DUAL WATER SYSTEM IMPROVEMENT PROJECT

ENVIRONMENTAL DOCUMENTATION

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

JULY 2025

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I. MITIGATED NEGATIVE DECLARATION

As Lead Agency under the California Environmental Quality Act (CEQA), City of Shafter (CITY) has reviewed the project described below to determine whether it could have a significant impact on the environment because of its development. In accordance with CEQA Guidelines Section 15382, "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

II. PROJECT NAME:

Dual Water System Improvement Project

III. PROJECT LOCATION & DESCRIPTION:

The proposed project involves constructing six new water supply wells, two 2.0 MG welded steel storage tanks, a booster pump station, and the associated water conveyance pipelines for the Oildale Mutual Water Company (OMWC) as part of their dual water system whereby these facilities will supply landscape water and water for exterior use only. This will serve to save treated water for interior uses and drinking water purposes while using raw water for exterior and landscape uses.

The two 2.0 MG AWWA D100 welded steel storage tanks and booster pump station are planned to be constructed at the existing OMWC property that is located south of Imperial Avenue and north of Flyover Court on APN 482-170-11 just west of Highway 65 in Section 33, T28S, R27E, M.D.B.&M. The two 2.0 MG storage tanks will be filled by a dedicated 36-inch transmission main that is connected to the five to six water supply wells. The water from the storage tank will then be conveyed to the existing developments to the west by gravity. In addition, the booster pump station will supply water to the area of the commercial and industrial development around Highway 65 and Imperial Avenue for exterior and landscape purposes. The tank dimensions are anticipated to be approximately 105-ft diameter by 32-ft tall and will be a welded steel storage tank that is epoxy coated on the interior and exterior and rests on a concrete ringwall foundation. The booster pump station will include above ground steel piping that is fusion bonded epoxy lined and coated, has booster pumps and motors, a 3,000-gallon hydropneumatic pressure tank, and electrical and controls.

Each of the five or six well sites will be located between the Lerdo-Beardsley Canal and a ½-mile west of Zerker Road in Sections 34, 35, & 36, T28S, R26E, and Section 31, T28S, R27E, M.D.B.&M. The wells are planned to be drilled to an approximate depth of 1,000-ft and will be equipped with a vertical turbine pump and vertical hollowshaft electric motor and variable speed drive. The site will be fenced with 6-ft tall chainlink fencing with vinyl slats or masonry block walls to match the surrounding residential developments. The well site will be surfaced with ¾" Class II aggregate base with the limits being the fencing or block wall. The well site will include an electrical meter main, motor control center, PLC, and SCADA and will be installed on a concrete foundation with a steel shade structure. The well facility will also include a pad-mount emergency back-up generator. The well discharge piping will be 12-inch steel piping with a 3,000-gallon hydropneumatic pressure vessel. A

10-ft x 10-ft metal building enclosure will be installed around the deep well pump and motor for noise attenuation. The well discharge piping will transition below ground and to 12-inch C900 PVC pipe prior to leaving the site. The 12-inch C900 PVC piping will connect to the existing dual water system distribution piping that is installed as part of the residential development.

One of the well sites is anticipated to be a potable water well. This well will be equipped in similar fashion to that described above but may also include a well head treatment system such as Granular Activated Carbon for the removal of 1,2,3-TCP. The treatment system would be installed on a reinforced concrete foundation and connected to the well discharge piping.

In addition, a 36-inch C905 PVC transmission main will be installed from the tank and booster pump station site at APN 482-170-11 west along Imperial Avenue approximately 8,900-ft to the Highway 99. The transmission main will be installed with a minimum 36-inches of ground cover. The transmission main will then cross the Highway 99, the UPRR railroad tracks, and the North Kern Water Storage District Lerdo-Beardsley Canal with a 48-inch cased crossing approximately 715-ft in length via the tunnel boring method. In addition, OMWC will extend an existing 12-inch potable water main northwesterly along Saco Road approximately 985-ft and cross the Highway 99, the UPRR railroad tracks, and the North Kern Water Storage District Lerdo-Beardsley Canal with a 16-inch pipeline and a 30-inch cased crossing approximately 340-ft in length via the bore and jack method. The cased crossings will be permitted with the California Department of Transportation (Caltrans), the UPRR Railroad, and the North Kern Water Storage District.

The document and documents referenced in the Initial Study/Mitigated Negative Declaration are available for review at the City of Shafter located at 336 Pacific Avenue, Shafter, CA 93263.

As mandated by the California Environmental Quality Act (CEQA), the public review period for this document was 30 days (CEQA Section 15073[b]). The public review period began on Monday, July 14, 2025 and ended on Wednesday, August 13, 2025. For further information, please contact Curtis M. Skaggs at (661) 393-4796 or cskaggs@djacivil.com.

IV. CONTACT INFORMATION:

Oildale Mutual Water Company
2836 McCray Street
Bakersfield, CA 93308
Contact Person: Ryan Nunneley
Phone: (661) 399-5516

V. FINDINGS:

As Lead Agency, City of Shafter (CITY) finds that the project will not have a significant impact on the environment. The Environmental Checklist (CEQA Guidelines Appendix G) or Initial Study (IS) identified one or more potentially significant effects on the environment, but revisions to the project have been made before the release of this Mitigated Negative Declaration (MND) or mitigation measures will be implemented that reduce all potentially significant impacts to less-than-significant levels. The Lead Agency further finds that there is no substantial evidence that this project would have a significant effect on the environment.

VI. MITIGATION MEASURES:

AESTHETICS MITIGATION MEASURES

1. Lighting will be less than 20-ft tall and the light fixtures will be shielded and directed downward to comply with the Kern County "Dark Skies Ordinance".

2. The sites will be painted a neutral color (tan), be screened with 8-ft tall masonry block walls to match the surrounding residential developments.

AIR QUALITY MITIGATION MEASURES

1. Water will be applied to the project site during grading, trenching, and backfilling operations to control dust and keep the project area clean.

2. The contract documents will require the Contractor to obtain and comply with a San Joaquin Valley Air Pollution Control District Dust Control Plan and to permit the new emergency backup diesel generator.

BIOLOGICAL RESOURCES MITIGATION MEASURES

1. Laurendine Biological Consulting, LLC's Biological Report and associated Avoidance Plans propose the biological recommendations to ensure the project will not have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species during construction activities.

2. San Joaquin Kit Fox

   Potential Project Effects from Modification to habitats for the San Joaquin Kit Fox.

The habitat present on the project site is suitable for San Joaquin kit fox, a California threatened and a federal endangered species, to utilize. However, while no individuals or their sign (e.g., dens, scat, tracks) were observed during the project's field survey, they could be transient through the project site. In addition, several burrows present on the adjacent parcel of the tank site are large enough to be considered potential dens. If occupied, SJKF might be subjected to increased noise levels and activity that may modify their denning behavior that could be considered a significant impact.

Kit fox are known to occur in the area and given that kit fox are highly motile species, they could utilize the more urban areas as well as the natural habitats in the project area. Construction activities have the potential to temporarily disturb suitable habitat for special status species including SJKF, and directly impact individuals if present during construction activities.

Effects on regional abundance and distribution of SJKF are not expected as the project occurs along the disturbed roadside edge of Imperial St. and Saco Rd., active agricultural lands, a disturbed residential development, and a small area of non-native grassland.

Mitigation. A pre-construction survey of the project area shall be conducted to ensure that SJKF have not moved into the area prior to beginning ground disturbance. In addition, potential den monitoring of the adjacent property should be completed, if possible. Should a SJKF establish an occupancy in the project construction area, the guidelines are provided in the 2011 U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (Appendix F).

If occupied known or natal dens cannot be avoided through the timing of construction or buffer zones, or should SJKF take up occupancy on the construction site, the applicant shall obtain permission or if required, take authorization, from the USFWS and CDFW to relocate kit fox from the dens or propose an alternative construction method to avoid dens. No occupied den or natal den will be disturbed until the CDFW and USFWS have provided guidance and issued appropriate "take" authorization.

Compliance with the above mitigation measures would reduce impacts to San Joaquin kit fox to a less than significant level and will not likely result in direct or indirect impacts to San Joaquin kit fox.

3. Swainson Hawk and Burrowing Owl

   Potential Project Effects from Modification to habitats for the Swainson's Hawk and Burrowing Owl.

   Potential Impacts. Direct affects to Swainson's hawk and burrowing owls could result from loss of suitable nesting or foraging habitat due to construction. Indirect impacts may result from construction noise or other construction activities that could modify nesting or other behaviors. While suitable habitat is abundant regionally for these species, conversion of the Valley grassland habitat would nonetheless constitute a significant impact to nesting and foraging habitat.

Mitigation. Swainson's hawk. None warranted. No Swainson's hawk nesting trees are located in the project area and sufficient foraging habitat is found regionally. Impacts to Swainson's hawk are not anticipated.

Mitigation. Avoidance and Minimization to Individual Owls. In order to avoid impacts to active burrowing owl nests, a qualified biologist should conduct pre-construction surveys for burrowing owls within the construction footprint and within 250 ft. of the footprint no more than 30 days prior to the onset of ground disturbance. These surveys should be conducted in a manner consistent with the CDFW's burrowing owl survey methods (CDFG 2012). If preconstruction surveys determine that burrowing owls occupy the site during the nonbreeding season (September 1 through January 31), then a passive relocation effort (e.g., blocking burrows with one-way doors and leaving them in place for a minimum of three days) may be necessary to ensure that the owls are not harmed or injured during construction.

Once it has been determined that owls have vacated the site, the burrows can be collapsed, and ground disturbance can proceed. If burrowing owls are detected within the construction footprint or immediately adjacent lands (i.e., within 250 ft. of the footprint) during the breeding season (February 1 through August 31), a construction-free buffer of 250 ft. should be established around all active owl nests. The buffer area should be enclosed with temporary fencing, and construction equipment and workers should not enter the enclosed setback areas. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. After the breeding season, passive relocation of any remaining owls may take place as described above.

Compliance with the above mitigation measures would reduce impacts to burrowing owl to a less than significant level and will not likely result in direct or indirect impacts to burrowing owl.

4. American Badger

Impacts to American Badgers

Potential Impacts. Conversion of natural lands would result in a loss of habitat for the American badger; however, no badgers or their sign were detected during the field survey, but should they move onto the site prior to or during construction, individual badgers could be harmed or injured from construction activities and this would constitute a significant adverse impact.

Mitigation. Pre-construction surveys conducted for burrowing owls and SJKF should also be used to determine the presence or absence of badgers in the development footprint. If an active badger den is identified during pre-construction surveys within or immediately adjacent to the work zone, a construction-free buffer of up to 300 ft. should be established around the den. Because badgers are known to use multiple burrows in a breeding burrow complex, a biological monitor should be present onsite during construction activities to ensure the buffer is adequate to avoid direct impact to individuals. The monitor would be necessary onsite until it is determined that young are of an independent age and construction activities would not harm individual badgers. Once it has been determined that badgers have vacated the site, the burrows can be collapsed or excavated, and ground disturbance can proceed.

Compliance with the above mitigation measures would reduce impacts to American badger to a less than significant level and will not likely result in direct or indirect impacts to badgers.

5. Nesting Raptors

   Disturbance to Nesting Raptors during Construction Activities

   While no nesting habitat for raptors is present along the project area, construction activities occurring during the breeding season (February through August) could result in nest abandonment or direct mortality to these birds. This would constitute a significant impact and be in violation of state and federal laws.

   Mitigation. A qualified biologist should conduct a pre-construction survey for nesting raptors (particularly burrowing owl) if construction activity is to occur during the breeding season (February 1 through August 31). This survey should be conducted no more than 14 days prior to the initiation of ground disturbing/construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). If nesting raptors are detected on the site during the survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffer (a minimum of 250 ft., up to a maximum of 500 ft. for active nests with eggs or chicks) would be determined at that time and may vary depending on location, species, and the type of work being completed. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. Pre-construction surveys during the non-breeding season are not necessary, as the birds are expected to abandon their roosts during construction activities.

   Compliance with the above mitigation measures would reduce impacts to nesting raptors to a less than significant level and will not likely result in direct or indirect impacts to nesting raptors and other migratory birds.

6. Water Quality

   Degradation of Water Quality in Seasonal Creeks, Reservoirs, and Downstream Waters

   The proposed project is for the construction of water storage tanks, treatment facility, pipelines, and six new wells. The majority of the acreage identified for this project has already undergone previous disturbance. Existing commercial parcel, roadside edges, residential development, and agricultural fields all contribute to the degraded conditions of the project site.

   Mitigation. Project impacts to water quality in seasonal creeks, reservoirs, and downstream waters are not expected to result from project development. Implementation of best management practices (BMPs) to protect water quality during the construction of the project will occur as a condition of Stormwater Pollutions Prevention Plan (SWPPP).

Compliance with the above mitigation measures would reduce impacts to seasonal creeks, reservoirs, and downstream waters to a less than significant level and will not likely result in direct or indirect impacts to these waters.

In addition to the mitigation measures discussed above, the following are BMPs that when implemented will further help to reduce possible impacts to kit fox and other species during construction activities.

- *A qualified wildlife biologist shall conduct a sensitive species education program (tailgate briefing) for all project personnel. Topics to be discussed during the briefing shall include: occurrence and distribution of sensitive species in the project area, take avoidance measures being implemented during the project, reporting requirements if incidental take occurs, and applicable definitions and prohibitions under the Endangered Species Act.*

- *A biological monitor(s) shall be present while ground-disturbing activities are occurring in sensitive habitat; however, no such habitat occurs in the project area. In addition to conducting pre-construction surveys for the project, the biological monitor(s) shall aid crews in satisfying take avoidance criteria and implementing project mitigation measures, will document all pertinent information concerning project effects on sensitive species, and shall assist in minimizing the adverse effects of project activities on sensitive species.*

- *Biological monitors are empowered to order cessation of activities if take avoidance and/or mitigation measures are violated and will notify an OMWC representative.*

- *All project vehicles shall be confined to existing roads or prominently staked and/or flagged access routes that are surveyed prior to use. Observed sensitive species and their habitat features such as dens, burrows, nests, etc. shall be flagged as necessary to alert project personnel to their presence. All project-related flagging shall be collected and removed after completion of the project.*

- *To prevent inadvertent entrapment of species, excavation will include only that amount that can be worked and backfilled within a single workday. If this is not possible, all open holes, steep-walled holes, or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks (wooden planks should be more no less than 10 inches in width and should reach to bottom of trench). Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.*

- *All spills of hazardous materials shall be cleaned up immediately.*

- *Pets are prohibited on the construction site.*

- *Firearms are prohibited on the construction site.*

- *All food-related trash, such as wrappers, cans, bottles, bags, and food scraps shall be disposed of daily in containers with secure covers and regularly removed from project sites.*

- *OMWC shall agree to and appoint a representative who will be the contact source for any employee or contractor who inadvertently kills or injures a threatened or endangered species, who finds a dead, injured, or entrapped individual, or who finds a dead, injured or entrapped threatened or endangered animal species. The representative will be identified during the preconstruction educational briefing.*

- *All project-related vehicles shall observe a speed limit of 25 mph or less on all except as posted on State and County highway/roads or paved facility roads.*

- *Appropriate measures shall be undertaken to prevent unauthorized vehicle entry to off-road survey routes in sensitive habitat areas. Signing will be the preferred method to discourage use.*

- *Work boundaries will be delineated with flagging, lathe stakes, temporary fencing, or other marking to minimize surface disturbance associated with project activities.*

- *The area of disturbance will be reduced to the smallest practical area, considering topography, placement of facilities, location of burrows, nesting sites or dens, public safety, and other limiting factors.*

- *Project vehicles shall be confined to existing primary or secondary roads or to specifically delineated project sites (i.e., areas that have been surveyed and described in existing documentation). Otherwise, off-road vehicle travel is not permitted.*

- *To the extent practicable, previously disturbed areas will be used to stockpile excavated materials, storage of equipment, digging of slurry or borrow pits, trailer placement, vehicle parking, and other surface disturbing actions.*

- *Project activities shall be minimized during evening hours when some listed species become active and vulnerable to vehicle strikes.*

- *Any contractor, employee(s), or other personnel who inadvertently kills or injures a threatened or endangered species shall immediately report the incident to their representative. The representative shall contact OMWC representative and, if feasible, a qualified biologist.*

  OMWC will contact CDFW immediately in the case of a dead, injured, or entrapped listed species. The CDFW contact for immediate assistance is State Dispatch at (916) 445- 0045. State Dispatch will contact the local warden or biologist. The qualified biologist will also document all circumstances of death, injury, or entrapment of sensitive species. The biologist will 1) take all reasonable steps to enable the individual animal to escape should it be entrapped, 2) contact CDFW or other appropriate authorities to identify an approved rehabilitation center and appropriate capture and transport techniques should the animal be injured, and 3) document circumstances of death in writing and if possible photographing dead animal in situ prior to moving.

- *USFWS and CDFW shall be notified in writing within three (3) working days in the event of an accidental death or injury of a San Joaquin kit fox or other threatened or endangered species. Notification shall include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The USFWS contact for this information is the Endangered Species, Program Field Office,*

2800 Cottage Way, Room W-2605, Sacramento, CA 95825, (916) 414-6600. The CDFG contact information is 1416 9th Street, Sacramento, CA 95814, and (916) 654-4262. Any dead or injured kit fox or other threatened or endangered species shall be turned over to the CDFW Environmental Services Division, Fresno Regional Headquarters at (559) 243-4017 at the agency's request. The dead, threatened, or endangered animal can be transported to California State University at Bakersfield or the Endangered Species Recovery Team in Bakersfield for storage and research, if CDFW approves.

CULTURAL RESOURCES MITIGATION MEASURES

1. In the event that prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50-ft of the resources will be halted and OMWC will consult with a qualified archaeologist to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, then OMWC and the archaeologist will meet to determine the appropriate avoidance measures or other appropriate mitigation. OMWC will make the final determination. All significant cultural materials recovered will be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.

2. In the event that paleontological resources are discovered, OMWC will notify a qualified paleontologist. The paleontologist will document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossil or fossil bearing deposits are discovered during construction, excavations within 50-feet of the find will be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist will notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If OMWC determines that avoidance is not feasible, the paleontologist will prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important. The plan will be submitted to the OMWC for review and approval prior to implementation.

3. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification.

GEOLOGY/SOILS MITIGATION MEASURES

1. In the event that paleontological resources are discovered, OMWC will notify a qualified paleontologist. The paleontologist will document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the

criteria set forth in CEQA Guidelines Section 15064.5. If fossil or fossil bearing deposits are discovered during construction, excavations within 50-feet of the find will be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist will notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the OMWC determines that avoidance is not feasible, the paleontologist will prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important. The plan will be submitted to the OMWC for review and approval prior to implementation.

NOISE IMPACT MITIGATION MEASURES

Noise levels will be increased on a temporary basis during construction activities for the installation of the test water well and drilling of the production wells. The temporary noise impacts attributed to general construction will be mitigated by limiting the hours of construction on-site to weekdays from 7 am to 5 pm.

For more information, please contact Dee Jaspar & Associates, Inc, District Engineer, 2730 Unicorn Road, Bldg A, Bakersfield, CA 93308 (661) 393-4796.

VII. INITIAL STUDY:

A. Project Name:
Dual Water System Improvement Project

B. Lead Agency Name and Contact Information:
City of Shafter
336 Pacific Avenue
Shafter, CA 93263
Contact Person: Michael James, Public Works Director
Phone: 661-746-5000

C. Project Location:
Each of the five or six well sites will be located between the Lerdo-Beardsley Canal and a ½-mile west of Zerker Road in Sections 34, 35, & 36, T28S, R26E, and Section 31, T28S, R27E, M.D.B.&M.

D. General Plan Land Use Designation:
The General Plan Land Use Designation is R-IA, Intensive Agriculture

E. Zoning:
The zoning is listed as (A), Agriculture.

F. Description of Project:
See Section III above.

G. Surrounding Land Uses and Setting:
The surrounding land uses include Single Family Residential around the proposed well sites and agricultural and light industrial land uses along the pipeline and at the tank site, respectively.

H. Public Agency Approvals:
   a. Kern County Encroachment Permit
   b. Caltrans Encroachment Permit
   c. Union Pacific Pipeline Crossing Agreement
   d. San Joaquin Valley Air Pollution Control District

I. 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.

☒ Aesthetics	☐ Agriculture/Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☒ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

J. Determination:

On the basis of this initial evaluation:

I find that although the proposed COULD have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

INITIAL STUDY PREPARED BY: Dee Jaspar & Associates, Inc., Company Engineer
2730 Unicorn Road, Bldg A, Bakersfield, CA 93308
(661) 393-4796

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

_____ _____
By: City of Shafter Date

VIII. EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact". The Lead Agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than- significant level (mitigation measures from "Earlier Analyses", as described in (5) below may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. the significance criteria or threshold, if any, used to evaluate each question; and

    b. the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) In nonurbanized 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?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☑	☐	☐
ii. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) 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 provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☑
d) 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☑

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iv. BIOLOGICAL RESOURCES. 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☑	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
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:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☑	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☑	☐	☐
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?	☐	☐	☐	☑
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:	☐	☐	☐	☑
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
ii) Strong seismic ground shaking?	☐	☐	☐	☑
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☑	☐	☐
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?	☐	☐	☐	☑
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:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
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?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
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?	☐	☐	☐	☑
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
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:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☑
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☑
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:	☐	☐	☐	☑

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) result in a substantial erosion or siltation on- or off-site;	☐	☐	☐	✔
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	✔
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	☐	☐	☐	✔
iv) impede or redirect flood flows?	☐	☐	☐	✔
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	✔
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	✔
xi. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	✔
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:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	✔
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:				
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?	☐	✔	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	✔
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:				
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)?	☐	☐	☐	✔
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	✔
xv. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:	☐	☐	☐	✔

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑
xvi. RECREATION.				
a) Would the project 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?	☐	☐	☐	☑
b) Does the project 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:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☑
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☐	☑
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
d) Result in inadequate emergency access?	☐	☐	☐	☑
xviii. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:	☐	☐	☐	☑
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	☐	☐	☐	☑
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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☑
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?	☐	☐	☐	☑

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☑
c) Result in a determination by the waste water 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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☑
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

i. AESTHETICS:

a. The project involves the construction of six new water supply wells, two 2.0-million-gallon water storage tanks, a booster pump station, and installation of 16" and 36" conveyance pipelines with steel cased crossings. The welded steel storage tanks and booster pump station will be constructed within an existing, light industrial development complex, while the associated conveyance will be installed underground along existing dirt and paved roads. The six well sites will be fenced with chain slink fencing with vinyl slats or masonry block walls to match the surrounding residential developments. The construction will not alter the aesthetics of the surrounding environment.

b. The storage tank project site is located on a vacant industrial lot, the well sites will be constructed on vacant residential lots, and the pipeline will be installed along existing paved and dirt roads. No heritage trees, rock outcroppings, or historic buildings will be disturbed as part of this project.

c. The storage tank project site is located on a vacant industrial lot, the well sites will be constructed on vacant residential lots, and the pipeline will be installed along existing paved and dirt roads. The well sites will be fenced with chain link fencing with vinyl slats or masonry block walls to match the surrounding residential developments. In addition, all access roads and other land will be returned to their existing conditions upon completion of this project. The project construction will not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

d. Some site lighting will be included as part of the storage tank and booster station site development. To mitigate against any adverse effect to the day views, all site lighting will be equipped with automatic photocells to prevent the lights from coming on during daylight hours. In addition, to mitigate against any adverse effect to the nighttime views, all site lighting will be designed to adhere to the Dark Skies Ordinance regulations per the County of Kern. This ordinance requires that all freestanding lighting not exceed 30' height, be aimed downwards, and be at least partially shielded to reduce light spillover onto nearby properties. The site lighting to be installed will be 20' in height.

No new sources of light will be created as part of the pipeline portion of the project.

MITIGATIONS:

1. *Lighting will be less than 20-ft tall and the light fixtures will be shielded and directed downward to comply with the Kern County "Dark Skies Ordinance".*

2. *The sites will be painted a neutral color (tan), be screened with 8-ft tall masonry block walls to match the surrounding residential developments.*

ii. AGRICULTURE AND FORESTRY RESOURCES:

a. The construction of the six well sites, the storage tank and booster pump station site, and the conveyance pipeline installation will not require the conversion of farmland to non-agricultural use. The size of the site is limited to what is necessary for the project.

b. The project will not require farmland to be converted for non-agricultural use nor will it conflict with existing zoning for agricultural use. The project site is not under the Williamson Act or any other contracts.

c. The project site is not zoned as forest land or timberland zoned Timberland Production.

d. The project site is not on forest land and therefore will not result in the loss of forest land or the conversion of forest land to non-forest use.

e. The storage tank and booster station site and the proposed well sites are not on existing agricultural land. The proposed conveyance pipelines run along existing dirt and paved roads within County and State rights-of-way, and along a private easement and will not require farmland to be converted for non-agricultural use. The size of the site is limited to what is necessary for the project.

iii. AIR QUALITY:

a. The project will not involve any conflicts or issues with the applicable air quality plan. The construction phase of the project was evaluated for the construction emissions using the Road Construction Emissions Model, Version 9.0.0. The emissions modeling was separated into three phases:
   1. Construction of 16" and 36" Conveyance Pipelines.
   2. Construction of Two 2.0 Million Gallon Storage Tanks and Booster Pump Station.
   3. Construction of six water supply wells.

   The results are attached as Exhibit C. Construction emission estimates were generated in tons for the duration of the project. These included nitrogen oxides, carbon dioxide, PM 10, and PM 2.5. During the construction period total construction emissions are estimated to equate to 3.0 tons for Nitrogen oxides (NOx) and 612.5 tons for Carbon Dioxides. While volatile organic carbons and particulate matter are not shown in tons, there will be emissions of these pollutants during construction.

b. The project includes the construction of six new water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and the installation of 16" and 36" conveyance pipelines with steel cased crossings. Construction of the project will temporarily generate greenhouse gases from the operation of gas or diesel driven equipment. However, the project will not violate air quality standards or contribute to an existing air quality violation.

Construction of the test well will comply with all necessary permits required by the San Joaquin Air Pollution Control District.

c. The project will not involve the release of any criteria pollutant into the air other than those noted in Exhibit C during the construction phase of the project.

d. The project will not involve chemicals or emissions that would expose sensitive receptors to substantial pollutant concentrations with respect to air quality.

e. The project will not create objectionable odors that would affect a substantial number of people.

MITIGATIONS:

1. *Water will be applied to the project site during grading, trenching, and backfilling operations to control dust and keep the project area clean.*

2. *The contract documents will require the Contractor to obtain and comply with a San Joaquin Valley Air Pollution Control District Dust Control Plan and to permit the new emergency backup diesel generator.*

iv. BIOLOGICAL RESOURCES:

a. Laurendine Biological Consulting, LLC performed a biological survey of the project area and their biological report is attached as Exhibit D. They found that the project can avoid habitat or sensitive species through the implementation of recommended measures outlined in the biological survey report.

b. The project site has been surveyed by a Biologist who determined the project can avoid any known riparian habitats or other sensitive natural communities as evidenced by the site evaluation performed by Laurendine Biological Consulting, LLC.

c. The project site has been surveyed by a Biologist who determined there are no known wetlands or coastal areas in the vicinity of the project or any known indirect effects to these particular areas as a result of the project.

d. The project site has been surveyed by a Biologist who determined the project will not interfere with the movement of wildlife species or other migratory species as evidenced by the site evaluation performed by Laurendine Biological Consulting, LLC.

e. The project will not conflict with any local policies or ordinances protecting biological resources as evidenced by the site evaluation performed by Laurendine Biological Consulting, LLC.

f. The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

MITIGATIONS:

Laurendine Biological's Biological Survey Report proposes the following biological recommendations to ensure the project will not have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species during construction activities.

a. Potential Project Effects from Modification to habitats for the San Joaquin Kit Fox.

The habitat present on the project site is suitable for San Joaquin kit fox, a California threatened and a federal endangered species, to utilize. However, while no individuals or their sign (e.g., dens, scat, tracks) were observed during the project's field survey, they could be transient through the project site. In addition, several burrows present on the adjacent
parcel of the tank site are large enough to be considered potential dens. If occupied, SJKF might be subjected to increased noise levels and activity that may modify their denning behavior that could be considered a significant impact.

Kit fox are known to occur in the area and given that kit fox are highly motile species, they could utilize the more urban areas as well as the natural habitats in the project area. Construction activities have the potential to temporarily disturb suitable habitat for special status species including SJKF, and directly impact individuals if present during construction activities.

Effects on regional abundance and distribution of SJKF are not expected as the project occurs along the disturbed roadside edge of Imperial St. and Saco Rd., active agricultural lands, a disturbed residential development, and a small area of non-native grassland.

Mitigation. *A pre-construction survey of the project area shall be conducted to ensure that SJKF have not moved into the area prior to beginning ground disturbance. In addition, potential den monitoring of the adjacent property should be completed, if possible. Should a SJKF establish an occupancy in the project construction area, the guidelines are provided in the 2011 U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (Appendix F).*

*If occupied known or natal dens cannot be avoided through the timing of construction or buffer zones, or should SJKF take up occupancy on the construction site, the applicant shall obtain permission or if required, take authorization, from the USFWS and CDFW to relocate kit fox from the dens or propose an alternative construction method to avoid dens. No
occupied den or natal den will be disturbed until the CDFW and USFWS have provided guidance and issued appropriate "take" authorization.*

Compliance with the above mitigation measures would reduce impacts to San Joaquin kit fox to a less than significant level and will not likely result in direct or indirect impacts to San Joaquin kit fox.

b. Potential Project Effects from Modification to habitats for the Swainson's Hawk and Burrowing Owl.

Potential Impacts. Direct affects to Swainson's hawk and burrowing owls could result from loss of suitable nesting or foraging habitat due to construction. Indirect impacts may result from construction noise or other construction activities that could modify nesting or other behaviors. While suitable habitat is abundant regionally for these species, conversion of the
Valley grassland habitat would nonetheless constitute a significant impact to nesting and foraging habitat.

Mitigation. Swainson's hawk. *None warranted. No Swainson's hawk nesting trees are located in the project area and sufficient foraging habitat is found regionally. Impacts to Swainson's hawk are not anticipated.*

Mitigation. Avoidance and Minimization to Individual Owls. *In order to avoid impacts to active burrowing owl nests, a qualified biologist should conduct pre-construction surveys for burrowing owls within the construction footprint and within 250 ft. of the footprint no more than 30 days prior to the onset of ground disturbance. These surveys should be conducted in a manner consistent with the CDFW's burrowing owl survey methods (CDFG 2012). If preconstruction surveys determine that burrowing owls occupy the site during the nonbreeding season (September 1 through January 31), then a passive relocation effort (e.g., blocking burrows with one-way doors and leaving them in place for a minimum of three days) may be necessary to ensure that the owls are not harmed or injured during construction.*

Once it has been determined that owls have vacated the site, the burrows can be collapsed, and ground disturbance can proceed. If burrowing owls are detected within the construction footprint or immediately adjacent lands (i.e., within 250 ft. of the footprint) during the breeding season (February 1 through August 31), a construction-free buffer of 250 ft. should be established around all active owl nests. The buffer area should be enclosed with temporary fencing, and construction equipment and workers should not enter the enclosed setback areas.

Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. After the breeding season, passive relocation of any remaining owls may take place as described above.

Compliance with the above mitigation measures would reduce impacts to burrowing owl to a less than significant level and will not likely result in direct or indirect impacts to burrowing owl.

c. Impacts to American Badgers

Potential Impacts. Conversion of natural lands would result in a loss of habitat for the American badger; however, no badgers or their sign were detected during the field survey, but should they move onto the site prior to or during construction, individual badgers could be harmed or injured from construction activities and this would constitute a significant
adverse impact.

Mitigation. *Pre-construction surveys conducted for burrowing owls and SJKF should also be used to determine the presence or absence of badgers in the development footprint. If an active badger den is identified during pre-construction surveys within or immediately adjacent to the work zone, a construction-free buffer of up to 300 ft. should be established around the den. Because badgers are known to use multiple burrows in a breeding burrow complex, a biological monitor should be present onsite during construction activities to ensure the buffer is adequate to avoid direct impact to individuals. The monitor would be necessary onsite until it is determined that young are of an independent age and construction activities would not harm individual badgers. Once it has been determined that badgers have vacated the site, the burrows can be collapsed or excavated, and ground disturbance can proceed.*

Compliance with the above mitigation measures would reduce impacts to American badger to a less than significant level and will not likely result in direct or indirect impacts to badgers.

d. Disturbance to Nesting Raptors during Construction Activities

While no nesting habitat for raptors is present along the project area, construction activities occurring during the breeding season (February through August) could result in nest abandonment or direct mortality to these birds. This would constitute a significant impact and
be in violation of state and federal laws.

Mitigation. *A qualified biologist should conduct a pre-construction survey for nesting raptors (particularly burrowing owl) if construction activity is to occur during the breeding season (February 1 through August 31). This survey should be conducted no more than 14 days prior to the initiation of ground disturbing/construction activities during the early part of
the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). If nesting raptors are detected on the site during the survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffer (a minimum of 250 ft., up to a maximum of 500 ft. for active nests with eggs or chicks) would be determined at that time and may vary depending on location, species, and the type of work being completed. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. Pre-construction surveys during the non-breeding season are not necessary, as the birds are expected to abandon their roosts during construction activities.*

Compliance with the above mitigation measures would reduce impacts to nesting raptors to a less than significant level and will not likely result in direct or indirect impacts to nesting raptors and other migratory birds.

e. Degradation of Water Quality in Seasonal Creeks, Reservoirs, and Downstream Waters

The proposed project is for the construction of water storage tanks, treatment facility, pipelines, and six new wells. The majority of the acreage identified for this project has already undergone previous disturbance. Existing commercial parcel, roadside edges, residential development, and agricultural fields all contribute to the degraded conditions of the project site.

*M**itigation.** Project impacts to water quality in seasonal creeks, reservoirs, and downstream waters are not expected to result from project development. Implementation of best management practices (BMPs) to protect water quality during the construction of the project will occur as a condition of Stormwater Pollutions Prevention Plan (SWPPP).*

Compliance with the above mitigation measures would reduce impacts to seasonal creeks, reservoirs, and downstream waters to a less than significant level and will not likely result in direct or indirect impacts to these waters.

In addition to the mitigation measures discussed above, the following are BMPs that when implemented will further help to reduce possible impacts to kit fox and other species during construction activities.

• A qualified wildlife biologist shall conduct a sensitive species education program (tailgate briefing) for all project personnel. Topics to be discussed during the briefing shall include: occurrence and distribution of sensitive species in the project area, take avoidance measures being implemented during the project, reporting requirements if incidental take occurs, and applicable definitions and prohibitions under the Endangered Species Act.

• A biological monitor(s) shall be present while ground-disturbing activities are occurring in sensitive habitat; however, no such habitat occurs in the project area. In addition to conducting pre-construction surveys for the project, the biological monitor(s) shall aid crews in satisfying take avoidance criteria and implementing project mitigation measures, will document all pertinent information concerning project effects on sensitive species, and shall assist in minimizing the adverse effects of project activities on sensitive species.

• Biological monitors are empowered to order cessation of activities if take avoidance and/or mitigation measures are violated and will notify an OMWC representative.

• All project vehicles shall be confined to existing roads or prominently staked and/or flagged access routes that are surveyed prior to use. Observed sensitive species and their habitat features such as dens, burrows, nests, etc. shall be

flagged as necessary to alert project personnel to their presence. All project-related flagging shall be collected and removed after completion of the project.

• To prevent inadvertent entrapment of species, excavation will include only that amount that can be worked and backfilled within a single workday. If this is not possible, all open holes, steep-walled holes, or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks (wooden planks should be more no less than 10 inches in width and should reach to bottom of trench). Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

• All spills of hazardous materials shall be cleaned up immediately.

• Pets are prohibited on the construction site.

• Firearms are prohibited on the construction site.

• All food-related trash, such as wrappers, cans, bottles, bags, and food scraps shall be disposed of daily in containers with secure covers and regularly removed from project sites.

• OMWC shall agree to and appoint a representative who will be the contact source for any employee or contractor who inadvertently kills or injures a threatened or endangered species, who finds a dead, injured, or entrapped individual, or who finds a dead, injured or entrapped threatened or endangered animal species. The representative will be identified during the preconstruction educational briefing.

