

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
	<p>it is determined by the qualified biologist that the young have fledged and are no longer dependent on the nest or burrow for survival. Typically, the young fledge by August 31. Actual fledging dates may be earlier or later, and shall be determined by the qualified biologist. Buffer distances may be reduced on an activity-by-activity basis and with the guidance of the qualified biologist and prior approval by the California Department of Fish and Wildlife. The standard buffer distances shall only be reduced to a size that retains “no disturbance” to burrowing owls.</p> <p><b>San Joaquin Kit Fox</b></p> <p>Specific to San Joaquin kit fox, the qualified biologist shall implement <i>Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance</i> (USFWS 2011). These include the following:</p> <p>Pre-activity surveys shall be conducted prior to the beginning of activities likely to impact the San Joaquin kit fox. If any evidence of site occupation by San Joaquin kit fox is observed, an avoidance buffer (see above) shall be established by a qualified biological monitor. If dens must be removed, they must be monitored for a minimum of three consecutive nights using cameras or tracking medium to determine kit fox use. If there is no kit fox activity for three consecutive nights, dens may be collapsed. If dens are actively being used by kit fox, no collapse of the den is permitted until all individuals have vacated the den. Destruction of natal dens and other “known” kit fox dens must not</p>				

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	<p>occur until authorized by U.S. Fish and Wildlife Service. Once kit foxes have been confirmed to have vacated the den, and U.S. Fish Wildlife Service approval has been obtained, dens may subsequently be hand excavated by a trained wildlife biologist. Replacement dens must be constructed in suitable habitat outside of the activity area.</p> <p>Kern-Tulare Water District shall appoint a representative to be the point of contact for any employee or contractor who might inadvertently kill or injure a kit fox, or who finds a dead, injured, or entrapped individual. The point of contact's name and telephone number shall be provided to the U.S. Fish Wildlife Service and California Department of Fish and Wildlife. If any kit fox is inadvertently injured or killed during construction or operations, all work shall immediately stop until the cause of injury is determined, and a plan to avoid any additional injury has been implemented in consultation with the qualified biologist and the U.S. Fish Wildlife Service and California Department of Fish and Wildlife.</p> <p>Any operator, or representative, contractor or subcontractor who inadvertently kills or injures a San Joaquin kit fox shall immediately report the incident to their point of contact. The point of contact shall contact the USFWS and CDFW immediately in the case of a dead, injured or entrapped kit fox. The CDFW contact for immediate assistance is State Dispatch at (916) 445-0045. State Dispatch shall contact the local warden or</p>				

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	biologist.				
	<p>The U.S. Fish Wildlife Service and California Department of Fish and Wildlife shall be notified via phone within 24 hours and in writing within three working days of the accidental death or injury to a San Joaquin kit fox during 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.</p> <p><b>Tricolored Blackbird</b> Specific to tricolored blackbird, construction activities shall avoid riparian areas during the breeding season. If it is not feasible to avoid these riparian areas during the breeding season (February 15 to September 15), then surveys for the tricolored blackbird shall be conducted following the guidelines in <i>Tricolored Blackbird Survey Protocols</i> (UC Davis 2008). If tricolored blackbirds are found on an activity site, activities shall be designed in such a manner as to avoid them and their habitat by 250 feet until young have fledged. Modifications to the habitat that would result in the inability of the tricolored blackbird to use the site for breeding in future breeding seasons shall be prohibited.</p>				
4.4-1	<p><b>MM 4.4-2: GENERAL MEASURES TO PROTECT BIOLOGICAL RESOURCES DURING CONSTRUCTION</b></p> <p>During construction, the following general measures shall be implemented to protect biological resources:</p> <ul style="list-style-type: none"> <li>All construction equipment shall be maintained</li> </ul>	<p>During construction</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The construction contractor(s) shall implement the listed measures at the construction site.</li> <li>The District shall periodically inspect the construction site to ensure that the measures are being implemented.</li> </ul>	District		

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	<p>properly to ensure that it is all in good working order.</p> <ul style="list-style-type: none"> <li>• Construction-related leaks and spills shall be promptly repaired and cleaned up.</li> <li>• Vehicle access and storage of vehicles, equipment, and materials shall be limited to existing dirt roads and previously disturbed areas.</li> <li>• Project-related vehicles shall observe a 20 mph for unpaved roads and 25 mph for paved roads speed limit in an activity area, except on county roads and State and federal highways. Nighttime construction traffic shall be limited to emergency traffic only.</li> <li>• Dogs and other pets shall not be allowed within the activity area.</li> <li>• No firearms shall be permitted within the activity area. Exceptions include those carried by agents of public law enforcement and security personnel.</li> <li>• All materials staged on an activity site shall be inspected thoroughly prior to being moved to ensure no special-status species or sheltering within the materials.</li> <li>• To prevent inadvertent entrapment of animals during the construction phase of an activity, all excavated, 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 be provided with escape ramps at a rate of one ramp every 100 feet. Escape ramps may be constructed of earth fill or wooden planks with a slope no steeper than 45 degrees. If wooden planks are used, perpendicular</li> </ul>				

