious surface in the project area and changes in water surface elevations during storm events. Construction of the project would slightly increase the amount of impervious surface in the project area. The new bridge would be wider than the existing bridge increasing the impervious area. However, the total impervious area would be minimal compared to the watershed area of the South Valley Floor Watershed within the Kings Basin. Therefore, the bridge replacement would have less than significant impacts on watershed runoff. In addition, because minimal additional roadway will be constructed, it is anticipated that the existing drainage system will be used and no change to current drainage patterns or volumes would occur.

## **4.3 Cumulative Impacts**

NEPA and CEQA require that the direct, indirect, and cumulative impacts of proposed actions be assessed and disclosed. A cumulative impact includes the total effect on a natural resource, ecosystem, or human community due to past, present, and future activities or actions. In the case of this Memorandum, water quality is the natural resource of primary concern. With preparation and implementation of BMPs, the proposed project would not adversely affect water quality. The Fresno Canal bridge replacement on McKinley Avenue is the only know concurrent project within the vicinity of the project that could also contribute to water quality impacts to the Fresno Canal.

All work for the project would occur in the non-irrigated/dry season and would not contribute to water quality effects in the waterway. In regards to future projects, bridge replacement, agriculture and

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rural residential are the types of projects that are most likely to occur in the vicinity of the project. While future development within the watershed could result in water quality, erosion, and drainage impacts to the canal and surrounding waterways, the incremental effects of the proposed project are not considerable when viewed in the context of effects from past projects and probable future projects. Future development within the watershed, including the planned Fresno Canal bridge replacement on McKinley Avenue, is subject to the federal, state, and local regulations described herein and would be required to implement BMPs to reduce water quality impacts to the extent practicable. Therefore, no adverse cumulative impacts are expected.

## 5.0 AVOIDANCE AND MINIMIZATION MEASURES

Local, State, and Federal agencies require the development of practical measures in response to the potential impacts of construction activities and ongoing project operations that discharge sediment and other undesirable elements to existing waterways. The measures required for the Fresno Canal Bridge replacement project are categorized as standard conditions. Standard conditions include the regulatory requirements dictated by local, State and/or federal mandates and include required compliance with NPDES permit requirements, preparation of SWPPP, and the County's Grading and Excavation Ordinances (Code of Ordinances Chapter 15.28, County of Fresno, 2016). Standard conditions include the application of BMPs to include measures that can be incorporated into the design of the project to avoid, minimize, or reduce potential environmental impacts to the Fresno Canal.

### 5.1 Standard Conditions

#### *Fresno County Ordinance Code, Chapter 15.28 Grading and Excavation*

The Fresno County grading and excavation ordinance establishes standards for grading and excavation within unincorporated Fresno County; sets forth rules and regulations to control excavation, grading, and earthwork construction, including fills and embankments; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspection of grading construction.

#### *Stormwater Pollution Prevention Plan*

As the project would disturb one acre or more of soils, it would require coverage under a CGP. The CGP requires the development and implementation of a SWPPP. The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed structures, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP must list specific BMPs the discharger would use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the CGP describes the elements that must be contained in a SWPPP.

Implementation of a SWPPP is the responsibility of the construction contractor's Qualified SWPPP Practitioner (QSP) or designee. As part of that responsibility, the effectiveness of construction BMPs must be monitored before and after storm events. Records of these inspections and monitoring results must be submitted to the SWRCB/RWQCB as part of the annual report required by the Statewide CGP. The SWPPP shall include measures to avoid creating contaminants, to minimize the release of contaminants, and to minimize contaminants from entering surface water or percolating into the

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ground. These measures shall address the construction and operational periods of the project. The SWPPP shall also include BMPs such as those listed below.

### ***National Pollutant Discharge Elimination System***

NPDES permits are required for discharges of pollutants to navigable waters of the United States, which includes any discharge to surface waters. Surface waters include lakes, rivers, streams, bays, the ocean, dry stream beds, wetlands, and storm sewers that are tributary to any surface water body. NPDES permits are issued under the Federal Clean Water Act, Title IV, Permits and Licenses, Section 402 (33 USC 466 et seq.). The SWRCB issues general permits for storm water runoff from industrial and construction sites statewide. Stormwater discharges from construction activities can be covered under these general permits, which are administered jointly by the SWRCB and RWQCB, by submitting a Notice of Intent with the SWPPP to the CVRWQCB.

## **5.2 Hazardous Materials Control**

### ***Lead and Heavy Metals***

A plan to properly remove paint from various surfaces in the project area shall be implemented prior to construction of the new bridge under Standard Special Provision (SSP) 14-11.07.