• All project-related vehicles shall observe a speed limit of 25 mph or less on all except as posted on State and County highway/roads or paved facility roads.

• Appropriate measures shall be undertaken to prevent unauthorized vehicle entry to off-road survey routes in sensitive habitat areas. Signing will be the preferred method to discourage use.

• Work boundaries will be delineated with flagging, lathe stakes, temporary fencing, or other marking to minimize surface disturbance associated with project activities.

• The area of disturbance will be reduced to the smallest practical area, considering topography, placement of facilities, location of burrows, nesting sites or dens, public safety, and other limiting factors.

• Project vehicles shall be confined to existing primary or secondary roads or to specifically delineated project sites (i.e., areas that have been surveyed and described in existing documentation). Otherwise, off-road vehicle travel is not permitted.

• To the extent practicable, previously disturbed areas will be used to stockpile excavated materials, storage of equipment, digging of slurry or borrow pits, trailer placement, vehicle parking, and other surface disturbing actions.

• Project activities shall be minimized during evening hours when some listed species become active and vulnerable to vehicle strikes.

• Any contractor, employee(s), or other personnel who inadvertently kills or injures a threatened or endangered species shall immediately report the incident to their representative. The representative shall contact OMWC representative and, if feasible, a qualified biologist.

OMWC will contact CDFW immediately in the case of a dead, injured, or entrapped listed species. The CDFW contact for immediate assistance is State Dispatch at (916) 445- 0045. State Dispatch will contact the local warden or biologist. The qualified biologist will also document all circumstances of death, injury, or entrapment of sensitive species. The biologist will 1) take all reasonable steps to enable the individual animal to escape should it be entrapped, 2) contact CDFW or other appropriate authorities to identify an approved rehabilitation center and appropriate capture and transport techniques should the animal be injured, and 3) document circumstances of death in writing and if possible photographing dead animal in situ prior to moving.

• USFWS and CDFW shall be notified in writing within three (3) working days in the event of an accidental death or injury of a San Joaquin kit fox or other threatened or endangered species. Notification shall include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The USFWS contact for this information is the Endangered Species, Program Field Office, 2800 Cottage Way, Room W-2605, Sacramento, CA 95825, (916) 414-6600. The CDFG contact information is 1416 9th Street, Sacramento, CA 95814, and (916) 654-4262. Any dead or injured kit fox or other threatened or endangered species shall be turned over to the CDFW Environmental Services Division, Fresno Regional Headquarters at (559) 243-4017 at the agency's request. The dead, threatened, or endangered animal can be transported to California State University at Bakersfield or the Endangered Species Recovery Team in Bakersfield for storage and research, if CDFW approves.

v. CULTURAL RESOURCES:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. According to the California Historical Resources Information Systems regional information center there is no known or recorded historical resources within the project area and the one-half mile radius. It is anticipated that the proposed project will not cause a substantial change in the significance of a historical resource. Mitigations will be put in place in the event that cultural resources are encountered during construction.

b. The project involves the construction of a test well site. It is anticipated that it will not cause a substantial change in the significance of an archaeological resource. A record search of the sacred land file did not indicate the presence of Native American cultural resources in the immediate project area. Letters explaining the project were mailed to Native American individuals/organizations who may have knowledge of cultural resources in the project area, however no responses were received. Mitigations will be put in place in the event that archaeological or Native American artifacts are encountered.

c. The project involves the construction of six wells, a tank site, and a conveyance pipeline. It is anticipated that it will not disturb any human remains. Mitigations will be put in place in the event that human remains are encountered.

MITIGATIONS:

1. *In the event that prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, all work within 50-ft of the resources will be halted and OMWC will consult with a qualified archaeologist to assess the significance of the find according to CEQA Guidelines Section 15064.5. If any find is determined to be significant, then the OMWC and the archaeologist will meet to determine the appropriate avoidance measures or other appropriate mitigation. OMWC will make the final determination. All significant cultural materials recovered will be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.*

2. *If human remains are uncovered during project construction, OMWC shall immediately halt work, contact the Tulare County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.4(e)(1) of the CEQA Guidelines. If the Coroner determines the remains are Native American in origin, the Coroner shall contact the Native American Heritage Commission (NAHC). As provided in Public Resources Code Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent shall be afforded the opportunity to provide recommendations concerning the future disposition of the remains and any associated grave goods as provided in PRC 5097.98.*

vi. ENERGY

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The six new water supply wells and booster pumps will all be equipped with high efficiency, inverter duty rated electric motors to maximize energy efficiency during operation of the new facilities. The project will not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated

conveyance pipelines. The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

vii. GEOLOGY AND SOILS:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not adversely affect the people in the area.

i) Based on the above noted information the risks of injury in the event of an earthquake are less than significant. The project site is not located in an Alquist-Priolo Earthquake Fault Zone, as defined by Special Publication 42 (revised 2007) published by the California Geologic Survey (CGS).

ii) Due to the nature of the project construction, which includes construction of six water wells, a water storage tank, and conveyance pipeline, the risks of injury in the event of strong seismic ground shaking are less than significant.

iii) Based on the above noted information, the risks of injury in the event of seismic related ground failure are less than significant.

iv) The topography of the project site and surrounding area is flat. Landslides are not considered a concern.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not result in substantial soil erosion or loss of topsoil.

c. The geologic conditions of the site are stable. The project will not result in unstable geologic conditions or other unsatisfactory soil collapse. Based on the existing grade of the surrounding topography, landslides will not be an issue, and neither will lateral spreading, subsidence, liquefaction or collapse. Attached is a copy of a Soil Survey Map provided by the National Cooperative Soil Survey for the project area in Exhibit G. A search was also conducted online using the US Fish and Wildlife Service Wetlands Mapper and a map of the project area has been attached hereto as Exhibit I. No current wetlands are located within 500' of the project area.

d. Soils in the area are not expansive.

e. Septic tanks and seepage pits will not be a part of this project. The project will not include any requirements for the disposal of wastewater on-site.

f. The project involves the construction of six wells, a tank site, and a conveyance pipeline. It is anticipated that it will not destroy a unique paleontological resource or site or unique geologic feature. Mitigations will be put in place in the event that paleontological resources are encountered.

MITIGATIONS:

2. *In the event that paleontological resources are discovered, OMWC will notify a qualified paleontologist. The paleontologist will document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. If fossil or fossil bearing deposits are discovered during construction, excavations within 50-feet of the find will be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist will notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the OMWC determines that avoidance is not feasible, the paleontologist will prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important. The plan will be submitted to the OMWC for review and approval prior to implementation.*

viii. GREENHOUSE GAS EMISSIONS:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The well pumps and booster pumps will all be equipped with premium efficiency, inverter duty rated electric motors and will not generate greenhouse gas emissions.

b. The project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

ix. HAZARDS AND HAZARDOUS MATERIALS:

The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not involve the use of hazardous materials.

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. One of the water wells will be a drinking water well facility that will involve the use of sodium hypochlorite for disinfection, however, this chemical will be contained within a double-walled container and housed in a locked building. The transport and use of this chemical will not create a significant hazard to the public and the project will not involve the disposal of hazardous materials.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. One of the water wells will be a drinking water well facility that will involve the use of sodium hypochlorite for disinfection; however, the chemical will be contained in a double-walled container inside of a locked building. Therefore, any accidental release of the chemical into the environment will be not create a significant hazard to the public or to the environment.

c. The project will not emit any hazardous emissions and is not located within a quarter mile of any schools. A map showing the project site in relation to the nearest schools has been provided and is attached hereto as Exhibit J.

d. The project site is not included on a list of hazardous materials sites. The current list of hazardous materials sites pulled from the California Dept. of Toxic Substances Control is attached hereto for reference as Exhibit K.

e. There is not a public airport or planned airport land use plan within the project area. While the project is located within two miles of a public airport, it will not result in excessive noise for people residing or working in the project area.

f. This project will not impair or interfere with an adopted emergency response plan or emergency evacuation plan.

g. The project will not expose people or structures to wildland fires. The well facility will be covered in gravel rock ground cover upon completion. The tank site, conveyance pipeline, and five of the water wells will all be used to expand the water system fire capacity.

x. HYDROLOGY AND WATER QUALITY:

a. The project involves the construction of six water supply wells, one of which will be a drinking water well. During drilling of this well, zone sampling will be conducted to ensure compliance with drinking water standards upon completion of the well. A minimum 50-ft deep sanitary seal will be constructed on all the water wells, along with a minimum 8'x8' concrete pad at the surface to create a physical barrier to so that the project will not substantially degrade ground water quality.

b. The project includes construction of six water supply wells. During operation, OMWC regularly monitor groundwater levels in their wells in order to ensure the wells are not excessively lowering groundwater levels in the area.

c. The project tank site and well sites will involve minor altering of the natural ground surface; however, this will not substantially alter the existing drainage pattern of the project area and there are no streams or rivers within the project vicinity.

i) Existing drainage patterns will not be impacted and will not result in substantial erosion or siltation.

ii) A stormwater retention basin will be constructed at the tank site to receive surface runoff so that flooding will not result, either on or offsite.

iii) The project will not create or contribute to additional runoff water which would exceed the capacity of existing stormwater systems or create polluted runoff.

iv) The project will not impede or redirect flood flows. The project is not located within a flood zone.

d. The project site is not within a flood zone and there is no risk of release of pollutants due to project inundation.

e. The project will not degrade water quality and will conform to State of California drinking water standards.

xi. LAND USE AND PLANNING:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The conveyance pipelines will be installed underground, and the project will not divide an established community.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not cause a significant environmental impact due to any conflicts with any land use plan, policy, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

xii. MINERAL RESOURCES:

a. The project involves the construction of a test water well and will not result in the loss or availability of a known mineral resource that would be of value to the region and residents of the state.

b. The project will not result in the loss or availability of a locally important mineral resource recovery site.

xiii. NOISE:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. During construction there will be a temporary increase in noise levels in the project vicinity which will be mitigated by limiting construction hours to daylight hours and weekdays only. There will be no permanent 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.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not expose persons to or generate excessive ground borne vibration or noise levels. Ground borne vibration and noise levels will be increased temporarily during construction but will be mitigated as described above by limiting work to daylight hours and weekdays only.

c. The tank site and conveyance pipeline is located within two miles or a public airport; however, the project will not expose people residing or working in the project area to excessive noise levels.

MITIGATIONS:

Noise levels during construction will be mitigated by limiting construction hours to normal work hours during weekdays only from 7:00 am to 5:00 pm, with the exception of the drilling of the production wells.

xiv. POPULATION AND HOUSING:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not induce substantial population growth.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. This project will not displace any existing housing or residents.

xv. PUBLIC SERVICES:

a. The project will not result in substantial adverse physical impacts to or involving governmental facilities such as fire protection, police protection, schools, parks, or other public facilities.

xvi. RECREATION:

a. The project will not increase the use of existing neighborhood and regional parks or other recreational facilities.

b. The project does not involve any recreational facilities or require modifications or expansion to such.

xvii. TRANSPORTATION:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. A substantial increase in traffic is not anticipated because of this project.

b. The project will not conflict with or be inconsistent with CEQA Guidelines 15064.3, subdivision (b).

c. The project will not involve any design features that would substantially increase hazards due to a geometric design feature that would impact traffic or farm equipment.

d. The project will not result in inadequate emergency access.

xviii. TRIBAL CULTURAL RESOURCES:

a. BCR Consulting, LLC has conducted a cultural resources assessment for the Dual Water System Improvement Project attached hereto as Exhibit E. BCR Consulting has determined that the proposed project will not introduce any elements to the setting that are not already present, negating any potential for visual effects. Additionally, the field survey did not result in any cultural resources recorded or any evidence for cultural resource sensitivity within the project sites. Therefore, no significant impact related to historical resources is anticipated and no mitigation is recommended, and no further investigations are recommended for the project sites unless:
   - The boundaries change to include areas that have not been subject to this cultural resource assessment.
   - Cultural materials are encountered during any proposed project activities.

xix. UTILITIES AND SERVICE SYSTEMS:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will require the construction of new electric power for each well site and for the tank and booster pump station site; however, this will not cause significant environmental effects.

b. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines.

c. The project will not require service by the wastewater treatment provider.

d. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. The project will not generate any solid waste.

e. The project complies with federal, state, and local statutes and regulations related to the solid waste that will be generated by the water facilities during its operation.

xx. WILDFIRE:

a. The project involves the construction of six water supply wells, two 2.0-million-gallon welded steel water storage tanks, a booster pump station, and associated conveyance pipelines. It will not substantially impair an adopted emergency response plan or emergency evacuation plan.

b. The project is in a developed, flat-lying area. Its construction and operation will not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c. The project will not require the installation or maintenances of additional roads, fuel breaks, or emergency water sources that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

d. The project is in a developed, flat-lying area. It will not expose people or structures to significant risks, including downstream flooding or landslides, etc.

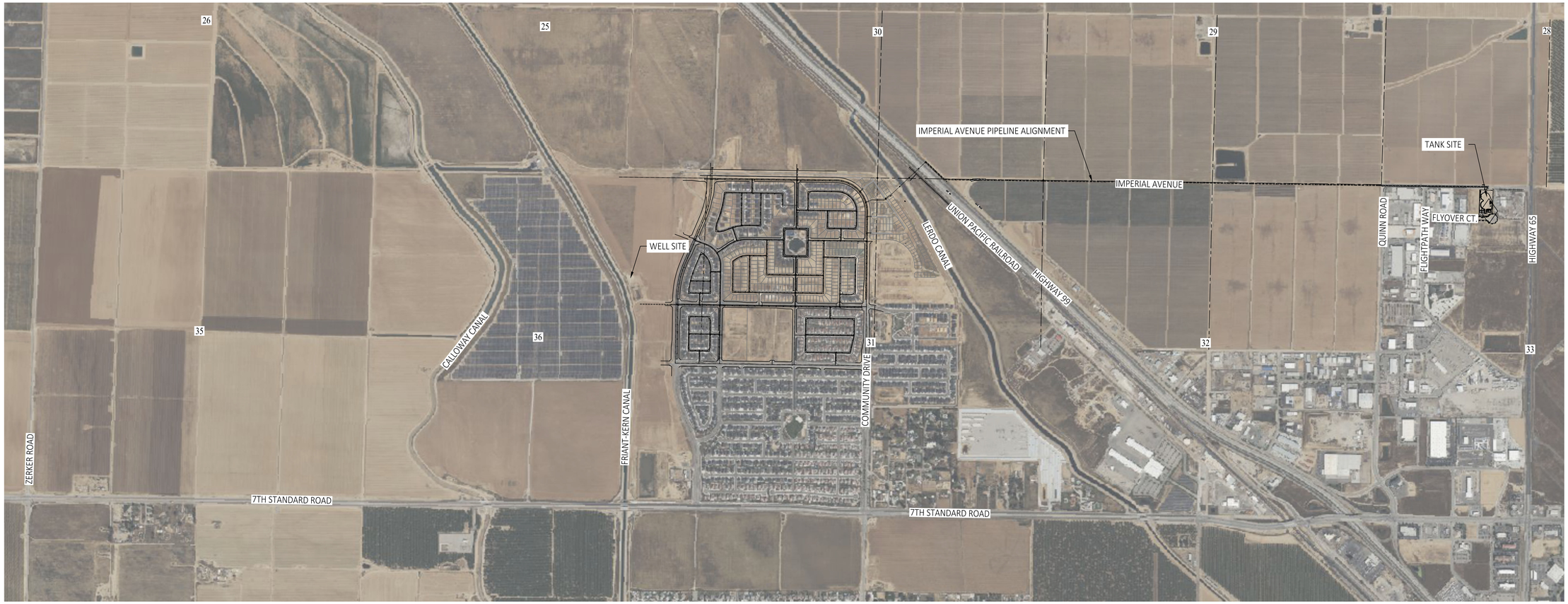
xxi. MANDATORY FINDINGS OF SIGNIFICANCE:

a. The project will not degrade the quality of the environment or detrimentally affect fish, wildlife, animals, plants or other important examples of California history or prehistory. A copy of a US Fish and Wildlife Wetlands map for the project area has been attached hereto in Exhibit I.

b. The project does not have impacts that are individually limited but cumulatively considerable.

c. The project does not have environmental effects which will cause substantial adverse effects on human beings directly or indirectly.

EXHIBIT A
"PROJECT SITE PLAN"



PROJECT SHEET INDEX

SCALE: 1" = 800'

BY	DESCRIPTION	DATE	REV

DEE JASPAR & ASSOCIATES, INC.
CIVIL ENGINEERS
2730 UNICORN ROAD, BLDG A
BAKERSFIELD, CA 93308
PHONE 661 393-4796
FAX 661 393-4798
659 N MAIN STREET, #B
PORTERVILLE, CALIFORNIA 93257
PHONE 559 791-9288
FAX 559 781-9275

PROJECT SITE PLAN

DUAL WATER SYSTEM IMPROVEMENT PROJECT

OILDALE MUTUAL WATER COMPANY
KERN COUNTY, CALIFORNIA

DRAWN	KRW
CHECKED	CMS
DATE	7/15/2025
SCALE	AS SHOWN
JOB NO.	
SHEET	1
OF	1 SHEETS

OILDALE MUTUAL WATER COMPANY
DUAL WATER SYSTEM IMPROVEMENT PROJECT

EXHIBIT B
"PROJECT DESCRIPTION"

Project Description

The proposed project involves constructing six new water supply wells, two 2.0 MG welded steel storage tanks, a booster pump station, and the associated water conveyance pipelines for the Oildale Mutual Water Company (OMWC) as part of their dual water system whereby these facilities will supply landscape water and water for exterior use only. This will serve to save treated water for interior uses and drinking water purposes while using raw water for exterior and landscape uses.

The two 2.0 MG AWWA D100 welded steel storage tanks and booster pump station are planned to be constructed at the existing OMWC property that is located south of Imperial Avenue and north of Flyover Court on APN 482-170-11 just west of Highway 65 in Section 33, T28S, R27E, M.D.B.&M. The two 2.0 MG storage tanks will be filled by a dedicated 36-inch transmission main that is connected to the five to six water supply wells. The water from the storage tank will then be conveyed to the existing developments to the west by gravity. In addition, the booster pump station will supply water to the area of the commercial and industrial development around Highway 65 and Imperial Avenue for exterior and landscape purposes. The tank dimensions are anticipated to be approximately 105-ft diameter by 32-ft tall and will be a welded steel storage tank that is epoxy coated on the interior and exterior and rests on a concrete ringwall foundation. The booster pump station will include above ground steel piping that is fusion bonded epoxy lined and coated, has booster pumps and motors, a 3,000-gallon hydropneumatic pressure tank, and electrical and controls.

Each of the five or six well sites will be located between the Lerdo-Beardsley Canal and a ½-mile west of Zerker Road in Sections 34, 35, & 36, T28S, R26E, and Section 31, T28S, R27E, M.D.B.&M. The wells are planned to be drilled to an approximate depth of 1,000-ft and will be equipped with a vertical turbine pump and vertical hollowshaft electric motor and variable speed drive. The site will be fenced with 6-ft tall chainlink fencing with vinyl slats or masonry block walls to match the surrounding residential developments. The well site will be surfaced with ¾" Class II aggregate base with the limits being the fencing or block wall. The well site will include an electrical meter main, motor control center, PLC, and SCADA and will be installed on a concrete foundation with a steel shade structure. The well facility will also include a pad-mount emergency back-up generator. The well discharge piping will be 12-inch steel piping with a 3,000 gallon hydropneumatic pressure vessel. A 10-ft x 10-ft metal building enclosure will be installed around the deep well pump and motor for noise attenuation. The well discharge piping will transition below ground and to 12-inch C900 PVC pipe prior to leaving the site. The 12-inch C900 PVC piping will connect to the existing dual water system distribution piping that is installed as part of the residential development.

One of the well sites is anticipated to be a potable water well. This well will be equipped in similar fashion to that described above but may also include a well head treatment system such as Granular Activated Carbon for the removal of 1,2,3-TCP. The

treatment system would be installed on a reinforced concrete foundation and connected to the well discharge piping.

In addition, a 36-inch C905 PVC transmission main will be installed from the tank and booster pump station site at APN 482-170-11 west along Imperial Avenue approximately 8,900-ft to the Highway 99. The transmission main will be installed with a minimum 36-inches of ground cover. The transmission main will then cross the Highway 99, the UPRR railroad tracks, and the North Kern Water Storage District Lerdo-Beardsley Canal with a 48-inch cased crossing approximately 715-ft in length via the tunnel boring method. In addition, OMWC will extend an existing 12-inch potable water main northwesterly along Saco Road approximately 985-ft and cross the Highway 99, the UPRR railroad tracks, and the North Kern Water Storage District Lerdo-Beardsley Canal with a 16-inch pipeline and a 30-inch cased crossing approximately 340-ft in length via the bore and jack method. The cased crossings will be permitted with the California Department of Transportation (Caltrans), the UPRR Railroad, and the North Kern Water Storage District.

OILDALE MUTUAL WATER COMPANY
DUAL WATER SYSTEM IMPROVEMENT PROJECT

EXHIBIT C
"CONSTRUCTION PHASE – AIR EMISSIONS DATA"

Oildale Mutual Water Company
Dual Water System Improvement Project
Emissions Model for the Construction of Six Water Supply Wells

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Construction of 6 Water Supply Wells

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.22	2.73	2.21	5.14	0.14	5.00	1.15	0.11	1.04	0.01	547.57	0.10	0.03	557.79
Grading/Excavation	0.22	2.71	2.06	5.13	0.13	5.00	1.15	0.11	1.04	0.00	469.12	0.10	0.01	475.66
Drainage/Utilities/Sub-Grade	1.38	13.69	13.81	5.70	0.70	5.00	1.69	0.65	1.04	0.03	2,750.77	0.67	0.03	2,777.42
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum (pounds/day)	1.38	13.69	13.81	5.70	0.70	5.00	1.69	0.65	1.04	0.03	2,750.77	0.67	0.03	2,777.42
Total (tons/construction project)	0.11	1.08	1.08	0.55	0.06	0.50	0.15	0.05	0.10	0.00	216.50	0.05	0.00	218.67

Notes:

Project Start Year ->	2021
Project Length (months) ->	9
Total Project Area (acres) ->	2
Maximum Area Disturbed/Day (acres) ->	1
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	20	0	160	12
Grading/Excavation	0	0	0	0	160	12
Drainage/Utilities/Sub-Grade	0	0	0	0	160	12
Paving	0	0	0	0	0	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Construction of 6 Water Supply Wells

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.02	0.02	0.04	0.00	0.04	0.01	0.00	0.01	0.00	4.52	0.00	0.00	4.17
Grading/Excavation	0.00	0.04	0.03	0.08	0.00	0.08	0.02	0.00	0.02	0.00	7.74	0.00	0.00	7.12
Drainage/Utilities/Sub-Grade	0.10	1.02	1.03	0.42	0.05	0.37	0.13	0.05	0.08	0.00	204.24	0.05	0.00	187.08
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum (tons/phase)	0.10	1.02	1.03	0.42	0.05	0.37	0.13	0.05	0.08	0.00	204.24	0.05	0.00	187.08
Total (tons/construction project)	0.11	1.08	1.08	0.55	0.06	0.50	0.15	0.05	0.10	0.00	216.50	0.05	0.00	198.38

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Oildale Mutual Water Company
Dual Water System Improvement Project
Emissions Model for Construction of Two 2.0 Million Gallon Welded Steel Storage Tanks and Booster Pump Station

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Two 2.0 Million Gallon Storage Tank and Booster Station Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.45	3.47	5.31	30.20	0.20	30.00	6.41	0.17	6.24	0.01	1,099.17	0.26	0.04	1,117.05
Grading/Excavation	0.92	8.09	11.15	30.46	0.46	30.00	6.64	0.40	6.24	0.02	2,189.36	0.47	0.11	2,233.02
Drainage/Utilities/Sub-Grade	1.96	18.57	18.69	30.97	0.97	30.00	7.14	0.90	6.24	0.03	3,246.02	0.70	0.04	3,275.21
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum (pounds/day)	1.96	18.57	18.69	30.97	0.97	30.00	7.14	0.90	6.24	0.03	3,246.02	0.70	0.11	3,275.21
Total (tons/construction project)	0.11	1.07	1.11	2.04	0.06	1.98	0.46	0.05	0.41	0.00	196.71	0.04	0.00	198.76

Notes:

Project Start Year ->	2021
Project Length (months) ->	6
Total Project Area (acres) ->	2
Maximum Area Disturbed/Day (acres) ->	2
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	20	0	160	24
Grading/Excavation	0	0	120	0	240	24
Drainage/Utilities/Sub-Grade	0	0	0	0	320	12
Paving	0	0	0	0	0	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Two 2.0 Million Gallon Storage Tank and Booster Station Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.01	0.01	0.08	0.00	0.08	0.02	0.00	0.02	0.00	3.02	0.00	0.00	2.79
Grading/Excavation	0.01	0.09	0.12	0.34	0.01	0.33	0.07	0.00	0.07	0.00	24.08	0.01	0.00	22.28
Drainage/Utilities/Sub-Grade	0.10	0.97	0.98	1.62	0.05	1.57	0.37	0.05	0.33	0.00	169.60	0.04	0.00	155.25
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum (tons/phase)	0.10	0.97	0.98	1.62	0.05	1.57	0.37	0.05	0.33	0.00	169.60	0.04	0.00	155.25
Total (tons/construction project)	0.11	1.07	1.11	2.04	0.06	1.98	0.46	0.05	0.41	0.00	196.71	0.04	0.00	180.32

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

Oildale Mutual Water Company
Dual Water System Improvement Project
Emissions Model for Construction of 16" and 36" Conveyance Pipelines and Cased Crossings

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> 16" & 36" Conveyance Pipelines and Cased Crossings				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Pounds)	**ROG (lbs/day)**	**CO (lbs/day)**	**NOx (lbs/day)**	**PM10 (lbs/day)**	**PM10 (lbs/day)**	**PM10 (lbs/day)**	**PM2.5 (lbs/day)**	**PM2.5 (lbs/day)**	**PM2.5 (lbs/day)**	**SOx (lbs/day)**	**CO2 (lbs/day)**	**CH4 (lbs/day)**	**N2O (lbs/day)**	**CO2e (lbs/day)**
Grubbing/Land Clearing	0.45	3.49	5.45	10.20	0.20	10.00	2.25	0.17	2.08	0.01	1,177.62	0.26	0.05	1,199.18
Grading/Excavation	1.06	11.38	12.67	10.56	0.56	10.00	2.54	0.46	2.08	0.03	3,437.63	0.62	0.23	3,523.08
Drainage/Utilities/Sub-Grade	1.38	15.84	13.95	10.68	0.68	10.00	2.69	0.61	2.08	0.03	3,148.31	0.92	0.05	3,185.26
Paving	0.90	10.32	10.31	0.55	0.55	0.00	0.46	0.46	0.00	0.03	2,588.50	0.45	0.17	2,651.66
Maximum (pounds/day)	1.38	15.84	13.95	10.68	0.68	10.00	2.69	0.61	2.08	0.03	3,437.63	0.92	0.23	3,523.08
Total (tons/construction project)	0.07	0.82	0.81	0.64	0.04	0.61	0.16	0.03	0.13	0.00	199.34	0.05	0.01	203.10

Notes:

Project Start Year ->	2021
Project Length (months) ->	6
Total Project Area (acres) ->	3
Maximum Area Disturbed/Day (acres) ->	3
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	40	0	160	24
Grading/Excavation	0	0	80	240	240	24
Drainage/Utilities/Sub-Grade	0	8	0	0	320	24
Paving	0	34	0	240	320	12

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> 16" & 36" Conveyance Pipelines and Cased Crossings				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust					
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	**ROG (tons/phase)**	**CO (tons/phase)**	**NOx (tons/phase)**	**PM10 (tons/phase)**	**PM10 (tons/phase)**	**PM10 (tons/phase)**	**PM2.5 (tons/phase)**	**PM2.5 (tons/phase)**	**PM2.5 (tons/phase)**	**SOx (tons/phase)**	**CO2 (tons/phase)**	**CH4 (tons/phase)**	**N2O (tons/phase)**	**CO2e (MT/phase)**
Grubbing/Land Clearing	0.00	0.02	0.04	0.07	0.00	0.07	0.01	0.00	0.01	0.00	7.77	0.00	0.00	7.18
Grading/Excavation	0.03	0.30	0.33	0.28	0.01	0.26	0.07	0.01	0.05	0.00	90.75	0.02	0.01	84.38
Drainage/Utilities/Sub-Grade	0.04	0.44	0.38	0.29	0.02	0.28	0.07	0.02	0.06	0.00	86.58	0.03	0.00	79.47
Paving	0.00	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.24	0.00	0.00	13.23
Maximum (tons/phase)	0.04	0.44	0.38	0.29	0.02	0.28	0.07	0.02	0.06	0.00	90.75	0.03	0.01	84.38
Total (tons/construction project)	0.07	0.82	0.81	0.64	0.04	0.61	0.16	0.03	0.13	0.00	199.34	0.05	0.01	184.25

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

OILDALE MUTUAL WATER COMPANY
DUAL WATER SYSTEM IMPROVEMENT PROJECT

EXHIBIT D
"SPECIES LIST – BIOLOGICAL RESOURES RESEARCH"

Biological Reconnaissance Survey Results
Oildale Mutual Water Company
Construction of Six Water Supply Wells, Two 2.0-Million Gallon Storage Tanks and Booster Pump Station, and 36-inch Conveyance Pipeline
Kern County, California

December 2020

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1.0 INTRODUCTION

This report has been prepared at the request of Mr. Curtis Skaggs, PE, with Dee Jaspar and Associates on behalf of Oildale Mutual Water Company (OMWC). The following sections evaluate special-status biological resources that may be affected by the proposed water transmission main, six new wells, and storage treatment facility north of Bakersfield, California.

Project components that have the potential to impact special-status species, their habitat, or other biological resources have been analyzed and recommendations to reduce potentially significant project-related impacts are provided, when deemed necessary.

2.0 BACKGROUND

2.1 Project Description

The proposed project involves constructing six new water supply wells, two 2.0 MG welded steel storage tanks, a booster pump station, and the associated water conveyance pipelines for the Oildale Mutual Water Company (OMWC) as part of their dual water system whereby these facilities will supply landscape water and water for exterior use only. This will serve to save treated water for interior uses and drinking water purposes while using raw water for exterior and landscape uses.

The two 2.0 MG AWWA D100 welded steel storage tanks and booster pump station are planned to be constructed at the existing OMWC property that is located south of Imperial St. and north of Flyover Court on APN 482-170-11 (2.07 acres) just west of Highway 65 in Section 33, T28S, R27E, M.D.B.&M (Figure 1-2). The two 2.0 MG storage tanks will be filled by a dedicated 36-inch transmission main that is connected to the five water supply wells.

The water from the storage tank will then be conveyed to the existing developments to the west by gravity. In addition, the booster pump station will supply water to the area of the commercial and industrial development around Highway 65 and Imperial St. for exterior and landscape purposes. The tank dimensions are anticipated to be approximately 105-ft diameter by 32-ft tall and will be a welded steel storage tank that is epoxy coated on the interior and exterior and rests on a concrete ringwall foundation.

The booster pump station will include above ground steel piping that is fusion bonded epoxy lined and coated, has booster pumps and motors, a 3,000 gallon hydropneumatic pressure tank, electrical, and controls.

Each of the six well sites will be located between the Lerdo-Beardsley Canal and a 1/2-mile west of Zerker Road in Sections 34, 35, & 36, T28S, R26E, and Section 31, T28S, R27E, M.D.B.&M (Figures 3-4). The wells are planned to be drilled to an approximate depth of 1,000-ft and will be equipped with a vertical turbine pump and vertical hollow shaft electric motor and variable speed drive. The site will be fenced with 6-ft tall chainlink fencing with vinyl slats or masonry block walls to match the surrounding residential developments. The well site will be surfaced with 3/4” Class II aggregate base with the limits being the fencing or block wall. The well site will include an electrical meter main, motor control center, PLC,

and SCADA and will be installed on a concrete foundation with a steel shade structure. The well facility will also include a pad-mount emergency back-up generator. The well discharge piping will be 12-inch steel piping with a 3,000-gallon hydropneumatic pressure vessel. A 10-ft x 10-ft metal building enclosure will be installed around the deep well pump and motor for noise attenuation. Well sites will range from 15,000 sq. ft. to 25,000 sq. ft. (0.34 acre to 0.57 acre).

The well discharge piping will transition below ground and to 12-inch C900 PVC pipe prior to leaving the site. The 12-inch C900 PVC piping will connect to the existing dual water system distribution piping that is installed as part of the residential development. One of the well sites is anticipated to be a potable water well. This well will be equipped in similar fashion to that described above, but may also include a wellhead treatment system such as Granular Activated Carbon for the removal of 1,2,3-TCP. The treatment system would be installed on a reinforced concrete foundation and connected to the well discharge piping.

In addition, a 36-inch C905 PVC transmission main will be installed from the tank and booster pump station site at APN 482-170-11 west along Imperial St. approximately 8,900-ft to the Highway 99. The transmission main will be installed with a minimum 36-inches of ground cover. The transmission main will then cross the Highway 99, the UPRR railroad tracks, and the North Kern Water Storage District Lerdo-Beardsley Canal with a 60-inch cased crossing approximately 715-ft in length via the tunnel boring method. In addition, OMWC will extend an existing 12-inch potable water main northwesterly along Saco Road approximately 985-ft and cross the Highway 99, the UPRR railroad tracks, and the North Kern Water Storage District Lerdo-Beardsley Canal with a 16-inch pipeline and a 30-inch cased crossing approximately 340-ft in length via the bore and jack method. The cased crossings will be permitted with the California Department of Transportation (Caltrans), the UPRR Railroad, and the North Kern Water Storage District.

Figure 1: Regional Location Map – Kern County, California (Google Earth Pro 2020).

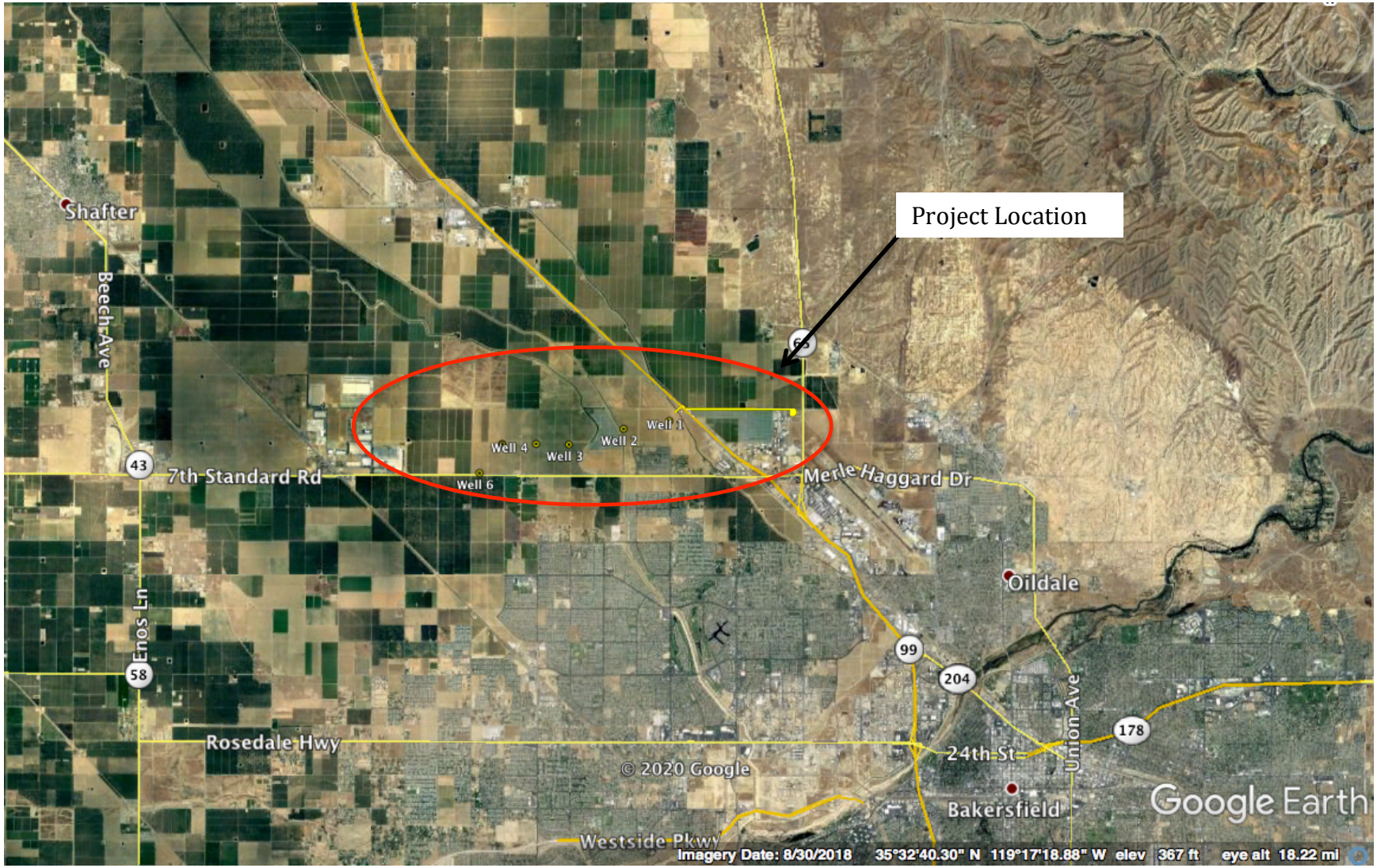


Figure 2: Location Map – Storage tank site and pipeline (Google Earth Pro 2020).

