FINAL
SCH# 2019012019

TISDALE ROAD BRIDGE (18C-0057) OVER WESTSIDE CANAL REPLACEMENT

Initial Study / Mitigated Negative Declaration

February 2019
TISDALE ROAD BRIDGE OVER WESTSIDE CANAL REPLACEMENT PROJECT

Initial Study / Mitigated Negative Declaration

Sutter County, California

Submitted To:
Sutter County
Development Services Department
1130 Civic Center Drive
Yuba City, CA 95993

Submitted by:
Drake Haglan and Associates, Inc.
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670
916.363.4210

February 2019
EXECUTIVE SUMMARY

The County of Sutter (County) proposes to construct a replacement bridge for the existing Tisdale Road Bridge (18C-0057) over Westside Canal (Canal). The Project is located in central Sutter County, approximately 10 miles south of State Route 20 (SR 20), 100 feet east of Cranmore Road, and midway between Yuba City and the City of Colusa. Land uses surrounding the Project site consist of agricultural lands with adjacent open space uses. Adjacent land uses include private agricultural lands, the Tisdale Bypass open-space area, and the business Sutter Mutual Water.

The proposed project would minimize impacts to the adjacent irrigation gate structure and improve safety in the existing roadway curve. The replacement bridge would be 60 feet in length with a roadway width of approximately 33 feet (two 11-foot lanes, 4-foot shoulders and 1.5-foot railings). The purpose of the proposed Project is to replace the structurally deficient bridge with a new bridge of similar footprint. The bridge would be replaced in approximately the same location with a slight offset to the south to minimize impacts to the adjacent gate structure between the Canal and the Tisdale Bypass and to improve safety in the existing roadway curve on the east side of the bridge. Roadway approaches would be widened slightly to provide a safe tapered transition to the new structure.

This Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) was submitted to the State Clearinghouse on January, 10, 2019 for a 30-day public review period that ended on February 9, 2019. During the public review period, the Draft IS/MND was available for review at the Sutter County Development Services Department Headquarters (1130 Civic Center Blvd., Yuba City, CA 95993) during business hours.

The Draft IS/MND prepared for the Project assesses the potential effects on the environment and the significance of those effects. Based on the results of the Draft IS/MND, the proposed Project would not have any significant effects on the environment once mitigation measures are implemented. This conclusion is supported by the following findings:

- The Project would not affect land use and land use planning.
- The Project would have a less-than-significant effect on aesthetics, agricultural and forest resources, air quality, geology and soils, greenhouse gas emissions, mineral resources, population and housing, recreation, utilities and services, and mandatory findings of significance.
- The Project would have a less-than-significant effect, once mitigation measures are implemented, on biological resources, cultural resources, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation and traffic, and tribal cultural resources.
- No substantial evidence exists that the Project would have a significant negative or adverse effect on the environment.

In addition to standard construction measures required by Caltrans Standard Specifications and other applicable laws, regulations, and policies, the following mitigation measures will be implemented as part of the Project to avoid or minimize potential environmental impacts. Implementation of these mitigation measures would reduce the potentially significant environmental impacts of the Project to a less-than-significant level.
<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Mitigation Measures</th>
<th>Timing</th>
<th>Responsible Party</th>
<th>Level of Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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 Game or U.S. Fish and Wildlife Service.</td>
<td><strong>Mitigation Measure BIO-1:</strong> <em>Conduct Preconstruction Surveys.</em> A qualified biologist shall conduct a preconstruction survey for woolly rose mallow and other special status plant species within 30 days prior to construction. If woolly rose mallow or other special status plant species are not found, then no further measures are necessary. If woolly rose mallow or other special status plant species are found in the Project area, notify CDFW at least ten days prior to dewatering or construction impacts in the vicinity of any observed special status plant species in accordance with the California Native Plant Protection Act of 1977 (CFGC Section 1900-1913) to allow sufficient time to transplant the individuals to a suitable location.</td>
<td>Prior to and during construction activities.</td>
<td>Sutter County</td>
<td>Less than significant</td>
</tr>
<tr>
<td></td>
<td><strong>Mitigation Measure BIO-2:</strong> <em>Protect Giant Garter Snakes.</em> Implement the following in order to reduce potential Project effects to giant garter snakes (snakes):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Caltrans will purchase 0.55 acre of snake conservation credits from a Service-approved snake conservation bank with a service area covering the proposed project.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Temporary fencing will be installed at the upstream and downstream limits of the construction area, to deter snakes from entering the action area and being harmed by construction activities. The fencing will be installed prior to the start of construction to ensure that snakes do not enter the construction zone.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Construction personnel will participate in a Service-approved worker environmental awareness program prior to the onset of construction activities. A Service-approved biologist will inform all construction personnel about the life history of the snake; how to identify species and their habitats; what to do if a snake is encountered during construction activities; and explain the state and federal laws pertaining to the snake.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A Service-approved biologist will conduct a pre-construction survey for the snake, no more than 24 hours prior to the start of construction activities. If construction activities stop for a period of two or more weeks, a new snake survey will be</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
completed no more than 24 hours prior to the reinitiating of construction activities. If a snake is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed. Any sightings and any incidental take will be reported to the Service immediately by telephone at (916) 414-6631 and email or written letter addressed to the Sacramento Valley Division, Chief, within one working day of the incident.

- Any vegetation or ground clearing will be confined to the minimal area necessary within 200 feet of aquatic snake habitat to facilitate construction activities. To ensure that construction equipment and personnel do not affect upland and aquatic snake habitat outside of the action area, exclusionary fencing will be erected to clearly define the snake habitat to be avoided. This will delineate the environmentally sensitive areas within the action area. The installation techniques and location of the exclusionary fencing will be coordinated with a Service-approved biologist, who will inspect and approve the fencing prior to commencement of construction.

- Upon completion of construction, disturbed sections of the canal will be hydro seeded to stabilize disturbed areas. If a live GGS is encountered during construction activities, immediately notify the Project biological monitor and the USFWS shall be immediately notified. The biological monitor shall do the following:
  - Stop all construction activity in the vicinity of the GGS. Monitor the GGS and allow the GGS to leave on its own. The monitor will remain in the area for the remainder of the workday to make sure the GGS is not harmed or if it leaves the site and does not return. Escape routes for GGS will be determined in advance of construction. If the GGS does not leave on its own within one working day, conduct further consultation with USFWS will be conducted.
  - Only personnel with a USFWS recovery permit pursuant to Section 10(a)(1)(A) of ESA will have the authority to capture and/or relocate GGS encountered in the PIA.
  - Upon locating dead, injured or sick GGS, Caltrans shall notify the USFWS Division of Law Enforcement or the Sacramento Fish and Wildlife Office within one working day. Written notification to both offices will be made within three calendar days and will include the date, time, and location of the finding of a specimen and any other pertinent information.

- No plastic, monofilament, jute, or similar erosion control matting that could entangle GGS will be employed. Use Possible substitutions include coconut coil matting, tactified hydro seeding compounds, or other material approved by the USFWS.
- Implement standard construction BMPs shall be implemented throughout construction, in order to avoid and minimize adverse effects to the water quality within the Project area. These BMPs shall be inspected daily to ensure their effectiveness. They shall be installed per the BMP’s per the BMP installation specifications. Maintain or replace BMPs deemed to be ineffective shall be maintained or replaced as necessary.

**Mitigation Measure BIO-3: Protect Western Pond Turtles.** Implement the following avoidance and minimization efforts to reduce potential Project effects to western pond turtle:

- If dewatering is necessary, both notify CDFW and dewater the construction area prior to construction activities.
- No more than two weeks prior to the commencement of ground-disturbing activities, the County shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the Project area. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Do not proceed with construction until the work area is determined to be free of turtles. Document the results of these surveys in a technical memorandum that will be submitted to CDFW (if turtles are documented).
- Implement standard construction BMPs throughout construction, in order to avoid and minimize adverse effects to the water quality within the Project area.

**Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Burrowing Owls.** Conduct preconstruction surveys within 30 days prior to construction to ensure that burrowing owls have not established territories. If no burrowing owls are found during any of the surveys, no further mitigation will be necessary. If burrowing owls are found, then implement the following measures prior to the commencement of construction:

- During the non-breeding season (September 1 through January 31), evict burrowing owls occupying the PIA, from the PIA by passive relocation as described in the Staff Report on Burrowing Owls (CDFW 2012).
- During the breeding season (February 1 through August 31), do not disturb occupied burrows and provide burrows a 250-foot protective buffer unless a qualified biologist approved by CDFW verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.

**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 Game or U.S. Fish and Wildlife Service.**

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Prior to and during construction activities.</th>
<th>Sutter County</th>
<th>Less than significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mitigation Measure BIO-5: Conduct Preconstruction Surveys for Swainson’s Hawk. Prior to construction, a qualified biologist shall conduct surveys to determine presence/absence of nesting Swainson’s hawk in and within 0.50 miles of the Project area according to the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley (CDFG, 2000). If no Swainson’s hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson’s hawk nests are found, consult CDFW regarding measures to reduce the likelihood of forced fledging of young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a no-work zone around the nest until the young have fledged as determined by a qualified biologist.</td>
<td>Prior to and during construction activities.</td>
<td>Sutter County</td>
<td>Less than significant</td>
</tr>
<tr>
<td>Mitigation Measure BIO-6a: Protect Migratory Birds. Use the following avoidance and minimization measures when work occurs on or in the vicinity of structures that may be subject to nesting by song sparrow and other migratory raptors and songbirds.</td>
<td>Prior to and during construction activities.</td>
<td>Sutter County</td>
<td>Less than significant</td>
</tr>
</tbody>
</table>
| • Avoid Active Nesting Season. Implement the following measures to avoid and minimize impacts to tree and shrub nesting species:  
  o If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31).  
  o If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), perform pre-construction surveys prior to the start of Project activities. |  |  |  |
| • Conduct Pre-construction Nesting Bird Surveys. If construction, grading or other Project-related activities are schedule during the nesting season (February 1 to August 31), conduct preconstruction surveys for other migratory bird species no less than 14 days and no more than 30 days prior to the beginning of construction within 250 feet of suitable nesting habitat.  
  o If the pre-construction surveys do not identify any nesting migratory bird species within areas potentially affected by construction activities, no further mitigation would be required. If the pre-construction surveys do identify nesting bird species within areas that may be affected by site construction, implement the following measures. |  |  |  |
| • Avoid Active Bird Nest Sites. Should active nest sites be discovered within areas that may be affected by construction activities, implement additional measures as described below:  
  o If active nests are found, establish no-work buffers to limit Project-related construction activities near the nest sites. Determine the size of the no-work buffer zone in consultation with the DFW, but use a 500 foot buffer when possible. Delineate the no-work buffer zone with highly |  |  |  |
visible temporary construction fencing. In consultation with DFW, monitoring of nest activity by a qualified biologist may be required if the Project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. Do not commence Project-related construction activity within the no-work buffer area until a qualified biologist and DFW confirms that the nest is no longer active.

**Mitigation Measure BIO-6b: Protect Bridge-Nesting Birds.** Incorporate the following avoidance and minimization measures for bridge-nesting birds if bridge demolition or construction of the new bridge occurs during the nesting season (February 1 to August 31). Install exclusionary netting around the undersides of the existing bridge before February 1 of the construction year to prevent new nests from being formed, and/or prevent the reoccupation of existing nests. Exclusionary netting may also be required during construction of the new bridge if it is completed during the breeding season. The construction contractor would do the following:

- Remove all existing unoccupied nests on the bridge during the non-nesting season (September 1 through January 31).
- Keep the bridge free of nests, using exclusionary netting or other approved methods, until completion of construction activities.
- Inspect all listed structures for nesting activity a minimum of three days per week; no two days of inspection would be consecutive. A weekly log would be submitted to the Project biologist. The contractor would continue inspections until bridge removal and completion of construction on new bridge. If an exclusion device were found to be ineffective or defective, the contractor would complete repairs to the device within 24 hours. If birds were found trapped in an exclusion device, the contractor would immediately remove the birds in accordance with USFWS guidelines.
- Submit for approval working drawings or written proposals of any exclusion devices, procedures, or methods to the Project biologist before installing them.
- The method of installing exclusion devices would not damage permanent features of the new bridge structure. Approval by the Project biologist of the working drawings or inspection performed by the authorized Project biologist would in no way relieve the contractor of full responsibility for deterring nesting.