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	<p>groves or rungs shall be provided to aid in traction. All holes and trenches, whether covered or uncovered, more than 2-feet deep shall be inspected daily for trapped animals regardless of whether or not work is occurring in that area. Before holes or trenches are filled, they shall be thoroughly inspected for trapped animals.</p> <ul style="list-style-type: none"> <li>• Species may be attracted to den-like structures such as pipes, culverts, pallets, wire bales, and construction equipment. All pipes 4-inch diameter or greater that are stored on an activity site shall be securely capped or covered to prevent use by species. Materials and equipment shall be thoroughly inspected for the presence of special-status species before being buried, capped, or otherwise used or moved in any way. If species are discovered within staged materials or equipment, all activity in the immediate area shall stop until the species has vacated the area on its own accord.</li> <li>• Use of rodenticides and herbicides in an activity area shall be restricted. This is necessary to prevent impacts to special-status species and the species that may be affected secondarily. All uses of such compounds shall 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 activity-related restrictions deemed necessary by the U.S. Fish Wildlife Service and California Department of Fish and Wildlife. If rodent control must be conducted, zinc phosphide</li> </ul>				

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	<p>shall be used because of a proven lower risk to secondary carnivores.</p> <ul style="list-style-type: none"> <li>• All food-related trash such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from an activity site.</li> <li>• No plants or wildlife shall be collected, taken, or removed from an activity site.</li> </ul>				
4.4-1	<p><b>MM 4.4-3: WORKER ENVIRONMENTAL AWARENESS PROGRAM</b></p> <p>Prior to construction, a Worker Environmental Awareness Program shall be developed and implemented in which individuals, including employees of contractors and subcontractors, who work on an activity site are informed about the sensitive biological resources in the area. This program shall consist of an onsite or training center presentation that may include a PowerPoint presentation and/or written materials for each participant. The program shall discuss the locations and types of sensitive biological resources on and near the Project site, an overview of the laws and regulations governing the protection of biological resources, the reasons for protecting these resources, the various protection measures to be implemented, and identify official points of contact should questions or issues arise. Workers shall also be trained and directed to recognize species (live or dead) as well as nests, dens, and burrows, and they shall coordinate with the assigned biologists to assure accurate records of the locations of any species (alive or dead) observed in the vicinity of an activity.</p>	<p>Prior to construction</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>• The District shall contract with a qualified biologist to develop and implement a Worker Environmental Awareness Program to inform individuals about sensitive biological resources in the area and to recognize species (live or dead) as well as nests, dens, and burrows.</li> <li>• If necessary, individuals shall coordinate with the assigned biologist to assure accurate records of the locations of any species (live or dead) observed in the vicinity of an activity.</li> <li>• The District shall verify that the program has been implemented.</li> </ul>	District		

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	Each participant shall be required to sign a statement declaring that the individual employee understands and will abide by the guidelines set forth in the program materials. A list of all participants shall be maintained and provided to wildlife agency representatives upon request. The program shall be presented annually and as needed to ensure that all workers receive training prior to being allowed to work on an activity site, and to ensure compliance with all protection measures.				
4.4-1	<p><b>MM 4.4-4: OIL AND GREASE DAILY MAXIMUM LIMITATION TO PROTECT WILDLIFE</b></p> <p>During operation, produced water shall not exceed a daily maximum limitation of 35 milligrams/liter of oil and grease. As part of the required reporting to the Central Valley Regional Water Quality Control Board, this daily maximum limitation shall be included as part of the reporting in order to ensure that this limitation is being met for the benefit of wildlife and, particularly, migratory birds and waterfowl that use the Pacific Flyway.</p>	During operation	District		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The District shall periodically test the produced water to ensure that it does not exceed a daily maximum limitation of 35 milligrams/liter of oil and grease.</li> <li>The District shall report findings of testing to the Central Valley Regional Water Quality Control Board (RWQCB) as part of reporting requirements related to associated Waste Discharge Requirements.</li> </ul>			
4.4-3	<p><b>MM 4.4-5: CLEAN WATER ACT SECTION 404 PERMIT</b></p> <p>Prior to construction, the District shall determine whether the U.S. Army Corps of Engineers (Corps) considers some or all of the affected drainages and/or basins waters of the United States and that the Project would result in the discharge of dredged or fill material into such waters. If the Corps determines that the Project would affect waters of the United States under the Corps' jurisdiction, then the District shall obtain an approved Clean Water Act Section 404 Permit from the</p>	Prior to construction	District, U.S. Army Corps		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The District shall determine whether the U.S. Army Corps of Engineers (Corps) will take jurisdiction over some or all of the affected drainages.</li> <li>If the Corps takes jurisdiction over some or all of the affected drainages, then the District shall submit an application and pay necessary fees to the Corps.</li> <li>Prior to construction, the District shall obtain an approved Clean Water Act (CWA) Section 404 Permit.</li> </ul>			