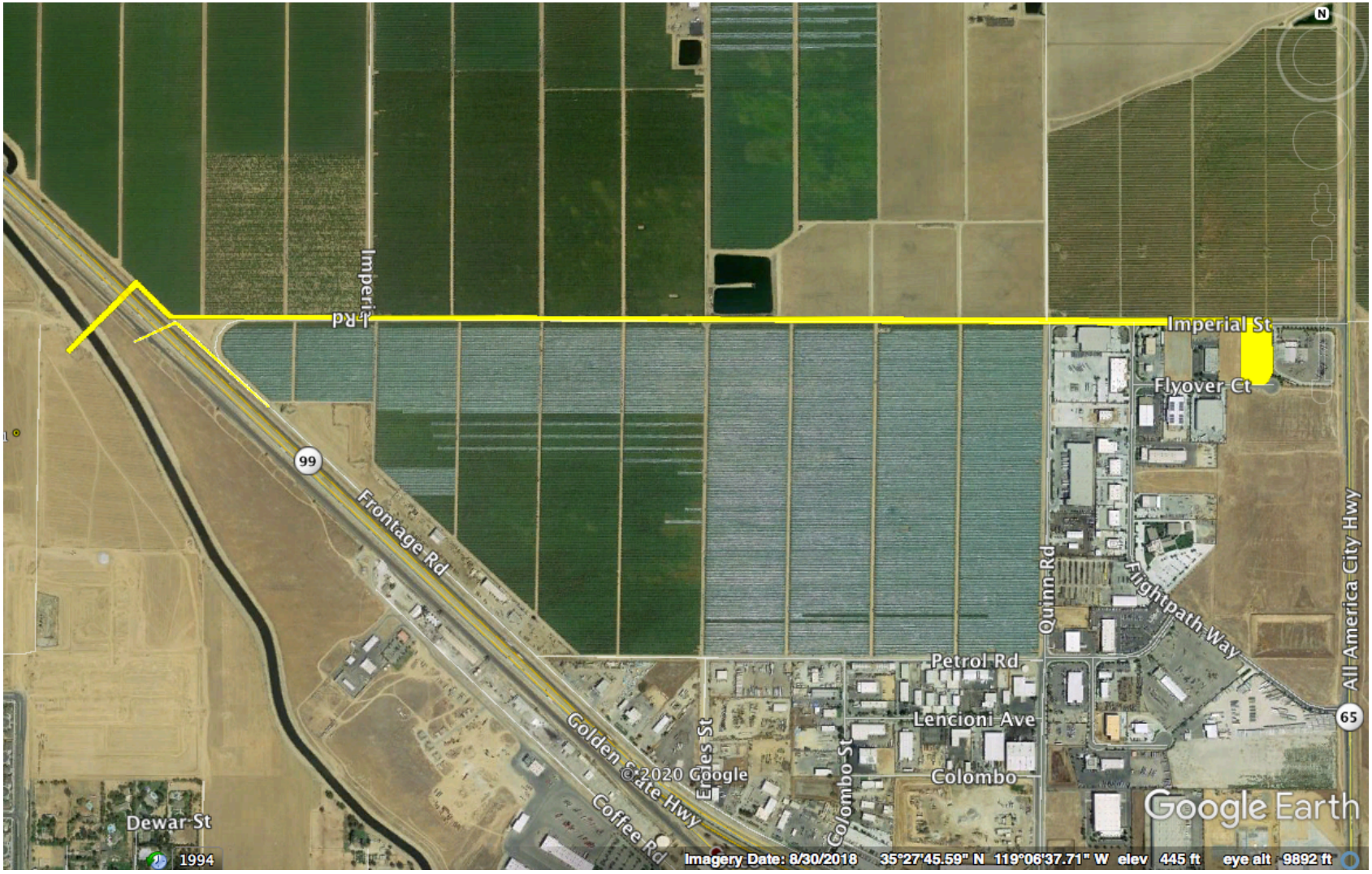


Figure 3. Wells 1 and 2 site location (NTS).

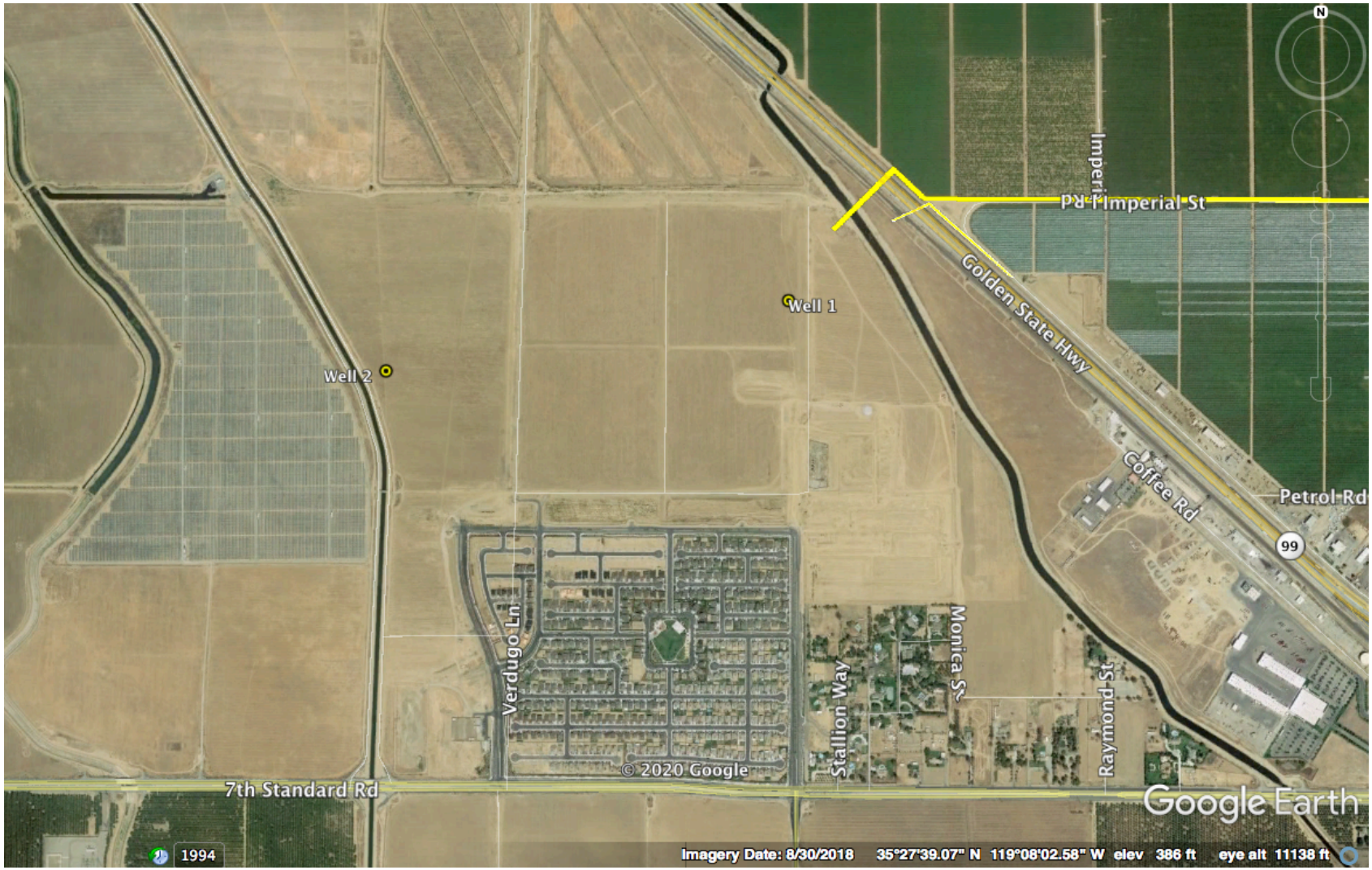
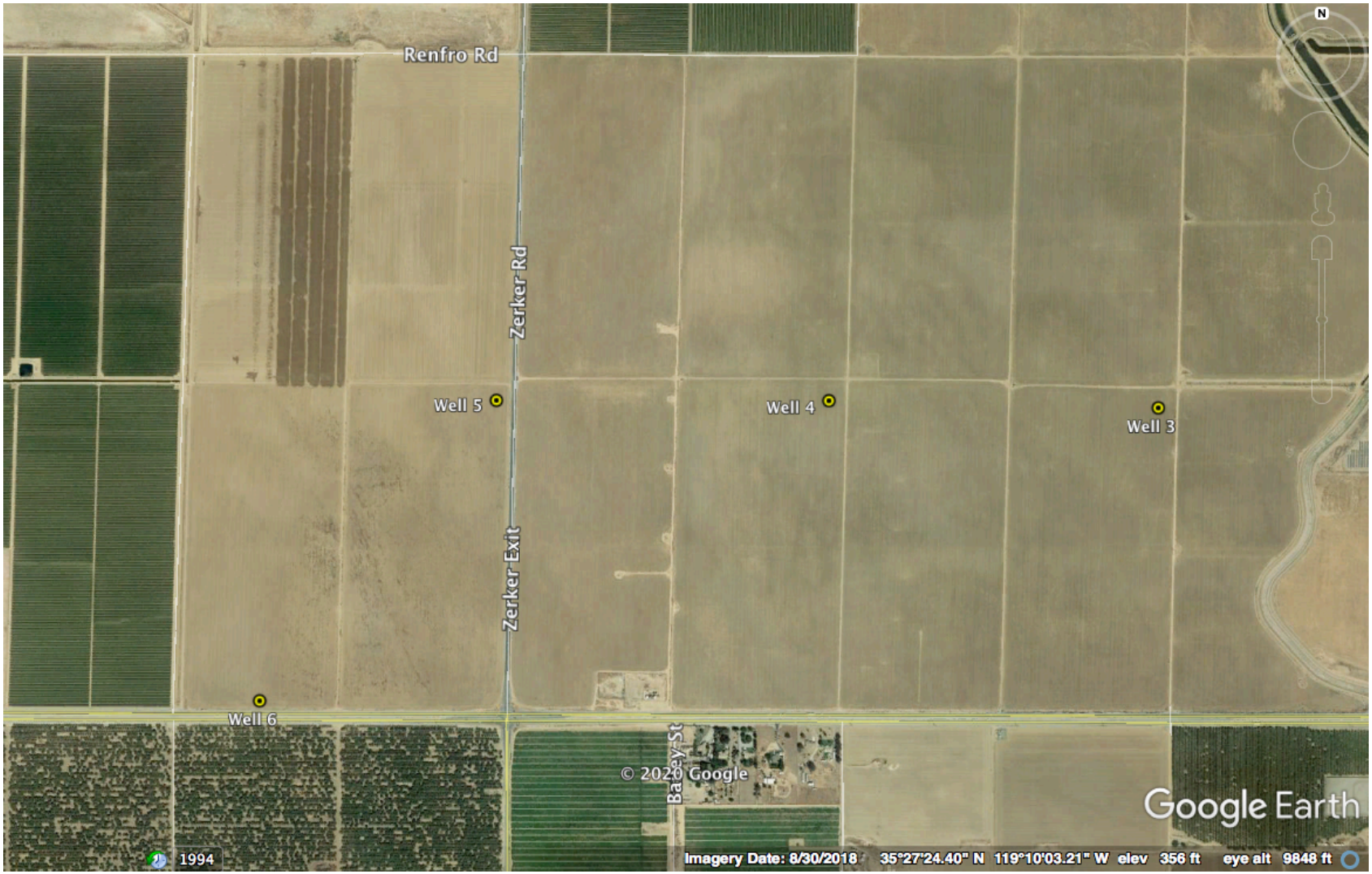


Figure 4. Wells 3, 4, 5, and 6 site locations (NTS).



2.2 Purpose

The purpose of this report is to document the biological resources within the project area and evaluate potential impacts to biological resources including special-status species, if they were identified. If potential impacts were identified, recommendations to reduce those impacts to species are included in this report.

The project site is located within the geographic range of several threatened and/or endangered wildlife and plant taxa. Based on general habitat conditions present in the project area and general vicinity, the following listed special-status species were evaluated: San Joaquin kit fox (*Vulpes macrotis mutica*), giant kangaroo rat, (*Dipodomys ingens*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), blunt-nosed leopard lizard (*Gambelia sila*), Swainson's hawk (*Buteo swainsonii*), Bakersfield cactus (*Opuntia treleasei*), California jewelflower (*Caulanthus californicus),* Kern mallow (*Ermalche parryi* var. *kernensis*), and San Joaquin wooly-threads (*Monolopia congdonii*).

Based on the general location of the project and conditions in the project area, several special-status plant and wildlife species known to occur in the region were eliminated from further consideration due to specific habitat requirements that are not expected and were not observed on or near the project area during the field survey (Appendix D). The species of special concern that have been identified as possibly occurring in the project area were given consideration and evaluated even though these species are not afforded any legal protection.

These wildlife species of special concern that could potentially be in the project area include: Burrowing owl (*Athene cunicularia*), and American badger (*Taxidea taxus*).

Listed plant and animal species are protected through the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Each of these laws, among other provisions, prohibits *take* of listed threatened and endangered wildlife species. CESA further prohibits take of listed rare, threatened, or endangered plants and candidates for listing. Although the definition of *take* under each law varies somewhat, in general, injuring or killing listed species without a permit issued from the United States Fish and Wildlife Service (USFWS) and/or the California Department of Fish and Wildlife (CDFW) is unlawful. Under FESA, harassment and/or harm are also considered *take* for which the USFWS requires a permit. In addition, regulations in the California Fish and Game Code (CFGC) identifies blunt-nosed leopard lizard (BNLL) as a fully protected species.

The site-specific evaluation for these special-status species is discussed more thoroughly in Section 3.0. Other resource considerations (e.g., *no net loss* of wetlands and wetland communities) were considered during the site evaluation.

2.3 Data Collection and Evaluation Methods

Special-status species considered in this evaluation include those that may occur in the project area that have statutory protections, such as federal- and state-listed (rare, threatened, or endangered; fully protected) species and candidates for listing under FESA and/or CESA. In addition, species that are of *concern* to either the USFWS or the CDFW, but have no

formal state of federal status, were given consideration; however, they were not evaluated further in this assessment.

Species may meet the criteria for consideration if a special-interest group, such as the California Native Plant Society (CNPS), has concluded through published data that the species is declining and warrants concern. In addition, consideration was given if potential habitat is present on the project site or immediate vicinity. Species evaluated in this biological resource assessment are collectively referred to as *special-status species*.

The list of special-status species that was evaluated for this proposed project was compiled by consulting pertinent literature, accessing the California Natural Diversity Data Base (CNDDB), USFWS IPaC, and the CNPS Rare Plant Inventory (CNPS 2020) and other pertinent information, including available literature, to complete the list of species considered in this document.

A standard 10-mile (16-kilometer) CNDDB report was generated for the project area (i.e., query of the United States Geological Survey (USGS) 7.5-minute topographic quadrangle) in which the project site is found as well as the quadrangles located within a 10-mile radius of the project footprint (Appendix D). The CNDDB contains records for special-status species and sensitive natural communities that have been reported by researchers, consultants, literature, and other entities deemed reliable sources by the CDFW and are updated electronically on a monthly basis. The potential for the occurrence of each species/natural community in the report for the USGS quadrangle containing the project site was evaluated.

Biologist Waring Laurendine, Laurendine Biological Consulting, LLC conducted a reconnaissance-level survey on November 8, 2020. In areas that warranted foot surveys, linear belt transects spaced 100 ft. apart were walked with the intent to visually inspect 100% of the project site. In addition, driving surveys along the roadside edge were also completed. Direct observations of special-status wildlife species and important habitat elements for special-status plants and wildlife were noted if encountered. All plant and wildlife taxa observed during the surveys were identified to the greatest extent possible.

Subsequent to conducting the reconnaissance-level field survey, special-status resource occurrence information from the existing databases and literature was reviewed against field survey results to complete an occurrence evaluation. Potential impacts to each identified special-status resource were compiled based on this occurrence evaluation. If potentially significant impacts were identified during the evaluation process, recommendations for reducing these impacts are included in this report. The sources of these recommendations include agency guidelines and protocols, previously prepared environmental documents for similar projects, and the biologist's experience and professional judgment.

3.0 EXISTING BIOLOGICAL ENVIRONMENT

3.1 General Site Conditions

The water storage and treatment facility (Tank Site) is located in a commercial area just west of Highway 65 on a 2.07-acre parcel (APN 482-170-11). The site has had prior disturbance grading and leveling of the site and has some infrastructure installed (Appendix A).

The water transmission main is located along Imperial St. in a Kern County road right-of-way and will head west. Surrounding land use includes grape vineyards until Highway 99 corridor. From east to west, the project will be directionally bored below Highway 99, railroad tracks, and Lerdo-Beardsley Canal. The 16-inch pipeline along Saco Rd. will make use of an existing casing underneath Highway 99, railroad tracks, and will emerge before the Lerdo-Beardsley Canal. West of Lerdo-Beardsley Canal is a residential development and this is where the 36-inch pipeline will tie-in to existing infrastructure. In addition to the water lines, six water well locations were surveyed. All well locations were located in highly disturbed sites (Appendix A).

No native tree species were noted and the small bit of vegetation that was observed is consistent with disturbed California grassland (non-native grassland). The surrounding land use is primarily agricultural, but some commercial and residential areas are present. Appendix A provides photographs depicting current site conditions along the project. Appendix B provides the project's engineered site plans.

According to the USDA Natural Resources Conservation Service soil survey maps, six different soil map units are present. The project area is comprised of Driver coarse sandy loam, 0 to 2 percent slopes, Delano sandy loam, 1 to 5 percent slopes, Kimberlina fine sandy loam, 0 to 2 percent slopes MLRA 17, Milham sandy loam, 0 to 2 percent slopes MLRA 17, Wasco sandy loam, and Water (Appendix C).

3.2 Special-status Biological Resources

Sections 3.2.1 and 3.2.2 discuss special-status plant and wildlife species identified as potentially occurring in the vicinity of the project (Appendix D), or those that warrant additional discussion due to regional sensitivity and/or potential impacts from the proposed project. This discussion is based on available literature regarding special-status species and LBC's professional experience in the project area (Section 5.0). Species initially evaluated, but eliminated from further consideration are included only in Appendix E.

3.2.1 Special-status Plant Species

Evaluation of potential project-related impacts to special-status plant species relies on a combination of literature reviews, species identification, elevation, soil types, and the habitat community in which the project area occurs. Appendix E provides the results of the literature review for sensitive plant species that may occur in the project area.

A brief description of the special-status plant species with the potential to occur in the project area is included in the following paragraphs. Appendix E provides the results of the literature review for sensitive plant species that may occur in the project area.

California jewelflower (*Caulanthus californicus*)

California jewelflower, a member of the mustard family (Brassicaceae), is an herbaceous annual that branches from the base, with upper leaves clasping the succulent stems. Plants reach a height of 6 to 15 inches (15–38 centimeters). Foliage is gray-green, with heart-shaped clasping stem leaves and wavy margined strap-shaped basal leaves. Unopened flowers appear

deep maroon in color. Open flowers are white to greenish-yellow. Habitat for this species is non-alkaline to slightly alkaline sandy loam soils of relatively undisturbed grassland communities below 3,000 feet in elevation (Al-Shehbaz 2016).

Seeds begin to germinate in the fall, and seedlings may continue to emerge for several months. The seedlings develop into rosettes of leaves during winter months, after which stems elongate and flower buds appear in February or March. Translucent white flowers with purple to green tips may continue blooming as late as May if rainfall and temperatures are favorable (USFWS 1998). It is thought that this species forms a persistent seed bank, but seeds appear to germinate only when exposed to conditions simulating prolonged weathering (Taylor & Davilla 1986). Seed dispersal agents are unknown, but may include gravity, seed-eating animals such as giant kangaroo rat (GKR), wind, and water.

Historically, the range of the species included the upper San Joaquin and adjacent valleys from Coalinga in the northwest to the Cuyama Valley in the southwest. Of 55 historical locations, approximately 20 extant populations remain (CNPS 2010b). Recently, extant populations have been found on the Carrizo Plain in San Luis Obispo County, and in the Kreyenhagen Hills of Fresno County. An attempt has been made to establish an artificial population at the Paine Wildflower Preserve, Kern County; however, this population has not been successful (CNPS 2010b; USFWS 1998).

Kern mallow (*Eremalche parryi* var. *kernensis*)

Kern mallow is an erect annual of the mallow family (Malvaceae). Plants have either bisexual or pistillate flowers. The fruit consists of 7-19 indehiscent, unwinged, one-seeded segments. The leaves are deeply 3-5 palmately-lobed or parted. Habitat includes eroded hillsides and alkali flats with non-native grassland, saltbush scrub, juniper woodland, or ephedra scrub from 230-500 feet in elevation.

The taxonomic characters that separate Kern mallow from Parry's mallow (*Eremalche parryi*) (Bates 1993) are complicated. Hickman (1993) classified this taxon as a subspecies of *E. parryi*. Others have kept Kern mallow as *E. kernensis* (USFWS 1998; CNPS 2020). A complex breeding system and diverse morphology have made definitive classification difficult. Another closely related species that also occurs in some areas with both Kern mallow and Parry's mallow is desert mallow (*E. exilis*). Using the historic strict definition of *E. kernensis* (as in USFWS (1998)), Kern mallow was considered as white-flowered plants known only from the area known as Lokern in western Kern County plus populations of pink flowered plants in the Buena Vista Valley, Elk Hills, Lost Hills, McKittrick Hills, Stockdale, and the Temblor Range in Kern County. Subsequently, many herbarium specimens previously identified as *E. kernensis* were found to have been misidentified and were actually *E. exilis*. Upon annotation of approximately 15 years of records for the taxon, Cypher (2002a, 2004) truncated the range to a narrow band along Lokern Road in Kern County. The USFWS currently accepts a definition of the species that includes all populations that exhibit both perfect and pistillate flowers (known as gynodioecy), regardless of flower color. *E. kernensis* is the only member of the genus to exhibit gynodioecy (USFWS 2013).

Historically, populations of this species were thought to be restricted to a small area within the Lokern area. However, based on recent studies the range is now considered to include populations from the Lokern area and several additional western Kern County locations as

well as populations that have been verified based on herbarium collections in San Luis Obispo, Santa Barbara, Ventura, and Tulare counties (USFWS 2013).

San Joaquin wooly-threads (*Monolopia condonii*)

San Joaquin wooly-threads, a member of the Asteraceae family, is a small, inconspicuous annual, which may be 1 to 10 inches (2.5–25 centimeters) in height at maturity. Stems are multiple, decumbent and often somewhat succulent. Leaves and stems are typically loosely floccose to woolly-haired. Leaves are 1.5 inches (4 centimeters) long by about 0.25 inch (0.64 centimeters) wide with wavy margins. Individual flowers are arranged in heads that are clustered towards the ends of branches. Each head has four to seven phyllaries that are commonly black tipped. Tiny yellow ray and disk flowers appear in late February or March. Ray flowers and their achenes are clearly distinguished from those of the disk (Johnson 2016).

Insect pollinators are not required for seed-set of this species. However, animals may be important to this plant species in other ways. For example, GKR activity contributes to greater plant size and flower head production in San Joaquin woolly-threads where the two species co-occur, probably by increasing available soil nutrients and reducing competition from other plants. The microhabitat offered by GKR *precincts* (burrow systems) also contributes to earlier seed germination and maturation of San Joaquin woolly-threads, possibly because precinct surfaces are warmer than the surrounding area during the winter months (USFWS 1998).

San Joaquin wooly-threads are found in valley grassland habitat types with silty sand or sandy loam soils at elevations ranging from 400 to 1,200 feet (122–366 meters). Valley saltbush is often the dominant shrub in these habitat types. The preferred microhabitat for this species consists of areas with reduced annual grass competition. It is generally not found where annual grasses are extremely dense and tall (Taylor 1989). This species is somewhat prostrate, allowing it to persist under grazing pressure. Known extant populations in Kern County occur along the Kern River near I-5, near Lost Hills, and on the Belridge Plain (USFWS 1998).

Bakersfield cactus (*Opuntia basilaris* var. *treleasei*)

Bakersfield cactus (*Opuntia basilaris* var. *treleasei*) is a beavertail-type cactus with bright, magenta-pink flowers. It generally flowers between April and May. Like other beavertail cacti (*Opuntia* species), Bakersfield cactus is a perennial with fleshy, flattened, green stems (pads). The pads of Bakersfield cactus vary in outline from rounded, heart-shaped, or diamond-shaped to nearly cylindrical. The pads differ from the common beavertail cactus in that Bakersfield cactus has spines. Spine length is highly variable through the range of this cactus. Bakersfield cactus occurs primarily on sandy soils of alluvial plains, washes, and ridges, in grassland and saltbush scrub vegetation.

Although it was once common from just north of Bakersfield, and south along the western flank of the foothills to the vicinity of Wheeler Ridge, much of the cactus has been eliminated through urbanization and disking of grazing lands. Remaining populations are fragmented, occurring in pockets which have been less disturbed

(USFWS 1998).

Suitable soils for some of the special-status plant species are present within the survey area. The field survey completed by LBC was not conducted during the optimal blooming period for annual special-status plant species. Of the listed species evaluated, California jewelflower, Kern mallow, San Joaquin wooly-threads, and Bakersfield cactus have not been recorded in the vicinity of the project location; no impacts to special-status plant species are anticipated.

Other special-status plant species were eliminated from further consideration, because project site conditions do not provide potential habitat or the site is located outside the known range for the species.

3.2.2 Special-status Wildlife Species

A brief description of the special-status wildlife species with the potential to occur in the vicinity of the project is included in the following paragraphs. Appendix E provides the results of the literature review for sensitive wildlife species that may occur in the project areas.

Based on the anticipated impacts and conditions in the vicinity of the project, five special-status wildlife species have the potential to be directly or indirectly impacted by the project and require further impact evaluation.

Blunt-nosed leopard lizard (*Gambelia sila*)

The BNLL is a relatively large lizard in the Iguanidae family. It has a long, regenerative tail, long and powerful hind limbs, and a short, blunt snout (Stebbins 1985). Adult total length may reach up to 13 inches (33 centimeters). Coloration consists of a light grayish, tan, or brown background with a conspicuous pattern of dark overlaying spots and/or pale crossbars. During the spring courtship season both sexes may develop reddish markings on the sides, tail, and ventral surfaces. Juveniles usually show a similar, but more yellowish pattern (USFWS 1998).

BNLL are active during the day, primarily between the months of April and October. Peak daily activity usually occurs when air temperatures are between 75 and 95 °F. Animals overwinter underground in rodent burrows. BNLL feed primarily on insects (particularly grasshoppers, crickets, and moths), other lizards, and occasionally plant material (USFWS 1998).

BNLL were historically distributed over the San Joaquin Valley and in adjacent lower foothills, plains, and valleys. Currently, this species is found only in the San Joaquin Valley. It inhabits sparsely vegetated plains, lower canyon slopes, valley floors, and washes. Associated vegetation may include a variety of grasses, saltbush, golden bush, iodine bush, and seep weed (USFWS 2010).

Giant kangaroo rat (*Dipodomys ingens*)

This species occupies annual grasslands and sparse shrublands with well-drained, usually loamy or sandy loam soils. Giant kangaroo rats (GKR) favor flat to gently sloping terrain with low annual precipitation, typically 5 inches (13 centimeters) or less in the southwestern San Joaquin Valley, and adjacent plateaus and valleys in the Inner Coast Ranges. The species is found from elevations of about 300 to 2,900 feet (91–884 meters). Little extant habitat remains at elevations below 650 feet (198 meters) and few colonies are located above 2,500 feet (762 meters).

GKR *burrow systems* (precincts) are distinctive due to the size and orientation of individual entrances, and the presence of cleared vegetation in the vicinity of the system. Precincts may include one to several burrow openings and a colony may consist of two to thousands of precincts. Burrows of two types may be observed within GKR precincts: hose with horizontal burrow openings, and those with vertical burrow openings. Horizontal burrow openings are similar in appearance compared to other kangaroo rats; however, these openings are usually quite large in comparison to other species. Other characteristics of GKR precincts include tracks from their distinctively large feet and tail drags, haystacks of seeds drying near burrows, and large scat near burrow entrances. Individual precincts are usually connected to other precincts by well-worn paths and are relatively easy to detect, even from a distance. This species is nocturnal and detection of characteristic burrow systems is used as a method of determining potential presence. When sign of presence is detected, small mammal trapping is needed to verify the species is actually present.

GKR originally occurred throughout the San Joaquin Valley from southern Merced County to southwestern Kern County and northern Santa Barbara County. By 1980, conversion of native valley grassland habitats to agricultural uses had reduced extant GKR distribution to approximately 2 to 3 percent of its historic range. The remaining habitat has been broken into six major geographic units, including Lokern. The Cuyama Valley is the farthest south of the identified extant populations of this species. Due to high vulnerability of these small, widely scattered colonies, GKR are currently federal- and state-listed as endangered (CDFW 2014; ETWP 1987; USFWS 1998; Williams 1980).

Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*)

The Tipton kangaroo rat is one of three subspecies of the San Joaquin kangaroo rat. It is a small rodent, measuring up to 9 inches (23 centimeters) in total length and weighing from 1 to 1.3 ounces (28–37 grams). Its head is large compared to other rodents, with large eyes and small rounded ears. The hind legs are elongated and serve as the principal means of locomotion. Coloration is dark above, changing to whitish ventrally with a white stripe extending laterally across each flank and along the sides of the prominently-tufted tail. The presence of four toes on the feet of the San Joaquin kangaroo rat helps to distinguish it from other sympatric kangaroo rat species that have five toes (CDFG 2005, ETWP 1988; USFWS 2015c).

Tipton kangaroo rats are typically found in scrub and grassland communities in level to near-level terrain having alluvial fan and floodplain soil with sparse grasses and woody vegetation such as iodine bush, saltbush, seep weed, and mesquite. San Joaquin kangaroo rats excavate shallow burrows from which they emerge at night to forage for seeds. They hold seeds in fur-

lined pouches on the sides of their mouth before caching a significant portion for later use.

Little information is available on the population densities of San Joaquin kangaroo rats; however, Tipton kangaroo rats are known to occur in the Tulare Sub-basin extending from Lemoore and Hanford in Kings County southward to the Caliente Wash in central Kern County, and west to the north side of Buena Vista Lake. The California Aqueduct is the approximate line between the ranges of the state- and federal-listed Tipton kangaroo rat and short-nosed kangaroo rat (*Dipodomys nitratoides brevinasus*). Tipton kangaroo rat is treated by the regulatory agencies as occupying lands to the east of the California Aqueduct and north of Buena Vista and Kern Lakes (USFWS 1998; Williams 1985).

Swainson's hawk (*Buteo swainsoni*)

Swainson's hawks are state-listed as a threatened species. They are diurnal and similar in size to the red-tailed hawk, but lack their pale spotting on scapulars. There are two distinct color morphs with variations in between. Light morphs have a whitish forehead and white patch on the throat below the bill, while the rest of the head, sides of the throat, patch on its chest, and all other upper body parts are dark brown. The belly is white with brown barring, and in flight their wings have dark trailing edges that contrast with the light colored leading edges and the belly. Individuals of the dark morph are entirely dark brown, except for a patch under the tail (Brown 2006; Dunn & Alderfer 2008). The Swainson's hawk feeds on mice, gophers, ground squirrels, rabbits, large arthropods, amphibians, reptiles, birds and sometimes fish (Brown & Amadon 1968; Dunkle 1977).

Swainson's hawks are an uncommon resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County and Mojave Desert. Limited breeding has been reported from Lanfair Valley, Owens Valley, Fish Lake Valley and Antelope Valley (Bloom 1980; Garrett & Dunn 1981). The majority of the state's breeding sites are in two disjunct populations in the Great Basin and Central Valley. In the Central Valley, nest sites are strongly associated with riparian forest vegetation, whereas in the Great Basin nest sites are widely distributed in upland habitats (Woodbridge 1998). Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Migrating individuals move south through the southern and central interior of California in September and October, and move north from March through May (Grinnell & Miller 1944; Zeiner et al. 1990).

San Joaquin kit fox (*Vulpes macrotis mutica*)

This species, currently federal-listed as endangered and state-listed as threatened, resembles a small, lanky dog in appearance, with disproportionately large ears containing an abundance of large white, inner guard hairs. The San Joaquin kit fox (SJKF) is the largest subspecies of kit fox, with adults weighing 4.5 to 5 pounds (2–2.3 kilograms). Total length is about 32 inches (81 centimeters), including a black-tipped tail up to 12 inches (30 centimeters) long. Coloration ranges from light buff to grayish along the back and tail; gray, rust, or yellowish along the sides; and white on the belly.

SJKF occur in a variety of open grassland, oak savannah, and shrub vegetation types/habitats as well as agricultural and urban areas in Kern County. In the southern San Joaquin Valley portion of the range, SJKF are generally found in sparse, annual grassland and scrub communities (e.g., valley sink scrub, saltbush scrub). Den characteristics of the taxon vary

across its range. In the southern portion of its range the taxon often creates dens with two entrances. Natal dens generally have multiple entrances. Entrances are usually 8 to 10 inches (20–25 centimeters) in diameter and are normally higher than wide, but kit foxes can utilize dens with entrances as small as 4 inches (10 centimeters) in diameter. Kit foxes do not typically excavate their own dens, but rather enlarge the burrows of other species, such as California ground squirrels, and change dens on a regular basis. Home ranges for the taxon have been reported by several authors to range from 1 to 12 square miles (1.6–19 square kilometers). In one study, a single kit fox was tracked to 70 dens during a 2-year period (Native Fish and Wildlife 1967; USFWS 1998).

SJKF are primarily nocturnal, but can be seen during the day when activities on the surface get their attention. Potential site occupation is determined based on observation of canid scat within a size range appropriate for this species, and presence of dens that meet the criteria for classification as known or natal/pupping per the USFWS guidelines (USFWS 2011).

Two species of concern that could occur on the project are discussed below:

Burrowing owl (*Athene cunicularia*)

The burrowing owl is a California species of special concern, and documented population declines have occurred in the state since at least the 1970s. It has no federal listing, but is protected by the Migratory Bird Treaty Act (CDFG 2012; CDFW 2015; MBTA 2015).

Adults have bold spotting and barring, and individuals of this species can be distinguished from all other small owls by their long legs. Burrowing owls are diurnal, and during active periods of the year may be observed above ground in the vicinity of their burrows, roosting on the ground or nearby high spots such as berms, fence posts, or shrubs. They have a varied diet that includes insects, small rodents, birds, amphibians, reptiles, and carrion, and there is some evidence that population sizes of California vole (*Microtus californicus*) influence their survival and reproductive success. In California, the species is typically found in close association with California ground squirrels (*Otospermophilus beecheyi*). The squirrels create burrows that are used by burrowing owls as year-round shelter and seasonal nesting habitat; however, burrowing owls may also use human-made structures such as culverts, corrugated metal pipes, debris piles, or openings beneath pavement as shelter and nesting habitat.