**Cultural Resources**

<table>
<thead>
<tr>
<th>Project implementation has the potential to discover unanticipated cultural resources during</th>
<th>Mitigation Measure CUL-1: Follow Protocol for the Unanticipated Discovery of Paleontological Resources. If cultural resources are discovered during ground-disturbing activities, cease all activity in the vicinity until the discovery is evaluated by an archaeologist or paleontologist working under the direction of a Principal Investigator who meets the</th>
<th>During construction activities.</th>
<th>Sutter County</th>
<th>Less than significant</th>
</tr>
</thead>
</table>
ground-disturbing activities. requirements of the Secretary of the Interior’s Qualification Standards. If the archaeologist/paleontologist determines that the resources may be significant, halt all further work in the vicinity of the resources until appropriate treatment is determined and implemented.

The need for archaeological and Native American monitoring during the remainder of the Project will be re-evaluated by the archaeologist as part of the treatment determination. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.

In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, the Project proponent will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.

| Project implementation has the potential to discover unanticipated human remains during ground-disturbing activities. | Mitigation Measure CUL-2: Follow Protocol for the Unanticipated Discovery of Cultural Resources or Human Remains. If buried cultural materials are encountered during construction, stop work in that area until a qualified archaeologist can evaluate the nature and significance of the find. In the event that human remains or associated funerary objects are encountered during construction, cease all work within 100 feet the vicinity of the discovery. Contact the Sutter County coroner immediately, in accordance with Section 1064.5 of CEQA and the California Health and Human Safety Code (Section 7050.5). If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent (MLD). The MLD will work with the land owner, or a representative of the land owner, a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects. | During construction activities. | Sutter County | Less than significant |

**Hazards and Hazardous Materials**

| Construction activities involve reasonably foreseeable upset and accident conditions that may subject the public and environment to the release of hazardous materials. | Mitigation Measure HAZ-1: Develop of a Health and Safety Plan (HASP). Develop a HASP for the Project. The HASP shall describe appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances shall be tested, handled and disposed of in accordance with appropriate federal, state and local regulations. | Prior to and during construction activities. | Sutter County | Less than significant |

| Construction activities involve reasonably | Mitigation Measure HAZ-2: Follow Procedure for Handling Asbestos and Lead-Based Paint. A California licensed abatement contractor will conduct a survey for asbestos and lead | Prior to and during | Sutter County | Less than significant |
foreseeable upset and accident conditions that may subject the public and environment to the release of hazardous materials.

If asbestos and/or lead containing materials are found, the following will be required:

- Removal, disposal, storage and transportation of materials from the structure that contain asbestos shall be performed in compliance with SSP 14-11.16 and other federal and state regulations for hazardous waste.
- Building materials associated with paint on structures, and paint on utilities shall be abated by a California-licensed abatement contractor and disposed of as a hazardous waste in compliance with SSP 14-11.13 and other federal and state regulations for hazardous waste.
- A Lead Compliance Plan shall be prepared by the contractor for the disposal of lead based paint. The grindings (which consist of the roadway material and the yellow and white color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints). In addition, the Lead Compliance Plan will also contain the following provision to address aerially deposited lead: SSP 7-1.02K (6)(j)(iii) – Earth Material Containing Lead.
- A California-licensed lead contractor shall be required to perform all work that will disturb any lead based paint as a result of planned or unplanned renovations in the Project area, including the presence of yellow traffic striping and pavement markings that may contain lead based paint. All such material must be removed and disposed of as a hazardous material in compliance with SSP 14-11.12.

### Hydrology and Water Quality

<table>
<thead>
<tr>
<th>Project implementation has the potential to violate water or waste discharge requirements.</th>
<th>Mitigation Measure HYD-1: Protect Surface Water Quality. If Project construction will disturb less than one acre of soil, the County will prepare a WPCP. If Project construction disturbs more than one acre of soil, the County will ensure that the Project contractor complies with the requirements of a National Pollution Discharge Elimination System (NPDES) permit from the RWQCB, Central Valley Region. As part of the permit, the contractor will be required to prepare and implement a SWPPP or a WPCP into their construction plans depending on the acreage of soil disturbed, prior to initiating construction activities. Either the WPCP or the SWPPP will identify BMPs to be used to avoid or minimize any adverse effects to surface waters before, during, and after construction. The prior to and during construction activities.</th>
<th>Sutter County</th>
<th>Less than significant</th>
</tr>
</thead>
</table>

Tisdale Road Bridge over Westside Canal Replacement Project
Initial Study/Mitigated Negative Declaration

Drake Haglan & Associates
February 2019
following BMPs will be incorporated into the Project as part of the construction specifications:

- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on applicable access roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.
- Fuel and maintain vehicles in a specified area that is designed to capture spills. All fueling and maintenance of vehicles and other equipment (including staging areas), will be located at least 20 meters from the Canal and any other drainages on site.
- Do not store fuels and hazardous materials on site.
- Inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids.
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are expected to begin in the winter of 2019. If rains are forecasted during construction, additional erosion and sedimentation control measures would be implemented.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in storm water pollution prevention practices.
- Revegetate disturbed areas in a timely manner to control erosion.

**Noise**

Project implementation has the potential to result in a temporary elevation of noise levels.

### Mitigation Measure NO-1: Implement Noise Control Measures

Implement the following control measures to minimize noise and vibration disturbances at sensitive receptors during periods of construction:

- Ensure construction only occurs Mondays to Fridays, from the hours of 7:00 AM to 6:00 PM and Saturdays from the hours of 8:00 AM to 5:00 PM. Ensure construction will not occur on Sundays or holidays.
- Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers’ recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment is generally quieter in operation than older equipment. Inspect all construction equipment at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Utilize construction methods or equipment that provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.
- Turn off idling equipment.

**Public Services**

**Mitigation Measure PUB-1: Develop a Construction Period Standard Emergency Access Plan.**
Prior to the start of construction, the contractor shall coordinate with the Meridian Basin Fire Protection District, the Sutter County Sheriff’s Department, and local public and private ambulance and paramedic providers in the area to prepare a Construction Period Emergency Access Plan. The Construction Period Emergency Access Plan shall identify phases of the Project and construction scheduling and shall identify appropriate alternative emergency access routes.

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Prior to construction activities.</th>
<th>Sutter County</th>
<th>Less than significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUB-1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tribal Cultural Resources**

**Mitigation Measure TCR-1: Avoid or replant vegetation significant to the United Auburn Indian Community.** Avoid Jimsonweed (*Datura wrightii*) and Tule (*Schoenoplectus acutus*) and place high visibility fencing around the vegetation identified by a Tribal representative as needing to be protected. If impacts to the identified vegetation cannot be avoided, replant the identified vegetation at a 3:1 ratio within the replanting areas specified in the Mitigation Monitoring and Reporting Program (MMRP) for the Project.

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>Prior to and during construction activities.</th>
<th>Sutter County</th>
<th>Less than significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCR-1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mitigation Measure TCR-2: Follow Protocol for the Inadvertent Discovery of a Tribal Cultural Resources.** If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR’s to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

<table>
<thead>
<tr>
<th>Mitigation Measure</th>
<th>During construction activities.</th>
<th>Sutter County</th>
<th>Less than significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCR-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur.
# ACRONYMS AND ABBREVIATIONS

The following is a list of abbreviations used within this document. Each term is defined in full once within the document before the abbreviation is used.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
</tr>
<tr>
<td>CRHR</td>
<td>California Register of Historical Resources</td>
</tr>
<tr>
<td>AB 32</td>
<td>Assembly Bill 32</td>
</tr>
<tr>
<td>CSA</td>
<td>community service area</td>
</tr>
<tr>
<td>AB 52</td>
<td>Assembly Bill 52</td>
</tr>
<tr>
<td>County</td>
<td>Sutter County</td>
</tr>
<tr>
<td>ACM</td>
<td>(presumed) asbestos-containing material</td>
</tr>
<tr>
<td>dB</td>
<td>decibel</td>
</tr>
<tr>
<td>APN</td>
<td>Assessor Parcel Number</td>
</tr>
<tr>
<td>dBA</td>
<td>A-weighted decibel</td>
</tr>
<tr>
<td>ARB</td>
<td>California Air Resources Board</td>
</tr>
<tr>
<td>DFW</td>
<td>U.S. Department of Fish and Wildlife</td>
</tr>
<tr>
<td>BA</td>
<td>Biological Assessment</td>
</tr>
<tr>
<td>Draft IS/MND</td>
<td>Draft Initial Study Mitigated Negative Declaration</td>
</tr>
<tr>
<td>BMP</td>
<td>best management practices</td>
</tr>
<tr>
<td>DWR</td>
<td>California Department of Water Resources</td>
</tr>
<tr>
<td>BP</td>
<td>before present</td>
</tr>
<tr>
<td>ESA</td>
<td>Endangered Species Act</td>
</tr>
<tr>
<td>CAAQS</td>
<td>California Ambient Air Quality Standards</td>
</tr>
<tr>
<td>FESA</td>
<td>federal Endangered Species Act</td>
</tr>
<tr>
<td>Caltrans</td>
<td>California Department of Transportation</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Agency</td>
</tr>
<tr>
<td>Canal</td>
<td>Sutter Mutual Water Company’s Westside Canal</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>CDC</td>
<td>California Department of Conservation</td>
</tr>
<tr>
<td>FRAQMD</td>
<td>Feather River Air Quality Management District</td>
</tr>
<tr>
<td>Caltrans</td>
<td>California Department of Transportation</td>
</tr>
<tr>
<td>FTA</td>
<td>Federal Transit Administration</td>
</tr>
<tr>
<td>CDFG</td>
<td>California Department of Fish and Game</td>
</tr>
<tr>
<td>General Plan</td>
<td>2030 Sutter County General Plan</td>
</tr>
<tr>
<td>CDFW</td>
<td>California Department of Fish and Wildlife</td>
</tr>
<tr>
<td>CEQA</td>
<td>California Environmental Quality Act</td>
</tr>
<tr>
<td>GGS</td>
<td>Giant Green Garter Snake</td>
</tr>
<tr>
<td>CFGC</td>
<td>California Fish and Game Code</td>
</tr>
<tr>
<td>H2S</td>
<td>hydrogen sulfide</td>
</tr>
<tr>
<td>CHRIS</td>
<td>California Historical Resources Information System</td>
</tr>
<tr>
<td>HASP</td>
<td>Health and Safety Plan</td>
</tr>
<tr>
<td>CNDDB</td>
<td>California Natural Diversity Database</td>
</tr>
<tr>
<td>HBP</td>
<td>Highway Bridge Program</td>
</tr>
<tr>
<td>CNEL</td>
<td>community-equivalent noise level</td>
</tr>
<tr>
<td>CNPS</td>
<td>California Native Plant Society</td>
</tr>
<tr>
<td>IPaC</td>
<td>Information for Planning and Consultation</td>
</tr>
</tbody>
</table>
CO: carbon monoxide
LBP: lead-based paint
MBTA: Migratory Bird Treaty Act
MSL: mean sea level
MMRP: Mitigation, Monitoring, and Reporting Program
MRZ-1: mineral resources zone (type) 1
MRZ-1: mineral resources zone (type) 3
NAAQS: National Ambient Air Quality Standards
NAHC: Native American Heritage Commission
NHPA: National Historic Preservation Act
NO2: nitrogen dioxide
NRHP: National Register of Historic Places
O2: ozone
OHWM: ordinary high water mark
NES: Natural Environment Study
NESHAP: national emissions standard for hazardous pollutants
NPDES: National Pollution Discharge Elimination System
OHE: overhead electrical lines
OHTC: overhead telephone and communication lines
OSHA: Occupational Safety and Health Administration
Pb: lead
PIA: Project Impact Area
PM2.5: particulate matter less than 2.5 microns in diameter
PM10: particulate matter less than 10 microns in diameter
Project: Tisdale Road Bridge over Westside Canal Replacement Project
REC: recognized environmental condition