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	Corps prior to the commencement of construction activities.				
4.4-3	<p><b>MM 4.4-6: CLEAN WATER ACT SECTION 401 WATER QUALITY CERIFICATION</b></p> <p>Prior to construction, the District shall determine whether the State Water Resources Control Board (SWRCB) and Central Valley Regional Water Quality Control Board (RWQCB) consider some or all of the affected drainages and/or basins waters of the State. If the SWRCB and Central Valley RWQCB determine that the Project would affect waters of the State, then the District shall either 1) verify coverage under an allowable Nation Wide Permit or 2) obtain an approved Clean Water Act Section 401 Water Quality Certification prior to the commencement of construction activities.</p>	Prior to construction	District, State Water Resources Control Board, Central Valley Regional Water Quality Control Board (RWQCB)		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The District shall determine whether the State Water Resources Control Board (SWRCB) and Central Valley Regional Water Quality Control Board (RWQCB) will take jurisdiction over some or all of the affected drainages.</li> <li>If the SWRCB and RWQCB takes jurisdiction over some or all of the affected drainages, then the District shall either verify coverage under an allowable Nation Wide Permit or submit an application, and pay necessary fees.</li> <li>Prior to construction, the District shall obtain an approved CWA Section 404 Water Quality Certification.</li> </ul>			
4.4-3	<p><b>MM 4.4-7: LAKE AND STREAMBED ALTERATION AGREEMENT</b></p> <p>Prior to construction, the District shall determine whether the California Department of Wildlife (CDFW) consider the bed, channel, or banks of affected drainages and/or basins under their regulatory control. If the CDFW determines that the Project affects bed, channel, or banks under their control, then the District shall obtain an approved Lake and Streambed Alteration Agreement prior to the commencement of construction activities.</p>	Prior to construction	District, CDFW		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The District shall determine whether CDFW will consider the bed, channel, or banks of affected drainages and/or basins under their regulatory control.</li> <li>If the CDFW considers such features under their control, then the District shall submit a Lake and Streambed Alteration Agreement application and pay necessary fees.</li> <li>Prior to construction, the District shall obtain an approved Lake and Streambed Alteration Agreement.</li> </ul>			

## Cultural Resources

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
4.5-1	<p><b>MM 4.5-1: CEASE WORK IF HISTORIC OR PREHISTORIC CULTURAL RESOURCE(S) FOUND</b></p> <p>In the event historic-era or prehistoric cultural materials are encountered during construction or ground disturbance activities, all work within 50 feet of the find shall cease immediately and the area cordoned off until a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist can evaluate the find and recommendations can be made. If the qualified archaeologist determines that the discovery represents a potentially significant cultural resource, additional investigations may be required to mitigate adverse impacts from Project implementation. These additional studies may include avoidance, testing, and evaluation or data recovery excavation. All reports, correspondence, and determinations regarding prehistoric or historic-era cultural materials found on the site shall be submitted to the California Historical Resources Information System's Southern San Joaquin Valley Information Center at California State University, Bakersfield.</p>	During construction	District		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>• If historic-era or prehistoric cultural materials are encountered during construction or ground disturbance activities, then all work within 50 feet shall cease and the area shall be cordoned off.</li> <li>• The District shall contract with a qualified archaeologist to evaluate the find and make recommendations.</li> <li>• The District shall allow the archaeologist to perform all recommendations, including include avoidance, testing, and evaluation or data recovery excavation as well as reporting.</li> <li>• Work shall not commence until the area has been cleared by the archaeologist.</li> </ul>			
4.5-2	<p><b>MM 4.5-2: WORKER CULTURAL AWARENESS PROGRAM</b></p> <p>Prior to the issuance of grading or building permits, and for the duration of construction activities, a Construction Worker Environmental and Cultural Awareness Training Program shall be provided to all new</p>	Prior to issuance of grading or building permits and during construction	District		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>• The District shall contract with a qualified archaeologist</li> </ul>			