Within California, burrowing owls are found throughout the Central Valley, in the San Francisco Bay Area, Carrizo Plain, and Imperial Valley. The Central Valley population is a year-round resident in annual and perennial grasslands or other vegetation communities that support little to no tree or shrub cover. The state of California is considered an important wintering ground for migrants, whose burrowing owl population is augmented during the winter season (CDFG 2012; Dunn & Alderfer 2008; Shuford & Gardali 2008).

American badger (*Taxidea taxus*)

This species is a low, squat animal with conspicuous silver-tipped dorsal fur and a short, black-tipped tail. The most striking visual feature of this species is its striped face, consisting of a median white stripe proceeding from the tip of its nose to the back of its head. Alternating white and dark stripes giving way to bright, white-outlined ears flanks this stripe.

The American badger has short but powerful legs, and the front feet are fitted with long claws that are well suited for digging out the burrows of the rodents on which it feeds. In addition to rodents, their diet includes other small mammals, invertebrates, birds, snakes and carrion. Mating occurs in late summer or early autumn, and litters of two to five offspring are born in early spring.

The historic range of American badgers in California was throughout the state with the exception of the humid coastal forests in Del Norte and Humboldt Counties. Their modern distribution in the lower San Joaquin Valley is restricted to the limited, often isolated tracts of grassland and shrubland habitats. Cultivated lands have been reported to provide little usable habitat for this species. In the 1980s, badgers were believed to be declining throughout California, and their status has not changed.

Badgers are primarily nocturnal animals and infrequently observed directly during daytime surveys; however, they have a fairly distinctive digging style and burrow shape, which is easily detected in the field. Combined with tracks, it is typically the method used to determine presence on a site (Reid 2006; Williams 1986; Zeiner et al. 1990).

3.2.3 Critical Habitat

The project does not occur in any area designated as critical habitat for listed species.

3.3 Field Surveys

Conditions on the project site and buffer zone were evaluated to ascertain potential for special-status plant and animal species occurrence, identify recommendations for species avoidance, and determine whether focused surveys were needed to further specify species presence. Figures 2-3 illustrate the project areas that were surveyed. Complete floristic surveys meeting CDFW protocol were not conducted (CDFG 2009).

3.3.1 Field Survey Results

A small area of non-native grassland between the railroad tracks and Lerdo-Beardsley Canal was identified; however, the majority of the project occurs on lands that have had extensive ground disturbance (Imperial St. and Saco Rd. roadside edge, a residential subdivision, and active agricultural fields). Suitable soils for some of the special-status plant species are present within the project area; however, these have been disturbed in the project area. The reconnaissance-level field survey completed by LBC was not conducted during the optimal blooming period for some special-status plant species; however, based on the amount of disturbance encountered during the field survey, they would not be expected to occur. A list of plants and wildlife species observed during the field surveys is provided in Tables 1 and 2. No threatened or endangered species were observed during the field survey.

The tank storage site is adjacent to a parcel that has several California ground squirrel burrows, several of which are large enough to be considered SJKF potential dens (Figure 5).

Figure 5. Potential San Joaquin kit fox dens.

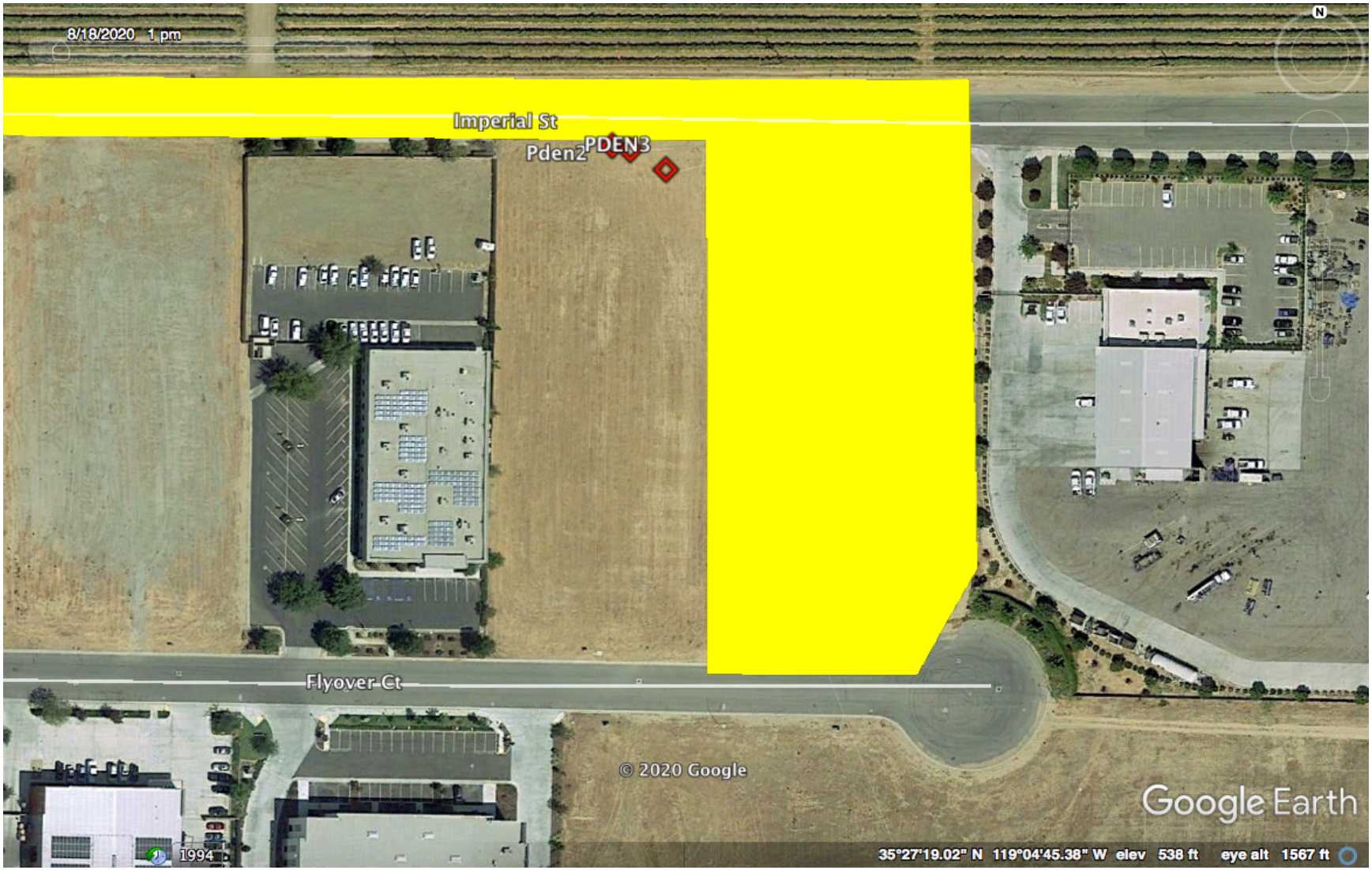


Table 1: Plants Observed During the Preconstruction Survey Conducted for the OMWC 36-inch Water Main Project

Scientific Name	**Common Name**
Asteraceae	
Baccharis salicifolia	Mulefat
Erigeron canadensis	Horseweed
Lactuca serriola	Prickly lettuce
Boraginaceae	
Amsinckia intermedia	Common fiddleneck
Chenopodiaceae	
Salsola sp.	Russian thistle
Malvaceae	
Malva parviflora	Cheeseweed mallow
Poaceae	
Bromus madritensis ssp. *rubens*	Red brome
Cynodon dactylon	Bermuda grass
Poa annua	Annual blue grass
Schismus arabicus	Mediterranean grass
Solanaceae	
Datura wrightii	Jimsonweed
Solanum elaeagnifolium	Silverleaf nightshade

Table 2: Wildlife Observed During Surveys Conducted for the OMWC 36-inch Water Main Project

Common Name	**Scientific Name**
Birds	
Red-tailed hawk	*Buteo jamaicensis*
House finch	*Carpodacus mexicanus*
Common raven	*Corvus corax*
American coot	*Fulica americana*
Western kingbird	*Tyrannus verticalis*
Mourning dove	*Zenaida macroura*
Mammals	
Black-tailed jackrabbit	*Lepus californicus*
California ground squirrel	*Otospermophilus beecheyi*
Audubon's cottontail	*Sylvilagus audubonii*
Botta's pocket gopher	*Thomomys bottae*

During the field investigation, no potential, known, or natal dens for SJKF were observed on the project site; however, several burrows were identified on the adjacent parcel to the west of the storage tank site that could serve as a SJKF potential dens.

No evidence of nesting raptors (e.g., burrowing owl, or Swainson's hawk) was observed during the survey. No Swainson's hawk nests or nesting habitat is available on the project site; however, burrowing owl could make use of the ground squirrel burrows on the project. Furthermore, the project site does afford limited foraging opportunities for these species (e.g., agricultural fields).

No burrows typical of *Dipodomys* sp. (e.g., giant kangaroo rat and Tipton kangaroo rat) were observed. The burrows present were those of California ground squirrel and gopher mounds.

Because of the high disturbance in the project area, the lack of small mammal burrows, and the isolated remnant non-native grassland parcel from know populations, BNLL is not expected to occur on this project.

4.0 IMPACTS AND MITIGATION MEASURES

As noted in this report, wetlands, special status plants and animals (i.e., threatened and endangered species, candidate species for threatened or endangered status, and species of special concern), and animal movement corridors are all biotic resource issues that may be regulated according to provisions of federal and state laws and/or local policies. These issues can affect how a property is used or developed. The discussion below addresses likely impacts to sensitive biological resources resulting from the proposed development. This discussion recognizes that not all impacts are significant and, therefore, establishes the criteria by which significance is determined. The discussion also examines state and federal laws that determine how sensitive habitats are developed.

4.1 SIGNIFICANCE CRITERIA

General plans, area plans, and specific projects are subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of propose projects on the environment before they are carried out. For example, site development may require the removal of some or all of its existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, and other conditions could potentially replace those species formerly occurring on a site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed.

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they

would:

- 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;

- 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;

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- 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;

- Reduce substantially the habitat of a fish or wildlife species, including causing a fish or wildlife population to drop below self-sustaining levels or threaten to eliminate an animal community;

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

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a "mandatory findings of significance" if the project has 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, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

4.2 RELEVANT GOALS, POLICIES, AND LAWS

4.2.1 Threatened and Endangered Species

State and federal endangered species legislation has provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as "species of special status." Permits may be

required from both the CDFG and USFWS if activities associated with a proposed project will result in the "take" of a listed species. "Take" is defined by the state of California as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" (California Fish and Game Code, Section 86). "Take" is more broadly defined by the federal Endangered Species Act to include "harm" (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

4.2.2 Migratory Birds

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., scc. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Migratory birds and their nests are also protected in California under the provisions of sections 3503 and 3513 of the California Fish and Game Code. Section 3503 of the Fish and Game Code makes it "unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3513 of the California Fish and Game Code makes it unlawful to "take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act."

4.2.3 Birds of Prey

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

4.2.4 Bats

Section 2000 and 4150 of the California Fish and Game Code states that it unlawful to take or possess a number of species, including bats, without a license or permit as required by Section 3007. Additionally, Title 14 of the California Code of Regulations states it is unlawful to harass, herd, or drive a number of species, including bats. To harass is defined as "an intentional act that disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering."

4.2.5 Wetlands and Other Jurisdictional Waters

Natural drainage channels and adjacent wetlands may be considered “waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts. Jurisdictional waters generally include:

• 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;

• All interstate waters including interstate wetlands:

• 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;

• All impoundments of waters otherwise defined as waters of the United States under the definition;

• Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e., the bulleted items above);

• The territorial seas; and

• Wetlands adjacent to waters (other than waters which are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section (i.e., the bulleted items above).

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds. However, the U.S Supreme Court decisions *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers* (referred together as the Rapanos decision) impose a "significant nexus" test for federal jurisdiction over wetlands. In June 2007, the USACE and Environmental Protection Agency (EPA) established guidelines for applying the significant nexus standard. This standard includes 1) a case-by-case analysis of the flow characteristics and functions of the tributary or wetland to determine if they significantly affect the chemical, physical, and biological integrity of downstream navigable waters; and 2) consideration of hydrologic and ecologic factors (EPA and USACE 2007).

The USACE has jurisdiction over Waters of the U.S. under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by “ordinary high water marks” on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according

to methodologies outlined in the 1987 *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction under the SWANCC decision, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Wildlife has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFW via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented that protects the habitat values of the drainage in question.

4.3 ENVIRONMENTAL IMPACTS AND MITIGATION

The proposed project is for the improvement and development of water conveyance and delivery systems within the OMWC. Construction of the proposed project will not remove habitat for species; however, the project will incorporate and implement appropriate impact minimization and mitigation measures to reduce impacts that could result from the project with negligible impacts to sensitive species locally and regionally.

The project will create six new wells, a 36-inch and a 16-inch pipeline tie-in to existing conveyance system, and a storage tank facility. The majority of these impacts are considered temporary. Regarding the storage facility and pipeline conveyance, project impacts are to occur on disturbed parcels along the roadside of Imperial St. and Saco Rd. Five of the well sites are located on active agricultural lands and the sixth well is in a residential development.

Impacts associated with development of the project are considered temporary. Development of the well locations and storage tank facility are considered permanent, but no habitat is associated with their development. As mentioned previously, the small area of non-native grassland will be directionally bored from below for the 36-inch pipeline and the receiving pit for the 16-inch pipeline will be located in the non-native grassland parcel (a 40 ft. x 40 ft. [0.04 acre] temporary disturbance).

4.3.1 Potential Project Impacts from Habitat Modification to Special Status Plant Species

Potential Impacts. Crushing and/or removal from vehicle traffic and clearing activities required by the project could impact plants. The listed California jewelflower, San Joaquin wooly-threads, Kern mallow, and Bakersfield cactus were not observed during the field

survey. Please note that complete floristic surveys meeting the CDFW protocol were not conducted (CDFG 2009).

Based on soils, geographic location, and the amount of disturbance along the project, the potentially occurring special-status plant species evaluated were determined to have a very low likelihood of occurrence (Appendix E).

Mitigation. None warranted.

4.3.2 Potential Project Impacts from Modification to habitats for Special-Status Animal Species that may forage or reside on site.

Potential Impacts. Impacts associated with the storage tank site are considered permanent as development will utilize the entire parcel (2.07 acres); however, while the impacts are considered permanent, the parcel is located in a commercial development that already has experienced site grading, leveling, and infrastructure improvements (Appendix A). No habitat for species remains. Potential impacts associated with pipeline installation are considered temporary, as the pipeline routes are along Imperial St. and Saco Rd. in disturbed roadside edges. Site conditions will return upon completion of the pipeline installations.

Temporary impacts to non-native grassland habitat will occur at the receiving pit for the 16-inch pipe between the railroad tracks and Lerdo-Beardsley Canal. Two species (SJKF and burrowing owl) have a remote potential to be impacted by the project. American badger is unlikely to occur, as it is not as tolerant of urban conditions. While no dens or sign of SJKF were observed, the project is within the known range of this species that could travel through the project area or possibly forage nearby. No burrowing owls or their sign were observed, but burrowing owl is known to inhabit ground squirrel burrows and burrows in canal levees, both occur on the project between the railroad tracks and Lerdo-Beardsley Canal.

The temporary loss of foraging habitat (small area of non-native grassland, and agricultural fields) would be considered a less-than-significant impact, as the wildlife identified are relatively abundant regionally so that this loss of foraging habitat will not adversely affect their regional abundance or distribution.

Mitigation. No mitigation is warranted as foraging opportunities are abundant regionally.

4.3.3 Potential Project Effects from Modification to habitats for the San Joaquin Kit Fox.

The habitat present on the project site is suitable for San Joaquin kit fox, a California threatened and a federal endangered species, to utilize. However, while no individuals or their sign (e.g., dens, scat, tracks) were observed during the project's field survey, they could be transient through the project site. In addition, several burrows present on the adjacent parcel of the tank site are large enough to be considered potential dens. If occupied, SJKF might be subjected to increased noise levels and activity that may modify their denning behavior that could be considered a significant impact.

Kit fox are known to occur in the area and given that kit fox are highly motile species, they could utilize the more urban areas as well as the natural habitats in the project area. Construction activities have the potential to temporarily disturb suitable habitat for special-

status species including SJKF, and directly impact individuals if present during construction activities.

Effects on regional abundance and distribution of SJKF are not expected as the project occurs along the disturbed roadside edge of Imperial St. and Saco Rd., active agricultural lands, a disturbed residential development, and a small area of non-native grassland.

Mitigation. A pre-construction survey of the project area shall be conducted to ensure that SJKF have not moved into the area prior to beginning ground disturbance. In addition, potential den monitoring of the adjacent property should be completed, if possible. Should a SJKF establish an occupancy in the project construction area, the guidelines are provided in the 2011 *U.S. Fish and Wildlife Service Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* (Appendix F).

If occupied known or natal dens cannot be avoided through the timing of construction or buffer zones, or should SJKF take up occupancy on the construction site, the applicant shall obtain permission or if required, take authorization, from the USFWS and CDFW to relocate kit fox from the dens or propose an alternative construction method to avoid dens. No occupied den or natal den will be disturbed until the CDFW and USFWS have provided guidance and issued appropriate "take" authorization.

Compliance with the above mitigation measures would reduce impacts to San Joaquin kit fox to a less than significant level and will not likely result in direct or indirect impacts to San Joaquin kit fox.

4.3.4 Potential Project Effects from Modification to habitats for the Swainson's Hawk and Burrowing Owl.

Potential Impacts. Direct affects to Swainson's hawk and burrowing owls could result from loss of suitable nesting or foraging habitat due to construction. Indirect impacts may result from construction noise or other construction activities that could modify nesting or other behaviors. While suitable habitat is abundant regionally for these species, conversion of the Valley grassland habitat would nonetheless constitute a significant impact to nesting and foraging habitat.

Mitigation. Swainson's hawk. None warranted. No Swainson's hawk nesting trees are located in the project area and sufficient foraging habitat is found regionally. Impacts to Swainson's hawk are not anticipated.

Mitigation. Avoidance and Minimization to Individual Owls. In order to avoid impacts to active burrowing owl nests, a qualified biologist should conduct pre-construction surveys for burrowing owls within the construction footprint and within 250 ft. of the footprint no more than 30 days prior to the onset of ground disturbance. These surveys should be conducted in a manner consistent with the CDFW's burrowing owl survey methods (CDFG 2012). If preconstruction surveys determine that burrowing owls occupy the site during the non-breeding season (September 1 through January 31), then a passive relocation effort (e.g., blocking burrows with one-way doors and leaving them in place for a minimum of three days) may be necessary to ensure that the owls are not harmed or injured during construction. Once it has been determined that owls have vacated the site, the burrows can be collapsed, and ground disturbance can proceed. If burrowing owls are detected within the construction

footprint or immediately adjacent lands (i.e., within 250 ft. of the footprint) during the breeding season (February 1 through August 31), a construction-free buffer of 250 ft. should be established around all active owl nests. The buffer area should be enclosed with temporary fencing, and construction equipment and workers should not enter the enclosed setback areas. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. After the breeding season, passive relocation of any remaining owls may take place as described above.

Compliance with the above mitigation measures would reduce impacts to burrowing owl to a less than significant level and will not likely result in direct or indirect impacts to burrowing owl.

4.3.5 Potential Project Effects from Modification to habitats for the Giant Kangaroo Rat.

Potential Impacts. Direct effects to giant kangaroo rat could result from the loss of valley grassland habitat due to construction activities: grading, trenching, drilling, and excavation. During the initial earth moving activities, these species may be killed by being crushed or buried in their burrows. Disoriented and displaced individuals may die while dispersing or be subject to exposure or increased predation common around construction sites where earthmoving displaces and kills small mammals. Vehicles may crush fleeing individuals. Loss of habitat or forage may further result in the death of additional individuals.

Mitigation. No mitigation is required. The project makes use of existing land disturbance that is devoid of burrows made by *Dipodomys* sp. The small area of non-native grassland will be temporarily impacted, as a 16-inch pipeline receiving bore pit (40 ft. x 40 ft.) is required. The 36-inch pipeline will be bored below this habitat. No burrows typical of those made by giant kangaroo rat were observed along the roadside edges, storage tank site, or at the six well locations. Project impacts will be at a less than significant level.

4.3.6 Potential Project Effects from Modification to habitats for the Tipton's Kangaroo Rat.

Potential Impacts. Direct effects to Tipton kangaroo rat will result from the loss of valley grassland habitat due to construction activities: grading, trenching, drilling, and excavation. During the initial earth moving activities, these species may be killed by being crushed or buried in their burrows. Disoriented and displaced individuals may die while dispersing or be subject to exposure or increased predation common around construction sites where earthmoving displaces and kills small mammals. Vehicles may crush fleeing individuals. Loss of habitat or forage may further result in the death of additional individuals.

Mitigation. No mitigation is required. The project makes use of existing land disturbance that is devoid of small mammal burrows. The small area of non-native grassland will be temporarily impacted, as a 16-inch pipeline receiving bore pit (40 ft. x 40 ft.) is required. The 36-inch pipeline will be bored below this habitat. No burrows typical of those made by *Dipodomys* sp. were observed along the roadside edges, storage tank site, or at the six well locations. Project impacts will be at a less than significant level.

4.3.7 Impacts to American Badgers

Potential Impacts. Conversion of natural lands would result in a loss of habitat for the American badger; however, no badgers or their sign were detected during the field survey, but should they move onto the site prior to or during construction, individual badgers could be harmed or injured from construction activities and this would constitute a significant adverse impact.

Mitigation. Pre-construction surveys conducted for burrowing owls and SJKF should also be used to determine the presence or absence of badgers in the development footprint. If an active badger den is identified during pre-construction surveys within or immediately adjacent to the work zone, a construction-free buffer of up to 300 ft. should be established around the den. Because badgers are known to use multiple burrows in a breeding burrow complex, a biological monitor should be present onsite during construction activities to ensure the buffer is adequate to avoid direct impact to individuals. The monitor would be necessary onsite until it is determined that young are of an independent age and construction activities would not harm individual badgers. Once it has been determined that badgers have vacated the site, the burrows can be collapsed or excavated, and ground disturbance can proceed.

Compliance with the above mitigation measures would reduce impacts to American badger to a less than significant level and will not likely result in direct or indirect impacts to badgers.

4.3.8 Disturbance to Nesting Raptors during Construction Activities

While no nesting habitat for raptors is present along the project area, construction activities occurring during the breeding season (February through August) could result in nest abandonment or direct mortality to these birds. This would constitute a significant impact and be in violation of state and federal laws.

Mitigation. A qualified biologist should conduct a pre-construction survey for nesting raptors (particularly burrowing owl) if construction activity is to occur during the breeding season (February 1 through August 31). This survey should be conducted no more than 14 days prior to the initiation of ground disturbing/construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). If nesting raptors are detected on the site during the survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffer (a minimum of 250 ft., up to a maximum of 500 ft. for active nests with eggs or chicks) would be determined at that time and may vary depending on location, species, and the type of work being completed. Buffers should remain in place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents. Pre-construction surveys during the non-breeding season are not necessary, as the birds are expected to abandon their roosts during construction activities.

Compliance with the above mitigation measures would reduce impacts to nesting raptors to a less than significant level and will not likely result in direct or indirect impacts to nesting raptors and other migratory birds.

4.3.9 Natural Communities of Special Concern

No natural communities of special concern identified by the CNDDB, CNPS, or USFWS IPaC occur on the Project.

Mitigation. None warranted.

4.3.10 Degradation of Water Quality in Seasonal Creeks, Reservoirs, and Downstream Waters

The proposed project is for the construction of water storage tanks, treatment facility, pipelines, and six new wells. The majority of the acreage identified for this project has already undergone previous disturbance. Existing commercial parcel, roadside edges, residential development, and agricultural fields all contribute to the degraded conditions of the project site.

M**itigation.** Project impacts to water quality in seasonal creeks, reservoirs, and downstream waters are not expected to result from project development. Implementation of best management practices (BMPs) to protect water quality during the construction of the project will occur as a condition of Stormwater Pollutions Prevention Plan (SWPPP).

Compliance with the above mitigation measures would reduce impacts to seasonal creeks, reservoirs, and downstream waters to a less than significant level and will not likely result in direct or indirect impacts to these waters.

4.3.11 Interference with the Movement of Native Wildlife

Many terrestrial animals need more than one biotic habitat in order to complete all of their biological activities. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles. Terrestrial animals use ridges, canyons, riparian areas, and open spaces for movement between their required habitats. Formal studies of wildlife movement in the area were not performed; however, because project construction is short in duration, disturbance to animal movement would be considered temporary. Furthermore, the proposed project site is not identified in the *Recovery Plan for Upland Species of the San Joaquin Valley, California* (USFWS 1998) as being located in the vicinity of an area identified where linkages should be pursued.

Mitigation. None required.

4.3.12 Conflict with Local Policies or Ordinances Protecting Biological Resources

The proposed project is not expected to conflict with the goals or policies of Kern County General Plan and recent updates.

Mitigation. None warranted.

4.3.13 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved Local, Regional, or State Habitat Conservation Plan.

The project site is not located on or adjacent to an environmental preserve. The project occurs just outside the boundary of the Metropolitan Bakersfield Habitat Conservation Plan; however, the installation and operation of the wells, storage tanks, and pipelines will not conflict with this plan or any other local, regional, or state habitat conservation plan.

Mitigation. No mitigation is required.

4.3.14 Disturbance to Jurisdictional Waters

A preliminary wetland delineation was not conducted; however, a sufficiently thorough investigation was conducted so that any areas meeting the technical criteria of jurisdictional wetlands (i.e. drainages and seasonal pools) would be identified. Review of the United States Fish and Wildlife Service Wetlands Geodatabase did not indicate the presence of wetlands within the project area. The project is not expected to result in impacts to jurisdictional wetlands or riparian habitats. Therefore, the project is expected to result in a less than significant impact to riparian habitats, Waters of the U.S., and Waters of the State.

Mitigation. None required.

In addition to the mitigation measures discussed above, the following are BMPs that when implemented will further help to reduce possible impacts to kit fox and other species during construction activities.

• A qualified wildlife biologist shall conduct a sensitive species education program (tailgate briefing) for all project personnel. Topics to be discussed during the briefing shall include: occurrence and distribution of sensitive species in the project area, take avoidance measures being implemented during the project, reporting requirements if incidental take occurs, and applicable definitions and prohibitions under the Endangered Species Act.

• A biological monitor(s) shall be present while ground-disturbing activities are occurring in sensitive habitat; however, no such habitat occurs in the project area. In addition to conducting pre-construction surveys for the project, the biological monitor(s) shall aid crews in satisfying take avoidance criteria and implementing project mitigation measures, will document all pertinent information concerning project effects on sensitive species, and shall assist in minimizing the adverse effects of project activities on sensitive species.

• Biological monitors are empowered to order cessation of activities if take avoidance and/or mitigation measures are violated and will notify an OMWC representative.

• All project vehicles shall be confined to existing roads or prominently staked and/or flagged access routes that are surveyed prior to use. Observed sensitive species and their habitat features such as dens, burrows, nests, etc. shall be flagged as necessary to alert project personnel to their presence. All project-related flagging shall be collected and removed after completion of the project.

• To prevent inadvertent entrapment of species, excavation will include only that amount that

can be worked and backfilled within a single workday. If this is not possible, all open holes, steep-walled holes, or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks (wooden planks should be more no less than 10 inches in width and should reach to bottom of trench). Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.

• All spills of hazardous materials shall be cleaned up immediately.

• Pets are prohibited on the construction site.

• Firearms are prohibited on the construction site.

• All food-related trash, such as wrappers, cans, bottles, bags, and food scraps shall be disposed of daily in containers with secure covers and regularly removed from project sites.

• OMWC shall agree to and appoint a representative who will be the contact source for any employee or contractor who inadvertently kills or injures a threatened or endangered species, who finds a dead, injured, or entrapped individual, or who finds a dead, injured or entrapped threatened or endangered animal species. The representative will be identified during the pre-construction educational briefing.

• All project-related vehicles shall observe a speed limit of 25 mph or less on all except as posted on State and County highway/roads or paved facility roads.

• Appropriate measures shall be undertaken to prevent unauthorized vehicle entry to off-road survey routes in sensitive habitat areas. Signing will be the preferred method to discourage use.

• Work boundaries will be delineated with flagging, lathe stakes, temporary fencing, or other marking to minimize surface disturbance associated with project activities.

• The area of disturbance will be reduced to the smallest practical area, considering topography, placement of facilities, location of burrows, nesting sites or dens, public safety, and other limiting factors.

• Project vehicles shall be confined to existing primary or secondary roads or to specifically delineated project sites (i.e., areas that have been surveyed and described in existing documentation). Otherwise, off-road vehicle travel is not permitted.

• To the extent practicable, previously disturbed areas will be used to stockpile excavated materials, storage of equipment, digging of slurry or borrow pits, trailer placement, vehicle parking, and other surface disturbing actions.

• Project activities shall be minimized during evening hours when some listed species become active and vulnerable to vehicle strikes.

• Any contractor, employee(s), or other personnel who inadvertently kills or injures a threatened or endangered species shall immediately report the incident to their representative. The representative shall contact OMWC representative and, if feasible, a qualified biologist.

OMWC will contact CDFW immediately in the case of a dead, injured, or entrapped listed species. The CDFW contact for immediate assistance is State Dispatch at (916) 445- 0045. State Dispatch will contact the local warden or biologist. The qualified biologist will also document all circumstances of death, injury, or entrapment of sensitive species. The biologist will 1) take all reasonable steps to enable the individual animal to escape should it be entrapped, 2) contact CDFW or other appropriate authorities to identify an approved rehabilitation center and appropriate capture and transport techniques should the animal be injured, and 3) document circumstances of death in writing and if possible photographing dead animal *in situ* prior to moving.

• USFWS and CDFW shall be notified in writing within three (3) working days in the event of an accidental death or injury of a San Joaquin kit fox or other threatened or endangered species. Notification shall include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The USFWS contact for this information is the Endangered Species, Program Field Office, 2800 Cottage Way, Room W-2605, Sacramento, CA 95825, (916) 414-6600. The CDFG contact information is 1416 9th Street, Sacramento, CA 95814, and (916) 654-4262. Any dead or injured kit fox or other threatened or endangered species shall be turned over to the CDFW Environmental Services Division, Fresno Regional Headquarters at (559) 243-4017 at the agency's request. The dead, threatened, or endangered animal can be transported to California State University at Bakersfield or the Endangered Species Recovery Team in Bakersfield for storage and research, if CDFW approves.

5.0 SUMMARY OF FINDINGS

The limited habitat present in the project area has the potential to support the federal- and state listed species identified in Section 3.2 (Appendix D). During the field survey, one listed species (SJKF), and one species of concern (burrowing owl) have the potential to be present on the project; however, none of these species were observed.

Project-related impacts (e.g., construction) could possibly impact foraging habitat; however, based on the location of the project (disturbed roadside edges, storage tank parcel in a developed commercial area, and agricultural fields), the majority of impacts are considered temporary. Because this project would be considered negligible to the overall survival of these species, a decision can be made that the project will have a less than significant impact on listed plant or wildlife species or their habitat.

6.0 LIST OF PREPARERS

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Mr. Laurendine has 35 years of biological consulting experience specializing in wetland delineation, environmental permit regulations, and project construction compliance monitoring in the state of California. He has consulted with a variety of clients including local agencies, large developers, planning firms, attorneys, cities, counties, water districts, and oil and gas companies. Mr. Laurendine earned a Bachelor of Arts Degree in Environmental Biology from Fresno State University in 1984.

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Zacharias, E. H. (2014). Atriplex depressa. In Jepson Flora Project (Ed.), *Jepson eFlora.* Retrieved from http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=76507

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Appendix A

Project Site Photos for the
Oildale Mutual Water Company – 36-inch Water Transmission Main Project



Looking north toward Imperial St. at the storage tank site.



Looking west along Imperial St. The pipeline will be installed in the dirt on the road edge.



Photograph was taken at the intersection of Quinn Rd. and Imperial St. The project pipeline continues west along Imperial St. in grape vineyards.



The pipeline continues west along Imperial St. through grape vineyards.



Looking south at the 16-inch pipeline route along Saco Rd. This portion of the project ties into an existing cased crossing under Highway 99.



Looking west at the 16-inch pipeline receiving bore pit location in the non-native grassland habitat between the railroad track and Lerdo-Beardsley Canal.



Looking east across Lerdo-Beardsley Canal, small area of non-native grassland, and Highway 99. The project intends to utilize an existing crossing at this location.



Looking east near the 36-inch pipe receiving pit location.



Looking west at Well 1 location. The site has had prior disturbance, as it is an active residential development.



Well 2 location, is in a disked field. Photograph taken looking east.



Well 3 location, is in a disked field. Photograph taken looking north.



Well 4 location, in an agricultural field. Photograph taken looking north.



Well 5 location, in a disked agricultural field. Photograph taken east of Zerker Exit, looking south toward 7th Standard Rd.



Well 6 location, agricultural field. Photograph was taken looking east along 7th Standard Rd.

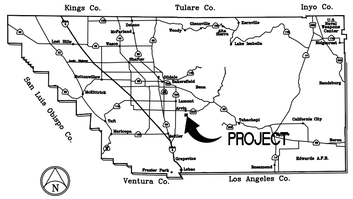
Appendix B

Site Plans

36"ø IRRIGATION WATER TRANSMISSION MAIN PROJECT

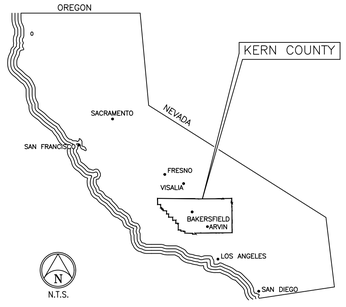
CAUTION:
CONTRACTOR SHALL CALL U.S.A. FOR LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
CALL 1-800-642-2444 48 HRS.

NOTE:
THE ENGINEER HAS MADE A DILIGENT SEARCH OF RECORDS, CONTACTED UTILITY COMPANIES AND OTHERWISE ENDEAVORED TO INDICATE ON THE DRAWINGS ALL UTILITIES WHICH EXIST WITHIN THE LIMITS OF THE WORK OF THIS PROJECT. HOWEVER, THE ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR OMISSIONS. THE CONTRACTOR SHALL CONTACT THE OWNERS OF THE UNDERGROUND FACILITIES AND REQUEST THEY LOCATE AND MARK ON THE GROUND THEIR FACILITIES PRIOR TO BEGINNING WORK. PRIOR TO DELIVERY OF ANY MATERIALS OR BEGINNING EXCAVATION FOR ANY CONSTRUCTION INCLUDING BUT NOT LIMITED TO SEWER LINES, WATER LINES, STORM DRAINS, STREETS, ETC. AND PRIOR TO BRINGING ANY ADDITIONAL MEN OR EQUIPMENT ON THE JOB, THE CONTRACTOR SHALL EXPOSE AND CONFIRM THE EXACT LOCATION AND ANY POSSIBLE CONFLICT WITH THE WORK TO BE PERFORMED. THE ENGINEER SHALL THEN DETERMINE IF ANY REVISIONS TO THE DESIGN ARE REQUIRED AND PREPARE ANY NECESSARY REVISIONS TO THE PLANS PRIOR TO THE CONTRACTOR PROCEEDING WITH ANY WORK ON OR AROUND THE AFFECTED LINE OR LINES. NO EXTRA COMPENSATION WILL BE ALLOWED FOR EXTRA COSTS INCURRED DUE TO THE CONTRACTOR'S FAILURE TO STRICTLY FOLLOW THIS PROCEDURE. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THIS REQUIREMENT APPLIES CONTINUOUSLY AND IS NOT LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL(S) HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL(S).



N.T.S.

COUNTY OF KERN



N.T.S.

STATE OF CALIFORNIA



VICINITY MAP
SCALE: 1" = 600'

SHEET INDEX

COVER SHEET....1
VICINITY MAP....2
PIPELINE PLAN & PROFILE....3-12
CASED CROSSING DETAILS....13
STANDARD DETAILS....14-16

NOTES:

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO, STORM WATER POLLUTION PREVENT PLAN (SWPPP) AND A SJAPCD DUST CONTROL PLAN.