ISA: Initial Site Assessment
ROG: reactive organic gas
RSP: rock slope protection
RWQCB: Regional Water Quality Control Board
SACOG: Sacramento Area Council of Governments
SMARA: California Surface Mining and Reclamation Act
SO2: sulfur dioxide
SR 20: State Route 20
SWPPP: Stormwater Pollution Prevention Plan
UCMP: University of California Museum of Paleontology
USDA: U.S. Department of Agriculture
U.S. EPA: U.S. Environmental Protection Agency
USFWS: U.S. Fish and Wildlife Service
USGS: U.S. Geological Survey
VdB: root mean square vibration velocity level in decibels
Zoning Code: Sutter County Zoning Code

Tisdale Road Bridge over Westside Canal Replacement Project
Initial Study/Mitigated Negative Declaration
Drake Haglan & Associates
February 2019
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY** .................................................................................................................. III  
**ACRONYMS AND ABBREVIATIONS** .............................................................................................. XI  
**TABLE OF CONTENTS** ................................................................................................................... XIII  
**INITIAL STUDY** ............................................................................................................................... 1  
1 **INTRODUCTION** ......................................................................................................................... 1  
2 **PROJECT DESCRIPTION** ............................................................................................................... 5  
   2.1 **PROJECT PURPOSE AND NEED** .......................................................................................... 5  
   2.2 **DEMOLITION AND CONSTRUCTION STAGING** ................................................................. 6  
   2.3 **CONSTRUCTION ACTIVITIES** ............................................................................................ 6  
   2.4 **PERMITS AND APPROVALS NEEDED** .............................................................................. 9  
3 **ENVIRONMENTAL FACTORS POTENTIALY AFFECTED** ....................................................... 10  
   3.1 **DETERMINATION: (TO BE COMPLETED BY LEAD AGENCY)** ........................................ 10  
4 **ENVIRONMENTAL CHECKLIST** ................................................................................................ 11  
   4.1 **AESTHETICS** ...................................................................................................................... 11  
   4.2 **AGRICULTURAL AND FOREST RESOURCES** ................................................................. 13  
   4.3 **AIR QUALITY** ..................................................................................................................... 15  
   4.4 **BIOLOGICAL RESOURCES** ............................................................................................... 18  
   4.5 **CULTURAL RESOURCES** .................................................................................................. 26  
   4.6 **GEOLOGY, SOILS, AND SEISMICITY** .................................................................................. 29  
   4.7 **GREENHOUSE GAS EMISSIONS** ....................................................................................... 32  
   4.8 **HAZARDS AND HAZARDOUS MATERIALS** ................................................................. 33  
   4.9 **HYDROLOGY AND WATER QUALITY** .................................................................................. 37  
   4.10 **LAND USE AND LAND USE PLANNING** ......................................................................... 41  
   4.11 **MINERAL RESOURCES** .................................................................................................... 42  
   4.12 **NOISE** ............................................................................................................................. 43  
   4.13 **POPULATION AND HOUSING** ........................................................................................... 48  
   4.14 **PUBLIC SERVICES** ........................................................................................................... 49  
   4.15 **RECREATION** ................................................................................................................... 51  
   4.16 **TRANSPORTATION AND TRAFFIC** ............................................................................... 52  
   4.17 **TRIBAL CULTURAL RESOURCES** .................................................................................... 54  
   4.18 **UTILITIES AND SERVICE SYSTEMS** ............................................................................... 57  
   4.19 **MANDATORY FINDINGS OF SIGNIFICANCE** .................................................................. 59  
5 **LIST OF PREPARERS AND REVIEWERS** .................................................................................. 60  
6 **REFERENCES** .................................................................................................................................. 61
LIST OF FIGURES

Figure 1. Project Vicinity Map .......................................................... 2
Figure 2. Project Location Map .......................................................... 3
Figure 3. Area of Potential Impact Map ............................................ 4
Figure 4. Project Detour Map ............................................................. 7

LIST OF TABLES

Table 1. Mitigation Measures ..................................................................... ii
Table 2. Construction Equipment ........................................................... 8
Table 3. Project Permits and Approvals ................................................ 9
Table 4. Typical Noise Levels ............................................................... 44
Table 5. Typical Construction Phases and Noise Levels ...................... 45
Table 6. Typical Construction Equipment Noise Levels ...................... 46

LIST OF APPENDICES

APPENDIX A: Comment Received and Response to Public Comment
# INITIAL STUDY

1. **Project Title:** Tisdale Road Bridge (18C-0057) over the Westside Canal Replacement Project

2. **Lead Agency Name and Address:** Sutter County Development Services Department  
   1130 Civic Center Blvd.  
   Yuba City, CA 95993

3. **Contact Person and Phone Number:** Neal Hay, Director  
   (530) 822-7400

4. **Project Location:** Approximately 10 miles south of State Route 20, midway between the Yuba City and the City of Colusa.

5. **Project Sponsor’s Name and Address:** Neal Hay  
   Sutter County Development Services Department, Engineering Division  
   1130 Civic Center Blvd.  
   Yuba City, CA 95993

6. **General Plan Designation(s):** Agriculture – 80 (AG-80)

7. **Zoning Designation(s):** Agriculture (AG)

---

## 1 INTRODUCTION

Sutter County (County) Development Services Department proposes to replace the existing bridge on Tisdale Road over the Westside Canal (Bridge No. 18C-0057) located approximately 10 miles south of State Route 20 between Yuba City and the City of Colusa in central Sutter County (Figure 1, Figure 2, and Figure 3). The general setting is agricultural with adjacent open space uses. The bridge currently carries vehicular traffic over the Sutter Mutual Water Company’s Westside Canal (Canal). The area in which the Project would occur will be referred to as the “Project site” or “Project area” throughout the remainder of this document.

The Project is funded primarily by the federal-aid Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA) through Caltrans Local Assistance. The replacement bridge would meet current applicable County and American Association of State Highway and Transportation Officials (AASHTO) design criteria and standards.
Source: ESRI Online Basemap, Aerial Imagery and Open Street Map, Sutter County Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project
Sutter County, CA

Figure 1
Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project
Sutter County, CA

Source: ESRI Online Basemap, Aerial Imagery and World Imagery Map, Sutter County Coordinate System NAD 83 State Plane California II FIPS 0402 Feet
Notes: This map was created for informational and display purposes only

Project Location Map
Figure 2
Figure 3

Project Impact Area and Biological Study Area

Source: ESRI Online Basemap, Aerial Imagery; DHA 2017; Coordinate System NAD83 State Plane California II FIPS 0402 Feet

Notes: This map was created for informational and display purposes only.

Legend

- Project Impact Area
- Biological Study Area

Tisdale Road over Westside Canal Bridge (18C-0057) Replacement Project
Sutter County, CA

Project Impact Area and Biological Study Area
This Initial Study identifies the potential environmental impacts of the Project to determine whether the Project may have a significant effect on the environment and identifies mitigation measures, where applicable, to reduce or avoid significant effects. This Initial Study has been prepared pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines (14 California Code of Regulations 1500 et seq.), which require that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. The County is a public agency with discretionary authority over the Project and is the Lead Agency under CEQA.

2 PROJECT DESCRIPTION

Located in Sutter County, California, the existing Bridge No. 18C-0057 was constructed in 1960. The existing bridge is 27-feet-long and 21-feet-wide where it crosses the Canal. The average daily traffic (ADT) in 2011 was 81 and the projected 2035 ADT is 64 (FHWA, 2016). All improvements would be constructed in accordance with current American Association of State Highway and Transportation Officials (AASHTO) Standards.

The bridge would be replaced in approximately the same location with a slight offset to the south to minimize impacts to the adjacent gate structure between the Canal and the Tisdale Bypass and to improve safety in the curve on the east side of the bridge. Roadway approaches would be widened slightly to provide a safe tapered transition to the new structure. A single span bridge is being considered to eliminate support elements within the Canal. With regard to historical significance, the bridge is identified as a 5, "not eligible" for listing on the National Register of Historic Places (NRHP).

2.1 Project Purpose and Need

The bridge has a sufficiency rating of 49.6 and has been designated as structurally deficient per the Caltrans Structure Maintenance and Investigations, Local Agency Bridge List (Caltrans, 2016). Based on details reported on the Caltrans Bridge Inspection Report, a number of the girders are missing connection details at the intermediate bent capable of transmitting live load. These girders are acting as single span girders instead of continuous two-span girders. The exterior girder is bent approximately five inches due to traffic impact to the rail near the abutment. The columns have advanced corrosion with complete section loss at locations in the web. One of the columns has started to buckle. The Project is needed to replace the existing deficient structure with a new structure that meets current design standards for shoulder widths, structural requirements, and includes traffic-rated barrier railings.

The purpose of the Project is to:

- Remove the existing structure and reconstruct with a bridge that would provide adequate and safe vehicle access; and
- Provide a new structure that is consistent with AASHTO design standards.

In general, the Project would involve the removal and replacement of the existing two-lane structure with a new, safer two lane structure. It is anticipated the new bridge would consist of reinforced concrete abutments supporting precast pre-stressed concrete voided slabs clear-spanning the Canal. The width of the new structure would be approximately 33 feet, including two 11-foot-wide lanes, two four-foot-wide shoulders, and two 1.50-foot-wide railings. The length of the bridge would be 60 feet with foundation elements placed to avoid existing abutment foundation elements.
2.2 Demolition and Construction Staging
Demolition of the existing bridge would be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the demolition of the existing bridge would be removed from the Project site and disposed of by the contractor. The construction contractor would prepare a bridge demolition plan.

2.2.1 Right-of-Way
The Project site is located mainly within an existing 40-foot-wide right of way. The bridge replacement and approach roadway widening would require an additional permanent easement of 0.255 acres from APN 021-110-002, and 0.003 acres from APN 021-110-007, and a temporary construction easement of 0.031 acres from APN 021-110-002.

2.2.2 Detour Route
The Tisdale Road bridge would be closed to through traffic during the removal of the existing bridge and construction of the replacement bridge. The removal and replacement of the existing bridge would require local traffic to utilize a detour to the north onto Acme Road or Coles Road to the south, via Reclamation Road. The implementation of the detour during the construction period would affect local traffic temporarily. However, the detour would reduce the overall construction schedule length.

2.3 Construction Activities
2.3.1 Installing Construction Area and Detour Signs
Sufficiently in advance of construction operations, detour signs would be installed identifying the road closure and detour routes. Signs would remain in place throughout the duration of construction.

2.3.2 Clearing, Grubbing, and Tree Removals
Minor disturbance and vegetation removal would occur at the ends of the existing bridge abutments to accommodate the new bridge. The maximum depth of excavation is expected to be six feet (72 inches).

2.3.3 Canal Diversion
Work within the Canal would be scheduled when there is little or no demand for water in the Canal and therefore a diversion would not be required. However, because work within the Canal is proposed to be conducted November/December through April/May, standard best management practices (BMPs), as described in the Water Pollution Control Plan (WPCP), would be implemented in order to prevent any construction debris from being washed down the Canal in the event of a storm.

2.3.4 Demolition
The existing bridge would be demolished and properly disposed of offsite. The Canal below the bridge would be protected from contamination and all debris generated by the demolition. Heavy equipment may be required to demolish and remove such features. Drainage features would be protected from contamination and all debris generated by the demolition would be removed from the site.
2.3.5  **New Bridge Foundations**  
The new abutment seat and associated foundations would involve excavations of up to six-feet-deep in the bank of the Canal. No supports would be placed within the Canal waterway.

2.3.6  **New Bridge Construction**  
New bridge construction would involve placement of precast, pre-stressed concrete slabs with a cast in place concrete overlay. Traffic rated barriers would be placed at the edge of deck, and Midwest Guardrail Systems would be installed on both approaches to the bridge.