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	<p>construction workers within one week of employment at the Project site. The training shall be prepared and conducted by a qualified archaeologist and Native American representative. The training may be in the form of a video. The qualified archaeologist and Native American representative shall be available to answer questions posed by workers. The training may be discontinued when ground disturbance is completed or suspended, but must resume when construction activities resume. The training shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• A discussion of applicable cultural resources statutes, regulations, and related enforcement provisions;</li> <li>• An overview of the prehistoric and historic environmental setting and context as well as current cultural information regarding local tribal groups provided by the Native American representative;</li> <li>• A summary of the effects of the Project on cultural resources;</li> <li>• Samples or visuals of artifacts that might be found in the Project area;</li> <li>• A discussion of what such artifacts may look like when partially or totally buried and then freshly exposed;</li> <li>• A discussion of what prehistoric and historic archaeological deposits look like at the surface and when exposed during construction;</li> <li>• Instruction that in the event cultural resources are unearthed during ground-disturbing activities, the qualified archaeologist shall be empowered to halt</li> </ul>		<p>and Native American representative to develop and implement a Worker Cultural Awareness Program to be presented to new construction workers.</p> <ul style="list-style-type: none"> <li>• The qualified archaeologist and Native American representative shall provide an informational guide that identifies the reporting procedures in the event of a discovery.</li> <li>• The District shall provide a sticker to be placed on each worker's hard hat acknowledging that the worker has completed the cultural training.</li> <li>• The District shall retain a copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be kept by the District.</li> </ul>		

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	<p>or redirect ground-disturbing activities away from the vicinity of the discovery until the qualified archaeologist has evaluated the find, determined whether the find is culturally sensitive, and designs an appropriate short- and long-term treatment plan. The qualified archaeologist shall establish an appropriate protocols and procedures for minimizing impacts during construction and future impacts during Project operation and maintenance;</p> <ul style="list-style-type: none"> <li>• An informational guide that identifies the reporting procedures in the event of a discovery;</li> <li>• Other information as deemed necessary by the qualified archaeologist or Native American representative;</li> <li>• An acknowledgement form signed by each working indicating that cultural training has been completed;</li> <li>• A sticker that shall be placed on hard hats indicating that the worker has completed the cultural training. Construction workers shall not be permitted to operate equipment within the construction area unless they have attended the training and are wearing hard hats with the required sticker; and</li> <li>• A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be kept by the District.</li> </ul>				
4.5-2	<p><b>MM 4.5-3: ARCHAEOLOGICAL MONITOR</b></p> <p>The services of a qualified archaeological monitor shall be retained by the District to monitor ground-disturbing activities during construction in areas of the area of</p>	<p>During construction</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>• The District shall contract with a qualified archaeologist to monitor ground-disturbing activities in areas</li> </ul>	District		

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	potential effect determined to be moderately sensitive for buried archaeological deposits. The qualified archaeological monitor shall be provided all Project documentation related to cultural resources prior to commencement of ground disturbance activities. Project documentation shall include, but not be limited to, previous cultural studies, surveys, maps, drawings, etc. Any modifications or updates to project documentation, including construction plans and schedules, shall immediately be provided to the qualified archaeological monitor.	<ul style="list-style-type: none"> <li>determined to be moderately sensitive for buried archaeological deposit.</li> <li>In the event that cultural resources are unearthed during monitoring, the protocol established in Mitigation Measure MM 4.5-1 shall be implemented.</li> </ul>			
4.5-3	<p><b>MM 4.5-4: AS-NEEDED PALEONTOLOGICAL MONITOR</b></p> <p>If any fossil remain are uncovered during construction, all work in that area shall cease and a 50-foot buffer established until a qualified paleontologist can determine scientific importance of the find. If the fossils are evaluated to be scientifically important, the qualified paleontologist shall remove them. If warranted, the qualified paleontologist shall make collections of exposed fossils from the lithologic units of high paleontological importance. All vertebrate and representative samples of mega-invertebrate and plant fossils shall be collected. The qualified paleontologist shall be equipped to allow for the rapid removal of fossil remains and/or matrix and thus reduce the potential for any construction delays. Depending upon the paleontologic importance of the rock unit, the rock shall be examined periodically for microfossils by wet or dry screening. If important fossil remains are found as a result of screening, samples of sufficient size to generate</p>	During construction	District		
		<p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>If any fossils are uncovered during construction, all work shall cease and a 50-foot buffer established.</li> <li>The District shall contract with a qualified paleontologist to determine the significance of the find.</li> <li>If warranted, the paleontologist shall make collections of exposed fossils and follow protocols established in this mitigation, including reporting to an accredited institution.</li> </ul>			