CONTRACTOR SHALL PERFORM A USA LOCATE PRIOR TO COMMENCING ANY CONSTRUCTION.

DEE JASPAR & ASSOCIATES, INC.
CIVIL • ENGINEERS
2730 UNICORN ROAD, BLDG A
BAKERSFIELD, CALIFORNIA 93308
PHONE 661 393-4796
FAX 661 393-4799
15 W. PUTNAM AVENUE, 2ND FLOOR
PORTERVILLE, CALIFORNIA 93257
PHONE 559 791-9286
FAX 559 783-9275

REGISTERED PROFESSIONAL ENGINEER
KRISTOPHER RYAN WILCOX
NO. 77910
EXP. 6/30/21
CIVIL
STATE OF CALIFORNIA

DESIGNED BY: KRISTOPHER R. WILCOX — RCE 77910 (06-30-21)

REGISTERED PROFESSIONAL ENGINEER
CURTIS M. SKAGGS
NO. 60960
EXP. 12/30/20
CIVIL
STATE OF CALIFORNIA

REVIEWED BY: CURTIS M. SKAGGS — RCE 60960 (12-31-20)

REGISTERED PROFESSIONAL ENGINEER
DEE JASPAR
NO. 23042
EXP. 12/31/21
CIVIL
STATE OF CALIFORNIA

APPROVED BY: DEE JASPAR — RCE 23042 (12-31-21)

APPROVED BY: DOUG NUNNELEY, MANAGER, OILDALE MUTUAL WATER COMPANY — DATE

OILDALE MUTUAL WATER COMPANY

KERN COUNTY, CALIFORNIA

AUGUST 2020

BASIS OF BEARINGS:

THE BEARING OF NORTH 89°57'18" WEST SHOWN FOR THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 34, T.31S.,R.29E., M.D.M., ON THE MAP 7-1, BOOK 6 OF FILED MAPS AT PAGE 92, IN THE OFFICE OF THE KERN COUNTY SURVEYOR, STATE OF CALIFORNIA, WAS USED AS THE BASIS OF BEARINGS ON THIS MAP.

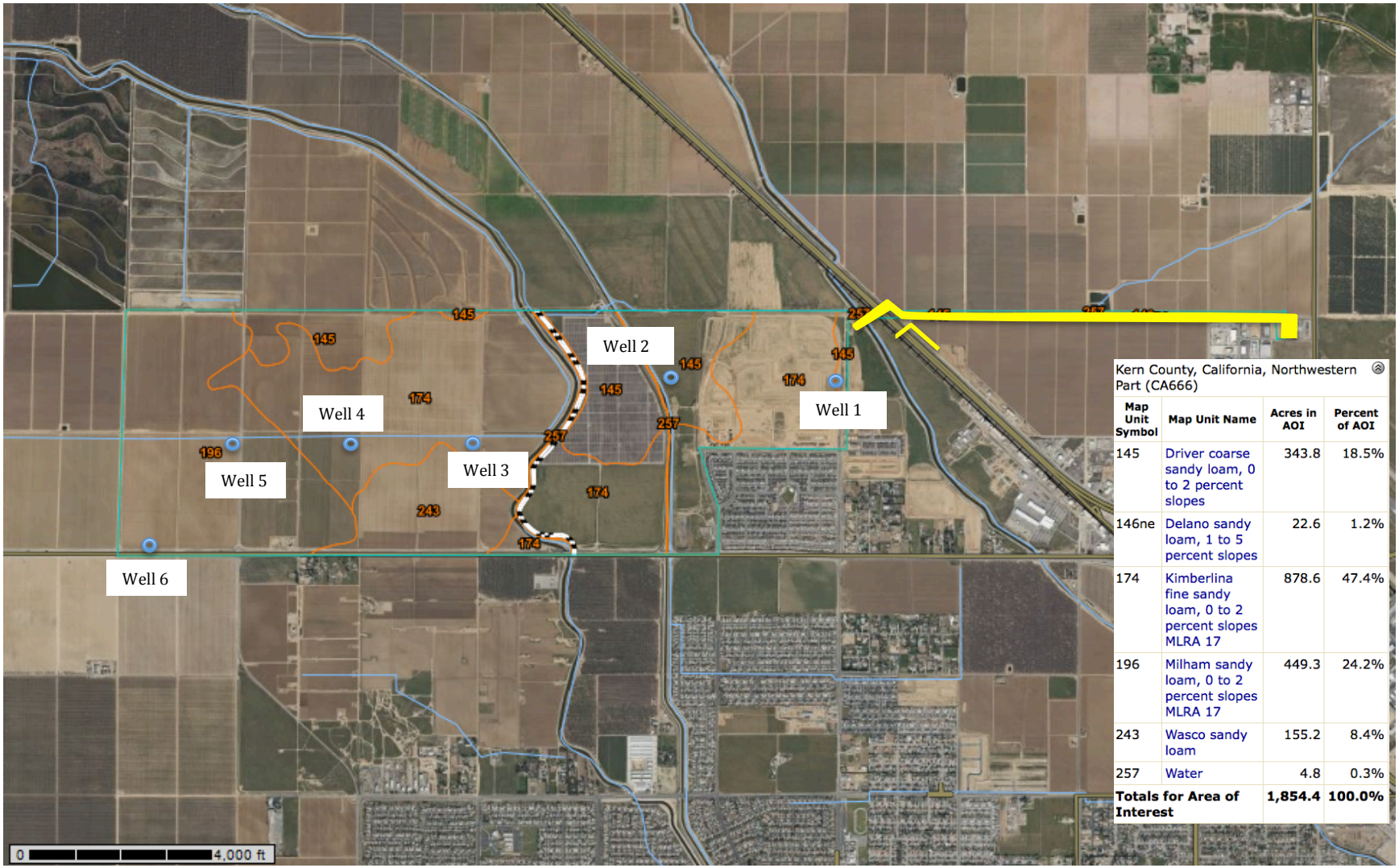
BENCHMARK: 421.00 (EPOCH 2010.00)

NATIONAL GEODETIC SURVEY MONUMENT FU0078 (NAVD 88) DESIGNATION-H 826. SURVEY DISC SET IN THE TOP OF CONCRETE MONUMENT AT THE SOUTHEAST CORNER OF THE INTERSECTION OF TEJON HWY AND SYCAMORE ROAD, 31.0 FEET EAST OF THE CENTERLINE OF TEJON HWY, 46.3 FEET SOUTH OF THE CENTERLINE OF SYCAMORE ROAD, 5.8 FEET SOUTH OF THE SOUTHWEST CORNER OF A CONCRETE IRRIGATION STANDPIPE, 1.3 FEET WEST OF A METAL WITNESS POST.

Appendix C

Natural Resources Conservation Service Soil Survey Data

USDA Natural Resources Conservation Service web soil survey map.



Kern County, California, Northwestern Part (CA666)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
145	Driver coarse sandy loam, 0 to 2 percent slopes	343.8	18.5%
146ne	Delano sandy loam, 1 to 5 percent slopes	22.6	1.2%
174	Kimberlina fine sandy loam, 0 to 2 percent slopes MLRA 17	878.6	47.4%
196	Milham sandy loam, 0 to 2 percent slopes MLRA 17	449.3	24.2%
243	Wasco sandy loam	155.2	8.4%
257	Water	4.8	0.3%
Totals for Area of Interest		**1,854.4**	**100.0%**

Appendix D

California Natural Diversity Database Query,
U.S. Fish and Wildlife Service IPaC Trust Resource Report, and
California Native Plant Society Inventory Results Generated for the Oildale Mutual Water Company 36-inch Water Main Project

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Famoso (3511952) OR North of Oildale (3511951) OR Knob Hill (3511858) OR Rosedale (3511942) OR Oildale (3511941) OR Oil Center (3511848) OR Stevens (3511932) OR Gosford (3511931) OR Lamont (3511838))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Agelaius tricolor tricolored blackbird	G2G3 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	320 1,000	955 S:3	0	0	0	0	0	3	1	2	3	0	0
Ammospermophilus nelsoni Nelson's antelope squirrel	G2 S2S3	None Threatened	BLM_S-Sensitive IUCN_EN-Endangered	310 510	285 S:2	0	1	0	0	0	1	2	0	2	0	0
Anniella grinnelli Bakersfield legless lizard	G2G3 S2S3	None None	CDFW_SSC-Species of Special Concern	330 410	20 S:11	0	0	4	0	0	7	5	6	11	0	0
Anniella spp. California legless lizard	G3G4 S3S4	None None	CDFW_SSC-Species of Special Concern	1,383 1,383	119 S:1	0	0	0	0	0	1	1	0	1	0	0
Arizona elegans occidentalis California glossy snake	G5T2 S2	None None	CDFW_SSC-Species of Special Concern	300 900	260 S:10	0	0	0	0	0	10	10	0	10	0	0
Astragalus hornii var. hornii Horn's milk-vetch	GUT1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	300 400	28 S:12	0	3	2	0	1	6	6	6	11	0	1
Athene cunicularia burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	300 794	2011 S:24	0	3	5	2	1	13	2	22	23	1	0
Atriplex tularensis Bakersfield smallscale	GX SX	None Endangered	Rare Plant Rank - 1A	350 350	3 S:1	0	0	0	0	1	0	1	0	0	0	1
Bombus crotchii Crotch bumble bee	G3G4 S1S2	None Candidate Endangered		362 900	369 S:5	0	0	0	0	0	5	4	1	5	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Buteo swainsoni Swainson's hawk	G5 S3	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	330 421	2535 S:6	0	2	1	0	0	3	2	4	6	0	0
Calochortus striatus alkali mariposa-lily	G3? S2S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	300 300	113 S:1	0	1	0	0	0	0	0	1	1	0	0
Caulanthus californicus California jewelflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley		67 S:1	0	0	0	0	1	0	1	0	0	0	1
Chloropyron molle ssp. hispidum hispid salty bird's-beak	G2T1 S1	None None	Rare Plant Rank - 1B.1	400 400	35 S:2	0	0	0	0	0	2	2	0	2	0	0
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	G3 S2.1	None None		610 610	60 S:1	0	0	0	0	0	1	1	0	1	0	0
Danaus plexippus pop. 1 monarch - California overwintering population	G4T2T3 S2S3	None None	USFS_S-Sensitive	480 600	383 S:4	0	0	0	0	2	2	4	0	2	2	0
Delphinium recurvatum recurved larkspur	G2? S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden	300 990	119 S:6	0	0	3	0	1	2	3	3	5	1	0
Desmocerus californicus dimorphus valley elderberry longhorn beetle	G3T2 S3	Threatened None		450 450	271 S:1	0	1	0	0	0	0	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Diplacus pictus calico monkeyflower	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden		73 S:1	0	0	0	0	0	1	1	0	1	0	0
Dipodomys nitratoides nitratoides Tipton kangaroo rat	G3T1T2 S1S2	Endangered Endangered	IUCN_VU-Vulnerable	300 580	79 S:9	0	2	1	3	0	3	7	2	9	0	0
Elanus leucurus white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	350 350	180 S:1	0	0	1	0	0	0	1	0	1	0	0
Emys marmorata western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	340 470	1398 S:3	0	1	0	0	0	2	3	0	3	0	0
Eremalche parryi ssp. kernensis Kern mallow	G3G4T3 S3	Endangered None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden	317 335	184 S:5	0	0	2	0	0	3	2	3	5	0	0
Eremophila alpestris actia California horned lark	G5T4Q S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	340 350	94 S:2	0	0	1	1	0	0	0	2	2	0	0
Eriastrum hooveri Hoover's eriastrum	G3 S3	Delisted None	Rare Plant Rank - 4.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	300 350	47 S:6	1	1	2	0	2	0	6	0	4	0	2

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Eschscholzia lemmonii ssp. kernensis Tejon poppy	G5T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_USDA-US Dept of Agriculture	600 600	86 S:1	0	0	0	0	0	1	1	0	1	0	0
Eumops perotis californicus western mastiff bat	G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	450 450	296 S:2	0	0	0	0	0	2	2	0	2	0	0
Gambelia sila blunt-nosed leopard lizard	G1 S1	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	40 900	389 S:13	0	2	3	1	0	7	10	3	13	0	0
Gonidea angulata western ridged mussel	G3 S1S2	None None		462 462	157 S:1	0	0	0	0	1	0	1	0	0	1	0
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	G2 S2.1	None None		345 375	56 S:2	0	0	0	0	0	2	2	0	2	0	0
Great Valley Mesquite Scrub Great Valley Mesquite Scrub	G1 S1.1	None None		300 335	7 S:3	0	1	0	0	0	2	3	0	3	0	0
Helminthoglypta callistoderma Kern shoulderband	G1 S1	None None	IUCN_EN-Endangered	375 375	3 S:1	0	0	0	0	0	1	1	0	1	0	0
Imperata brevifolia California satintail	G4 S3	None None	Rare Plant Rank - 2B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive	400 400	32 S:1	0	0	0	0	0	1	1	0	1	0	0
Lasiurus cinereus hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority	400 400	238 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Layia leucopappa Comanche Point layia	G1 S1	None None	Rare Plant Rank - 1B.1 SB_SBBG-Santa Barbara Botanic Garden	850 850	10 S:1	0	0	0	0	0	1	1	0	1	0	0
Lytta moesta moestan blister beetle	G2 S2	None None		560 560	12 S:1	0	0	0	0	0	1	1	0	0	1	0
Lytta morrisoni Morrison's blister beetle	G1G2 S1S2	None None		560 560	10 S:1	0	0	0	0	0	1	1	0	0	1	0
Masticophis flagellum ruddocki San Joaquin coachwhip	G5T2T3 S2?	None None	CDFW_SSC-Species of Special Concern	104 315	96 S:4	0	2	0	0	0	2	2	2	4	0	0
Monolopia congdonii San Joaquin woollythreads	G2 S2	Endangered None	Rare Plant Rank - 1B.2 SB_UCBG-UC Botanical Garden at Berkeley	330 460	111 S:9	0	2	0	0	7	0	7	2	2	7	0
Navarretia setiloba Piute Mountains navarretia	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive USFS_S-Sensitive	600 600	56 S:1	0	0	0	0	1	0	1	0	0	0	1
Onychomys torridus tularensis Tulare grasshopper mouse	G5T1T2 S1S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	300 332	53 S:3	0	1	1	0	0	1	0	3	3	0	0
Opuntia basilaris var. treleasei Bakersfield cactus	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	420 915	62 S:26	0	1	10	7	7	1	11	15	19	0	7
Perognathus inornatus San Joaquin pocket mouse	G2G3 S2S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern	332 900	127 S:11	0	1	0	0	0	10	1	10	11	0	0
Phrynosoma blainvillii coast horned lizard	G3G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	300 320	784 S:3	0	2	0	0	0	1	0	3	3	0	0
Sorex ornatus relictus Buena Vista Lake ornate shrew	G5T1 S1	Endangered None	CDFW_SSC-Species of Special Concern	335 335	7 S:1	0	0	0	0	0	1	1	0	1	0	0
Spea hammondii western spadefoot	G3 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	312 378	1409 S:11	0	3	0	4	0	4	5	6	11	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Stylocline citroleum oil neststraw	G3 S3	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive		84 S:1	0	0	0	0	0	1	1	0	1	0	0
Stylocline masonii Mason's neststraw	G1 S1	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	330 330	7 S:1	0	0	0	0	0	1	1	0	1	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	520 1,400	594 S:5	0	0	1	0	0	4	4	1	5	0	0
Tortula californica California screw moss	G2G3 S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	160 160	15 S:1	0	0	0	0	0	1	1	0	1	0	0
Valley Saltbush Scrub Valley Saltbush Scrub	G2 S2.1	None None		335 340	19 S:2	0	0	0	1	0	1	2	0	2	0	0
Vulpes macrotis mutica San Joaquin kit fox	G4T2 S2	Endangered Threatened		320 1,290	1018 S:85	1	12	11	3	0	58	46	39	85	0	0

United States Department of the Interior

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

In Reply Refer To: December 05, 2020
Consultation Code: 08ESMF00-2021-SLI-0495
Event Code: 08ESMF00-2021-E-01333
Project Name: 36-inch Irrigation Water Transmission Main Project

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

To Whom It May Concern:

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

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2021-SLI-0495

Event Code: 08ESMF00-2021-E-01333

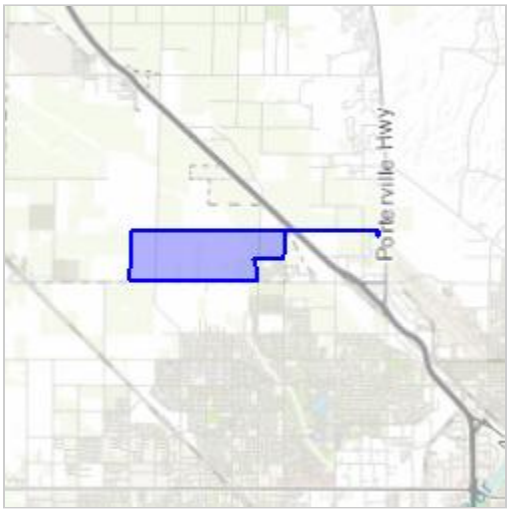
Project Name: 36-inch Irrigation Water Transmission Main Project

Project Type: WATER SUPPLY / DELIVERY

Project Description: The proposed project involves constructing six new water supply wells, two 2.0 MG
welded steel storage tanks, a booster pump station, and the associated water conveyance
pipelines for the Oildale Mutual Water Company (OMWC) as part of their dual water
system whereby these facilities will supply landscape water and water for exterior use
only. This will serve to save treated water for interior uses and drinking water purposes
while using raw water for exterior and landscape uses.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/35.448814595399675N119.1363675455203W



Counties: Kern, CA

Endangered Species Act Species

There is a total of 12 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Mammals

NAME	STATUS
Giant Kangaroo Rat *Dipodomys ingens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6051	Endangered
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered
Tipton Kangaroo Rat *Dipodomys nitratoides nitratoides* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7247 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/40/office/11420.pdf	Endangered

Birds

NAME	STATUS
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Blunt-nosed Leopard Lizard *Gambelia silus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/625	Endangered
Giant Garter Snake *Thamnophis gigas* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf	Threatened

Fishes

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

Crustaceans

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

Flowering Plants

NAME	STATUS
Bakersfield Cactus *Opuntia treleasei*	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/7799	
San Joaquin Wooly-threads *Monolopia (=Lembertia) congdonii*	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/3746	

Critical habitats

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

CNPS California Native Plant Society

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

Plant List

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

Search Criteria

Found in Quads 3511952, 3511951, 3511858, 3511942, 3511941, 3511848, 3511932 3511931 and 3511838;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Allium howellii var. howellii	Howell's onion	Alliaceae	perennial bulbiferous herb	Mar-Apr	4.3	S3	G3G4T3
Astragalus hornii var. hornii	Horn's milk-vetch	Fabaceae	annual herb	May-Oct	1B.1	S1	G4G5T1T2
Atriplex tularensis	Bakersfield smallscale	Chenopodiaceae	annual herb	Jun-Oct	1A	SX	GX
Azolla microphylla	Mexican mosquito fern	Azollaceae	annual / perennial herb	Aug	4.2	S4	G5
Calochortus striatus	alkali mariposa lily	Liliaceae	perennial bulbiferous herb	Apr-Jun	1B.2	S2S3	G3?
Caulanthus californicus	California jewelflower	Brassicaceae	annual herb	Feb-May	1B.1	S1	G1
Chloropyron molle ssp. hispidum	hispid bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.1	S1	G2T1
Clarkia exilis	slender clarkia	Onagraceae	annual herb	Apr-May	4.3	S3	G3
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	4.2	S4	G4
Delphinium recurvatum	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
Diplacus pictus	calico monkeyflower	Phrymaceae	annual herb	Mar-May	1B.2	S2	G2
Eremalche parryi ssp. kernensis	Kern mallow	Malvaceae	annual herb	Jan,Mar,Apr,May(Feb)	1B.2	S3	G3G4T3
Eriastrum hooveri	Hoover's eriastrum	Polemoniaceae	annual herb	(Feb)Mar-Jul	4.2	S3	G3

Eschscholzia lemmonii ssp. kernensis	Tejon poppy	Papaveraceae	annual herb	(Feb)Mar-May	1B.1	S2	G5T2
Goodmania luteola	golden goodmania	Polygonaceae	annual herb	Apr-Aug	4.2	S3	G3
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	3.2	S3S4	G3G4
Imperata brevifolia	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	2B.1	S3	G4
Lasthenia ferrisiae	Ferris' goldfields	Asteraceae	annual herb	Feb-May	4.2	S3	G3
Monardella linoides ssp. oblonga	Tehachapi monardella	Lamiaceae	perennial rhizomatous herb	(May)Jun-Aug	1B.3	S2	G5T2
Monolopia congdonii	San Joaquin woollythreads	Asteraceae	annual herb	(Jan)Feb-May	1B.2	S2	G2
Opuntia basilaris var. treleasei	Bakersfield cactus	Cactaceae	perennial stem succulent	Apr-May	1B.1	S1	G5T1
Stylocline citroleum	oil neststraw	Asteraceae	annual herb	Mar-Apr	1B.1	S3	G3
Stylocline masonii	Mason's neststraw	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
Tortula californica	California screw-moss	Pottiaceae	moss		1B.2	S2S3	G2G3
Trichostema ovatum	San Joaquin bluecurls	Lamiaceae	annual herb	Jul-Oct	4.2	S3	G3

Suggested Citation

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Appendix E

Special-status Plant and Wildlife Evaluation

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
Animals			
Invertebrates			
Bombus crotchii Crotch bumble bee	--/Candidate CE/--	Known to occur primarily in open grasslands and scrublands in California, including the Pacific Coast, Western Desert, Great Valley and adjacent foothills throughout the southwestern portion of the state. The primary food plants for the species include milkweed (*Asclepias* sp.), pincushion (*Chenactis* sp.), lupine (*Lupinus* sp.), clover (*Medicago* sp.), phacelia (*Phacelia* sp.), and sage (*Salvia* sp.).	**Absent.** Suitable habitat does not exist in the project area.
Branchinecta lynchi Vernal pool fairy shrimp	FT/--	Occupies a variety of different vernal pool habitats, from small, clear, sandstone rock pools to large, turbid, alkaline, grassland valley floor pools. They are most frequently found in pools measuring less than 0.05 acres (0.02 hectares). Distribution in the Central Valley ranges from Shasta County to Tulare County. Kern County has no documented occurrences.	**Absent.** Habitat is not present. No aquatic resources were observed on the project site.
Danaus plexippus pop. 1 Monarch – California overwintering population	--/--/	California overwinter populations travel between San Diego and British Colombia. Females deposit eggs on milkweed (*Asclepias* spp.) throughout the migratory range.	**Absent.** Suitable habitat does not exist in the project area.
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT/--	Central Valley riparian forest; nearly always found on or close to its host plant, elderberry (*Sambucus* species).	**Absent.** Suitable habitat does not exist in the project area.
Gonidea angulate Western ridged mussel	--/--	Primarily found in creeks and rivers, but less frequently in lakes. Originally in most of California, now extirpated from central and southern California.	**Absent.** Suitable habitat does not exist in the project area.
Helminthoglypta callistoderma Kern shoulderband	--/--	These aquatic snails are only known from Tulare and Kern Counties, along the lower Kern River canyon and require dead vegetation along the water's edge.	**Absent.** Suitable habitat does not exist in the project area.
Lytta moesta Moestan blister beetle	--/--	Not much information exists on this blister beetle. Known to occur in the Central Valley. Collections described from Blackwell's Corners, Kern County and Brentwood, Contra Costa County. Lytta are nest parasites of solitary bees as the beetle larvae feed on the pollen stores that the bee provides her own larvae.	**Absent.** Suitable habitat does not exist in the project area.
Lytta morrisoni Morrison's blister beetle	--/--	Not much information exists on the Morrison's blister beetle. Known to occur in the Central Valley. Fresno, County, the Carrizo Plains in San Luis Obispo County, near Earilmart and Pixley Nation Wildlife Refuge	**Absent.** Suitable habitat does not exist in the project area.

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
		in Tulare County and from Kern and San Benito counties. Lytta are nest parasites of solitary bees as the beetle larvae feed on the pollen stores that the bee provides her own larvae.	
Fish			
Hypomesus transpacificus Delta smelt	FT/CT	Found only in the Sacramento-San Joaquin Estuary in the interface between salt and freshwater.	**Absent.** Habitat is not present. No permanent aquatic resources were observed on the project site.
Ampibians			
Rana draytonii California red-legged frog	FT/--	Inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 3,936 feet.	**Absent.** Suitable habitat does not exist in the project area.
Spea (=*Scaphiopus*) *hammondii* Western spadefoot	--/SC	Mainly occurs in valley and foothill grasslands of San Joaquin Valley, coast ranges, south into Mexico. Vernal pools or other temporary pools/wetlands are required for breeding usually below 4,472 feet in elevation.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Reptiles			
Emys marmorata Western pond turtle	--/SC	Inhabits permanent or nearly permanent bodies of water in many habitat types. Requires basking and suitable nesting sites.	**Absent.** Suitable habitat does exist in the study area.
Gambelia sila Blunt-nosed leopard lizard	FE, CE, FP	Inhabits sparsely vegetated open grassland saltbush scrub, alkali sink scrub, and wash habitats. Known from San Joaquin Valley, Elkhorn plain, Panoche Valley,	**Possible** Non-native grassland habitat is present; however, with the amount of disturbance in the area and the fact the parcel is isolated from known populations it is highly doubtful this species is present on site. Protocol BNLL surveys were not completed for this project.
Anniella grinnelli Bakersfield Legless lizard	--/--/SC	Southern San Joaquin Valley known from two disjunct areas: The east side of the Carrizo plain and portions of the City Limits of Bakersfield. Microhabitat for this species is poorly known. Other legless lizard species occur in sparsely vegetated areas with moist, loose soil. Often found underneath litter, rocks, and logs.	**Absent.** Suitable habitat does not exist in the project area.
Anniella spp. California legless lizard	--/--/SC	Found in a variety of habitats, generally in moist, loose soil. From Contra Costa County south to San Diego.	**Absent.** Suitable habitat does not exist in the project area.
Arizona elegans occidentalis *California glossy snake*	--/--/SC	Patchily distributed from eastern portion of the San Francisco Bay, Southern San Joaquin valley, coast, transverse, and peninsular ranges, and south to Baja California. Reported on a range of habitats including	**Absent.** Suitable habitat does not exist in the project area.

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
		scrub and grasslands, often with loose or sandy soils.	
Masticophis flagellum ruddocki San Joaquin coachwhip	--/SC	Open dry habitats with little or no tree cover found in valley grassland and saltbush scrub in the San Joaquin Valley.	**Possible.** Suitable habitat is located in the study area, but none were observed during the field surveys of the study area.
Phrynosoma blainvillii Coast (California) horned lizard	--/SC	Occurs in a variety of habitats including annual grassland, valley and foothill woodland, coniferous and riparian, and pine-cypress, in Sierra Nevada below 3,940 feet, but most common in lowlands along sandy washes with scattered low brushes.	**Absent.** Suitable habitat is available for this species. During protocol surveys for BNLL, this species was observed on numerous occasions.
Thamnophis gigas Giant garter snake	FT/--	Highly aquatic usually found in areas with low gradient freshwater marshes, sloughs, drainage canals, irrigation ditches, rice fields, and occasionally in slow-moving creeks. Prefers locations with vegetation close to the water for basking. Known from Chico, Butte, Fresno Counties; but historically further south in the San Joaquin Valley.	**Absent.** Suitable aquatic habitat does not exist in the study area.
Birds			
Agelaius tricolor Tricolored blackbird	--/CT/SC	Occurs near fresh water with dense cattails, or thickets of willows or shrubs. Forages in grassland, wetlands, drainage canals, and upland areas. Found throughout the Central Valley.	**Absent.** Suitable foraging habitat is located in the study area, but lacks nesting habitat. None were observed during the field surveys of the study area.
Athene cunicularia Burrowing owl	--/--/SC	Inhabit dry, open grasslands, rolling hills, desert floors, prairies, savannas, agricultural land, and other areas of open, bare ground. These owls will also inhabit open areas near human habitation, such as airports, golf courses, shoulders of roads, railroad embankments, and the banks of irrigation ditches and reservoirs.	**Possible.** Suitable habitat for this species is available The project site is within the range for this species; however, no burrows/nests or sign were observed during the field surveys.
Buteo swainsoni Swainson's hawk	--/CT	Riparian and sometimes large isolated trees used for nesting; grasslands and agricultural lands used for foraging; in California, breeds primarily in the Sacramento Valley, with occasional nesting to the south through Kern County; migrate through the Central and San Joaquin Valleys to their wintering grounds in South America.	**Possible.** Suitable foraging habitat, but no nesting habitat is available onsite. No Swainson's hawks have been observed during the site visit.
Elanus leucurus White-tailed kite	--/--/FP	Inhabit rolling foothills and valley margins with scattered oaks and river bottomlands or marshes adjacent to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated dense-topped trees for nesting and perching.	**Absent.** Suitable habitat does not exist in the project area.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	T/E	Nests in walnut and almond orchards in California, natural nesting habitat is in cottonwood-tree willow riparian forest. Known populations of breeding western yellow-billed cuckoo are several disjunct locations in California, Arizona, and western New Mexico.	**Absent.** Suitable nesting habitat is not present. In addition, no riparian habitat is available for this species.
Empidonax traillii	FE/CE	Breeds in dense riparian tree and shrub habitat associated with rivers,	**Absent.** Suitable habitat does not exist in the

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
extimus Southwestern willow flycatcher		lakes, and other wetlands.	project area.
Eremophila alpestris actia California horned lark	--/--/WL	Inhabits grasslands, meadows, prairie, deserts and tundra. They frequent open agricultural fields.	**Absent.** Suitable habitat does exist in the project area; agricultural fields and non-native grassland; however, none were observed during the field survey.
Mammals			
Ammospermophilus nelsoni Nelson's antelope squirrel	--/CT	Found in grasslands or open shrublands; formerly more extensive, current range includes southwestern portion of the San Joaquin Valley and in adjacent valleys to the west.	**Absent.** Non-native grassland habitat is present. No San Joaquin antelope squirrels were observed during any site visit.
Dipodomys ingens Giant kangaroo rat	FE/CE	Western side of the San Joaquin Valley, including the Carrizo Plain and the Panoche Valley; grassland and shrub-land habitats with sparse vegetative cover and soils that are well-drained, fine sandy loams with gentle slopes.	**Absent.** Non-native grassland habitat is present, but no sign of kangaroo rat occupancy is present on the project site; furthermore, no burrows indicative of giant kangaroo rat were observed during the field surveys. Small mammal trapping was not completed as a part of this study.
Dipodomys nitratoides nitratoides Tipton kangaroo rat	FE, CE	Found in arid communities on the valley floor portions of Kern, Tulare, and Kings counties in scrub and grassland communities in level to near-level terrain with alluvial fan-floodplain soil (fine sands and sandy loams) with sparse grasses and woody vegetation such as iodine bush, saltbush, seep weed, and mesquite.	**Absent.** Non-native grassland habitat is present,, but no sign of kangaroo rat occupancy is present on the project site. A small mammal trapping was not a part of this study.
Eumops perotis californicus Western mastiff bat	--/--/SC	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, annual and perennial grasslands, chaparral, desert scrub, and urban areas; roosts in cliff faces, as well as high buildings, trees, and tunnels; uncommon resident in southwestern San Joaquin Valley.	**Absent.** Suitable habitat is not available for this species. This species was not observed during surveys.
Lasiurus cinereus Hoary bat	--/--	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees, feeds primarily on moths. Requires water.	**Absent.** Suitable habitat is not available for this species. This species was not observed during surveys.
Onychomys torridus tularensis Tulare grasshopper mouse	--/SC	Found in valley grasslands habitats, blue oak savanna, desert associations dominated by annual grasses and California ephedra, alkali sink scrub, saltbush scrub, and upper Sonoran shrub associations, dominated by ephedra.	**Absent.** Non-native grassland habitat is present, but no sign of small mammal burrows, with the exception of California ground squirrel, were observed during the site visit. Small mammal trapping was not completed for this project.
Perognathus inornatus	---/--	Grassland, oak savanna and arid scrubland in the southern Sacramento	**Absent.** Non-native grassland habitat is present,

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
inornatus San Joaquin pocket mouse		Valley, Salinas Valley, San Joaquin Valley and adjacent foothills, south to the Mojave Desert.	but no sign of small mammal burrows, with the exception of California ground squirrel, were observed during the site visit. Small mammal trapping was not completed for this project.
Sorex ornatus relictus Buena Vista Lake ornate shrew	FE/SC	Formerly occupied marshlands of the San Joaquin Valley and the Tulare Basin. Its range has become much restricted due to the loss of lakes and sloughs in the area. It has been recorded from the Kern Lake Preserve area and the Kern National Wildlife Refuge. Current distribution is unknown but likely to be very restricted due to the loss of habitat.	**Absent.** Suitable habitat is not available for this species. This species was not observed during surveys.
Taxidea taxus American badger	--/SC	Uncommon resident found through California; in less disturbed grassland and shrubland habitats in San Joaquin Valley.	**Possible.** Habitat is present. No dens or evidence of badger presence was observed during the site visit: however, it could travel through or forage in the project area.
Vulpes macrotis mutica San Joaquin kit fox	FE, CT	Found in valley saltbush scrub, valley sink scrub, Interior Coast Range saltbush scrub, upper Sonoran sub-shrub scrub, non-native grassland, and valley sacaton grassland in the Central Valley and adjacent foothills and valleys, infrequently to the outer Coast Ranges; generally not found in densely wooded areas, wetland areas, or areas subject to frequent periodic flooding.	**Possible.** Habitat is present. The project site is within the known range for this species. No dens or evidence of San Joaquin kit fox sign was observed during the field survey; however, several potential dens (ground squirrel burrows) were large enough to be used by this species.
Plants			
Allium howellii var. *howellii* Howell's onion	--/--/4.3	Perennial herb bulb that occurs in valley and foothill grasslands in clay or serpentinite soils between 164-7,218 feet in elevation. Know to occur from Fresno, Kings, Kern, Merced, San Benito, Santa Clara, San Luis Obispo, and Tulare Counties. Blooming period March to April.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Astragalus hornii var. *hornii* Horn's milk-vetch	--/--/1B.1	Annual herb in the Fabaceae found in meadows and seeps and on playas and lake margins on alkaline soils between 197 and 2,789 feet (60–850 meters) in elevation. Known from occurrences in the Southern San Joaquin Valley, the Tehachapi Mountains and the Western Transverse Ranges in Kern, Los Angeles, and San Bernardino Counties. Blooming period May to October.	**Absent.** Suitable habitat is not available for this species. This species was not observed during surveys.
Atriplex tularensis Bakersfield smallscale	--/CT/1A	Herbaceous annual in the Chenopodiaceae found in chenopod scrub, between 295 and 656 feet (90–200 meters) in elevation. Known to occur in the Southern San Joaquin Valley in Kern County. Blooming period June to October.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Azolla microphylla	--/--/4.2	Herbaceous annual in the Chenopodiaceae found in chenopod scrub,	**Absent.** No suitable habitat is available for this