2.3.7  **New Approach Roadway Construction**  
Adjacent roadway improvements would require excavation for a new structural section, placement of aggregate base and an asphalt roadway surface. **Table 1** provides a description of the type of equipment likely to be used during the construction of the Project.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Construction Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic hammer</td>
<td>Demolition</td>
</tr>
<tr>
<td>Hoe ram</td>
<td>Demolition</td>
</tr>
<tr>
<td>Jack hammer</td>
<td>Demolition</td>
</tr>
<tr>
<td>Water truck</td>
<td>Earthwork construction, dust control</td>
</tr>
<tr>
<td>Bulldozer / loader</td>
<td>Earthwork construction, clearing and grubbing</td>
</tr>
<tr>
<td>Haul truck</td>
<td>Earthwork construction, clearing and grubbing</td>
</tr>
<tr>
<td>Front-end loader</td>
<td>Dirt or gravel manipulation</td>
</tr>
<tr>
<td>Grader</td>
<td>Ground grading and leveling</td>
</tr>
<tr>
<td>Dump truck</td>
<td>Fill material delivery</td>
</tr>
<tr>
<td>Bobcat</td>
<td>Fill distribution</td>
</tr>
<tr>
<td>Excavator</td>
<td>Soil manipulation and placement of rock slope protection</td>
</tr>
<tr>
<td>Compaction equipment</td>
<td>Earthwork</td>
</tr>
<tr>
<td>Roller / compactor</td>
<td>Earthwork and asphalt concrete construction</td>
</tr>
<tr>
<td>Backhoe</td>
<td>Soil manipulation, drainage work</td>
</tr>
<tr>
<td>Drill rig</td>
<td>Construction of drilled or driven pile foundations</td>
</tr>
<tr>
<td>Holding tanks</td>
<td>Slurry storage for pile installation</td>
</tr>
<tr>
<td>Crane</td>
<td>Placement of false work beams</td>
</tr>
<tr>
<td>Concrete truck and pump</td>
<td>Placing concrete</td>
</tr>
<tr>
<td>Paver</td>
<td>Asphalt concrete construction</td>
</tr>
<tr>
<td>Truck with seed sprayer</td>
<td>Erosion control landscaping</td>
</tr>
<tr>
<td>Generators</td>
<td>Power hand tools</td>
</tr>
</tbody>
</table>
2.3.8 Construction Sequence/Schedule and Timing

Construction of the proposed Project is anticipated to take between 4 to 6 months. Construction is scheduled for the winter of 2019 calendar year and would begin in December/January, or as determined appropriate by the Sutter Mutual Water Company and the irrigation needs of its customers, as well as the USFWS, CDFW, and RWQCB.

2.4 Permits and Approvals Needed

The following permits, reviews, and approvals are required for Project construction:

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit/Approval</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caltrans/FHWA</td>
<td>Approval of Categorical Exclusion (CE)</td>
<td>Follows approval of technical studies.</td>
</tr>
<tr>
<td>Army Corps of Engineers</td>
<td>Section 404 Nationwide Permit</td>
<td>Application to follow release of IS/MND</td>
</tr>
<tr>
<td>Central Valley Regional Water Quality Control Board</td>
<td>Section 401 Water Quality Certification Agreement</td>
<td>Application to follow release of IS/MND</td>
</tr>
<tr>
<td>California Department of Fish and Wildlife</td>
<td>Section 1602 Streambed Alteration Agreement</td>
<td>Application to follow release of IS/MND</td>
</tr>
<tr>
<td>California Department of Fish and Wildlife</td>
<td>California Endangered Species Act Sections 2081 (b) and (c) - Incidental Take Permit or Consistency Determination</td>
<td>Application to follow release of IS/MND</td>
</tr>
<tr>
<td>United States Fish and Wildlife Service</td>
<td>Section 7 Consultation for Threatened and Endangered Species</td>
<td>Follows approval of Biological Assessment</td>
</tr>
<tr>
<td>Sutter County</td>
<td>Grading and Erosion Control Permit</td>
<td>Application to follow release of IS/MND</td>
</tr>
</tbody>
</table>
3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The Project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

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

3.1 Determination: (To be Completed by Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

[Signature]

[Printed Name]

[Date]

Sutter County Development Services Department

Tisdale Road Bridge over Westside Canal Replacement Project
Initial Study/Mitigated Negative Declaration

Drake Hagan & Associates
February 2019
4 ENVIRONMENTAL CHECKLIST

4.1 Aesthetics

4.1.1 Setting

Visual character is a description (not evaluation) of a site, and includes attributes such as form, line, color, and texture. Visual quality is the intrinsic appeal of a landscape or scene due to the combination of natural and built features in the landscape, and this analysis rates visual quality as high, moderate, or low. Visual sensitivity is the level of interest or concern that the public has for maintaining the visual quality of a particular aesthetic resource, and is a measure of how noticeable proposed changes might be in a particular scene and is based on the overall clarity, distance, and relative dominance of the proposed changes in the view, as well as the duration that a particular view could be seen.

The 2011 Sutter County General Plan (General Plan) does not inventory any scenic vista on the Project site. The General Plan and the General Plan Technical Background Report identify geographic features such as the Sutter Buttes, Feather River, and Bear River as scenic resources within the County. In addition, the General Plan Technical Background Report also recognizes the following for their aesthetic value as scenic resources: valley orchards, rice fields, and other agricultural operations that create vast viewsheds of undeveloped areas; Sacramento River and Sutter Bypass; the California coastal mountains and the Sierra Nevada mountain range; and habitat and wildlife areas within the County. The Tisdale Bypass adjacent to the Project site is considered a part of the Sutter Bypass, and is therefore considered a scenic resource under the General Plan.

The Project site is approximately 9.15 miles south from the southern extent of the Sutter Buttes. Views of the Sutter Buttes from the Project site are partially obstructed by mature hardwood trees and other vegetation within the Project vicinity.

The existing visual character of the Project site can be described as rural countryside. Land use within the Project vicinity is agricultural with adjacent open space uses. Adjacent land uses include private agricultural lands, the Tisdale Bypass open-space area, and the business Sutter Mutual Water. The visual quality of the Project site is considered moderate, as it is representative of the general visual character of
the surrounding area. The location of the Tisdale Bypass, the Canal, and the agricultural lands adjacent to the Project site add visual quality to the site and the surrounding area.

Viewer groups include roadway users, agricultural residents and workers within the vicinity of the Project site and Sutter Mutual Water workers. Viewer sensitivity at the Project site is considered low for all viewer groups since aesthetic changes to the bridge under the Project would be minimal.

4.1.2 Discussion

a) Less-than-Significant Impact. The Project site is located within a predominately agricultural setting with adjacent open space uses. The existing bridge crosses over the Canal. The Project site is representative of the general visual character of agricultural Sutter County. Additionally, the Project bridge replacement would not change the current land uses in the area (roadway, bridge, agricultural, open space) and would be constructed in the same location as the existing bridge. Because the replacement bridge would be built in the same location as the existing bridge structure, constructed with similar aesthetic elements as the existing bridge, and would not change land use within the Project vicinity, the Project would not impact views of the Sutter Buttes from the Project site or elsewhere within the Project vicinity. The replacement bridge would meet current applicable County and AASHTO design criteria and standards.

b) No Impact. The Project is not within a state scenic highway. There are no officially designated state scenic highways, eligible scenic highways, or scenic byways within the County.

c) Less-than-Significant Impact. Construction of the Project would result in temporary changes to local visual conditions, but the visual character of the Project would be compatible with the existing visual character of the corridor. The Project would not affect the pattern elements (landscaping trees and vegetation) of the Project site, nor would it interrupt land use diversity with the addition of new land uses. Since the Project would be in the same location and have similar aesthetic design elements as the existing bridge, there would be minimal impacts to existing views. The Project would not substantially change the existing visual character or degrade the existing visual quality of the site and its surroundings.

d) No Impact. The Project site is not located where street lighting is present. Roadway traffic and lighting from private properties are sources of nighttime light. The Project would not result in any changes that would introduce new sources of light and glare (i.e., billboards, street lamps, security lighting, etc.) to the vicinity of the Project site during operation of the replacement bridge structure. Project construction would occur during daylight hours only, and therefore would not result in the introduction of new sources of light and glare from the operation of construction equipment at night. Additionally, the Project is not considered a roadway capacity-increasing improvement, so a greater number of vehicles would not be introduced in this area as a result of Project construction and operation.
4.2 Agricultural and Forest Resources

| Issues (and Supporting Information Sources): | Potentially Significant Impact | Less Than Significant with Mitigation Incorporation | Less Than Significant Impact | No Impact |
| --- | --- | --- | --- |
| Agricultural and Forest 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: 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? | | | |

4.2.1 Setting

According to the California Department of Conservation’s Farmland Mapping and Monitoring Program, the Project site does not include prime farmland, unique farmland, farmland of statewide importance, forest, or timberland. However, prime farmland is located to the east and south of the Project site within the Project vicinity. There are no lands covered under a Williamson Act contract within or adjacent to the project site. There is no land zoned as timberland within the Project vicinity.

Project construction and operation would occur primarily within the existing County right-of-way. Approximately 0.255 acres would be required from APN 21-110-002 and approximately 0.003 acres would be required from APN 21-110-007 as permanent right-of-way acquisitions. In addition, approximately 0.031 acres would be required from APN 21-110-002 as a temporary construction easement.
4.2.2 Discussion

a) **Less-than-Significant Impact.** The Project would occur mainly within the existing right-of-way. Permanent and/or temporary right of way would be required for APN 021-110-002 and APN 021-110-007, as described above in the Setting subsection. All right-of-way acquisitions are minimal and would be done with collaboration of both the property owners and the County. In addition, permanent and temporary acquisitions of property would not impede, inhibit, or otherwise adversely affect agricultural operations on agricultural parcels within the Project vicinity. The Project would not require any permanent or temporary conversions of prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use.

b) **No Impact.** According to the California Department of Conservation, there are no lands covered by a Williamson Act contract within or adjacent to the Project site. The Project would not result in the acquisition or conversion of land covered by a Williamson Act contract; therefore, the Project would not result in any impacts to any lands covered by a Williamson Act contract.

c) **No Impact.** According to the California Department of Conservation Farmland Mapping and Monitoring Program and the General Plan, there is no land zoned as forestland or timberland adjacent to the Project site. The Project would not cause potential forestland or timberland within the Project vicinity to be rezoned to non-forest use.

d) **No Impact.** According to the California Department of Conservation Farmland Mapping and Monitoring Program and the General Plan, there is no land zoned as forestland adjacent to the Project site.

e) **No Impact.** As discussed above in the Setting subsection, no important farmlands are located within the Project site. The Project does not propose any new land uses or the permanent conversion of existing agricultural lands, nor result in any other actions that would impact the adjacent agricultural lands. The Project would not result in any actions that could induce substantial population growth or otherwise indirectly result in the conversion of farmland to nonagricultural use.
4.3 Air Quality

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Quality</strong> – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Conflict with or obstruct implementation of the applicable air quality plan?</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>d) Expose sensitive receptors to substantial pollutant concentrations?</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>e) Create objectionable odors affecting a substantial number of people?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3.1 Setting

The Project site is located in Sutter County within the Sacramento Valley Air Basin, and is under the jurisdiction of the Feather River Air Quality Management District (FRAQMD). The FRAQMD is one of 35 regional air quality districts in California, and has jurisdiction over all of Sutter and Yuba Counties. Air quality districts are public health agencies whose mission is to improve the health and quality of life for all residents through effective air quality management strategies. Sutter County is a member of the Sacramento Area Council of Governments (SACOG), a regional planning association that also includes the counties of El Dorado, Placer, Sacramento, Yolo, and Yuba, and is located within the Sacramento Valley Air Basin. SACOG is responsible for regional transportation planning within its jurisdiction and preparing air quality conformity analyses, documents that are used to bring regional emissions into compliance with federal and state air quality standards pursuant to the Clean Air Act.

The Clean Air Act requires the U.S. Environmental Protection Agency (U.S. EPA) to set National Ambient Air Quality Standards (NAAQS) for major pollutants that could be detrimental to the environment and human health. There are six such “criteria” air pollutants that the U.S. EPA has set standards for: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), particulate matter less than 10 microns in size (PM₁₀), and particulate matter less than 2.5 microns in size (PM₂.₅). The state of California has set similar standards under the California Clean Air Act called the California Ambient Air Quality Standards (CAAQS). California has set CAAQS for sulfate, hydrogen sulfide (H₂S), vinyl chloride, and visibility reducing particles in addition to the six criteria pollutants regulated by the NAAQS. An air basin is in “attainment” (compliance) when the levels of the pollutant in that air basin are below NAAQS and CAAQS thresholds.
The Project site is located in an area that is currently in non-attainment for ozone (severe) and PM$_{10}$.