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	a representation of the organisms preserved shall be collected and processed, if warranted, onsite or at a convenient location. The reports documenting the fossil finds shall be submitted to an accredited institution such as the Vertebrate Paleontology Division of Natural History Museum of Los Angeles County or the University of California Museum of Paleontology at the Berkeley Natural History Museum.				
4.5-4	<p><b>MM 4.5-5: DISCOVERY OF HUMAN REMAINS</b></p> <p>In the event that human remains are discovered, further excavation or disturbance shall be prohibited pursuant to California Health and Safety Code Section 7050.5. The specific protocol, guidelines, and channels of communication outlined by the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and Senate Bill 447 shall be followed. In the event of the discovery of human remains, at the direction of the county coroner, Health and Safety Code Section 7050.5(c) shall guide potential Native American consultation.</p>	<p>During construction</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>• If human remains are discovered during construction, further excavation or disturbance shall be prohibited and the County Coroner shall be notified.</li> <li>• The County Coroner shall assess the discovery and determine if Native American consultation is warranted.</li> <li>• No work shall occur until the County Coroner has given clearance to commence work.</li> </ul>	<p>District, Coroner (if needed), Native American Representative(s) (if needed)</p>		

## Geology and Soils

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
4.6-1	<b>MM 4.6-1: PREPARE GEOTECHNICAL STUDY</b> Prior to final design, a geotechnical study shall be prepared for the Project site, and recommendations of the study shall be incorporated into final design of the Project. The study shall include recommendations on proper recompaction of native soil deposits at the two reservoir sites in order to properly engineer the dams for the reservoirs. The study shall also include an analysis of the potential for collapsible and expansive soils at the site as well as design remedies in the event that such soils are present and could pose a geotechnical hazard to the Project facilities.	Prior to final design	District		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>The District shall contract with a qualified engineer or other professional to prepare a site-specific geotechnical report.</li> <li>The recommendation of the report shall be incorporated into final design.</li> </ul>			
4.6-1	<b>MM 4.6-2: MINIMIZE GROUND DISTURBANCE</b> During construction, the contractor(s) shall limit ground disturbance to the minimum area necessary for construction and operation of the Project.	During construction	District		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>The construction contractor(s) shall limit ground disturbance to the greatest extent feasible.</li> <li>The District shall verify in the field that this mitigation is being implemented.</li> </ul>			
4.6-1	<b>MM 4.6-3: USE EXISTING ROADS</b> During construction, the contractor(s) shall use existing roads to the greatest extent feasible to minimize erosion.	During construction	District		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>The construction contractor(s) shall use existing roads to the greatest extent feasible.</li> <li>The District shall verify in the field that this mitigation is being implemented.</li> </ul>			

## Hazards and Hazardous Materials

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4.8-2	<p><b>MM 4.8-1: RE-ABANDON PREVIOUSLY UNKNOWN OIL WELL(S)</b></p> <p>If, during construction, a previously unknown abandoned oil well is uncovered or damaged during ground-disturbance activities, all work shall cease in the vicinity of the well, and the Division of Oil, Gas, and Geothermal Resources shall be contacted for requirements and approvals. Such requirements will likely include the submittal and approval of Notice of Intention to Abandon/Re-Abandon Well (OG108). No work shall occur in the vicinity of a well until Division approval has been granted and the affected well has been re-abandoned to the satisfaction of the Division.</p>	During construction	District; Division of Oil, Gas, and Geothermal Resources (if needed)		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>If a previously unknown well is uncovered or damaged during construction, all work shall cease in the vicinity of the well, and the Division of Oil, Gas, and Geothermal Resources (DOGGR) shall be contacted for requirements and approvals.</li> <li>Work shall not commence until approval has been granted and the affected well has been re-abandoned to the satisfaction of DOGGR.</li> </ul>			
4.8-2	<p><b>MM 4.8-2: PROVIDE DUST MASKS TO CONSTRUCTION WORKERS</b></p> <p>During construction, the construction contractor(s) shall make dust masks available to all construction workers and shall make workers aware that there is the possibility of exposure to, and the risks associated with the inhaling of, environmentally-persistent pesticides, residual hydrocarbons, and the <i>Coccidioides</i> fungus that could be found in the Project site's soil.</p>	During construction	District		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>The construction contractor(s) shall make dust masks available to all construction workers and shall make workers aware that there is the possibility of exposure to, and the risks associated with the inhaling of, environmentally-persistent pesticides, residual hydrocarbons, and the <i>Coccidioides</i> fungus.</li> <li>The District shall verify in the field that this mitigation is being implemented.</li> </ul>			