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
Mexican mosquito fern		between 295 and 656 feet (90–200 meters) in elevation. Known to occur in the Southern San Joaquin Valley in Kern County. Blooming period June to October.	species. This species was not observed during the survey.
Calochortus striatus Alkali mariposa-lily	--/--/1B.2	Bulbiferous perennial herb found in chaparral, chenopod scrub, Mojavean desert scrub meadows, and seeps on alkaline soils between 230-5,234 feet in elevation. Known to occur in the southern San Joaquin Valley and southern Sierra Nevada from Kern County, Los Angeles, and San Bernardino Counties. Blooming period April to June.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Caulanthus californicus California jewelflower	FE/CE/1B.1	Herbaceous annual found in chenopod scrub, pinyon and juniper woodland, and valley foothill grasslands between 200-3,281 feet in elevation. Although many populations are thought to have been extirpated from San Joaquin Valley, occurrences are known from Kern, Kings, Tulare, San Luis Obispo, Santa Barbara, and Fresno Counties. Blooming period February to May.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Chloropyron molle ssp. *hispidum* Hispid salty bird's-beak	--/--/1B.1	Hemiparasitic annual herb in the Orobanchaceae found on alkaline soils in meadows and seeps, playas, and valley and foothill grasslands below 509 feet (155 meters) in elevation. Blooming period June to September.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Clarkia exilis Slender clarkia	-/-/4.3	Annual herb in the Onagraceae found in chaparral, cismontane woodland and coastal scrub, often on serpentinite soils between 705 and 3,658 feet (215–1,115 meters) in elevation. Blooming period April to June.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Convolvulus simulans Small-flowered morning-glory	--/--/4.2	Herbaceous annual in the Convolvulaceae found in open areas in chaparral, coastal scrub, and valley and foothill grasslands/ San Joaquin Valley from Eastern Contra Costa County south to Kern County; South Coast Ranges from Monterey County South to Santa Barbara County and the Peninsular Ranges. Blooming period March to July.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Delphinium recurvatum Recurved larkspur	--/--/1B.2	Perennial herb in chenopod scrub, cismontane woodland, and valley and foothill grasslands on alkaline soils between 10-2,461 feet. Known to occur in Mojave Desert and southern San Joaquin Valley Kern County north to Solano County, the southern Inner Coastal Ranges from San Luis Obispo county north to Stanislaus County, and the Sacramento Valley from San Joaquin County north to Butte County. Blooming period March to June.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Diplacus pictus Calico monkeyflower	--/--/1B.2	Annual herb in the Phrymaceae found in chaparral and cismontane woodlands between 1,198 and 4,265 feet in elevation in the Southern Sierra Nevada Foothills in Tulare and Fresno Counties. Blooming period March to May.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
Eremalche parryi ssp. *kernensis* Kern Mallow	FE/--/ 1B.2	Annual herb that occurs in chenopod scrub, pinyon and juniper woodland, and valley and foothill grassland on dry open sandy to clay soils between 230-4,232 feet in elevation. Know from Kings, Kern, Santa Barbara, San Luis Obispo, Tulare, and Ventura Counties. Blooming period March to May.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Eriastrum hooveri Hoover's eriastrum	Delisted/--/4.2	Annual herb that occurs in chenopod scrub, pinyon and juniper woodland, valley and foothill grassland between 164-3,002 feet in elevation. Known from Fresno, Kings, Kern, Los Angeles, San Benito, and San Luis Obispo Counties. Blooming period march to July. (Delisted 10/7/03)	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Eschscholzia lemmonii ssp. *kernensis* Tejon Poppy	--/--/1B.1	Annual herb in chenopod scrub, and valley and foothill grasslands, between 525-3,281 feet in elevation. Known to occur from southern Sierra Nevada foothills and southern San Joaquin Valley in Kern County. Blooming period March to May.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Goodmania luteola Golden goodmania	--/--/4.2	Perennial, rhizomatous herb in the Poaceae found in bogs and fens, meadows and seeps, and marshes and swamps (streambanks and lake margins) between (15–1,980 meters) in elevation. Known in El Dorado, Fresno, Humboldt, Mendocino, Mono, Placer, and Tulare Counties. Blooming period June to August.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Hordeum intercedens Vernal barley	--/--/3.2	Annual grass in Poaceae found in vernal-pools in valley grassland, freshwater wetlands, and wetland-riparian habitats. Known to occur from San Diego, Riverside, Los Angeles, Orange, Santa Barbara, and into the central valley, Blooming period March to June.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Imperata brevifolia California satintail	--/--/2B.1	Herbaceous perennial herb in the Asteraceae found on granitic or carbonate, rocky soils in openings in montane coniferous forests pinyon and juniper woodland between 4,495 and 9,498 feet (1,370–2,895 meters) in elevation. Known from occurrences in the Western Transverse Ranges and the San Gabriel Mountains in Los Angeles, San Bernardino, and Riverside Counties. Blooming period April to August.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Lasthenia ferrisiae Ferris' goldfields	-/-/4.2	Annual herb in the Asteraceae found in cismontane woodland, alkaline playas, valley and foothill grassland, and vernal pools on mesic soil between 0 and 1,542 feet (0–470 meters) is elevation. Known to occur in Alameda, Contra Costa, Monterey, Marin, Napa, Solano, and Sonoma Counties. Populations historically occurring in Mendocino, Santa Barbara, and Santa Clara Counties are presumed extirpated. Blooming period February to May.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
Layia leucopappa Comanche Point layia	--/--/1B.1	Annual herb in the Asteraceae found in chaparral, and valley and foothill grassland in clay or serpentinite soil between 16 and 1,312 feet (5–400 meters) in elevation. Known to occur in San Luis Obispo County. Blooming period March to May.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Monardella linoides ssp. *oblonga* Tehachapi monardella	S/-/1B.3	Perennial rhizomatous herb in the Lamiaceae family occurring on dry gravelly slopes and flats in chaparral and conifer woodland between 450 and 790 feet (1500 to 2600 m). Known to occur in Tehachapi, Kern, and Tulare Counties. Blooming period (May) June to August.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Monolopia congdonii San Joaquin woollythreads	FE/--/1B.2	Annual herb in valley and foothill grasslands on sandy soils between 197-2,625 feet in elevation. Known to occur in the San Joaquin Valley from Kern County north to San Benito County and the Carrizo Plain in San Luis Obispo and Santa Barbara Counties. Blooming period February to May.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Navarretia setiloba Piute Mountains navarretia	--/--/1B.1	Herbaceous annual in the Polemoniaceae found on clay or gravelly loam soils in cismontane woodland, pinyon and juniper woodland, and valley and foothill grasslands from 1,001 and 6,890 feet (305–2,100 meters) in elevation. Known from occurrences in the Southern Sierra Nevada in Kern and Tulare Counties. Blooming period April to July.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Opuntia basilaris var. *treleasei* Bakersfield cactus	FE/CE/1B.1	Perennial stem succulent in the Cactaceae found in chenopod scrub, cismontane woodland, and valley and foothill grasslands between 394 and 1,804 feet in elevation. Known to occur in the Southeast San Joaquin Valley and Southern Sierra Nevada Foothills in Kern County. Blooming period April to May.	**Absent.** No suitable habitat is available for this species. This species was not observed during the survey.
Trichostema ovatum San Joaquin bluecurls	--/--/4.2	Annual herb found in valley grasslands Known to occur in Fresno, Kings, Tulare, Santa Barbara, San Luis Obispo, and Kern Counties. Blooming period July to October.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Stylocline citroleum Oil neststraw	--/--/1B.1	Annual herb in the Asteraceae found in shadescale scrub, coastal sage scrub, and valley and foothill grassland on flats, with clay soils in oil producing areas between 164 to 1,312 feet. In elevation. Known from locations in Kern and San Diego Counties. Blooming period March to April.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Stylocline masonii Mason's neststraw	--/--/1B.1	Annual herb in the Asteraceae found in chenopod scrub, coastal scrub, and valley and foothill grasslands on clay soils between 164 and 1,312 feet (50–400 meters) in elevation. Known from locations in Kern and San Diego Counties. Blooming period March to May.	**Absent.** Suitable habitat is available for this species. This species was not observed during surveys.
Tortula californica	S/-/1B.2	A bryophyte, moss, found on sandy soils in chenopod scrub, valley	**Absent.** Suitable habitat is available for this

Species	Status Federal/State/Other	Habitat	*Occurrence in the Study Area
California screw-moss		and foothill grassland between 148 ft. to 2,461 ft. in elevation. Known to occur in San Diego, Riverside, Los Angeles, Ventura, several Channel Islands, Kern, and Monterey Counties.	species. This species was not observed during surveys.

Appendix F

2011 U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance

U.S. FISH AND WILDLIFE SERVICE STANDARDIZED RECOMMENDATIONS FOR PROTECTION OF THE ENDANGERED SAN JOAQUIN KIT FOX PRIOR TO OR DURING GROUND DISTURBANCE

Prepared by the Sacramento Fish and Wildlife Office
January 2011

INTRODUCTION

The following document includes many of the San Joaquin kit fox (*Vulpes macrotis mutica*) protection measures typically recommended by the U. S. Fish and Wildlife Service (Service), prior to and during ground disturbance activities. **However, incorporating relevant sections of these guidelines into the proposed project is not the only action required under the Endangered Species Act of 1973, as amended (Act) and does not preclude the need for section 7 consultation or a section 10 incidental take permit for the proposed project.** Project applicants should contact the Service in Sacramento to determine the full range of requirements that apply to your project; the address and telephone number are given at the end of this document. Implementation of the measures presented in this document may be necessary to avoid violating the provisions of the Act, including the prohibition against "take" (defined as killing, harming, or harassing a listed species, including actions that damage or destroy its habitat). These protection measures may also be required under the terms of a biological opinion pursuant to section 7 of the Act resulting in incidental take authorization (authorization), or an incidental take permit (permit) pursuant to section 10 of the Act. The specific measures implemented to protect kit fox for any given project shall be determined by the Service based upon the applicant's consultation with the Service.

The purpose of this document is to make information on kit fox protection strategies readily available and to help standardize the methods and definitions currently employed to achieve kit fox protection. The measures outlined in this document are subject to modification or revision at the discretion of the Service.

IS A PERMIT NECESSARY?

Certain acts need a permit from the Service which includes destruction of any known (occupied or unoccupied) or natal/pupping kit fox dens. Determination of the presence or absence of kit foxes and /or their dens should be made during the environmental review process. All surveys and monitoring described in this document must be conducted by a qualified biologist and these activities do not require a permit. A qualified biologist (biologist) means any person who has completed at least four years of university training in wildlife biology or a related science and/or has demonstrated field experience in the identification and life history of the San Joaquin kit fox. In addition, the biologist(s) must be able to identify coyote, red fox,

gray fox, and kit fox tracks, and to have seen a kit fox in the wild, at a zoo, or as a museum mount. Resumes of biologists should be submitted to the Service for review and approval prior to an6y survey or monitoring work occurring.

SMALL PROJECTS

Small projects are considered to be those projects with small foot prints, of approximately one acre or less, such as an individual in-fill oil well, communication tower, or bridge repairs. These projects must stand alone and not be part of, or in any way connected to larger projects (i.e., bridge repair or improvement to serve a future urban development). The Service recommends that on these small projects, the biologist survey the proposed project boundary and a 200-foot area outside of the project footprint to identify habitat features and utilize this information as guidance to situate the project to minimize or avoid impacts. If habitat features cannot be completely avoided, then surveys should be conducted and the Service should be contacted for technical assistance to determine the extent of possible take.

Preconstruction/preactivity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox. Kit foxes change dens four or five times during the summer months, and change natal dens one or two times per month (Morrell 1972). Surveys should identify kit fox habitat features on the project site and evaluate use by kit fox and, if possible, assess the potential impacts to the kit fox by the proposed activity. The status of all dens should be determined and mapped (see Survey Protocol). Written results of preconstruction/preactivity surveys must be received by the Service within five days after survey completion and prior to the start of ground disturbance and/or construction activities.

If a natal/pupping den is discovered within the project area or within 200-feet of the project boundary, the Service shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization. If the preconstruction/preactivity survey reveals an active natal pupping or new information, the project applicant should contact the Service immediately to obtain the necessary take authorization/permit.

If the take authorization/permit has already been issued, then the biologist may proceed with den destruction within the project boundary, except natal/pupping den which may not be destroyed while occupied. A take authorization/permit is required to destroy these dens even after they are vacated. Protective exclusion zones can be placed around all known and potential dens which occur outside the project footprint (conversely, the project boundary can be demarcated, see den destruction section).

OTHER PROJECTS

It is likely that all other projects occurring within kit fox habitat will require a take authorization/permit from the Service. This determination would be made by the Service during the early evaluation process (see Survey Protocol). These other projects would include, but are not limited to: Linear projects; projects with large footprints such as urban development; and projects which in themselves may be small but have far reaching impacts (i.e., water storage or conveyance facilities that promote urban growth or agriculture, etc.).

The take authorization/permit issued by the Service may incorporate some or all of the protection measures presented in this document. The take authorization/permit may include measures specific to the needs of the project and those requirements supersede any requirements found in this document.

EXCLUSION ZONES

In order to avoid impacts, construction activities must avoid their dens. The configuration of exclusion zones around the kit fox dens should have a radius measured outward from the entrance or cluster of entrances due to the length of dens underground. The following distances are **minimums**, and if they cannot be followed the Service must be contacted. Adult and pup kit foxes are known to sometimes rest and play near the den entrance in the afternoon, but most above-ground activities begin near sunset and continue sporadically throughout the night. Den definitions are attached as Exhibit A.

Potential den**	50 feet
Atypical den**	50 feet
Known den*	100 feet
Natal/pupping den (occupied and unoccupied)	Service must be contacted

*Known den: To ensure protection, the exclusion zone should be demarcated by fencing that encircles each den at the appropriate distance and does not prevent access to the den by kit foxes. Acceptable fencing includes untreated wood particle-board, silt fencing, orange construction fencing or other fencing as approved by the Service as long as it has openings for kit fox ingress/egress and keeps humans and equipment out. Exclusion zone fencing should be maintained until all construction related or operational disturbances have been terminated. At that time, all fencing shall be removed to avoid attracting subsequent attention to the dens.

**Potential and Atypical dens: Placement of 4-5 flagged stakes 50 feet from the den entrance(s) will suffice to identify the den location; fencing will not be required, but the exclusion zone must be observed.

Only essential vehicle operation on existing roads and foot traffic should be permitted. Otherwise, all construction, vehicle operation, material storage, or any other type of surface-disturbing activity should be prohibited or greatly restricted within the exclusion zones.

DESTRUCTION OF DENS

Limited destruction of kit fox dens may be allowed, if avoidance is not a reasonable alternative, provided the following procedures are observed. The value to kit foxes of potential, known, and natal/pupping dens differ and therefore, each den type needs a different level of protection. **Destruction of any known or natal/pupping kit fox den requires take authorization/permit from the Service**.

Destruction of the den should be accomplished by careful excavation until it is certain that no kit foxes are inside. The den should be fully excavated, filled with dirt and compacted to ensure that kit foxes cannot reenter or use the den during the construction period. If at any point during excavation, a kit fox is discovered inside the den, the excavation activity shall cease immediately and monitoring of the den as described above should be resumed. Destruction of the den may be completed when in the judgment of the biologist, the animal has escaped, without further disturbance, from the partially destroyed den.

Natal/pupping dens: Natal or pupping dens which are occupied will not be destroyed until the pups and adults have vacated and then only after consultation with the Service. Therefore, project activities at some den sites may have to be postponed.

Known Dens: Known dens occurring within the footprint of the activity must be monitored for three days with tracking medium or an infra-red beam camera to determine the current use. If no kit fox activity is observed during this period, the den should be destroyed immediately to preclude subsequent use.

If kit fox activity is observed at the den during this period, the den should be monitored for at least five consecutive days from the time of the observation to allow any resident animal to move to another den during its normal activity. Use of the den can be discouraged during this period by partially plugging its entrances(s) with soil in such a manner that any resident animal can escape easily. Only when the den is determined to be unoccupied may the den be excavated under the direction of the biologist. If the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant, for example during the animal's normal foraging activities.

The Service encourages hand excavation, but realizes that soil conditions may necessitate the use of excavating equipment. However, extreme caution must be exercised.

Potential Dens: If a take authorization/permit has been obtained from the Service, den destruction may proceed without monitoring, unless other restrictions were issued with the take authorization/permit. If no take authorization/permit has been issued, then potential dens should be monitored as if they were known dens. If any den was considered to be a potential den, but is later determined during monitoring or destruction to be currently, or previously used by kit fox (e.g., if kit fox sign is found inside), then all construction activities shall cease and the Service shall be notified immediately.

CONSTRUCTION AND ON-GOING OPERATIONAL REQUIREMENTS

Habitat subject to permanent and temporary construction disturbances and other types of ongoing project-related disturbance activities should be minimized by adhering to the following activities. Project designs should limit or cluster permanent project features to the smallest area possible while still permitting achievement of project goals. To minimize temporary disturbances, all project-related vehicle traffic should be restricted to established roads, construction areas, and other designated areas. These areas should also be included in preconstruction surveys and, to the extent possible, should be established in locations disturbed by previous activities to prevent further impacts.

1. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.

2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the Service and the California Department of Fish and Game (CDFG) shall be contacted as noted under measure 13 referenced below.

3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is

discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.

4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.

5. No firearms shall be allowed on the project site.

6. No pets, such as dogs or cats, should be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.

7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.

8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service.

9. An employee education program should be conducted for any project that has anticipated impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the project. The program should include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.

10. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. should be

re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is disturbed during the project, but after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the Service, California Department of Fish and Game (CDFG), and revegetation experts.

11. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for guidance.

12. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916)445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530)934-9309. The Service should be contacted at the numbers below.

13. The Sacramento Fish and Wildlife Office and CDFG shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The Service contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFG contact is Mr. Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.

14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.

Any project-related information required by the Service or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at:

Endangered Species Division
2800 Cottage Way, Suite W2605
Sacramento, California 95825-1846
(916) 414-6620 or (916) 414-6600

EXHIBIT "A" - DEFINITIONS

"Take" - Section 9 of the Endangered Species Act of 1973, as amended (Act) prohibits the "take" of any federally listed endangered species by any person (an individual, corporation, partnership, trust, association, etc.) subject to the jurisdiction of the United States. As defined in the Act, take means " . . . to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct". Thus, not only is a listed animal protected from activities such as hunting, but also from actions that damage or destroy its habitat.

"Dens" - San Joaquin kit fox dens may be located in areas of low, moderate, or steep topography. Den characteristics are listed below, however, the specific characteristics of individual dens may vary and occupied dens may lack some or all of these features. Therefore, caution must be exercised in determining the status of any den. Typical dens may include the following: (1) one or more entrances that are approximately 5 to 8 inches in diameter; (2) dirt berms adjacent to the entrances; (3) kit fox tracks, scat, or prey remains in the vicinity of the den; (4) matted vegetation adjacent to the den entrances; and (5) manmade features such as culverts, pipes, and canal banks.

"Known den" - Any existing natural den or manmade structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records, past or current radiotelemetry or spotlighting data, kit fox sign such as tracks, scat, and/or prey remains, or other reasonable proof that a given den is being or has been used by a kit fox. The Service discourages use of the terms "active" and "inactive" when referring to any kit fox den because a great percentage of occupied dens show no evidence of use, and because kit foxes change dens often, with the result that the status of a given den may change frequently and abruptly.

"Potential Den" - Any subterranean hole within the species' range that has entrances of appropriate dimensions for which available evidence is insufficient to conclude that it is being used or has been used by a kit fox. Potential dens shall include the following: (1) any suitable subterranean hole; or (2) any den or burrow of another species (e.g., coyote, badger, red fox, or ground squirrel) that otherwise has appropriate characteristics for kit fox use.

"Natal or Pupping Den" - Any den used by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two, therefore, for purposes of this definition either term applies.

"Atypical Den" - Any manmade structure which has been or is being occupied by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings.

OILDALE MUTUAL WATER COMPANY
DUAL WATER SYSTEM IMPROVEMENT PROJECT

EXHIBIT E
"CALIFORNIA HISTORICAL RESOURES INFORMATION SYSTEMS (CHRIS) – CULTURAL, HISTORIC, AND ARCHAEOLOGICAL RESOURES RECORDS SEARCH"

CULTURAL RESOURCES ASSESSMENT

Construction of Six Water Supply Wells, Two 2.o-Million Gallon Storage Tanks and Booster Pump Station, and 36" Conveyance Pipeline

Kern County, California

Prepared for:

Curtis M. Skaggs, PE
Dee Jaspar & Associates, Inc.
Bakersfield - Porterville

Prepared by:

David Brunzell, M.A., RPA
BCR Consulting LLC
505 West 8th St
Claremont, California 91711

BCR Consulting LLC Project No. DJA2002

Sites Recorded: None
Keywords: Reconnaissance Survey
USGS Quadrangle: 7.5-minute *Oildale* (1973), California

BCRCONSULTING LLC

January 14, 2021

MANAGEMENT SUMMARY

BCR Consulting LLC (BCR Consulting) is under contract to Dee Jaspar & Associates, Inc. to conduct a Phase I Cultural Resources Assessment for the Construction of Six Water Supply Wells, Two 2.0-Million Gallon Storage Tanks and Booster Pump Station, and 36" Conveyance Pipeline Project (project) in Kern County, California. This work was completed pursuant to the California Environmental Quality Act (CEQA). During the current assessment, BCR Consulting reviewed and summarized the cultural resources records search performed by the Southern San Joaquin Valley Information Center (SSJVIC) on November 20, 2020. This research has revealed that eight cultural resource studies have taken place resulting in four cultural resources recorded within 0.5 miles of the project site. A full bibliography of previous resources and reports and a map depicting resource locations are provided in Appendix B. The resources within the records search radius included:

- P-15-2050: Historic-Period Southern Pacific Rail Alignment
- P-15-4734: Historic-Period Beardsley Canal
- P-15-10560: Unspecified Prehistoric Isolated Artifact
- P-15-13729: Historic-Period Lerdo Canal

Although the resources identified as P-15-2050 (the Southern Pacific Rail Alignment) and P-15-4734 (the Beardsley Canal) appear to intersect the project alignments on the map (see Appendix B), they will be bored under and will not be subject to impacts. Therefore, these resources do not merit further consideration for the current project. The proposed project will not introduce any elements to the setting that are not already present, negating any potential for visual effects. Additionally, the field survey has not resulted in any cultural resources recorded or any evidence for cultural resource sensitivity within the project sites. Therefore, no significant impact related to historical resources is anticipated under CEQA. No mitigation is recommended and no further investigations are recommended for the project sites unless:

- The boundaries change to include areas that have not been subject to this cultural resource assessment;
- Cultural materials are encountered during any proposed project activities.

The current study attempted to determine whether cultural resources were present within the boundaries of any of the proposed project sites or pipeline alignments. Although none were yielded during the records search and field survey, ground-disturbing activities have the potential to reveal buried deposits not observed during these tasks. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register of Historical Resources (California Register) or the National Register of Historic Places (National Register), plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed.

Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic-period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;
- historic-period structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks;
- human remains.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

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INTRODUCTION

BCR Consulting LLC (BCR Consulting) is under contract to Dee Jaspar & Associates, Inc. to conduct Phase I Cultural Resources Assessment for the Construction of Six Water Supply Wells, Two 2.0-Million Gallon Storage Tanks and Booster Pump Station, and 36" Conveyance Pipeline Project (project) in Kern County, California. This work was completed pursuant to the California Environmental Quality Act (CEQA). The project site is located in portions of Sections 28, 29, 30, 31, 32, and 33 of Township 28 South, Range 27 East, Mt. Diablo Baseline and Meridian. It is depicted on the U.S. Geological Survey (USGS) *Oildale* (1973), *California* 7.5-minute topographic quadrangle (Figure 1).

Project Description

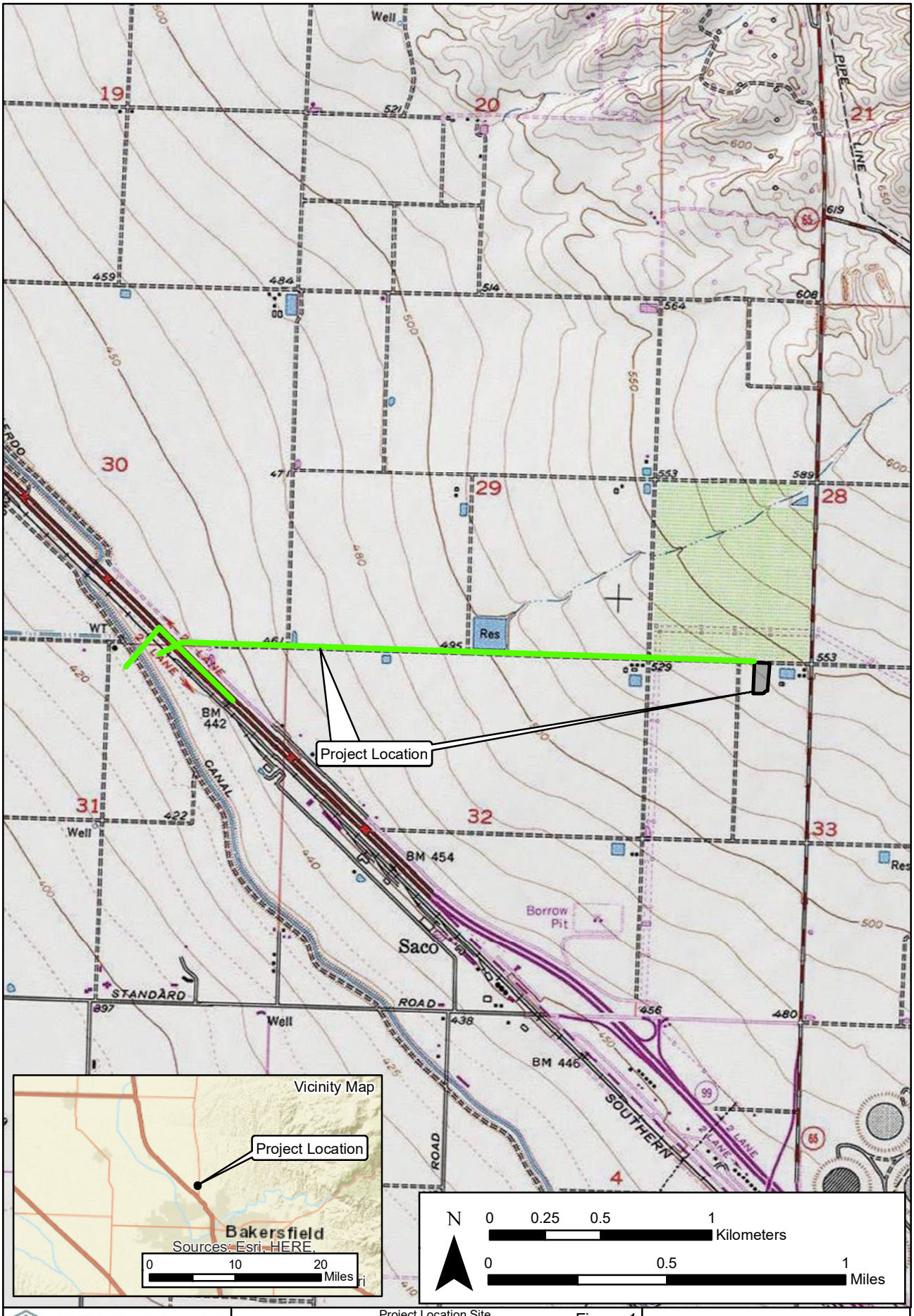
The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99, the Lerdo Canal, and the Southern Pacific Railroad alignment via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore.

Personnel

David Brunzell, M.A., RPA acted as Principal Investigator. Mr. Brunzell compiled the technical report and provided project oversight. The records search was completed through the Southern San Joaquin Valley Information Center (SSJVIC) by SSJVIC personnel. BCR Consulting Archaeological Crew Chief Nicholas Shepetuk, B.A. completed the systematic pedestrian field survey. Resumes are included in Appendix C.

NATURAL SETTING

The elevation of the well sites range from 405 to 430 feet above mean sea level (AMSL). Project sites have been graded flat although natural topography conveys water via levee-controlled sheetwashing and channelized drainages in a southwesterly direction (USGS 1992). Most of the local vegetation is a result of cultivation. Prior to the introduction of large-scale agriculture and oil drilling, the local watershed fed the Kern River's massive system of channels, sloughs, and tule-choked marshes that defined the local ecosystem (Wallace 1978:462). As a result, the biotic character of the region was historically much more diversified than is presently evident. Large freshwater marshes and vast expanses of grassland supported a variety of wildlife, including grizzly bears and wolves (both locally extinct), tule elk, jackrabbits, quail, and numerous fish, rodents, reptiles and birds (Twisselmann 1967, Osborne 1992, Cogswell 1977, and Moyle 1976). The formerly active waterways and high-energy flood zones have deposited late Pleistocene and Holocene alluvium that covers all of the proposed project sites and pipelines (California Geological Survey 2011). None of these deposits have locally yielded surface or buried cultural resources of any kind (see also Results/Research section below).



BCR CONSULTING LLC
Claremont Napa Tehachapi
www.bcrconsulting.net
909-525-7078

Project Location Site
Oildale Mutual Water Company 36-inch Irrigation
Water Transmission Main Project
Reference: ESRI; USGS Quad: Oildale, California (1973)

Figure 1

Dee Jaspar & Associates, Inc.

CULTURAL SETTING

Prehistory

Humans proliferated globally during the early Holocene due to gradual environmental warming that marked the close of the last ice age, and signs of prehistoric humans in the so-called “Lake Country” of the San Joaquin Valley go back at least 8,000 years (Wallace 1977:449). A dearth of archaeological data for the region makes early chronology particularly problematic, although a number of significant finds do indicate probable trends. One site on the western shore of Buena Vista Lake has yielded evidence for a hunting culture carbon dated to 6,000 B.C. The subsistence strategy for the site was inferred from an assemblage of stone tools suited to killing and processing big game (ibid., Fredrickson 1965, Fredrickson and Grossman 1966). The southern shore of Tulare Lake has yielded numerous fluted points attributed to early fluted traditions, and indicating similar subsistence strategies. Although the Tulare Lake finds were not recovered from a verifiably dated stratum and have not been locally associated with Pleistocene fauna or other data to pinpoint a particular tradition, fluted points found throughout North America commonly precede the dates offered for the Buena Vista Lake site and almost certainly do here (Rondeau 2009). Culleton et al. (2005) has organized the late Holocene into three temporal phases for the Buena Vista Basin. Culleton’s study synthesized his own findings with those by Hartzell (1992), Fredrickson (1983), Walker (1947), and Wedel (1941; see Table A).

Table A. Prehistoric Holocene Phases of the Buena Vista Basin

Phase	Cultural Hallmarks
Late Holocene I (4000-2000 BP)	Sparse/even population distribution; seasonal encampments supported by hunting, and seed gathering and processing; extended burials.
Late Holocene II (2000-900 BP)	Populations along lakeshores diminish considerably based on more mobile settlement strategy and terrestrially based resources.
Late Holocene III/Yokut (900 BP- Contact)	Populations expand considerably and diversify resource exploitation strategies to include slough-based resources and satellite settlements along the sloughs; lake-shore sites exhibit more permanent settlements and include shell middens, cemeteries, and house pits.

Ethnography

The project sites are situated within the traditional boundaries of the Southern Valley Yokuts. This prehistoric population depended heavily on the Tulare, Buena Vista, and Kern Lakes and their connecting sloughs and rivers for sustenance and transportation (Wallace 1978:448). The local Southern Valley Yokuts, also referred to as the Chuxoxi, represented one of the southernmost Yokut political units and were associated with the Kern River delta (Wallace 1978:449; Kroeber 1925:483). Chuxoxi trade routes and rights to the delta allowed them to reap the benefits of the related perennial water sources. This enabled local populations to pursue a relatively sedentary lifestyle in an otherwise arid climate. Prehistorically, such sedentism often coincides with a village-style residential model in which residential bases remain the same or seasonal, while specialized procurement parties are deployed to more remote areas to collect specialized resources (Binford 1980, Thomas 1983). This village model has been locally supported by early ethnographers, who considered Yokuts unique in California for forming "true tribes" and for developing an unparalleled array of dialects (Kroeber 1925:474).

History

The first Europeans to establish contact with the Sothern Valley Yokuts were Spanish troops led by Captain Don Pedro Fages in pursuit of deserters. Father Francisco Garces also travelled through the San Joaquin Valley searching for an overland route from Yuma to Monterey. During his travels, Garces noted positive interactions with locals (see Smith 1939, Bailey 1984). The Mexican era (1821-1848) saw little notable cultural exchange between Mexicans and Southern Valley Yokuts, although an 1833 malaria epidemic devastated the local native population (Wallace 1978:460). The ensuing American era, punctuated by California's annexation into the United States in 1848, resulted in overwhelming Anglo settlement and seizing of Indian lands, and disrupted any remaining prehistoric Yokut influence in the San Joaquin Valley. Mining and ranching represented the early historical focus of the San Joaquin Valley, although the region's abundant natural water supply, mild climate, and huge tracts of arable land soon led to the successful development of agriculture. The resulting diversion of local water and escalating land values transformed the physical and economic character of the area, and has allowed it to remain one of the world's most productive agricultural regions to this day (Preston 1981).

METHODS

This work was completed pursuant CEQA, Public Resources Code (PRC) Chapter 2.6, Section 21083.2, and California Code of Regulations (CCR) Title 14, Chapter 3, Article 5, Section 15064.5. The pedestrian cultural resources survey is intended to locate and document previously recorded or new cultural resources, including archaeological sites, features, isolates, and historic-period buildings, that exceed 45 years in age within defined boundaries. This study is intended to determine whether cultural resources are located within the given subject property boundaries, whether any cultural resources are significant pursuant to the above-referenced regulations and standards, and to develop specific mitigation measures that will address potential impacts to existing or potential resources. Tasks pursued to achieve that end include:

- Cultural resources records search to review any previous local studies conducted and the resulting cultural resources recorded;
- Systematic pedestrian survey of all proposed project sites and pipelines;
- Development of recommendations following CEQA guidelines.

Research

Prior to fieldwork, the SSJVIC completed the cultural resources records search on November 20, 2020. The cultural resource record search included a review of all prerecorded historic-period and prehistoric cultural resources, as well as a review of known cultural resources surveys and excavation reports generated from projects located within one half-mile of the subject property. In addition, a review was conducted of the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories from the California Office of Historic Preservation (OHP) including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Built Environment Resources Directory (BERD).

Field Survey

A reconnaissance-level cultural resource field survey of the project site was conducted on November 17, 2020. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the proposed well, tank, and booster station site, and one transect along each side of proposed pipelines. Digital photographs were taken at various points within the boundaries of each project site (see Appendix A).

RESULTS

Research

Research completed through the SSJVIC on November 20, 2020 revealed that eight cultural resource studies have taken place resulting in four cultural resources recorded within 0.5 miles of the project site. A full bibliography of previous resources and reports, and a map depicting resource locations are provided in Appendix B. The resources within the records search radius included:

- P-15-2050: Historic-Period Southern Pacific Rail Alignment
- P-15-4734: Historic-Period Beardsley Canal
- P-15-10560: Unspecified Prehistoric Isolated Artifact
- P-15-13729: Historic-Period Lerdo Canal

The cultural resource studies identified during the research are summarized below.

Table B. Cultural Resource Studies within 0.5 Mile of the Project Sites

USGS 7.5 Min. Quad.	Reports Within One Half-Mile of Project Sites
Oildale, California (1973)	KE-263 (1981) Baker, Susan; *Archaeological Reconnaissance of the Kern River Co-Generation Plant Gas and Electricity Pipeline Routes, Kern County, California*
	KE-668 (1989) Moratto, Michael J.; Cultural Resources Study of the Proposed Gasline 375 Extension, Kern County, California
	KE-1456 (1993) Schiffman, Robert A.; Archaeological Survey of the Coberly-Etcheverry Property
	KE-3223 (2006) Schiffman, Robert A. and Alan P. Gold; Cultural Resource Survey for a 47.69-Acre Parcel, Tentative Tract Map 6420, North of Seventh Standard Road and West of Highway 99 in Northwest Bakersfield, Kern County, California
	KE-3528 (2006) Arrington, Cindy, Bryon Bass, Joan Brown, Chris Corey, and Kevin Hunt; Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California
	KE-3864 (2006), Orfila, Rebecca S.; A Cultural Resource Assessment for Land Designated for 12 Inch Underground Water Main Adjacent to Meadows Field Airport, Kern County, California
	KE-4490 (2008) Pruett, Catherine Lewis; A Cultural Resources Assessment for a Pumping Station, the Friant-Kern Canal Crossing, and a One Mile Pipeline, Northwest of Bakersfield, Kern County, California
	KE-4757 (2015) Johnston, Sarah and Chris Brewer; Historic Property Survey for

USGS 7.5 Min. Quad.	Reports Within One Half-Mile of Project Sites
	the Proposed North Kern Water Storage District Drought Relief Pipeline Project, Kern County, California

Although the resources identified as P-15-2050 (the Southern Pacific Rail Alignment) and P-15-4734 (the Beardsley Canal) appear to intersect the project alignments on the map (see Appendix B), they will be bored under and will not be subject to impacts. Therefore, these resources do not merit further consideration for the current project. The proposed project will not introduce any elements to the setting that are not already present, negating any potential for visual effects.