### 4.3.2 Discussion

a) **Less-than-Significant Impact.** The purpose of the Project is to replace the existing Tisdale Road Bridge in order to meet current structural and geometric standards while minimizing adverse impacts to the Canal and the surrounding area. The Project would not increase roadway capacity or service capacities that would induce unplanned growth or remove an existing obstacle to growth. General Plan policy ER 9-A requires “an adequate distance between facilities that may produce toxic or hazardous air pollutants and sensitive receptors...” Operation of the replacement bridge facility would not produce toxic or hazardous air pollutants above the levels of the existing bridge structure, and therefore is compliant with General Plan policy ER 9-A. As a bridge replacement project that would be likely to produce less than 3,000 metric tons of carbon dioxide equivalent (CO$_{2e}$) per year, the Project is pre-screened as compliant with the Sutter County Climate Action Plan (Climate Action Plan) through Table 1 of the 2011 Greenhouse Gas Pre-Screening Measures for Sutter County; see the Greenhouse Gas Emissions section for more information. Because the General Plan and the Climate Action Plan have been determined to be consistent with applicable federal and state air quality statutes, regulations, and plans, the Project’s consistency with the General Plan and the Climate Action plan ensures the project is consistent with applicable federal and state air quality statutes, regulations, and plans. The Project would not increase long-term traffic levels and there would be no operational impacts to air quality.

b) **Less-than-Significant Impact.** Since the Project would not add lanes or increase capacity, it would only affect local air pollutants during construction (approximately four to six months). The Project would not affect long-term air pollutant emissions in the area or stationary air pollutant sources.

**Construction**

The primary concern to the FRAQMD during construction would be PM$_{10}$ emissions from dust-generating activities.

The FRAQMD distinguishes two types of projects: Type 1 projects that result in operational phases with air quality emissions and Type 2 projects that do not result in operational phases with air quality emissions. Construction phase emissions are the only emissions generated by Type 2 projects and therefore are the only emissions used in impacts analysis for Type 2 projects.

The Project is a Type 2 project under these FRAQMD guidelines. Type 2 projects have air quality impacts that are considered less than significant if the averaged project life emissions do not exceed 25 lbs./day of NO$_x$ or reactive organic gases (ROG) and the daily emissions of 80 lbs./day of PM$_{10}$. The Project would be expected to emit NO$_x$, ROG, and PM$_{10}$ levels below these thresholds.

Roadway construction emissions modeling of the Project predicts that the Project would have the potential to emit a maximum of 9.52 lbs./day of NO$_x$, 4.71 lbs./day of ROG, and 22.07 lbs./day of PM$_{10}$. The assumptions were made during modeling that (1) the types and quantities of construction equipment typical of bridge projects would be used, (2) all on-road equipment used...
for the Project would be year 2010 or newer models, and (3) all construction equipment would meet California Air Resources Board (ARB) Tier 4 requirements.

Good work practices include but are not limited to the following measures that will be implemented in order to minimize construction emissions:

- Implement a Fugitive Dust Control Plan.
- Ensure that construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringelmann 2.0) and ensure that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operation, as a responsibility of the contractor. Limit idling time to five minutes (13 CCR Section 2485, 2449).
- Utilize existing power sources (i.e. power poles) or clean fuel generators rather than temporary power generators.
- Develop a traffic plan to minimize traffic flow interference from construction activities.
- Apply for and receive an ARB Portable Equipment Registration with a state or local district permit as required for applicable portable engines and portable engine-driven equipment units used at the Project site.
- Suspend grading operations when winds exceed 20 miles per hour or when winds carry dust beyond the property line despite implementation of all feasible dust control measures.
- Have an operational water truck available on site at all times. Water the construction site as directed by the Department of Public Works, FRAQMD, and as necessary to prevent fugitive dust violations. Sweep paved streets frequently, and install wheel washers where Project vehicles exit the Project site and staging area.
- Cover onsite dirt piles, install wind breaks, and employ water and/or soil stabilizers to reduce wind-blown dust emissions. Apply chemical soil stabilizers according to manufacturer specifications on all inactive construction areas. Minimize the free fall distance and fugitive dust emissions of all transfer processes.
- Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less, and provide temporary traffic control as needed.
- Reestablish ground cover on applicable areas of the construction site as soon as possible through seeding and watering.
- The open burning of waste is legally prohibited.

c) **Less-than-Significant Impact.** The Project would result in minimal air pollutant emissions during the short-term duration of construction and would not result in an increase in operational activities or emissions. Therefore, the Project would not 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 (ozone and PM_{10}).

d) **No Impact.** There are no air quality sensitive receptors (e.g. residential dwellings, schools, daycares, parks and recreation areas, or medical facilities) within 1,000 feet of the Project site.

e) **Less-than-Significant Impact.** The Project would not produce objectionable odors.
4.4 Biological Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Resources – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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 Game or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) 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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

4.4.1 Setting

The Project is located in western Sutter County approximately 0.3 miles east of the Colusa County line along Tisdale Road and approximately 100 feet east of Cranmore Road. The Project is on the Tisdale Weir CA USGS 7.5’ Quadrangle within Township 14 North, Range 01 East, Section 36.

The Project lies in the River Alluvium Ecological Subsection, an area on nearly level floodplains and very gently sloping levees. The natural levees have been almost completely replaced by the construction of artificial levees. The subsection elevation range is about 25 to 150 feet. Fluvial erosion and deposition are the main geomorphic processes. The predominant natural plant communities are Fremont cottonwood series and emergent aquatic communities along streams and needlegrass grasslands on levees and floodplains. The annual average precipitation at the National Climatic Data Center Colusa 2
SSW, California weather station (041948) is 16.22 inches (WRCC, 2016). More than 97 percent of the area’s rainfall occurs between October and May (WRCC, 2016). Elevation of the study area ranges between 36 and 44 feet above mean sea level (msl).

4.4.2 Data Sources/Methodology

The Tisdale Road Bridge Replacement Natural Environment Study (NES) and Biological Assessment (BA) were prepared for the Project and are available for public review at the County Development Services Department during business hours (Caltrans 2017b; Caltrans 2017c). An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, or associated sensitive habitat occurs within the Project area. Data on special-status species and habitats known in the area was obtained from the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDB), the United States Fish and Wildlife Service’s (USFWS) Information for Planning and Consultation (IPaC) website, the NOAA Fisheries West Coast Region Species Lists, and the California Native Plant Society’s (CNPS) Inventory of Rare Plants. Maps and aerial photographs of the Project area and surrounding areas were reviewed. Field surveys were conducted on May 10, 2017 to determine the habitats present.

4.4.3 Habitats and Species of Concern

The Project is located in the Central Valley, an area characterized by vast agricultural regions, and dotted with numerous population centers, including the community of Grimes, the closest unincorporated community located approximately five miles northwest of the Project. Topography is generally flat. The Project area is at an elevation of approximately 40 feet above sea level. Terrestrial habitat types in the Project area include barren, ruderal (disturbed), and urban (developed). The aquatic habitat type in the Project area includes the Canal, which is an irrigation canal and classified as lower perennial riverine habitat.

The Canal is considered to be waters of the U.S, and is, therefore, considered sensitive by both federal and state agencies.

Special Status Plant Species

The Project area does not provide suitable habitat for any federal or state listed plant species; however, it does provide suitable habitat for the non-listed special status plant species woolly rose-mallow. Woolly rose-mallow is listed by the California Native Plant Society as being “fairly endangered” in California, meaning that 20 to 80 percent of the known occurrences are threatened. The banks of the Canal could provide potentially suitable habitat for this species as evidenced by the small patches of freshwater emergent vegetation found above and below the ordinary high water mark (OHWM). Woolly rose-mallow was not observed during the survey conducted in May 2017.

Special Status Aquatic and Semi-Aquatic Species

Western Pond Turtle (*Emys marmorata*). Western pond turtle is a California species of special concern. The Canal does provide suitable habitat for this species. Water is typically present until October when irrigation demand ceases and the flow control structures within the channel provide suitable basking structure. The presence of aquatic vegetation provides potentially suitable foraging habitat for this species. This species was not observed during the surveys conducted in May 2017.
Giant Garter Snake (*Thamnophis gigas*). Giant garter snake (GGS) is a federally- and state-listed threatened species and as such is protected by the federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA), respectively. Aquatic habitat conditions for GGS in the Canal and the surrounding upland habitat conditions are marginal; however, the channel may be used as aquatic dispersal habitat while the ruderal (disturbed) areas may be used as upland dispersal habitat for the species. This species was not observed during the surveys conducted in May 2017.

**Special Status Terrestrial Species**

**Western Burrowing Owl (*Athene cunicularia*)**. Western burrowing owl is a California species of special concern. Soils within the Project area are sandy and friable and, although there are no mounds, the slopes of the levee around the Tisdale Bypass could provide potential nesting habitat for this species while the agricultural fields and ruderal areas with short vegetation could provide potential foraging habitat. This species was not observed during the surveys conducted in May 2017.

**Swainson’s Hawk (*Buteo swainsonii*)**. Swainson’s hawk is a state-listed threatened species under the CESA. The Project is located within a predominately agricultural setting which supports grassland habitat and agricultural fields that provide suitable foraging areas for Swainson’s hawk. While there is no suitable nesting habitat within the Project area, suitable nesting habitat is located immediately adjacent and within 0.25 miles of the Project area. Several Swainson’s hawks were observed exhibiting nesting behavior and foraging over the Tisdale Bypass within the vicinity of the Project area during the May 2017 survey.

**Song Sparrow (“Modesto” population) (*Melospiza melodia*)**. Song sparrow is a California species of special concern. The ruderal (disturbed) areas, particularly the Himalayan blackberry thicket along the southern bank west of the bridge, could provide suitable nesting habitat for this species. No song sparrows were observed during the field surveys conducted in May 2017.

**Nesting Songbirds and Raptors**. The more densely vegetated ruderal (disturbed) habitat as well as the existing Tisdale Road Bridge, provides potential nesting and foraging habitat for birds listed by the Migratory Bird Treaty Act (MBTA). No nests were observed within the ruderal (disturbed) habitat however numerous cliff swallow nests were observed under the Tisdale Road Bridge.

**4.4.4 Discussion**

a) **Less-than-Significant Impact with Mitigation**. The following provides a discussion of the potential species that could be present during construction activities, impacts to these species and associated habitat, and the mitigation measures that will be implemented in order to minimize the impacts of construction activities on these species and associated habitat.

Impacts to plant species could include loss of the plant species through trampling or excavation if present within the construction zone or damage to sensitive root systems, through compaction, could occur outside of the construction zone. Therefore, implementation of the Project could have a potentially significant impact on special-status plants. Implementation of Mitigation Measure BIO-1 would reduce potential impacts to special-status plants to a less-than-significant level.

Due to agricultural demand for water, work within the Canal is proposed to be conducted November/December through April/May when demand for water is low and the Canal is dry.
This timing corresponds to the inactive period of GGS; therefore, GGS should not be present within the Canal during the time of bridge construction. However, western pond turtle although unlikely due to the low-quality habitat within the project are, there is the potential for western pond turtle to be present within the Canal during the winter months. Lastly, although unlikely, there is the potential for GGS to be aestivating within the ruderal (disturbed) areas. Potential impacts include direct harm to these species that could potentially come into contact with construction personnel and/or equipment, temporarily inhibiting movement of western pond turtle and/or GGS through the Project area, and increased chance of predation or physical harm if they were to become trapped in the construction area or the dewatering area. Trenches left open during the night could trap snakes and/or turtles moving through the construction area. Lastly, the movement of equipment within uplands and construction of bridge structures could crush aestivating GGS and/or pond turtles or nests containing eggs or young, if construction extends beyond April.

Noise associated with construction activities involving heavy equipment operation that occurs during the breeding season (generally between February 1 and August 31) could disturb nesting burrowing owls, Swainson’s hawks, song sparrows, and other raptors and songbirds if an active nest is located near these activities. Potential impacts could include abandonment of nest sites and the mortality of young. Any disturbance that causes nest abandonment and subsequent loss of eggs or developing young at active nests located near the Project area would violate the CESA (CFGC Sections 2800, 3503, and 3503.5) and the MBTA.