## Hydrology and Water Quality

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
4.9-1	<p><b>MM 4.9-1: STORMWATER POLLUTION PREVENTION PLAN</b></p> <p>Prior to ground-disturbing activities, the District shall prepare and implement a Stormwater Pollution Prevention Plan that specifies best management practices, with the intent of keeping all products of erosion from moving offsite. The Stormwater Pollution Prevention Plan shall include contain a site map that shows the construction site perimeter, existing and proposed man-made facilities, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site. Additionally, the Stormwater Pollution Prevention Plan shall contain a visual monitoring program and a chemical monitoring program for non-visible pollutants to be implemented (if there is a failure of best management practices). The requirements of the Stormwater Pollution Prevention Plan shall be incorporated into design specifications and construction contracts. Recommended best management practices for the construction phase may include the following:</p> <ul style="list-style-type: none"> <li>• Stockpiling and disposing of demolition debris, concrete, and soil properly.</li> <li>• Protecting any existing storm drain inlets and stabilizing disturbed areas.</li> <li>• Implementing erosion controls.</li> <li>• Properly managing construction materials.</li> <li>• Managing waste, aggressively controlling litter, and implementing sediment controls.</li> </ul>	Prior to construction	District		

### Steps to Compliance:

- The District shall contract with a qualified specialist to prepare a Stormwater Pollution Prevention Plan (SWPPP).
- The construction contractor(s) shall implement all best management practices outlined in the SWPPP, including the visual monitoring program and a chemical monitoring program.
- The District shall verify in the field that this mitigation is being implemented.

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4.9-1	<p><b>MM 4.9-2: WASTE DISCHARGE REQUIREMENTS</b></p> <p>Prior to Project operation, the District shall obtain approved Waste Discharge Requirements from the Central Valley Regional Water Quality Control Board that includes Water Quality Objectives to protect the quality of waters of the State.</p>	<p>Prior to operation</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The District shall submit an Application of Waste Discharge and pay necessary fees to the RWQCB.</li> <li>Prior to operation, the District shall obtain approved Lake and Streambed Alteration Agreement Requirements.</li> <li>During operation, the District shall adhere to all requirements, including any testing and reporting requirements.</li> </ul>	District, Central Valley RWQCB		
4.9-8	<p><b>MM 4.9-3: NEW DAM AND ASSOCIATED RESERVOIR APPLICATIONS</b></p> <p>Prior to construction of the Guzman and Section 35 Reservoirs, the District shall submit an application to the Department of Water Resources Division of Safety of Dams for each earthen embankment and associated reservoir and receive written approval of plans and specifications for each earthen embankment and reservoir from the Division of Safety of Dams. Per California Water Code, Division 3, Dams and Reservoirs, and California Code of Regulations, Title 23, Division 2, Chapter 1, Dams and Reservoirs, the applications shall include:</p> <ul style="list-style-type: none"> <li>Name and address of the owner;</li> <li>Location, type, size, and height of the proposed dam or reservoir and appurtenant works;</li> <li>Storage capacity of the reservoir;</li> <li>As accurately as may be readily obtained, the area of the drainage basin, rainfall and stream flow records and flood flow records and estimates;</li> </ul>	<p>Prior to construction of dams</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>The District submit an application to the Division of Safety of Dams for each earthen embankment and associated reservoir.</li> <li>Prior to construction of dams, the District shall receive written approval of plans and specifications for each earthen embankment and reservoir from Division of Safety of Dams.</li> </ul>	District, Division of Safety of Dams		

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
	<ul style="list-style-type: none"> <li>• Purpose for which the impounded or diverted water is to be used;</li> <li>• Maps and plans and specifications of such character and size and setting forth such pertinent details and dimensions as the Division of Safety of Dams requires;</li> <li>• Copy of an entitlement to the use of water issued by the State Water Resources Control Board or a statement of the legal basis of the right;</li> <li>• Evidence that a statement of water diversion and use has been filed with State Water Resources Control Board or a statement either establishing that a statement of water diversion and use is not legally required, or showing good cause for not filing one;</li> <li>• Evidence of water rights;</li> <li>• Information necessary to enable the department to comply with the requirements of California Environmental Quality Act, either a copy of an environmental impact report or negative declaration, or evidence that a lead agency is preparing or shall prepare environmental documentation or data and information necessary for the department to act as a lead agency to prepare environmental documentation;</li> <li>• Filing fee based upon estimated cost of the dam and/or reservoir as set forth in California Water Code, Division 3, Section 6300; and</li> <li>• Such other pertinent information as the Division of Safety of Dams requires.</li> </ul>				