Field Survey

Fieldwork took place on November 17, 2020. During the field survey, BCR Consulting personnel carefully inspected the project site and identified no cultural resources within its boundaries. Surface visibility was approximately 90 percent. Ground disturbances were severe and resulted from previous agricultural activities, mechanical grading for vehicle access and utility installation, and pavement installation.

RECOMMENDATIONS

The research and field survey have not resulted in the identification of any cultural resources or cultural resource sensitivity. Therefore, no significant impact related to historical resources is anticipated under CEQA. No mitigation is recommended and no further investigations are recommended for the project sites unless:

- The boundaries change to include areas that have not been subject to this cultural resource assessment;
- Cultural materials are encountered during any proposed project activities.

The current study attempted to determine whether cultural resources were present within the boundaries of any of the proposed project sites and pipelines. Although none were yielded during the records search and field survey, ground-disturbing activities have the potential to reveal buried deposits not observed during these tasks. Prior to the initiation of ground-disturbing activities, field personnel should be alerted to the possibility of buried prehistoric or historic cultural deposits. In the event that field personnel encounter buried cultural materials, work in the immediate vicinity of the find should cease and a qualified archaeologist should be retained to assess the significance of the find. The qualified archaeologist shall have the authority to stop or divert construction excavation as necessary. If the qualified archaeologist finds that any cultural resources present meet eligibility requirements for listing on the California Register or the National Register, plans for the treatment, evaluation, and mitigation of impacts to the find will need to be developed. Prehistoric or historic cultural materials that may be encountered during ground-disturbing activities include:

- historic-period artifacts such as glass bottles and fragments, cans, nails, ceramic and pottery fragments, and other metal objects;

- historic-period structural or building foundations, walkways, cisterns, pipes, privies, and other structural elements;
- prehistoric flaked-stone artifacts and debitage (waste material), consisting of obsidian, basalt, and or cryptocrystalline silicates;
- groundstone artifacts, including mortars, pestles, and grinding slabs;
- dark, greasy soil that may be associated with charcoal, ash, bone, shell, flaked stone, groundstone, and fire affected rocks;
- human remains.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification.

CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required f or this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: December 23, 2020	
	David Brunzell
Authorized Signature	Printed Name

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APPENDIX A

PHOTOGRAPHS



Photo 1. Booster, Tanks, and Well Site Overview (View NW)



Photo 2. Booster, Tanks, and Well Site Overview (View South)



Photo 3. Irrigation Alignment Overview in Imperial Street (View West)



Photo 4. Irrigation Alignment Overview West of Imperial Street Terminus (View West)



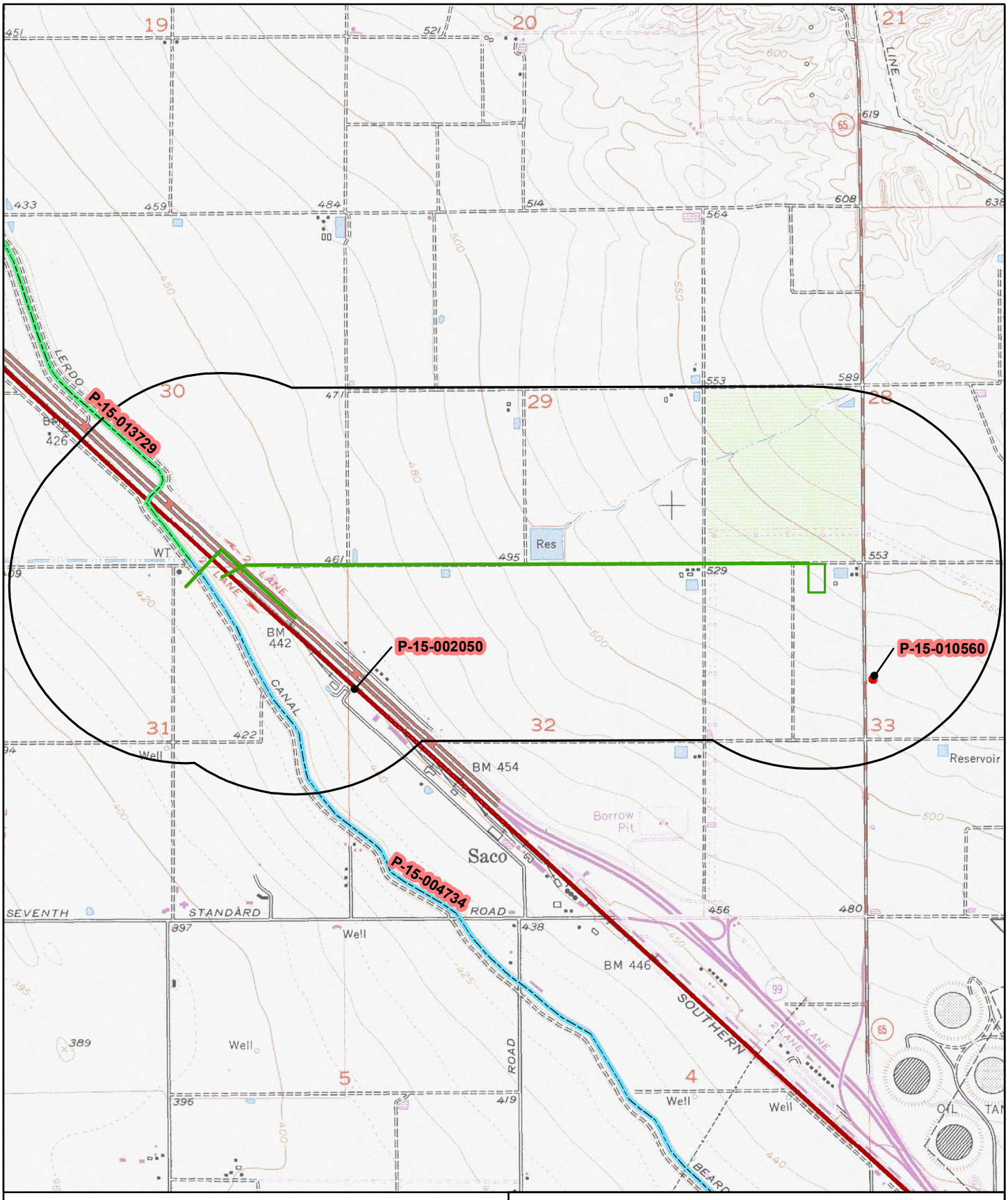
Photo 5. Irrigation Alignment Towards Highway 99 (View West)



Photo 6. Beardsley Canal Overview (View Southeast)

APPENDIX B

RECORDS SEARCH RESULTS



May depict confidential cultural resource locations.
Do not distribute.

0 0.125 0.25 0.5 Miles

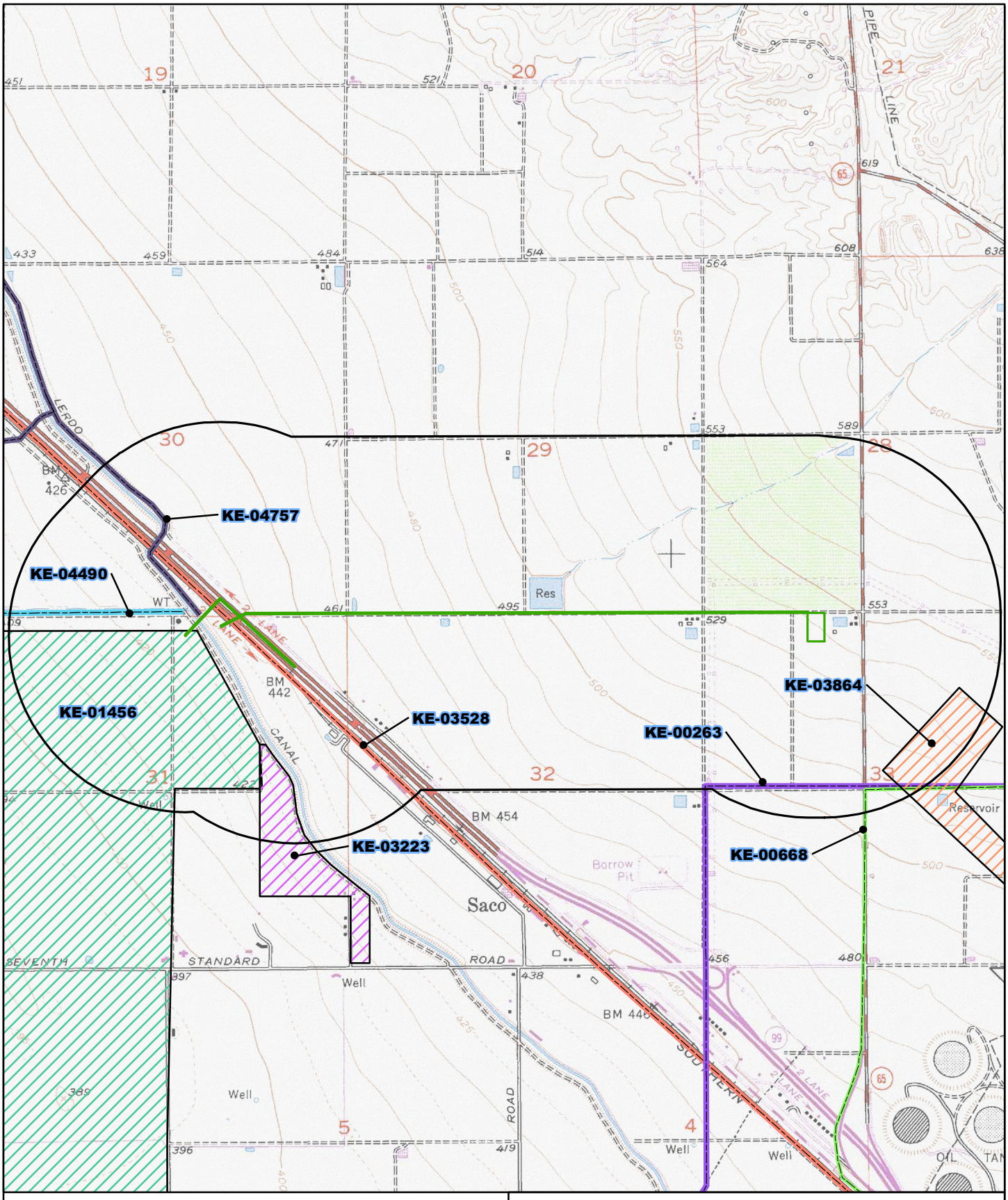
0 0.175 0.35 0.7 Kilometers

N

Project Area

Record Search radius

SSJV Information Center Record Search 20-410
Requester: Nicholas Shepetuk, BCR Consulting, LLC
Project Name: DJA2002 / Oildale Mutual Water Company
36-Inch Irrigation Water Transmission Main Project
USGS 7.5' Quad(s): Oildale
County: Kern
Resources Only



May depict confidential cultural resource locations.
Do not distribute.

Project Area

Record Search radius

SSJV Information Center Record Search 20-410
Requester: Nicholas Shepetuk, BCR Consulting, LLC
Project Name: DJA2002 / Oildale Mutual Water Company
36-Inch Irrigation Water Transmission Main Project
USGS 7.5' Quad(s): Oildale
County: Kern
Reports Only

Report List

SSJVIC Record Search 20-410

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
KE-00263	NADB-R - 1140012	1981	Baker, Suzanne	Archaeological Reconnaissance of the Kern River Co-Generation Plant Gas and Electricity Pipeline Routes, Kern County, California	Archaeological Consultants	
KE-00668	NADB-R - 1140372	1989	Moratto, Michael J.	Cultural Resources Study of the Proposed Gasline 375 Extension, Kern County, California	Infotec Research, Inc.	
KE-01456	NADB-R - 1140686	1993	Schiffman, Robert A.	Archaeological Survey of the Coberly-Etcheverry Property	Bakersfield College	
KE-01456A		1995	Schiffman, Robert A.	Addendum to Coberly - Etcheverry Archaeological Survey	Individual Consultant	
KE-03223		2006	Schiffman, Robert A. and Gold, Alan P.	Cultural Resource Survey for a 47.69-Acre Parcel, Tentative Tract Map 6420, North of Seventh Standard Road and West of Highway 99 in Northwest Bakersfield, Kern County, California	Archaeological Associates of Kern County	
KE-03528	Submitter - SWCA Cultural Resources Report Database No. 06-507; Submitter - SWCA Project No. 10715-180	2006	Arrington, Cindy, Bass, Bryon, Brown, Joan, Corey, Chris, and Hunt, Kevin	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California	SWCA Environmental Consultants	
KE-03864	Submitter - CAR Project No. 06-22	2006	Orfila, Rebecca S.	A Cultural Resource Assessment for Land Designated for 12 Inch Underground Water Main Adjacent to Meadows Field Airport, Kern County, California	Center for Archaeological Research, California State University, Bakersfield	
KE-04490	Submitter - Project #100815	2008	Pruett, Catherine Lewis	A Cultural Resources Assessment for a Pumping Station, the Friant-Kern Canal Crossing, and a One Mile Pipeline, Northwest of Bakersfield, Kern County, California	Three Girls and a Shovel, LLC.	
KE-04757		2015	Johnston, Sarah and Brewer, Chris	Historic Property Survey for the Proposed North Kern Water Storage District Drought Relief Pipeline Project, Kern County, California	Johnston & Associates	15-013729

Resource List

SSJVIC Record Search 20-410

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-15-002050	CA-KER-002050H	Resource Name - Southern Pacific Railroad, McKittrick Branch; Resource Name - Midway-Sunset 2; Resource Name - KS-1; Resource Name - FCG-27; Resource Name - Old Southern Pacific Railroad Grade; Resource Name - Asphalto Line of the South Pacific Railroad	Structure, Site	Historic	AH02; AH04; AH07; HP39	1985 (R. Apple, J. Underwood, Wirth Environmental Services); 1987 (R. Schiffman); 1994 (Bruce Steidl, Keith Colvin, Helen Johnson, Woodward-Clyde Cosultants); 1995 (R.E. Parr, Center for Archaeological Research, California State University, Bakersfield); 1996 (R. Tidmore, J. Gardner, R.E. Parr, J. Hinshaw, Center for Archaeological Research, California State University, Bakersfield); 1998 (B. Hatoff, P. Frazier, D. Lawler, Woodward-Clyde International-Americas); 1998 (P. Frazier, L. Wear, B. Hattoff, D. Lawler, Woodward-Clyde International-Americans); 1999; 1999 (Mike Aviña, Jones & Stokes Associates, Inc.); 1999 (B. Hatoff, B. Bass, D. Lawler, URS Greiner Woodward-Clyde); 2009 (K.R. Way, J.M. Hamad, J. Sprague, G. Sprague, Pacific Legacy, Inc.); 2009 (K.R. Way, J. Sprague, N. Sims, P. Sharp-Garcia, C. Davis, M. Armstrong, A Stevenson, Pacific Legacy, Inc.); 2010 (L. Hoffman, J. Covert, SWCA Environmental Consultants); 2011 (M. Dalope, S. Andrews, C. Whitley, J. Neal, ASM Affiliates, Inc.); 2012 (S. Andrews, ASM Affiliates, Inc.); 2012 (A. Bell, C. Rambo, C. Whitley, S. Escamilla, A. Troupin, R. Azpitrate, ASM Affiliates, Inc.); 2016 (P. Carey, ASM Affiliates, Inc.); 2018 (Marcos Ramos Ponciano, Andrew York, AECOM)	KE-00861, KE-00865, KE-01267, KE-01958, KE-01994, KE-02162, KE-02278, KE-02452, KE-02560, KE-04056, KE-04383, KE-04414, KE-04503, KE-05045

Resource List

SSJVIC Record Search 20-410

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-15-004734		Resource Name - Beardsley Canal; Other - 4-10-AS-17; OHP Property Number - 110725; OTIS Resource Number - 503604	Structure	Historic	HP20	1993 (JRP Consulting); 1995 (Ann Samuelson, Bryan Mischke, John Yelding-Sloan, Charlane Gross, WSA)	
P-15-010560		Resource Name - ASM ISO-1	Other	Prehistoric	AP02	2002 (Ken Moslak, Richard Krautkramer, ASM Affiliates, Inc.)	
P-15-013729	CA-KER-007705H	Resource Name - JKE-024; Resource Name - Lerdo Canal; OTIS Resource Number - 677780	Structure	Historic	HP20	2009 (Steven J. Melvin, Rebecca Flores, JRP Historical Consulting, LLC.); 2015 (Chris Brewer, Individual Consultant)	KE-03777, KE-04757

APPENDIX C

PERSONNEL QUALIFICATIONS

DAVID BRUNZELL, M.A., RPA
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EXPERTISE

Cultural Resource Project Management
National Environmental Policy Act Cultural Resource Compliance
California Environmental Quality Act Cultural Resource Compliance
National Historic Preservation Act (NHPA) Section 106 Compliance
Government Agency (Federal/State/Regional) Partnering, Streamlining, and Consultation
Technical Report Writing for Archaeology, History, and Architectural History
NRHP/CRHR Evaluation of Pre/historic Archaeological, and Historic Architectural Resources
Preparation of all DPR523 Site Records
Archaeological, Historical, and Architectural History Research
Archaeological Excavation
Archaeological and Architectural History Survey
Lithic and Ground Stone Analysis
Global Positioning Systems / Archaeological Mapping and Orienteering
Fossil Preparation
Laboratory Analysis
Native American Consultation

EDUCATION

California State University, Fullerton, M.A. Anthropology/Archaeology, 2002
California State University, Fullerton, B.A. Anthropology, 1997
Pomona College Field School, Southern Oregon/Northern California, 1995

PERMITS

BLM Principal Investigator for Cultural Resource Investigations (California, Great Basin)
California Department of Transportation Principal Investigator for Cultural Resources
Authorized Researcher at Each of the Twelve California Archaeological Information Centers

PROFESSIONAL AFFILIATIONS, AWARDS, AND CERTIFICATIONS

2002-Present Member, Register of Professional Archaeologists
2000-Present Member, Society for American Archaeology
2009-11 Member, Society for California Archaeology
2011-18 Certified Archaeologist for Unincorporated Orange County
2013-15 Board of Directors, Claremont Heritage
2000 McKenna Scholarship Award, 4th Recipient
1996-2002 Lambda Alpha Society, National Collegiate Honors Society for Anthropology

SELECTED SAN JOAQUIN VALLEY PROJECTS MANAGED FOR BCR CONSULTING

Archaeological Monitoring Program, Beacon Photovoltaic Project: Project Sites 1, 3, and 4, Kern County, California

Cultural Resources Assessment of Approximately 7,688 Acres for the Strata Equity Group Solar Properties in California City, Kern County, California.

Phase I Cultural Resources Assessment and Extended Phase I Subsurface Testing, Vaughn Water Company New Municipal Water Well Project, Kern County, California

Phase I Cultural Resources Assessment and Extended Phase I Subsurface Testing, Sonshine Water System Consolidation Project, Kern County, California

Cultural Resources Assessment, Petro Resources Oil and Gas Exploration Project, Kern County, California

Phase II Archaeological Testing Report, Gasco Energy Oil and Gas Exploration Project, Kern County, California

Cultural Resources Assessment Greenfield Homes II, Bakersfield, Kern County, California

Cultural Resources Assessment of the VY4458 Doormaster Sales Project, Bakersfield Kern County, California

Cultural Resources Assessment of the Daybreak Oil and Gas, Inc. Bear # 6 and 7 Oil and Natural Gas Well Drilling Project, Kern County, California

Cultural Resources Assessment of West Coast Land Service Six Proposed Well Sites and Associated Access Roads in Barrel Valley, Unincorporated Kern County, California

Cultural Resources Assessment of the Peoples Church CA Project, Bakersfield, Kern County, California

Cultural Resources Assessment Allensworth Test Well Project, Allensworth, Unincorporated Tulare County, California

Cultural Resources Assessment and Subsurface Testing, Piute Mountain School Potable Water Supply Project, Kern County, California

Cultural Resources Assessment of the E&B Natural Resources Corporation Blackwells Corner 2015 Oil and Gas Exploration Project, Kern County, California

Cultural Resources Orientation, Foothill Energy LLC 24-24 Project, Bakersfield, Kern County, California

Cultural Resources Assessment of the CV738 Roeding Park Project, Fresno, Fresno County, California

National Register Eligibility Evaluation of the Coalinga Library Building, Coalinga, Fresno County

Cultural Resources Assessment of the MK Operating, LLC MCKA #4 Oil and gas Exploration Project, Fresno County, California

Cultural Resources Assessment of the CV802 Hwy 41/33 Project, Kings County, California

Cultural Resources Assessment of the Hwy 41 Utica Project, Kings County, California

NICHOLAS SHEPETUK, B.A.
Archaeological Crew Chief (2017-Present)
BCR Consulting LLC
310-469-2291
nickshepetuk@gmail.com

SKILLS

Technical Report Writing for Archaeology, History, and Architectural History
Archaeological, Historical, and Architectural History Research
Archaeological Excavation
Archaeological and Architectural History Survey
Lithic and Ground Stone Analysis Including Typo-technological Analysis and Refitting Studies
Archaeological Mapping
Geoprocessing Using GIS Software
Laboratory Analysis
Human Osteological Analysis and Identification

EDUCATION

University of California, Berkeley, B.A. Anthropology, 2017

Continuing Education

Maya Research Program, Archaeological Field School 2016
University of California, California Archaeology Laboratory, Excavation/Research 2016
University of California, Historical Archaeology Laboratory, Excavation/Research 2017
University of California, Geoarchaeology and Southwest Asia Prehistory Laboratory, Lithic Analysis 2016, 2017

RELATED PROFESSIONAL EXPERIENCE

Position as a Human Osteological Lab Technician at the Human Evolution Research Center, University of California, Berkeley

SELECTED PROJECTS

Cultural Resources Assessment of the Dewalt Project in Bakersfield, Kern County, California
Archaeological Survey for the Early Implementation Section 106 Project in Los Banos, Merced County, California

Cultural Resources Assessment of the Martin Homes Project, Tract 7318, Project in Bakersfield, Kern County, California

Cultural Resources Assessment of the Sacramento T-Mobile Telecom Project, Sacramento County, California

Archaeological Monitoring of the HP Communications Project in the City of Berkeley, Alameda County, California

Phase II Archaeological Excavation of the Wawona Combined Evaluation Project in Wawona, Mariposa County, California

Archaeological Excavation of the Willits 17 Site Evaluation Project in Willits, Mendocino County, California

Cultural Resources Assessment, Test Excavation, and Archaeological Evaluation of the CSL1024 Telecommunications Project, Unincorporated Kern County, California

Cultural Resources Assessment and Eligibility Evaluations Raceway Project, Rosamond, Kern County, California; Lancaster, Los Angeles County; Unincorporated Los Angeles County, California

Phase I Cultural Resources Assessment and Extended Phase I Subsurface Testing, Arsenic Mitigation Project, Kern County, California

Cultural Resources Assessment 1, 2, 3-TCP Treatment Project Municipal Wells 8 and 13, Arvin, Kern County, California

Cultural Resources Assessment of the Ansolabehere 9-3 and 10-3 Project, Kern County, California

Cultural Resources Assessment of the Union Avenue Wells Project, Bakersfield, Kern County, California

Archaeological Monitoring of the Bayshore A Project, Lancaster, Los Angeles County, California

Archaeological Monitoring of the Park to Playa Project in Baldwin Hills, Los Angeles County, California

Archaeological Monitoring of the Bob Hope Crossing Project, Cathedral City, Riverside County, California

Cultural Resources Assessment of the Caprock Warehouse Project in Fontana, San Bernardino County, California

Cultural Resources Assessment of the Union Fontana Warehouse Project in Fontana, San Bernardino County, California

Cultural Resources Assessment of Assessor Parcel Number 3128-531-05-0000 in the City of Victorville, San Bernardino County, California

Cultural Resources Assessment of the Antelope North Solar Project, Lancaster, Los Angeles County, California

Cultural Resources Assessment of Bench Ranch Solar Project, Lancaster, Los Angeles County, California

APPENDIX D

TRIBAL COMMUNICATIONS

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

December 15, 2020

Nicholas Shepetuk

BCR Consulting LLC

Via Email to: nickshepetuk@gmail.com

Re: Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project, Kern County

Dear Mr. Shepetuk:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contacts List
December 15, 2020

Big Pine Paiute Tribe of the Owens Valley
James Rambeau, Sr., Chairperson
P.O. Box 700 — Paiute - Shoshone
Big Pine ,CA 93513
j.rambeau@bigpinepaiute.org
(760) 938-2003
(976) 938-2942 Fax

Big Pine Paiute Tribe of Owens Valley
Sally Manning, Environmental Director
P.O. Box 700 — Paiute
Big Pine ,CA 93513
s.manning@bigpinepaiute.org
(760) 938-2003
(760) 938-2942 Fax

Big Pine Paiute Tribe of the Owens Valley
Danelle Gutierrez THPO
P.O. Box 700 — Paiute
Big Pine ,CA 93513
d.gutierrez@bigpinepaiute.org
(760) 938-2003, ext. 228
(760) 938-2942 Fax

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street — Chumash
Bakersfield ,CA 93307
chumashtribe@sbcglobal.net
(661) 322-0121

Coastal Band of the Chumash Nation
Mariza Sullivan, Chairman
P. O. Box 4464 — Chumash
Santa Barbara ,CA 93140
cbcntribalchair@gmail.com
(805) 665-0486

Fernandeno Tataviam Band of Mission Indians
Jairo F. Avila, THPO
1019 Second St., Suite 1 — Fernandeno Tataviam
San Fernando ,CA 91340
jairo.avila@tataviam-nsn.us
(818) 837-0794 Office
(818) 837-0796 Fax

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010 — Kawaiisu Tubatulabal
Lake Isabella ,CA 93240
(661) 340-0032 Cell

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010 — Tubatulabal Kawaiisu
Lake Isabella ,CA 93240
bbutterbredt@gmail.com
(760) 378-2915 Cell

Kern Valley Indian Community
Brandy Kendricks
30741 Foxridge Court — Kawaiisu Tubatulabal
Tehachapi ,CA 93561
krazykendricks@hotmail.com
(661) 821-1733
(661) 972-0445

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio Street — Yowlumne Kitanemuk
Bakersfield ,CA 93305
2deedominguez@gmail.com
(626) 339-6785

This list is current 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 of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project, Kern County.

Native American Heritage Commission
Native American Contacts List
December 15, 2020

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838
Newhall ,CA 91322
ddyocum@comcast.net
(503) 593-0933
(503) 574-3308

Fernandeno
Tataviam
Serrano
Vanyume
Kitanemuk

San Manuel Band of Mission Indians
Jessica Mauck, Director-CRM Dept.
26569 Community Center Drive
Highland ,CA 92346
jmauck@sanmanuel-nsn.gov
(909) 864-8933

Serrano

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore ,CA 93245
(559) 924-1278
(559) 924-3583 Fax

Tache
Tachi
Yokut

Tejon Indian Tribe
Octavio Escobedo III, Chairperson
P.O. Box 640
Arvin ,CA 93203
oescobedo@tejonindiantribe-nsn.gov
(661) 834-8566

Kitanemuk

Tejon Indian Tribe
Colin Rambo, CRM Tech
P.O. Box 640
Arvin ,CA 93203
colin.rambo@tejonindiantribe-nsn.gov
(661) 834-8566
(484) 515-4790 Cell

Kitanemuk

Tubatulabals of Kern Valley
Robert L. Gomez, Jr., Tribal Chairperson
P.O. Box 226
Lake Isabella ,CA 93240
(760) 379-4590
(760) 379-4592 Fax

Tubatulabal

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville ,CA 93258
neil.peyron@tulerivertribe-nsn.gov
(559) 781-4271
(559) 781-4610 Fax

Yokuts

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas ,CA 93906
kwood8934@aol.com
(831) 443-9702

Foothill Yokuts
Mono
Wuksache

yak tityu tityu yak tiłhini - Northern Chumash Tribe
Mona Olivas Tucker, Chairwoman
660 Camino Del Rey
Arroyo Grande ,CA 93420
olivas.mona@gmail.com
(805) 489-1052 Home
(805) 748-2121 Cell

Chumash

This list is current 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 of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project, Kern County.

December 22, 2020

Big Pine Paiute Tribe of the Owens
Valley James Rambeau, Sr., Chairperson
P.O. Box 700
Big Pine, California 93513

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Big Pine Paiute Tribe of the Owens Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Fernandeno Tataviam Band of Mission
Indians Jairo F. Avila, THPO
1019 Second Street, Suite 1
San Fernando, California 91340

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Avila:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Fernandeno Tataviam Band of Mission Indians elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Big Pine Paiute Tribe of Owens Valley
Sally Manning, Environmental
Director P.O. Box 700
Big Pine, California 93513

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Manning:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Big Pine Paiute Tribe of Owens Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010
Lake Isabella, California 93240

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Secretary:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kern Valley Indian Community elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Big Pine Paiute Tribe of the Owens
Valley Danelle Gutierrez THPO
P.O. Box 700
Big Pine, California 93513

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear THPO Gutierrez:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Big Pine Paiute Tribe of the Owens Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010
Lake Isabella, California 93240

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Chairperson Robinson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kern Valley Indian Community elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Chumash Council of
Bakersfield Julio Quair,
Chairperson
729 Texas Street
Bakersfield, California 93307

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Chairperson Quair:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Chumash Council of Bakersfield elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

Kern Valley Indian Community
Brandy Kendricks
30741 Foxridge Court
Tehachapi, California 93561

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Kendricks

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kern Valley Indian Community elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Coastal Band of the Chumash
Nation Manza Sullivan, Chairman
P.O. Box 4464
Santa Barbara, California 93140

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairman:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Coastal Band of the Chumash Nation elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Kitanemuk & Yowlumne Tejon
Indians Delia Dominguez,
Chairperson
115 Radio Street
Bakersfield, California 93305

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kitanemuk & Yowlumne Tejon Indians elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

San Fernando Band of Mission
Indians Donna Yocum, Chairperson
P.O. Box 221838
Newhall, California 91322

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the San Fernando Band of Mission Indians elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tubatulabals of Kern Valley
Robert L. Gomez, Jr.
Tribal Chairperson
P.O. Box 226
Lake Isabella, California
93240

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Tubatulabals of Kern Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

San Manuel Band of Mission Indians
Jessica Mauck, Director-CRM Department
26569 Community Center Drive
Highland, California 92346

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Mauck:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the San Manuel Band of Mission Indians elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC



David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, California 93258

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Tule River Indian Tribe elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore, California 93245

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Santa Rosa Rancheria Tachi Yokut Tribe elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC



David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Court,
Salinas, California 93906

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Wuksache Indian Tribe/Eshom Valley Band elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tejon Indian Tribe
Octavio Escobedo III, Chairperson
P.O. Box 640
Arvin, California 93203

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Tejon Indian Tribe elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

yak titutityu yak tilhini- Northern Chumash Tribe
Mona Olivas Tucker, Chairwoman
660 Camino Del Rey
Arroyo Grande, California 93420

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Chairwoman:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tejon Indian Tribe
Colin Rambo, CRM Tech
P.O. Box 640
Arvin, California 93203

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Rambo:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

EXHIBIT F
"NATIVE AMERICAN HERITAGE COMMISSION – CULTURAL RESOURCES RESEARCH"

(See Appendix D of the Cultural Resources Report attached hereto as Exhibit E)

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[**Vacant**]

COMMISSIONER
[**Vacant**]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

December 15, 2020

Nicholas Shepetuk

BCR Consulting LLC

Via Email to: nickshepetuk@gmail.com

Re: Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project, Kern County

Dear Mr. Shepetuk:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,

Nancy Gonzalez-Lopez
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contacts List
December 15, 2020

Big Pine Paiute Tribe of the Owens Valley
James Rambeau, Sr., Chairperson
P.O. Box 700 — Paiute - Shoshone
Big Pine ,CA 93513
j.rambeau@bigpinepaiute.org
(760) 938-2003
(976) 938-2942 Fax

Big Pine Paiute Tribe of Owens Valley
Sally Manning, Environmental Director
P.O. Box 700 — Paiute
Big Pine ,CA 93513
s.manning@bigpinepaiute.org
(760) 938-2003
(760) 938-2942 Fax

Big Pine Paiute Tribe of the Owens Valley
Danelle Gutierrez THPO
P.O. Box 700 — Paiute
Big Pine ,CA 93513
d.gutierrez@bigpinepaiute.org
(760) 938-2003, ext. 228
(760) 938-2942 Fax

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street — Chumash
Bakersfield ,CA 93307
chumashtribe@sbcglobal.net
(661) 322-0121

Coastal Band of the Chumash Nation
Mariza Sullivan, Chairman
P. O. Box 4464 — Chumash
Santa Barbara ,CA 93140
cbcntribalchair@gmail.com
(805) 665-0486

Fernandeno Tataviam Band of Mission Indians
Jairo F. Avila, THPO
1019 Second St., Suite 1 — Fernandeno Tataviam
San Fernando ,CA 91340
jairo.avila@tataviam-nsn.us
(818) 837-0794 Office
(818) 837-0796 Fax

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010 — Kawaiisu Tubatulabal
Lake Isabella ,CA 93240
(661) 340-0032 Cell

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010 — Tubatulabal Kawaiisu
Lake Isabella ,CA 93240
bbutterbredt@gmail.com
(760) 378-2915 Cell

Kern Valley Indian Community
Brandy Kendricks
30741 Foxridge Court — Kawaiisu Tubatulabal
Tehachapi ,CA 93561
krazykendricks@hotmail.com
(661) 821-1733
(661) 972-0445

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio Street — Yowlumne Kitanemuk
Bakersfield ,CA 93305
2deedominguez@gmail.com
(626) 339-6785

This list is current 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 of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project, Kern County.

Native American Heritage Commission
Native American Contacts List
December 15, 2020

San Fernando Band of Mission Indians
Donna Yocum, Chairperson
P.O. Box 221838
Newhall ,CA 91322
ddyocum@comcast.net
(503) 593-0933
(503) 574-3308

Fernandeno
Tataviam
Serrano
Vanyume
Kitanemuk

San Manuel Band of Mission Indians
Jessica Mauck, Director-CRM Dept.
26569 Community Center Drive
Highland ,CA 92346
jmauck@sanmanuel-nsn.gov
(909) 864-8933

Serrano

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore ,CA 93245
(559) 924-1278
(559) 924-3583 Fax

Tache
Tachi
Yokut

Tejon Indian Tribe
Octavio Escobedo III, Chairperson
P.O. Box 640
Arvin ,CA 93203
oescobedo@tejonindiantribe-nsn.gov
(661) 834-8566

Kitanemuk

Tejon Indian Tribe
Colin Rambo, CRM Tech
P.O. Box 640
Arvin ,CA 93203
colin.rambo@tejonindiantribe-nsn.gov
(661) 834-8566
(484) 515-4790 Cell

Kitanemuk

Tubatulabals of Kern Valley
Robert L. Gomez, Jr., Tribal Chairperson
P.O. Box 226
Lake Isabella ,CA 93240
(760) 379-4590
(760) 379-4592 Fax

Tubatulabal

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville ,CA 93258
neil.peyron@tulerivertribe-nsn.gov
(559) 781-4271
(559) 781-4610 Fax

Yokuts

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas ,CA 93906
kwood8934@aol.com
(831) 443-9702

Foothill Yokuts
Mono
Wuksache

yak tityu tityu yak tiłhini - Northern Chumash Tribe
Mona Olivas Tucker, Chairwoman
660 Camino Del Rey
Arroyo Grande ,CA 93420
olivas.mona@gmail.com
(805) 489-1052 Home
(805) 748-2121 Cell

Chumash

This list is current 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 of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code,Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed:
Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project, Kern County.