In addition, demolition of the existing bridge structure would remove potentially suitable nesting habitat for birds. If birds are nesting under the bridge at the time of demolition, there is the potential to result in nest abandonment and subsequent loss of eggs or developing young at active nests located near the Project area would violate the MBTA.

With the implementation of Mitigation Measures BIO-2, BIO-3, and HYD-1, impacts to special-status aquatic and semi-aquatic wildlife species would be less than significant.

With the implementation of Mitigation Measures BIO-4, BIO-5, and BIO-6a and 6b, impacts to special-status terrestrial wildlife species would be less than significant.

b.c) Less-than-Significant Impact with Mitigation. There is no riparian habitat within the Project area that would be considered sensitive; however, the Canal is considered jurisdiction waters of the US. In addition, as described above, the Canal provides potentially suitable habitat for several sensitive species, including GGS which is listed by the USFWS.

This Project would not involve permanent modification or alteration of the Canal, as the bridge span abutments would be located at each top of channel location, above the OHWM. While in-channel work within the Canal would be minimal, some degree of permanent rock slope protection (RSP) may be required at the bridge supports on the banks to prevent scour to the new bridge supports. The placement of RSP and the new bridge structure could result in up to 0.05 acres of permanent impacts to the Canal.

The Project would temporarily impact approximately 0.10 acres of the Canal. Temporary impacts to the Canal would result from stream diversion and removal of the existing bridge.
With the implementation of Mitigation Measure HYD-1, impacts to the Canal would be less than significant.

d) **Less-than-Significant Impact.** The Project would not substantially interfere 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. The Project area is not located within an established native resident or migratory wildlife corridor or wildlife nursery site. However, as discussed above, the Canal may provide a movement corridor for wildlife to disperse. Construction noise could temporarily alter foraging patterns of resident wildlife species and temporarily disrupt wildlife movement within the Project area. This disturbance would only occur during Project construction and the disruption of wildlife movement would be temporary in nature. Therefore, impacts to wildlife or fish movement or migration would be considered less than significant.

e) **No Impact.** There are currently no tree preservation policies established for Sutter County. In addition, no trees would be removed as part of the Project. There would be no impact.

f) **No Impact.** The Project is currently not located within the boundaries of any adopted Natural Community Conservation Plan or a Habitat Conservation Plan. There would be no impact.

### 4.4.5 Mitigation Measures

**Mitigation Measure BIO-1: Conduct Preconstruction Surveys.** A qualified biologist shall conduct a preconstruction survey for woolly rose mallow and other special status plant species within 30 days prior to construction. If woolly rose mallow or other special status plant species are not found, then no further measures are necessary. If woolly rose mallow or other special status plant species are found in the Project area, notify CDFW at least ten days prior to dewatering or construction impacts in the vicinity of any observed special status plant species in accordance with the California Native Plant Protection Act of 1977 (CFGC Section 1900-1913) to allow sufficient time to transplant the individuals to a suitable location.

**Mitigation Measure BIO-2: Protect Giant Garter Snakes.** Implement the following in order to reduce potential Project effects to giant garter snakes (snakes):

- Caltrans will purchase 0.55 acre of snake conservation credits from a Service-approved snake conservation bank with a service area covering the proposed project.
- Temporary fencing will be installed at the upstream and downstream limits of the construction area, to deter snakes from entering the action area and being harmed by construction activities. The fencing will be installed prior to the start of construction to ensure that snakes do not enter the construction zone.
- Construction personnel will participate in a Service-approved worker environmental awareness program prior to the onset of construction activities. A Service-approved biologist will inform all construction personnel about the life history of the snake; how to identify species and their habitats; what to do if a snake is encountered during construction activities; and explain the state and federal laws pertaining to the snake.
- A Service-approved biologist will conduct a pre-construction survey for the snake, no more than 24 hours prior to the start of construction activities. If construction activities stop for a period of two or more weeks, a new snake survey will be completed no more than 24 hours prior to the...
reinitiating of construction activities. If a snake is encountered during construction, activities will cease until appropriate corrective measures have been completed or it has been determined that the snake will not be harmed. Any sightings and any incidental take will be reported to the Service immediately by telephone at (916) 414-6631 and email or written letter addressed to the Sacramento Valley Division, Chief, within one working day of the incident.

- Any vegetation or ground clearing will be confined to the minimal area necessary within 200 feet of aquatic snake habitat to facilitate construction activities. To ensure that construction equipment and personnel do not affect upland and aquatic snake habitat outside of the action area, exclusionary fencing will be erected to clearly define the snake habitat to be avoided. This will delineate the environmentally sensitive areas within the action area. The installation techniques and location of the exclusionary fencing will be coordinated with a Service-approved biologist, who will inspect and approve the fencing prior to commencement of construction.

- Upon completion of construction, disturbed sections of the canal will be hydro seeded to stabilize disturbed areas.

- If a live GGS is encountered during construction activities, immediately notify the Project biological monitor and the USFWS shall be immediately notified. The biological monitor shall do the following:
  - Stop all construction activity in the vicinity of the GGS. Monitor the GGS and allow the GGS to leave on its own. The monitor will remain in the area for the remainder of the workday to make sure the GGS is not harmed or if it leaves the site and does not return. Escape routes for GGS will be determined in advance of construction. If the GGS does not leave on its own within one working day, conduct further consultation with USFWS will be conducted.
  - Only personnel with a USFWS recovery permit pursuant to Section 10(a)(1)(A) of ESA will have the authority to capture and/or relocate GGS encountered in the PIA.

- No plastic, monofilament, jute, or similar erosion control matting that could entangle GGS will be employed. Possible substitutions include coconut coir matting, tactified hydro seeding compounds, or other material approved by the USFWS.

- Implement standard construction BMPs shall be implemented throughout construction, in order to avoid and minimize adverse effects to the water quality within the Project area. These BMPs shall be inspected daily to ensure their effectiveness. They shall be installed per the BMP’s per the BMP installation specifications. Maintain or replace BMPs deemed to be ineffective shall be maintained or replaced as necessary.

**Mitigation Measure BIO-3: Protect Western Pond Turtles.** Implement the following avoidance and minimization efforts to reduce potential Project effects to western pond turtle:

- If dewatering is necessary, both notify CDFW and dewater the construction area prior to construction activities.

- No more than two weeks prior to the commencement of ground-disturbing activities, the County shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the Project area. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any
identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Do not proceed with construction until the work area is determined to be free of turtles. Document the results of these surveys in a technical memorandum that will be submitted to CDFW (if turtles are documented).

- Implement standard construction BMPs throughout construction, in order to avoid and minimize adverse effects to the water quality within the Project area.

Mitigation Measure BIO-4: Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Burrowing Owls. Conduct preconstruction surveys within 30 days prior to construction to ensure that burrowing owls have not established territories. If no burrowing owls are found during any of the surveys, no further mitigation will be necessary. If burrowing owls are found, then implement the following measures prior to the commencement of construction:

- During the non-breeding season (September 1 through January 31), evict burrowing owls occupying the PIA, from the PIA by passive relocation as described in the Staff Report on Burrowing Owls (CDFW 2012).
- During the breeding season (February 1 through August 31), do not disturb occupied burrows and provide burrows a 250-foot protective buffer unless a qualified biologist approved by CDFW verifies through non-invasive means that either: 1) the birds have not begun egg laying, or 2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. Once the fledglings are capable of independent survival, the burrow can be destroyed.

Mitigation Measure BIO-5: Conduct Preconstruction Surveys for Swainson’s Hawk. Prior to construction, a qualified biologist shall conduct surveys to determine presence/absence of nesting Swainson’s hawk in and within 0.50 miles of the Project area according to the Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley (CDFG, 2000). If no Swainson’s hawks are found during any of the surveys, no further mitigation will be necessary. If Swainson’s hawk nests are found, consult CDFW regarding measures to reduce the likelihood of forced fledging of young or nest abandonment by adult birds. These measures will likely include, but are not limited to, the establishment of a no-work zone around the nest until the young have fledged as determined by a qualified biologist.

Mitigation Measure BIO-6a: Protect Migratory Birds. Use the following avoidance and minimization measures when work occurs on or in the vicinity of structures that may be subject to nesting by song sparrow and other migratory raptors and songbirds.

- **Avoid Active Nesting Season.** Implement the following measures to avoid and minimize impacts to tree and shrub nesting species:
  - If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31).
  - If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), perform pre-construction surveys prior to the start of Project activities.

- **Conduct Pre-construction Nesting Bird Surveys.** If construction, grading or other Project-related activities are schedule during the nesting season (February 1 to August 31), conduct preconstruction surveys for other migratory bird species no less than 14 days and no more than 30 days prior to the beginning of construction within 250 feet of suitable nesting habitat.
If the pre-construction surveys do not identify any nesting migratory bird species within areas potentially affected by construction activities, no further mitigation would be required. If the pre-construction surveys do identify nesting bird species within areas that may be affected by site construction, implement the following measures.

- **Avoid Active Bird Nest Sites.** Should active nest sites be discovered within areas that may be affected by construction activities, implement additional measures as described below:
  - If active nests are found, establish no-work buffers to limit Project-related construction activities near the nest sites. Determine the size of the no-work buffer zone in consultation with the DFW, but use a 500 foot buffer when possible. Delineate the no-work buffer zone with highly visible temporary construction fencing. In consultation with DFW, monitoring of nest activity by a qualified biologist may be required if the Project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. Do not commence Project-related construction activity within the no-work buffer area until a qualified biologist and DFW confirms that the nest is no longer active.

**Mitigation Measure BIO-6b: Protect Bridge-Nesting Birds.** Incorporate the following avoidance and minimization measures for bridge-nesting birds if bridge demolition or construction of the new bridge occurs during the nesting season (February 1 to August 31). Install exclusionary netting around the undersides of the existing bridge before February 1 of the construction year to prevent new nests from being formed, and/or prevent the reoccupation of existing nests. Exclusionary netting may also be required during construction of the new bridge if it is completed during the breeding season. The construction contractor would do the following:

- Remove all existing unoccupied nests on the bridge during the non-nesting season (September 1 through January 31).
- Keep the bridge free of nests, using exclusionary netting or other approved methods, until completion of construction activities.
- Inspect all listed structures for nesting activity a minimum of three days per week; no two days of inspection would be consecutive. A weekly log would be submitted to the Project biologist. The contractor would continue inspections until bridge removal and completion of construction on new bridge. If an exclusion device were found to be ineffective or defective, the contractor would complete repairs to the device within 24 hours. If birds were found trapped in an exclusion device, the contractor would immediately remove the birds in accordance with USFWS guidelines.
- Submit for approval working drawings or written proposals of any exclusion devices, procedures, or methods to the Project biologist before installing them.
- The method of installing exclusion devices would not damage permanent features of the new bridge structure. Approval by the Project biologist of the working drawings or inspection performed by the authorized Project biologist would in no way relieve the contractor of full responsibility for deterring nesting.
4.5 Cultural Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Resources – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

4.5.1 Setting

A cultural resource is a broad term that includes prehistoric, historic and traditional cultural properties that reflect the physical evidence of past human activity across the landscape. Cultural resources, along with prehistoric and historic human remains and associated grave-goods, must be considered under various federal, state, and local regulations including CEQA, and the National Historic Preservation Act of 1966 (NHPA). Cultural resources that are listed in or eligible for inclusion in the National Register of Historic Places (NRHP) are also considered eligible for listing in the California Register of Historical Resources (CRHR). Those cultural resources that are listed in or eligible for inclusion in the CRHR are referred to as historical resources. To be considered a historical resource, or “historically significant,” the resource must meet the criteria for listing in the CRHR, which include the following:

a) Be associated with the events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

b) Be associated with the lives of persons important to our past;

c) Embody the distinctive characteristics of a type, period, region, method of construction, or represent the work of an important creative individual, or possess high artistic value; or

d) Yield, or be likely to yield, important information in prehistory or history.

PAR Environmental Services, Inc. (PAR) conducted a cultural resources investigation for the Project which included a records search at CHRIS, background research, Native American consultation, and pedestrian survey. Additionally, geotechnical core samples were examined for cultural materials; none were identified.