Any work that disturbs the existing paint system may expose workers to health hazards and can produce debris containing heavy metal in amounts that exceed the thresholds established in Titles 8 and 22 of the California Code of Regulations and produce toxic fumes when disturbed or heated. All debris disturbed or produced while working on the structure shall be contained. For bridges over water, the containment system must include a skimming boom consisting of a float with a skirt to collect floating debris.

Prior to starting work that disturbs the existing paint system, and when revisions to the compliance program are required, the contractor must submit a lead compliance plan under Section 7-1.07, "Lead Compliance Plan," of the Standard Specifications. The Contractor must make necessary arrangements to test the debris as required by the disposal facility and as specified. At a minimum testing must include total lead by U.S. EPA Method 6010B, soluble lead by California Waste Extraction Test, and soluble lead by Toxicity Characteristic Leaching Procedure.

### ***Asbestos***

The structure shall be tested for asbestos content prior to demolition. If asbestos is present, asbestos-containing building materials (ACBMs) shall be removed. The U.S. EPA requires that the concrete has been thoroughly inspected as well as any other suspect material associated with a bridge, which will be subject to demolition or renovation operations. If ACBMs are found, a Cal-OSHA certified ACBM contractor shall be retained to remove the ACBMs in accordance with EPA and California Occupational Safety and Health Administration (Cal/OSHA) standards. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal/OSHA asbestos worker construction standards. The ACBMs shall be disposed of properly at an appropriate offsite disposal facility. All debris disturbed or produced while working on the structure must be contained. For bridges over water, the containment system shall include a skimming boom consisting of a float with a skirt to collect floating debris.

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### 5.3 Best Management Practices

The SWPPP is to be designed with BMPs that the CVRWQCB has deemed as effective at reducing erosion, controlling sediment, and managing runoff. These can include: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Sediment control BMPs include installing silt fences or placing straw wattles below slopes, installing berms and other temporary run-on and runoff diversions. The BMPs listed below are examples of what could be considered and does not preclude new or innovative approaches currently available or being developed. The SWPPP, including the monitoring log, must be kept on site during construction activity and will be made available upon request to the CVRWQCB.

#### *Applicable BMPs*

- Work within the channel of Fresno Canal should be limited to avoid the rainy season.
- Land disturbing activities and the installation of erosion and sedimentation control devices shall be coordinated to reduce on-site erosion and off-site sedimentation. These measures may include mulches (above the mean high water line), soil binders and erosion control blankets, and silt fencing.
- Existing vegetation shall be protected where feasible to provide an effective form of erosion and sediment control, as well as watershed protection, dust and pollution control.
- The area of construction and disturbance should be limited to as small an area as feasible. Stabilizing material, such as water, shall be applied to the soil surface to prevent the movement of dust at the project site due to traffic, wind, and grading activities.
- Area of construction and disturbance shall be returned to pre-construction contours and revegetated with native species. Hydroseeding could be implemented as a temporary measure, if feasible.
- All portions of the canal bank disturbed during construction must be replaced and protected with rock slope protection per Fresno Irrigation District Standards.
- Berms shall be provided along the tops of slopes to prevent water from running uncontrolled down the slopes and entering the canal channel.
- All construction related materials shall be hauled off-site after completion of construction.
- All erosion control measures and storm water control measures shall be properly maintained until the site has returned to a pre-construction state.
- All construction roadway areas shall be properly protected to prevent excess erosion, sedimentation, and water pollution.
- All vehicle and equipment maintenance procedures shall be conducted off-site. In the event of an emergency, any maintenance shall occur away from the canal channel.
- All concrete curing activities shall be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction materials, vehicles, stockpiles, and staging areas shall be situated outside of the canal channel and as far away from the watercourse as feasible. All stockpiles shall be covered, as quickly as feasible after the stockpiles are created.

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## 6.0 PERMITS REQUIRED

The project would span the entire Fresno Canal channel at Del Rey Avenue but may require work in the channel. Therefore, the project would be required to comply with the following statutory requirements:

- **CWA Section 404 Compliance.** The project is anticipated to be eligible for NWP 14 for Linear Transportation Projects. A Pre-construction Notification is required only for projects over 0.1 acres under the NWP 14.
- **CWA Section 401 Compliance.** The project would require a Section 401 water quality certification to be issued by the CVRWQCB.
- **California Fish and Game Code Section 1600 Compliance.** The project would require a Section 1600 streambed alteration agreement to be issued by CDFW.
- **CWA Section 402 Compliance.** The project would require a NPDES CGP for Discharge of storm water associated with construction activities. A SWPPP would also be developed and implemented as part of the CGP.

## 7.0 REFERENCES

- California Department of Transportation. 2015. Standard Specifications: Section 13-1.  
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