December 22, 2020

Big Pine Paiute Tribe of the Owens
Valley James Rambeau, Sr., Chairperson
P.O. Box 700
Big Pine, California 93513

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Big Pine Paiute Tribe of the Owens Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Fernandeno Tataviam Band of Mission
Indians Jairo F. Avila, THPO
1019 Second Street, Suite 1
San Fernando, California 91340

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Avila:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Fernandeno Tataviam Band of Mission Indians elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Big Pine Paiute Tribe of Owens Valley
Sally Manning, Environmental
Director P.O. Box 700
Big Pine, California 93513

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Manning:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Big Pine Paiute Tribe of Owens Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Kern Valley Indian Community
Julie Turner, Secretary
P.O. Box 1010
Lake Isabella, California 93240

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Secretary:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kern Valley Indian Community elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Big Pine Paiute Tribe of the Owens
Valley Danelle Gutierrez THPO
P.O. Box 700
Big Pine, California 93513

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear THPO Gutierrez:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Big Pine Paiute Tribe of the Owens Valley elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Kern Valley Indian Community
Robert Robinson, Chairperson
P.O. Box 1010
Lake Isabella, California 93240

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Chairperson Robinson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kern Valley Indian Community elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Chumash Council of
Bakersfield Julio Quair,
Chairperson
729 Texas Street
Bakersfield, California 93307

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Chairperson Quair:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Chumash Council of Bakersfield elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

Kern Valley Indian Community
Brandy Kendricks
30741 Foxridge Court
Tehachapi, California 93561

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Kendricks

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Kern Valley Indian Community elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Coastal Band of the Chumash
Nation Manza Sullivan, Chairman
P.O. Box 4464
Santa Barbara, California 93140

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairman:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Coastal Band of the Chumash Nation elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Kitanemuk & Yowlumne Tejon
Indians Delia Dominguez,
Chairperson
115 Radio Street
Bakersfield, California 93305

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

San Fernando Band of Mission
Indians Donna Yocum, Chairperson
P.O. Box 221838
Newhall, California 91322

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tubatulabals of Kern Valley
Robert L. Gomez, Jr.
Tribal Chairperson
P.O. Box 226
Lake Isabella, California
93240

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

San Manuel Band of Mission Indians
Jessica Mauck, Director-CRM Department
26569 Community Center Drive
Highland, California 92346

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Mauck:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC



David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tule River Indian Tribe
Neil Peyron, Chairperson
P.O. Box 589
Porterville, California 93258

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Santa Rosa Rancheria Tachi Yokut Tribe
Leo Sisco, Chairperson
P.O. Box 8
Lemoore, California 93245

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley
General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC



David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Wuksache Indian Tribe/Eshom Valley Band
Kenneth Woodrow, Chairperson
1179 Rock Haven Court,
Salinas, California 93906

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

The proposed project will include construction of a new 36-inch irrigation water transmission main, a new 16-inch potable pipeline alignment, and well, tank, and booster station located in Kern County. The 36-inch water main will be placed in the Imperial Street right of way between the proposed well, tank, and booster station site to the west of Highway 65 and will terminate immediately to the west of the Lerdo Canal. It will cross underneath Highway 99 and the Lerdo Canal via directional bore. The new 16-inch potable pipeline alignment will be placed along the eastern frontage of Highway 99, running approximately 550 feet northeast by southwest and crossing beneath Highway 99 at its northwestern terminus via directional bore. The proposed project is depicted on the attached project map. The proposed Project will be evaluated pursuant to the California Environmental Quality Act (CEQA). An Initial Study/Mitigated Negative Declaration will evaluate the potential environmental impacts associated with implementing the proposed Project. You have 30 calendar days from receipt of this letter to notify us in writing that you would like to consult on the Project. Please provide the lead contact person's contact information in your response. Should the Wuksache Indian Tribe/Eshom Valley Band elect to engage in the consultation process, please provide written comments to:

Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tejon Indian Tribe
Octavio Escobedo III, Chairperson
P.O. Box 640
Arvin, California 93203

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Chairperson:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

yak titutityu yak tilhini- Northern Chumash Tribe
Mona Olivas Tucker, Chairwoman
660 Camino Del Rey
Arroyo Grande, California 93420

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Ms. Chairwoman:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Oildale Mutual Water Company
Doug Nunneley, General Manager
dnunneley@oildalewater.com

Mr. Nunneley can also be reached by phone at (661) 399-5516. Thank you for your involvement in this process.

Sincerely,

BCR Consulting LLC

David Brunzell, M.A./RPA
Principal Investigator/Archaeologist

Attachment: Project Map

December 22, 2020

Tejon Indian Tribe
Colin Rambo, CRM Tech
P.O. Box 640
Arvin, California 93203

Subject: Notice of Proposed Project Pursuant to Public Resources Code Section 21090.3.1 ("AB 52"), *Oildale Mutual Water Company 36-Inch Irrigation Water Transmission Main Project*

Dear Mr. Rambo:

This letter is to inform you that the Oildale Mutual Water Company (OMWC) is planning the 36-inch Irrigation Water Transmission Main Project (the proposed project). Per AB 52, the tribe has the right to consult on a proposed public or private project prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report.

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Doug Nunneley, General Manager
dnunneley@oildalewater.com

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Principal Investigator/Archaeologist

Attachment: Project Map

EXHIBIT G
"NATIONAL COOPERATIVE SOIL SURVEY – WEB SOIL SURVEY MAP"

United States Department of Agriculture

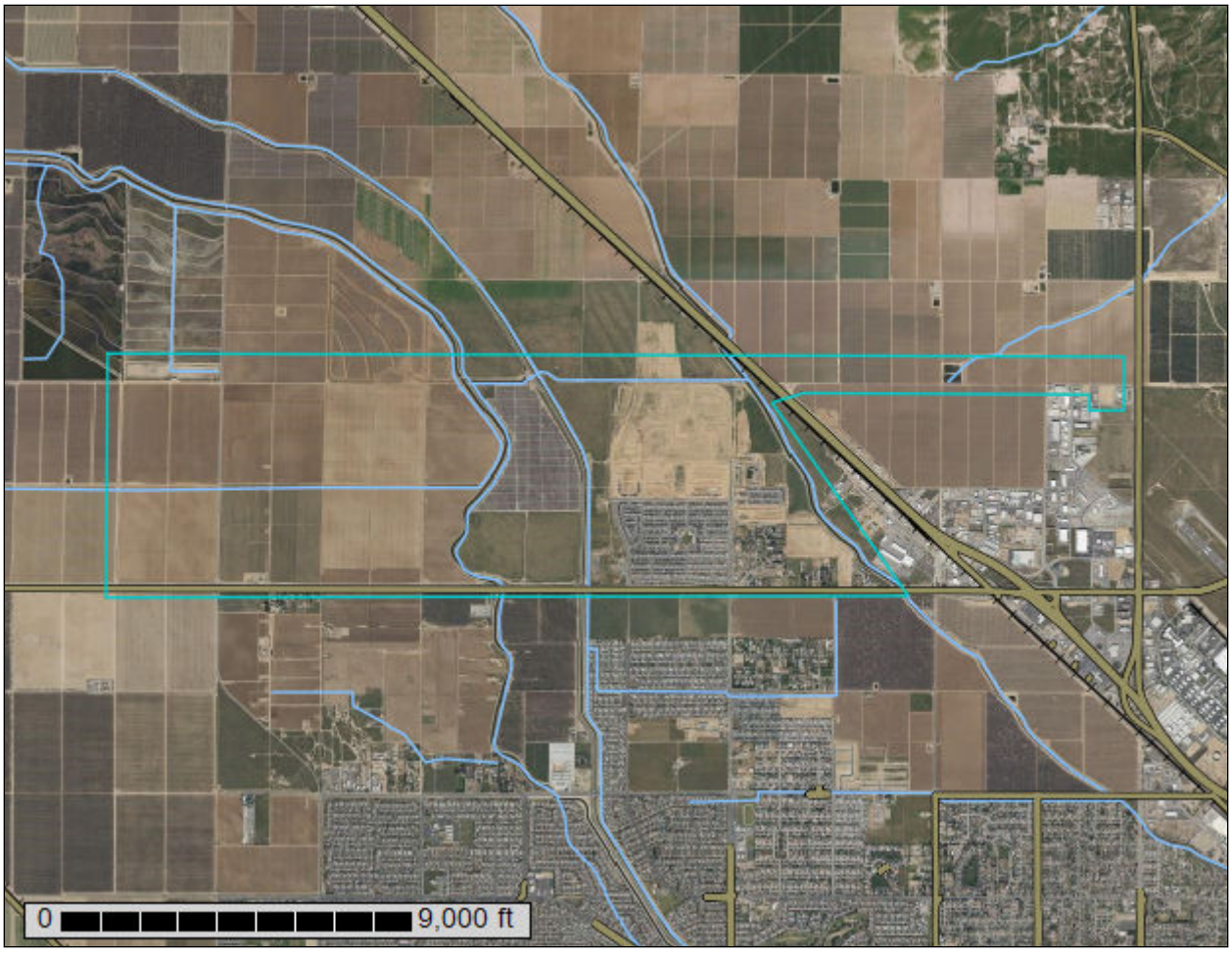
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Kern County, California, Northwestern Part

Oildale Mutual Water Company Dual Water System Improvement Project



January 7, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

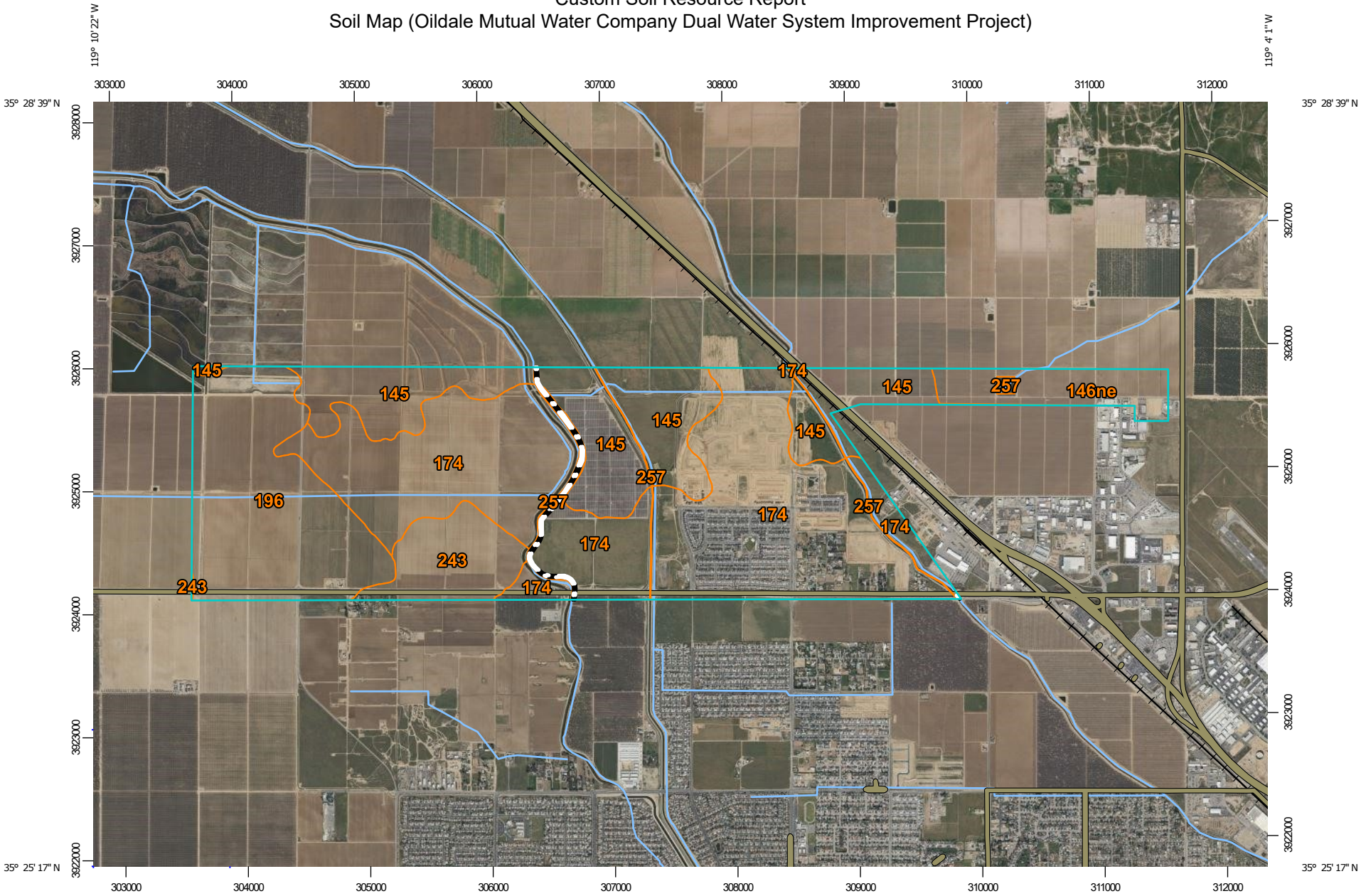
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Soil Map (Oildale Mutual Water Company Dual Water System Improvement Project)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Kern County, California, Northwestern Part
Survey Area Data: Version 13, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 9, 2020—Feb 25, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Oildale Mutual Water Company Dual Water System Improvement Project)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
145	Driver coarse sandy loam, 0 to 2 percent slopes	624.3	21.8%
146ne	Delano sandy loam, 1 to 5 percent slopes	143.0	5.0%
174	Kimberlina fine sandy loam, 0 to 2 percent slopes MLRA 17	1,364.9	47.7%
196	Milham sandy loam, 0 to 2 percent slopes MLRA 17	541.9	19.0%
243	Wasco sandy loam	172.3	6.0%
257	Water	12.6	0.4%
Totals for Area of Interest		**2,859.1**	**100.0%**

Map Unit Descriptions (Oildale Mutual Water Company Dual Water System Improvement Project)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the

scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Kern County, California, Northwestern Part

145—Driver coarse sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hkhr
Elevation: 400 to 520 feet
Mean annual precipitation: 7 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Driver and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Driver

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 16 inches: coarse sandy loam
Bt - 16 to 27 inches: clay loam
Cq - 27 to 37 inches: sandy loam
2C - 37 to 65 inches: stratified loamy coarse sand to loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 30 inches to abrupt textural change
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Lewkalb
Percent of map unit: 5 percent
Hydric soil rating: No

Wasco
Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed, hardpan soil
Percent of map unit: 5 percent
Hydric soil rating: No

146ne—Delano sandy loam, 1 to 5 percent slopes

Map Unit Setting
National map unit symbol: 1sgcn
Elevation: 500 to 700 feet
Mean annual precipitation: 7 to 9 inches
Mean annual air temperature: 64 to 66 degrees F
Frost-free period: 260 to 290 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Delano and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Delano

Setting
Landform: Fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granitoid

Typical profile
A - 0 to 18 inches: sandy loam
Btk1 - 18 to 37 inches: sandy clay loam
Btk2 - 37 to 60 inches: sandy loam

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Hesperia

Percent of map unit: 7 percent
Landform: Inset fans
Hydric soil rating: No

Pleito

Percent of map unit: 5 percent
Landform: Fan remnants
Hydric soil rating: No

Arents, loamy

Percent of map unit: 3 percent
Landform: Alluvial fans
Hydric soil rating: No

Calicreek

Percent of map unit: 2 percent
Landform: Flood plains
Hydric soil rating: No

Riverwash

Percent of map unit: 1 percent
Landform: Drainageways
Hydric soil rating: No

Urban land

Percent of map unit: 1 percent
Landform: Alluvial fans
Hydric soil rating: No

Oil-waste land

Percent of map unit: 1 percent
Landform: Alluvial fans, depressions
Hydric soil rating: No

174—Kimberlina fine sandy loam, 0 to 2 percent slopes MLRA 17

Map Unit Setting

National map unit symbol: 2ss96
Elevation: 120 to 1,160 feet
Mean annual precipitation: 4 to 8 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 240 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Kimberlina and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kimberlina

Setting

Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 9 inches: fine sandy loam
C - 9 to 45 inches: fine sandy loam
2C - 45 to 71 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: RareNone
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to slightly saline (0.3 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Wasco

Percent of map unit: 7 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Milham

Percent of map unit: 6 percent
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

196—Milham sandy loam, 0 to 2 percent slopes MLRA 17

Map Unit Setting

National map unit symbol: 2ss91
Elevation: 200 to 1,200 feet
Mean annual precipitation: 5 to 8 inches
Mean annual air temperature: 63 to 65 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Milham and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Milham

Setting

Landform: Alluvial fans, plains, fan remnants, terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Typical profile

Ap - 0 to 4 inches: sandy loam
Bk - 4 to 10 inches: sandy loam
Btk1 - 10 to 22 inches: loam
Btk2 - 22 to 49 inches: clay loam
2Ck - 49 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 25.0
Available water capacity: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R017XG043CA - Loamy 6-8" P.Z.
Hydric soil rating: No

Minor Components

Kimberlina

Percent of map unit: 5 percent
Landform: Alluvial fans
Hydric soil rating: No

Garces

Percent of map unit: 5 percent
Hydric soil rating: No

Panoche

Percent of map unit: 5 percent
Hydric soil rating: No

243—Wasco sandy loam

Map Unit Setting

National map unit symbol: hklx

Elevation: 250 to 3,700 feet
Mean annual precipitation: 4 to 7 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 210 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Wasco and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wasco

Setting

Landform: Alluvial fans, flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

Ap - 0 to 15 inches: sandy loam
C - 15 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

257—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

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EXHIBIT H
"FLOOD INSURANCE RATE MAP"

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from USDA - Farm Service Agency - Aerial Photography Field Office dated 2005 and from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1992 or later.

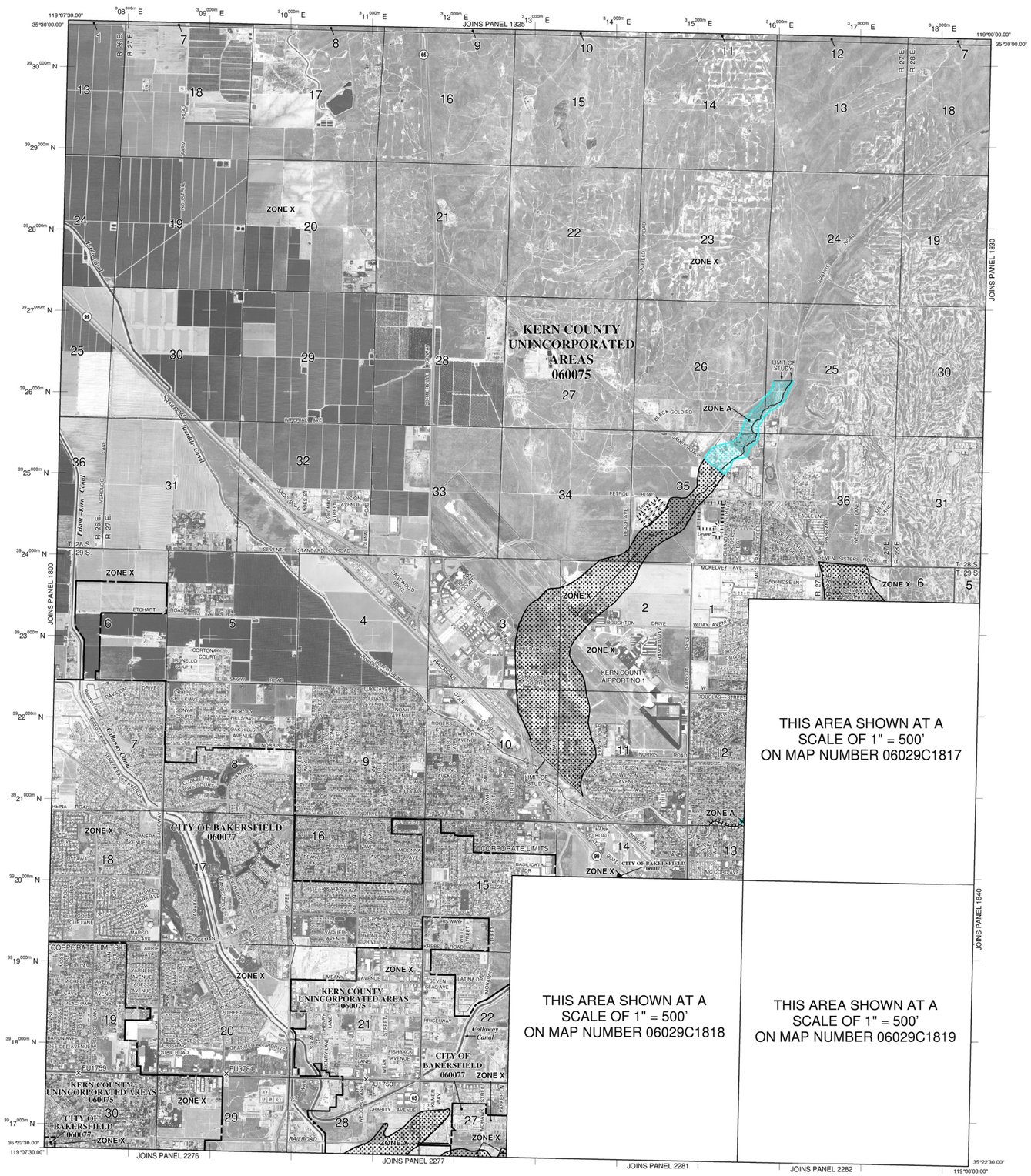
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

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Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report,* and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000mN — 1000-meter Universal Transverse Mercator grid ticks, zone 11
- 6000000 M — 5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1825E

FIRM
FLOOD INSURANCE RATE MAP
KERN COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1825 OF 4125
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KERN COUNTY	060075	1825	E
BAKERSFIELD, CITY OF	060077	1825	E

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
06029C1825E

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

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Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC–3, #9202
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Silver Spring, MD 20910–3282

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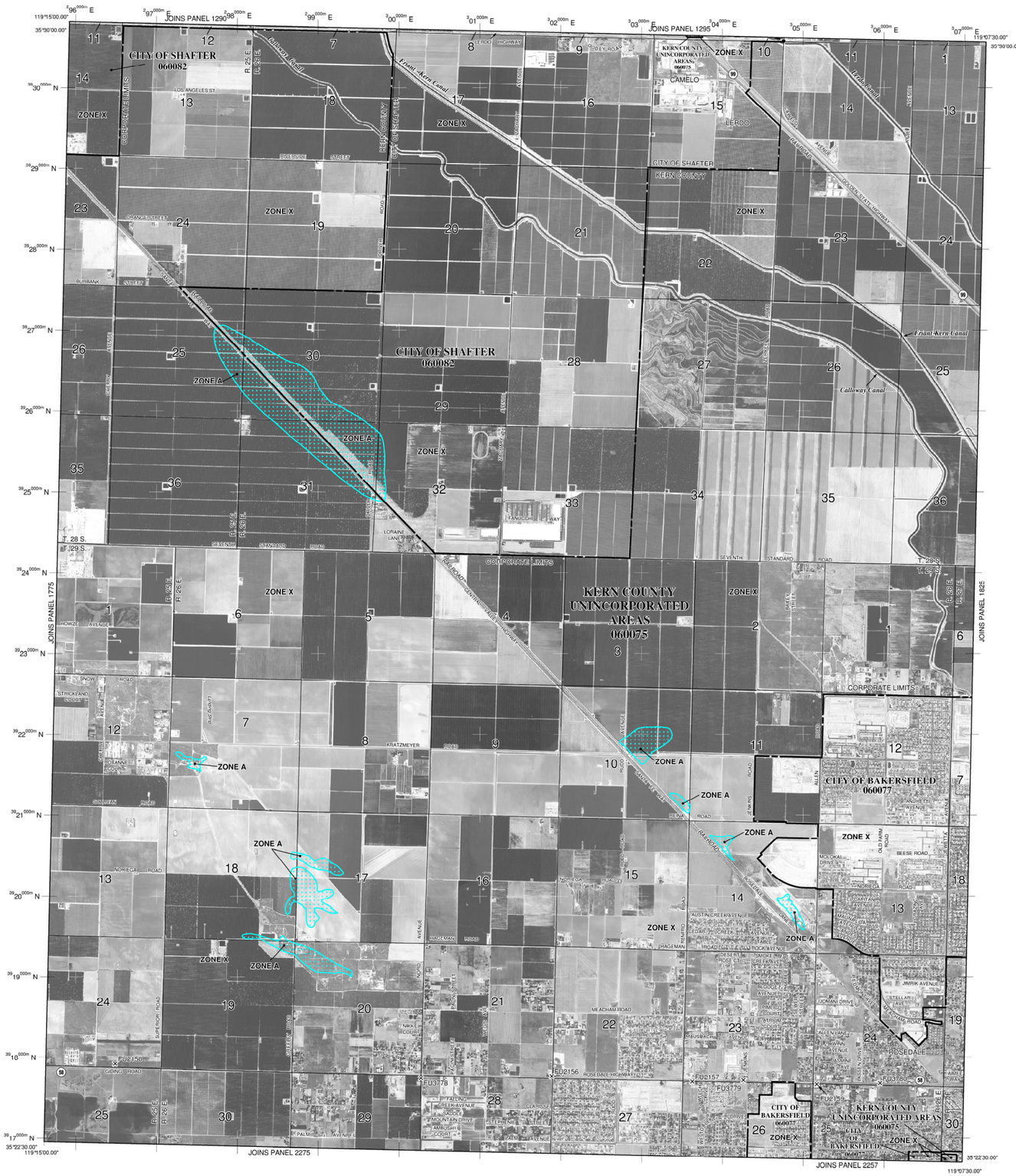
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LEGEND

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ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000mN — 1000-meter Universal Transverse Mercator grid ticks, zone 11
- 6000000 M — 5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

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MAP SCALE 1" = 2000'
1000 0 2000 4000 FEET
600 0 600 1200 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1800E

FIRM
FLOOD INSURANCE RATE MAP
KERN COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1800 OF 4125
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
KERN COUNTY	060075	1800	E
BAKERSFIELD, CITY OF	060077	1800	E
SHAFTER, CITY OF	060082	1800	E

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
06029C1800E

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

EXHIBIT I
"U.S. FISH AND WILDLIFE SERVICE – NATIONAL WETLANDS INVENTORY MAP"

U.S. Fish and Wildlife Service

National Wetlands Inventory

OMWC Dual Water System Project



January 8, 2021

Wetlands

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

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.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

National Wetlands Inventory

OMWC Dual Water System Project - 2



January 8, 2021

Wetlands

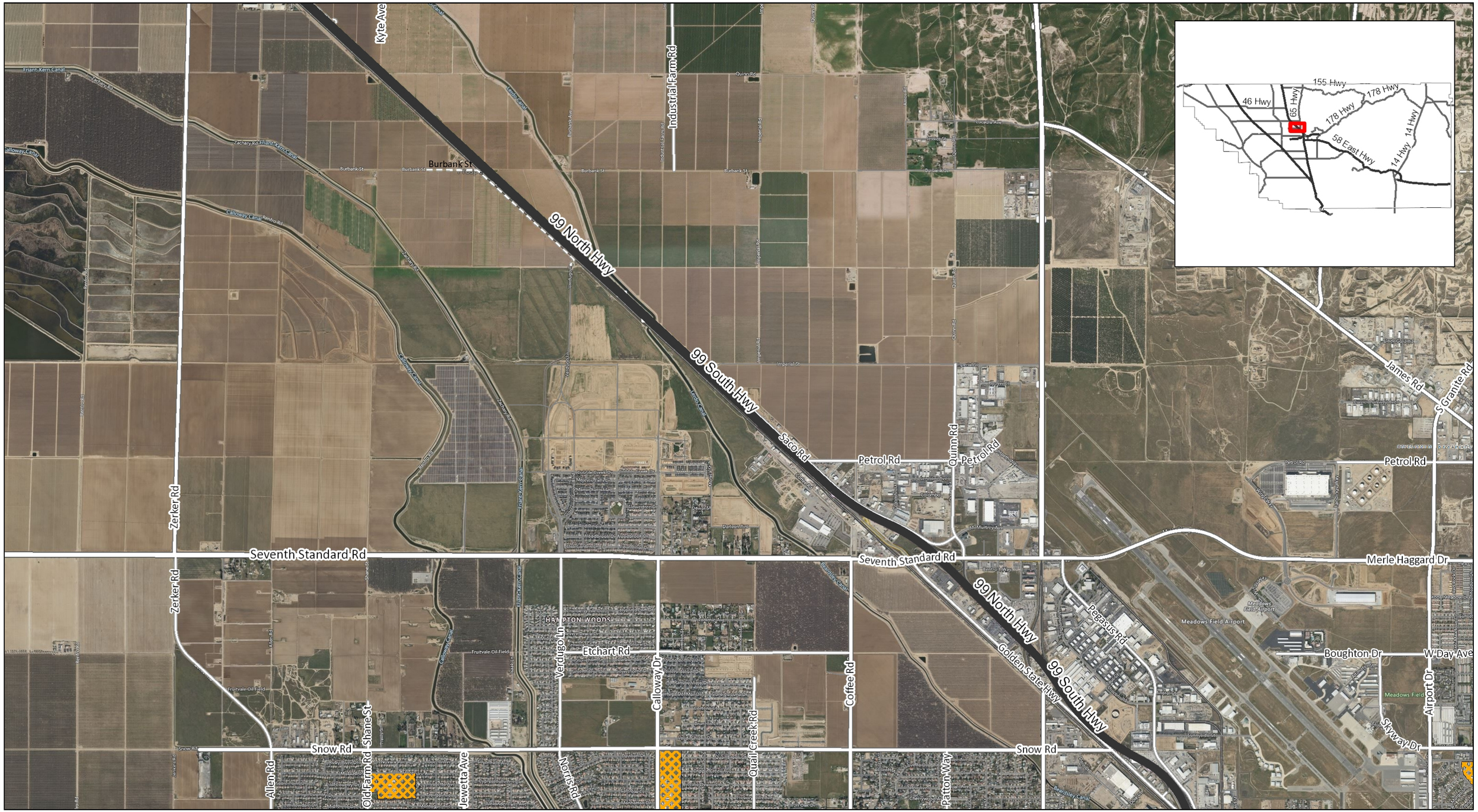
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
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EXHIBIT J
"MAP OF SCHOOLS IN PROJECT VICINITY"

Kern County GIS

Generated by Kern County Web Map Service



1.14 0 0.57 1.14 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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1: 36,112

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EXHIBIT K
"LIST OF HAZARDOUS MATERIALS SITES PER CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL"

Dee Jaspar Associates, Inc.
2730 Unicorn Road, Building A
Bakersfield, CA 93308

List of Hazardous Materials Sites in Kern County per California Department of Toxic Substances Control

Current as of January 8, 2021

SITE / FACILITY NAME	ENVIROSTOR ID	PROGRAM TYPE	STATUS	STATUS DATE	ADDRESS DESCRIPTION	CITY	ZIP	CALENVIROSCREEN SCORE	COUNTY	SITE CODE	LATITUDE	LONGITUDE
SHAFTER AIRPORT	15070029	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	2/7/1992	LERDO HIGHWAY AT HIGHWAY 99	SHAFTER	93263	NA	KERN	100130	35.5003	-119.1829
K & D SALVAGE	15500001	STATE RESPONSE	ACTIVE	6/29/1998	600 SOUTH UNION AVENUE	BAKERSFIELD	93307	96-100%	KERN	101086	35.3490	-119.0023
GROSSI/CALANDRI PROPERTY	15100008	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	2/7/1997	INTERSECTION OF MARIE AVE & W 15TH ST	ROSAMOND	93560	61-65%	KERN	100184	34.8496	-118.1589
BROWN AND BRYANT, INC., ARVIN FACILITY	15280011	FEDERAL SUPERFUND - LISTED	ACTIVE	3/1/1985	600 S DERBY ST	ARVIN	93203	81-85%	KERN	100025, 102409	35.2031	-118.8231
OSAGE INDUSTRIES, 60TH STREET WEST	15330005	STATE RESPONSE	ACTIVE	6/2/1994	60TH STREET WEST T9N, R13W, S10 SE CORNER	ROSAMOND	93560	56-60%	KERN	101534	34.8833	-118.2333
JOHN ALEXANDER RESEARCH INC	15330004	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	3/7/2003	1753 SIERRA HIGHWAY	ROSAMOND	93560	61-65%	KERN	100006	34.8457	-118.1602
PURDY COMPANY	15330010	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	2/28/1997	12901 UNITED ROAD	MOJAVE	93501	76-80%	KERN	100176, 101671	35.0093	-118.1546
DELANO PCE PLUME	60001327	STATE RESPONSE	ACTIVE	8/4/2010	MAIN STREET AND 10TH AVENUE	DELANO	93215	66-70%	KERN	102044	35.7691	-119.2457
OSAGE INDUSTRIES, 15TH STREET	15330001	STATE RESPONSE	ACTIVE	12/27/2017	2001 15TH STREET, WEST	ROSAMOND	93560	61-65%	KERN	100257	34.8519	-118.1583
RESOURCE RENEWAL TECHNOLOGY, INC. - MARICOPA FACILITY	70000045	STATE RESPONSE	ACTIVE	9/14/2011	24306 HIGHWAY 166	MARICOPA	93252	56-60%	KERN	101650	35.0584	-119.3568
J R SIMPLOT, EDISON	15070030	STATE RESPONSE	ACTIVE - LAND USE RESTRICTIONS	5/1/1986	430 PEPPER DRIVE	EDISON	93220	81-85%	KERN	100133	35.3515	-118.8778
SAN JOAQUIN DRUM COMPANY	15340023	STATE RESPONSE	ACTIVE	9/1/2010	3930 GILMORE AVENUE	BAKERSFIELD	93308	81-85%	KERN	100128, 101658, 101704,	35.3897	-119.0518
ENVIRONMENTAL PROTECTION CORPORATION - EASTSIDE DISPOSAL FACILITY	15490019	STATE RESPONSE	ACTIVE	7/1/1994	ROUND MOUNTAIN ROAD	BAKERSFIELD	93301	76-80%	KERN	100054	35.4621	-118.8989
MOBILE SMELTING	15330011	STATE RESPONSE	ACTIVE	6/29/1998	UNITED STREET & REED ROAD	MOJAVE	93501	76-80%	KERN	100188	34.9830	-118.1507
SILVER QUEEN JUNKYARD	15500002	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	6/30/2006	BACK LOT AT 11847 UNITED STREET	MOJAVE	93501	76-80%	KERN	100273	34.9947	-118.1525
BENHAM AND JOHNSON	15280253	STATE RESPONSE	ACTIVE	8/30/2010	340 DANIELS LN	BAKERSFIELD	93307	96-100%	KERN	100020	35.3493	-118.9979
BROWN AND BRYANT - SHAFTER FACILITY	15280010	STATE RESPONSE	ACTIVE	3/1/1985	135 COMMERCIAL DRIVE	SHAFTER	93263	86-90%	KERN	100026, 102191	35.4988	-119.2683
UNITED METAL RECOVERY	15330007	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	6/1/1995	12433 UNITED STREET	MOJAVE	93501	76-80%	KERN	100177	35.0025	-118.1520
BRIDGES AND SON TRUCKING	15280037	STATE RESPONSE	ACTIVE	5/1/2006	1200 ORANGE AVENUE	ROSAMOND	93560	61-65%	KERN	100179	34.8570	-118.1524
COMMODITY REFINING EXCHANGE	15330008	STATE RESPONSE	CERTIFIED / OPERATION & MAINTENANCE - LAND USE RESTRICTIONS	6/27/2003	11847 UNITED STREET	MOJAVE	93501	76-80%	KERN	100175	34.9935	-118.1500
OASIS CLEANERS	60002269	STATE RESPONSE	ACTIVE	11/19/2015	920 MAIN STREET	DELANO	93215	66-70%	KERN	102276	35.7686	-119.2454
FORMER NATIONAL CLEANERS	60002270	STATE RESPONSE	ACTIVE	11/19/2015	811 11TH AVENUE	DELANO	93215	66-70%	KERN	102277	35.7705	-119.2468
AVENUE A UNAUTHORIZED DISPOSAL SITE	15490015	STATE RESPONSE	ACTIVE	10/2/1996	AVENUE A 1-1/2 MILE EAST HIGHWAY 14	ROSAMOND	93560	56-60%	KERN	101339	34.8227	-118.1423
MOJAVE GUNNERY RANGE - (J09CA7281) MMRP	80000950	STATE RESPONSE	ACTIVE	9/14/2006	2 MILE SW OF 21000 HACIENDA BLVD	MOJAVE	93505	41-45%	KERN	101450	35.0758	-117.9981
OAK LANE CLEANERS	60002268	STATE RESPONSE	ACTIVE	11/19/2015	910 MAIN STREET	DELANO	93215	66-70%	KERN	102275	35.7682	-119.2453
S R KILBY PROPERTY	15100009	STATE RESPONSE	ACTIVE	6/29/1998	2021 WEST 15TH STREET	ROSAMOND	93560	61-65%	KERN	100183	34.8504	-118.1588