The Tisdale Bypass, the Canal, and a small (likely modern) private irrigation ditch intake, are located in the Project area and were found to be not eligible for listing in the National Register of Historic Places (NRHP), nor do they appear to be historical resources under CEQA. Caltrans evaluated the Tisdale Road Bridge (No. 18C-0057) as part of the statewide historic bridge inventory and found it to be ineligible for listing in
the NRHP (Category 5). As a result of the investigation, no historical or archaeological resources are in the Project area.

Paleontological resources are the fossilized remains of organisms that are preserved in the geologic record. Fossils are considered nonrenewable resources that are protected by federal, state, and local environmental laws and regulations. According to the Society of Vertebrate Paleontology standards and guidelines, sedimentary rock units with a high potential for containing significant nonrenewable paleontological resources are those within which vertebrate or significant invertebrate fossils have been previously determined to be present, or likely to be present. The potential paleontological importance of the Project area can be assessed by identifying the rock units that are over 10,000 years old within the underlying landform. An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets at least one of the following criteria:

- A type specimen (i.e., the individual from which a species or subspecies has been described);
- A member of a rare species;
- A species that is part of a diverse assemblage,
- A skeletal element different from, or a specimen more complete than, those now available for its species,
- A complete specimen; or
- At least 10,000 years or older.

4.5.2 Discussion

a) Less-than-Significant Impact. Bridge 18C-0057 was built in 1925 and found to be not eligible for listing in the NRHP; therefore, it is not considered a historical resource for the purposes of CEQA. PAR Environmental Services, Inc. prepared a Historical Resources Evaluation Report (HRER) for the Tisdale Bypass, the Canal, and a small private irrigation ditch located in the Project area. These resources were found not eligible for listing in the NRHP. Therefore, this impact is less than significant.

b) Less-than-Significant Impact. Background research and field surveys did not reveal any archaeological resources in the Project area. Compliance with California Public Resources Code Sections 5097.5, 5097.9 et seq. and construction contract specifications, including halting construction in the vicinity of a potential cultural resources find and notifying the County to allow evaluation of the resource by a qualified archaeologist prior to resuming construction, would ensure any potential impacts on buried or previously undiscovered historical resources are less than significant.

c) Less-than-Significant Impact with Mitigation. The underlying geologic landform in the Project area is Holocene-age (11,700 years before present [BP]) alluvium (Helley, E.J. and Harwood, D.S., 1985; Jennings et. al, 1977), which is not considered a unique geologic feature but has the potential to contain paleontological resources. A search of the University of California Museum of Paleontology (UCMP) collections database identified 76 fossil occurrences in the County, (UCMP, 2017). The fossils located in the County are primarily from the Eocene epoch (approximately 56 to 34 million years ago) and include invertebrates and microfossils located near the Sutter Buttes. The only fossilized mammals identified in the County are Quaternary-age vertebrate fossils near Oswald Road (approximately 13 miles southward), and near Gilsizer Slough.
The disturbed upper sediments deposited by the active river processes, canals, and agriculture activity have a low potential for paleontological resources, however in the event that paleontological resources are encountered during construction activities, implementation of Mitigation Measure CUL-1 would reduce the impact to less than significant.

d) **Less-than-Significant Impact with Mitigation.** Based on the prehistoric and historic uses of the area and the current disturbed nature of the Project area, human remains are not expected to be exposed by Project related ground-disturbing activities. In the event that human remains are discovered during construction activities, implementation of Mitigation Measure CUL-2 would reduce the impact to less than significant with mitigation.

### 4.5.3 Mitigation Measures

**Mitigation Measure CUL-1:** *Follow Protocol for the Unanticipated Discovery of Paleontological Resources.*

If cultural resources are discovered during ground-disturbing activities, cease all activity in the vicinity until the discovery is evaluated by an archaeologist or paleontologist working under the direction of a Principal Investigator who meets the requirements of the Secretary of the Interior’s Qualification Standards. If the archaeologist/paleontologist determines that the resources may be significant, halt all further work in the vicinity of the resources until appropriate treatment is determined and implemented.

The need for archaeological and Native American monitoring during the remainder of the Project will be re-evaluated by the archaeologist as part of the treatment determination. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature.

In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, the Project proponent will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.

**Mitigation Measure CUL-2:** *Follow Protocol for the Unanticipated Discovery of Cultural Resources or Human Remains.*

If buried cultural materials are encountered during construction, stop work in that area until a qualified archaeologist can evaluate the nature and significance of the find. In the event that human remains or associated funerary objects are encountered during construction, cease all work within 100 feet the vicinity of the discovery. Contact the Sutter County coroner immediately, in accordance with Section 1064.5 of CEQA and the California Health and Human Safety Code (Section 7050.5). If the human remains are determined to be Native American, the coroner will notify the Native American Heritage Commission, who will notify and appoint a Most Likely Descendent (MLD). The MLD will work with the land owner, or representative of the land owner, a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects.
### 4.6 Geology, Soils, and Seismicity

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology, Soils and Seismicity – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Strong seismic ground shaking?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv) Landslides?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4.6.1 Setting

The Project is located in the Sacramento Valley which is within the Great Central Valley geomorphic province. This geomorphic province is generally seismically inactive, with most active faults to the west in the Coast Ranges or to the east in the Sierra Nevada Mountains. The Project area could experience ground shaking from regionally active faults. The faults identified in Sutter County include the Quaternary Faults, located in the northern section of the County within the Sutter Buttes, and the Pre-Quaternary Fault, located in the southeastern corner of the County, just east of where Highway 70 enters the County (Table 5.1-2 of the General Plan Technical Background Report). Both faults are listed as non-active faults but have the potential for seismic activity. The California Mining and Geology Board define active faults as faults that have caused soil and strata displacement with evidence of surface displacement within the last 11,000 years. The California Mining and Geology Board define conditionally active faults as faults that show evidence of surface displacement within the past 11,000 to 750,000 years, and define potentially active faults as faults that show evidence of surface displacement within the last 1.6 million years.
The Soil Survey of Sutter County, California identified three soil types in the Project site vicinity (USDA, 2015).

**Nueva loam, with 0 to 2 percent slopes.** This soil is formed in alluvium from mixed sources. It is classified as having moderate infiltration rates and in a somewhat poorly drained soil drainage class. It is a partially hydric soil and has a high corrosion potential. At the site, this soil type has a soil erosion potential of approximately 0.30 tons per acre per year.

**Columbia fine sandy loam, with 0 to 8 percent slopes.** This soil is formed in alluvium from mixed sources. It is classified as having slow infiltration rates and as being in a somewhat poorly drained soil drainage class. It is a partially hydric soil and has a moderate corrosion potential. At the site, this soil type has a soil erosion potential of approximately 0.22 tons per acre per year.

**Holillipa loamy sand, with 0 to 2 percent slopes.** This soil is formed in alluvium from mixed sources. It is classified as having a high infiltration rate and being in a somewhat excessively drained soil drainage class. It is an all hydric soil and has a moderate corrosion potential. At the site, this soil type has a soil erosion potential of approximately 0.18 tons per acre per year.

Nueva loam is the only soil type within the Project area of direct effect. At the Project site, Nueva loam has a surface layer of neutral silt loam and moderately alkaline loam or clay loam is the underlying material. This soil type supports a variety of orchard crops, primarily walnuts, peaches, pears and prunes (Lytle, 1988).

### 4.6.2 Discussion

a) **Less-than-Significant Impact.** The major feature at the Project site is the Canal and the existing Tisdale Road Bridge. The area surrounding the Project site is composed of agricultural and open space land. According to the United States Geological Survey (USGS) Earthquake Hazards Program (2014), there are no active faults in the vicinity of the Project site. According to the Department of Conservation (CDC), the Project site is not located within a delineated Alquist-Priolo Earthquake Fault Zone (CDC, 2015). According to research conducted for and turned into Table 5.1.2 of the General Plan Technical Background Report, there are no faults identified as active within Sutter County as defined by the California Mining and Geology Board.

The seismic hazard most likely to impact the Project site is ground shaking. Strong seismic ground shaking could contribute to the potential landslide activities within the Project site, but this is unlikely since there are no known active faults within the vicinity. According to the Department of Conservation, the Project site is not located within a delineated Landslide Zone (CDC, 2015).

Liquefaction of granular soils can be caused by strong vibratory motion due to earthquakes. Soils that are highly susceptible to liquefaction are medium- to fine-grained, loose, granular and saturated at depths of less than 50 feet below the ground surface. Liquefaction of soils causes surface distress, loss of bearing capacity, and settlement of structures that are founded on the soils. The Project is located on the Nueva soil series, which has a composition of loam, stratified sandy to silt loam, and clay loam textures. The probability of soil liquefaction taking place on the Project site is considered to be low to moderate.
The Project is a bridge replacement and would not expose additional people or structures to substantial adverse effects. The new bridge would comply with the Caltrans Seismic Design Criteria, which would minimize the potential effects of ground shaking.

b) **Less-than-Significant Impact.** The Project involves removing the existing bridge and constructing a new bridge. Construction activities would involve earth moving activities. The Project site covers a relatively small area and would not result in substantial loss of topsoil. Project operations would not result in a significant increase in the potential for soil erosion over existing conditions. With adherence to the 2016 Caltrans Seismic Design Criteria and Sutter County Grading Ordinance (Ordinance 1770, Amended, 05/27/2009), potential erosion impacts from construction activities would be less than significant.

c) **Less-than-Significant Impact.** According to the Department of Conservation, the Project is not located within a delineated Landslide Zone (CDC, 2015). The Project site does not have loose sandy soil or a shallow water table, nor does it contain soils that would be susceptible to lateral spreading, liquefaction, or collapse. The potential for landslides along the Canal within the Project site is low. With adherence to all applicable codes and regulations, including the 2016 Caltrans Seismic Design Criteria, the Project’s impacts associated with on or off-site landslide would be minimized.

d) **Less-than-Significant Impact.** Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). The extent of shrinking and swelling is influenced by the environment, including the extent of wet or dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls. The Project site consists of loam, stratified sandy to silt loam, and clay loam textures which do not have a high shrink-swell potential. The Project would replace the existing Tisdale Road Bridge, and would not expose individuals or properties to adverse effects associated with expansive soil.

e) **No Impact.** The Project does not involve the connection to sewer systems or septic tanks as part of the Project.
4.7 Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse Gas Emissions –Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

4.7.1 Setting

California’s primary legislation for reducing greenhouse gas emission is the California Global Warming Solutions Act (Assembly Bill [AB] 32). Sutter County adopted their Climate Action Plan March 29, 2011 as well as adopted a set of greenhouse gas emissions analysis prescreening measures on June 18, 2016 as a set of greenhouse gas emissions analysis screening measures in April 2011.

Feather River Air Quality Management District (FRAQMD) has not set significance thresholds for greenhouse gas emissions for the construction or operational phases of projects.

4.7.2 Discussion

a.b) Less-than-Significant Impact. Sutter County differentiates two types of projects for the purposes of greenhouse gas emissions analysis prescreening: Tier 1 and Tier 2 projects. Tier 1 projects are projects that have little to operational emissions (despite often having moderate construction phase greenhouse gas emissions), and include project types such as pipelines, bridge or road replacement with no increase in traffic capacity, and drainage improvements. Tier 1 projects are prescreened out of greenhouse gas screening analysis and are assumed to be consistent with the General Plan and the Climate Action Plan, pursuant to Table 1 of the 2016 Sutter County Greenhouse Gas Emissions Pre-Screening Thresholds. Tier 2 projects are projects that generate both construction and operational greenhouse gas emissions, and include project types such as agricultural homestays, breweries, and school facilities. Tier 2 projects can be prescreened out or required to be analyzed with the Climate Action Plan, pursuant to Table 2 of the 2016 Sutter County Greenhouse Gas Emissions Pre-Screening Thresholds.