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
	<p>Per Division of Safety of Dams' guidance, the applications may also need to include:</p> <ul style="list-style-type: none"> <li>• Data concerning subsoil and foundation conditions and the materials entering into construction of the dam or reservoir;</li> <li>• Investigations of, and reports on, subsurface conditions, involving such matters as exploratory pits, trenches and adits, drilling, coring, geophysical surveys, tests to determine leakage rates, and physical tests to measure in place the properties and behavior of foundation materials at the dam or reservoir site;</li> <li>• Investigations of, and reports on, the geology of the dam or reservoir site and its vicinity, possible geologic hazards, availability and quality of construction materials, and other pertinent features; or</li> <li>• Such other appropriate information as may be necessary in a given instance.</li> </ul> <p>Plans and specifications submitted to Division of Safety of Dams shall be prepared by, and the work of construction, enlargement, repair, alteration or removal of a dam or reservoir shall be under the responsible charge of, a civil engineer registered pursuant to State law or of such other person as may be permitted under the provisions of the Business and Professions Code to assume responsible charge of such work.</p>				
4.9-8	<p><b>MM 4.9-4: NOTICES OF COMPLETION</b></p> <p>Upon completion of the Guzman and Section 35 Reservoirs, the District shall give notices of completion</p>	<p>Upon completion of dams</p> <p><b>Steps to Compliance:</b></p>	District, Division of Safety of Dams		

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
	<p>to Division of Safety of Dams and, as soon thereafter as possible, file supplementary drawings or descriptive matter showing or describing the earthen embankment and associated reservoir as actually constructed, including the following:</p> <ul style="list-style-type: none"> <li>• A record of all grout holes and grouting;</li> <li>• A record of permanent location points and bench marks;</li> <li>• A record of tests of concrete or other material used in the construction of the dam or reservoir; and</li> <li>• Any other items which may be of permanent value and have a bearing on the safety and permanency of the dam or reservoir.</li> </ul>	<ul style="list-style-type: none"> <li>• Upon completion of dams, the District shall give notices of completion to Division of Safety of Dams and, as soon thereafter as possible, file supplementary drawings or descriptive matter.</li> </ul>			
4.9-8	<p><b>MM 4.9-5: CERTIFICATES OF APPROVAL</b></p> <p>Prior to impounding water, either through action or inaction, at the Guzman and Section 35 Reservoirs, the District shall receive certificates of approval from the Division of Safety of Dams that finds the that the Reservoirs are safe to impound water within the limitations prescribed in the certificates.</p>	<p>Prior to impounding water in dams</p> <p><b>Steps to Compliance:</b></p> <ul style="list-style-type: none"> <li>• Prior to impounding water in dams, the District shall receive certificates of approval from the Division of Safety of Dams.</li> </ul>	District, Division of Safety of Dams		

**Noise**

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
4.11-1	<b>MM 4.11-1: HEARING CONSERVATION PROGRAM</b> Prior to construction, the District shall require that the chosen construction contractor(s) have established an effective Hearing Conservation Program during the construction period in compliance with 29 Code of Federal Regulations 1910.95, including providing hearing protection devices, employee training and education, and recordkeeping. The chosen contractor(s) shall provide the District with proof of compliance.	Prior to construction	District		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>• Prior to construction, the District shall ensure that a Hearing Conservation Program has been established.</li> <li>• The District shall retain a proof of compliance record.</li> </ul>			

## Transportation and Traffic

Impact	Mitigation Measure	Timeframe	Responsible Monitoring Agency	Date	Initials
4.12-1	<b>MM 4.12-1: ENCROACHMENT PERMIT</b> Prior to construction of the 18-inch pipeline alignment under State Route 65, the District shall submit a Standard Encroachment Permit Application (TR-0100) to, and receive an approved encroachment permit from, the California Department of Transportation, District 6, Encroachment Permits Office. As required by Caltrans, the application shall include supporting documentation such as, but not limited to: plans, location map, environmental documentation, letter of authorization, surety bonds, liability insurance, any applicable fees, etc.	Prior to construction	District, California Department of Transportation		
		<b>Steps to Compliance:</b> <ul style="list-style-type: none"> <li>• The District submit a Standard Encroachment Permit Application (TR-0100) to the California Department of Transportation, District 6, Encroachment Permits Office (Caltrans).</li> <li>• Prior to construction, the District shall receive an approved encroachment permit from Caltrans.</li> </ul>			

# Environmental Commitment Program

		<b>Title:</b> Kern-Tulare Water District Oil Field Water Reuse Project <b>Tracking Number:</b> EA-15-006 <b>Anticipated Start Date:</b> August 2017 <b>Approximate Duration:</b> 6 months				<b>Point of Contact:</b> Steve Dalke Kern-Tulare Water District <a href="mailto:sdalke@kern-tulare.com">sdalke@kern-tulare.com</a>				
		<b>Natural Resources Specialist:</b> Jennifer L. Lewis, <a href="mailto:jllewis@usbr.gov">jllewis@usbr.gov</a> , 559-487-5197 <b>Wildlife Biologist:</b> Shauna McDonald, <a href="mailto:smcdonald@usbr.gov">smcdonald@usbr.gov</a> , 559-487-5202 <b>Architectural Historian:</b> Kevin (Lex) Palmer, <a href="mailto:kpalmers@usbr.gov">kpalmers@usbr.gov</a> , 916-978-5213								
Resource	Summary of Environmental Commitments	Timeframe for Implementation	Party Responsible for Implementation	Proponent Verification of Compliance		Reclamation Verification of Compliance				
				Initials	Date	Commitment Implementation Date	Verification Interval	Final Verification Date	Initials	Date of Verification
Air Quality	The District shall comply with applicable emission standards set by the San Joaquin Valley Air Pollution Control District. This includes following construction dust ordinance or other Best Management Practices.	Duration of the Project	Contractor				Once			
Biological Resources	A qualified biologist shall conduct surveys for bald eagle and other raptors on and within 500' of an activity site for active raptor nests prior to onsite activities. If raptors are found to occur, their active nest shall be avoided by 500'. The 500' no-disturbance area can be reduced if it is determined by a qualified biologist that activities do not affect breeding success. If found to occur, active golden eagle nests shall be avoided by 1 mile and activities shall not occur within line-of-sight of active nests	Prior to Construction	KTWD				Once			
Biological Resources	Specific to other migratory birds protected by the Migratory Bird	Prior to Construction	KTWD				Once			



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	Treaty Act, the qualified biologist shall conduct the survey for active bird nests at an activity site if activities are scheduled to occur during the breeding season (February 15 through September 15). The survey shall include the site and no less than 500' outside of site boundaries. If active nests are located within the site boundaries, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified biologist deems disturbance potential to be minimal (in consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife). Restrictions may include establishment of avoidance buffers (no ingress of personnel or equipment at a minimum radius of 50' or more around the nest as									



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	recommended by the biologist) or alteration of the construction schedule. All observed nests shall be monitored by a qualified biologist to determine nest status and the potential for nest abandonment.									
Biological Resources	For the protection of San Joaquin kit fox, applicable avoidance measures from Service (2011) would be implemented. Those measures that are applicable are the ones that do not involve take (such as den destruction).	Prior to Construction	KTWD				Once			
Cultural Resources	In the unlikely event that unanticipated buried archaeological deposits are encountered during construction, work in the immediate vicinity of the discovery must cease until the find can be evaluated by Reclamation and managed pursuant to the requirements of 36 Code of Federal Regulations (CFR) 800.13 and other	Duration of the Project	KTWD				Once			



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	applicable Federal laws and regulations. If human remains are inadvertently discovered, Reclamation will comply fully with Native American Graves Protection and Repatriation Act of 1990 as outlined at 43 CFR Part 10, and other Federal laws and regulations as applicable.									
Water Resources	The District would be subject to the National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharges associated with construction and land disturbance activities.	During Construction	Contractor				Once			
Water Resources	The District shall follow the Monitoring and Reporting Program, as per their NPDES permit, to minimize impact to water resources	Duration of the Project	Contractor				Once			
Water Resources	The District would meet the Central Valley Regional Water Quality Control Board issued Water Quality Objectives associated with their Waste	Duration of the Project	KTWD				Once			



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Resource	Summary of Environmental Commitments	Timeframe for Implementation	Party Responsible for Implementation	Proponent Verification of Compliance		Reclamation Verification of Compliance					
				Initials	Date	Commitment Implementation Date	Verification Interval	Final Verification Date	Initials	Date of Verification	
	Discharge Requirement (WDR) permit to protect and enhance the beneficial uses of water in the Tulare Lake Basin.										
Water Resources	The District shall follow the Monitoring and Reporting Program, as per their WDR permit, to minimize impact to water resources.	Duration of the Project	KTWD				Once				
Various	Treated produced water shall not exceed the daily maximum limitation of 35 mg/L of oil and grease.	Duration of the Project	KTWD				Once				
Various	The District would be subject to any certifications of approval from the California Department of Water Resources Division of Safety of Dams.	Duration of the Project	KTWD				Once				
		<b>Funding:</b> The proponent is responsible for all direct costs to implement, monitor and evaluate the environmental commitments described in the table. The proponent is also responsible for the costs incurred by Reclamation staff to monitor and evaluate the environmental commitments.									



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