As a bridge replacement project that would be likely to produce less than 3,000 metric tons of carbon dioxide equivalent (CO2e) per year, the Project is pre-screened as a Tier 1 project and as compliant with the Climate Action Plan. As the Project would not include additional through lanes, the Project would not increase roadway facilities or service capabilities, or induce unplanned growth or remove an existing obstacle to growth. Consequently, the construction of the Project is considered small, short term in nature and would not generate substantial air quality (including greenhouse gas emission) pollutant concentrations as discussed under the Air Quality section. The Project would not increase long-term traffic levels and there would be no operational impacts associated with greenhouse gas emissions.
4.8 Hazards and Hazardous Materials

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards and Hazardous Materials – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>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 for people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

4.8.1 Setting

An Initial Site Assessment (ISA) was prepared on behalf of Sutter County Development Services Department (Caltrans, 2017d). The ISA was performed in general conformance with the scope and limitations of ASTM Practice E 1527-05. The ISA identifies Recognized Environmental Conditions (RECs) for the Project site that may adversely affect roadway and/or bridge construction or right-of-way acquisition. RECs are defined by the ASTM Practice E 1527-05 as: “the presence or likely presence of any
hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” A database report was obtained from Environmental Database Resources, Inc. consisting of information compiled from various government records, such as Geotracker, National Priorities List and solid waste information system, for information regarding the Project area. Based on the results of the records review, no potential RECs have been found in the Project site.

An ISA does not test for asbestos or lead-based paint within the Project site. The Occupational Safety & Health Administration (OSHA) requires that all thermal systems insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered presumed Asbestos Containing Materials (ACM) and treated accordingly. Potential ACMs were not observed on the Project site. But since the Tisdale Bridge was built in 1960, there is a potential for ACMs to occur in its rail shim sheet packing and bearing pads. Structures constructed prior to 1978 are presumed to contain lead-based paint (LBP) unless proven otherwise, although structures constructed after 1978 may also contain lead-based paints. Since the Tisdale Road Bridge was built in 1960, it is assumed the existing paint on the Tisdale Bridge would contain concentrations of lead that exceed the threshold values for hazardous waste. Analysis and mitigation measures regarding ACMs and lead-based paint are discussed in more detail below.

4.8.2 Discussion

a) Less-than-Significant Impact. Construction of the Project would potentially require the use of various types and quantities of hazardous materials. Hazardous materials that are typically used during construction include, but are not limited to, hydraulic oil, diesel fuel, grease, lubricants, solvents, and adhesives. Although equipment used during construction activities could contain various hazardous materials, these materials would be used in accordance with the manufacturer’s specifications and all applicable regulations. Operation of the Project would not involve the routine storage or use of hazardous materials.

b) Less-than-Significant Impact with Mitigation. No known RECs or other known contamination has been found on the Project site. As stated above, the Project has the potential to use a variety of hazardous materials. Avoidance, minimization, and/or mitigation measures are proposed as part of the Project for potential asbestos containing materials and lead-based paint that may be present at the Project site.

Asbestos: Because the Caltrans Historic Bridge Inventory indicates that the Tisdale Road Bridge was built in 1960, there is the potential to encounter ACMs during demolition of the existing bridge structure. New uses of asbestos containing materials (ACM) were banned by the EPA in 1989, and so new ACMs would not be used in construction of the replacement bridge.

Lead Based Paint: Because of the construction age of the existing structure, there is the potential for lead-based paint to be present in the bridge paint, pavement striping, and thermoplastic paint on the bridge roadway. During construction, building materials associated with the bridge, thermoplastic, or pavement striping yellow paint would be abated by a California-licensed abatement contractor and disposed of as a hazardous waste.
Aerially Deposited Lead (ADL): Lead was used as a gasoline additive prior to 1987. Therefore, ADL is commonly present adjacent to heavily traveled roadways in service prior to 1987. Based on our review of air photos and topographical maps, Tisdale Road was historically, and is currently, a local residential street. Due to its low vehicular use (200 average daily vehicular trips [ADT] in 2013), historic deposition of vehicle exhaust particulates containing lead are not expected to be significant along Tisdale Road at the Project site. During construction, any existing hazardous materials that may be encountered would pose a hazard for construction workers and the environment. Construction workers typically are at the greatest risk for exposure to contaminated soil. Accidents or spills during transport of hazardous materials or wastes could have the potential to expose the public and the environment to these substances.

Implementation of Mitigation Measures HAZ-1 and HAZ-2 would be required to ensure there would not be 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 and reduce the impact to a less-than-significant level.

c) **No Impact.** There are no schools located within 0.25 miles of the Project site. The closest school to the Project site is Winship Elementary School, approximately four miles northeast of the Project site.

d) **Less-than-Significant Impact.** This Project site is not included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The closest water body that may be affected is the Canal within the Project site. As discussed in (b), avoidance, minimization, and/or mitigation measures are proposed as part of the Project for potential ACMs, LBP, and ADL that may be present at the Project site.

e) **No Impact.** The Project is not located within an airport land use plan and is not located within two miles of a public-use airport. The nearest public airport is Sutter County Airport located approximately 13 miles to the south. The Project is also not located within the Sutter County Airport Safety Zones, as defined by the SACOG Airport Land Use Commission.

f) **No Impact.** The Project is not located within the vicinity of a private air strip. The nearest private airstrip to the Project is Moronis Airport located approximately 5.8 miles to the northwest.

g) **Less-than-Significant Impact with Mitigation.** During the Project, the bridge would be closed during the removal of the existing bridge and the construction of the new bridge. A detour has been planned for the Project. However, this detour would not significantly interfere with an adopted emergency response plan or an adopted emergency evacuation plan. Information about emergency response times is available in the Public Services section of this document. Implementation of Mitigation Measure PUB-1 would ensure that impacts to individuals from the threat of fire would remain less than significant.

h) **Less-than-Significant Impact with Mitigation.** The Project is a replacement of an existing bridge and would not expose additional people or structures to the threat of fire. Construction of the new Tisdale Bridge structure would be coordinated with Meridian Basin Fire Protection District and the Sutter County Sheriff’s Department through a standard Construction Period Emergency
Access Plan. Implementation of Mitigation Measure PUB-1 would ensure that impacts to individuals from the threat of fire would remain less than significant.

4.8.3 Mitigation Measures

Mitigation Measure HAZ-1: Develop of a Health and Safety Plan (HASP). Develop a HASP for the Project. The HASP shall describe appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances shall be tested, handled and disposed of in accordance with appropriate federal, state and local regulations.

Mitigation Measure HAZ-2: Follow Procedure for Handling Asbestos and Lead-Based Paint. A California licensed abatement contractor will conduct a survey for asbestos and lead containing materials prior to demolition (including concrete elements) and contractor will submit a National Emission Standard for Hazardous Air Pollutants (NESHAP) notification. Per Section 14-9.02 of the Asbestos NESHAP regulation, all “demolition activity” requires written notification even if there is no asbestos present. This notification shall be typewritten and postmarked or delivered no later than 10 days prior to the beginning of the asbestos demolition or removal activity.

If asbestos and/or lead containing materials are found, the following will be required:

- Removal, disposal, storage and transportation of materials from the structure that contain asbestos shall be performed in compliance with SSP 14-11.16 and other federal and state regulations for hazardous waste.
- Building materials associated with paint on structures, and paint on utilities shall be abated by a California-licensed abatement contractor and disposed of as a hazardous waste in compliance with SSP 14-11.13 and other federal and state regulations for hazardous waste.
- A Lead Compliance Plan shall be prepared by the contractor for the disposal of lead based paint. The grindings (which consist of the roadway material and the yellow and white color traffic stripes) shall be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints). In addition, the Lead Compliance Plan will also contain the following provision to address aerially deposited lead: SSP 7-1.02K (6)(j)(iii) – Earth Material Containing Lead.
- A California-licensed lead contractor shall be required to perform all work that will disturb any lead based paint as a result of planned or unplanned renovations in the Project area, including the presence of yellow traffic striping and pavement markings that may contain lead based paint. All such material must be removed and disposed of as a hazardous material in compliance with SSP 14-11.12.

Mitigation Measure PUB-1: Please see the Public Services section of this document for information about this mitigation measure.
### 4.9 Hydrology and Water Quality

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrology and Water Quality – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) 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?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.9.1 Setting

The Project area is within the Sacramento-Stone Corral Hydrologic Unit (18020104). The Sacramento-Stone Corral watershed encompasses 1,884 square miles and includes Glenn, Colusa, Butte, Sutter, and Yolo counties. Flows in the watershed generally travel from the coastal ranges in the west towards the Sacramento River. The majority of water from the watershed is discharged to the Sacramento River.

The Canal is a perennial drainage on the Tisdale Weir CA USGS 7.5-minute Quadrangle. Water is drawn from the Sacramento River into the Main Canal which then diverts water into the Westside Canal. The Westside Canal flows in a northwest to southeast direction through the Project area, under Tisdale Road.

The Westside Canal is located within the Sutter sub-basin within the Sacramento Valley groundwater basin. The geologic formations of the Sutter Subbasin include pre-Cretaceous metamorphic and igneous rocks of the Sierra Nevada block, which extends beneath the valley fill overlain principally by Tertiary sedimentary formations derived from these and other rocks which are exposed in the Sierra Nevada to the east. The sedimentary rocks are of both marine and continental origin and are frequently interbedded with tuff breccia. Volcanic rocks are also represented in the area in and around Sutter Buttes, which are erosional remnants of an extinct Pliocene volcano. Only the sedimentary rocks can be considered as being water bearing to any appreciable degree. The Sutter Subbasin aquifer system is comprised of continental deposits of Quaternary (recent) to Late Tertiary (Miocene) age. The cumulative thickness of these deposits increases from a few hundred feet near the Sierra Nevada foothills on the east to over 2,000 feet along the western margin of the basin (DWR, 2006).

4.9.2 Discussion

a, f) Less-than-Significant Impact with Mitigation. Construction of the new bridge over the Canal has the potential to expose bare soil and potentially generate other water quality pollutants that could be exposed to precipitation and subsequent entrainment in surface runoff to the Canal. Prior to in-channel construction activities, the area of the channel where construction activities would occur would be dewatered through a stream diversion. Construction activities involving soil disturbance, excavation, cutting/filling, and grading activities could result in increased erosion and sedimentation to the Canal and waters downstream. Construction materials such as asphalt, concrete, and equipment fluids could be exposed to precipitation and subsequent runoff. If precautions are not taken to contain contaminants, construction could produce contaminated storm water runoff (nonpoint source pollution), a major contributor to the degradation of water quality.

Construction of the Project is anticipated to take between 4 to 6 months. Construction is scheduled for the winter of 2019 calendar year and would begin in November, or as determined appropriate by the Sutter Mutual Water Company and the irrigation needs of its customers, as well as the USFWS, CDFW, and RWQCB. If less than one acre of soil will be disturbed, a WPCP will be prepared. If Project construction will disturb more than one acre of soil, the Project is subject to Construction General Permit (Order No. 2009-0009-DWQ [as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ]) requirements, which requires preparation and implementation of a SWPPP. The Project would comply with the NPDES Construction General Permit including preparing and implementing a SWPPP that identifies Project specific BMPs to protect water quality during Project construction. Through
implementation of these measures, described in more detail under Mitigation Measure HYD-1, impacts to water quality would be reduced to be less than significant.

b) **Less-than-Significant Impact.** The Project area is not actively used for groundwater recharge. The Project is similar in size and scale as the existing bridge and roadway approaches. The Project would not construct a significant amount of new impervious surfaces that would impede surface water drainage into the soil. No wells would be constructed, and construction activities would not intercept or alter groundwater recharge, discharge, or flow conditions.

c-e) **Less-than-Significant Impact.** The Project would not alter the course of the Canal, nor would it alter the existing drainage pattern of the site. The Project is designed to replace the existing bridge structure with one that is similar in size and along a similar alignment. In addition, the new bridge would be designed to divert the flow of storm water off the bridge and onto the surrounding area rather than directly into the Canal. The drainage of the site is not expected to result in substantial on or offsite siltation or erosion.

The Project would not substantially increase the amount or rate of surface runoff such that on or off-site flooding would occur nor would it create any additional features or change the surrounding land uses in such a way that would exceed the existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

g-j) **No Impact.** The Canal is not mapped by FEMA as a 100-year flood hazard zone and the Project would not construct housing or other structures that would result in the exposure of people or structures to 100-year flood hazards nor would it place any structures that would redirect or impede flood flows. The Project site is mapped by FEMA as being located in Zone X, a moderate flood hazard area, which has the potential to be inundated by structural failure of the Shasta Dam.

Although the Project is located within a dam or levee failure inundation zone; the Project is a bridge replacement project and would not modify the surrounding levees and therefore would not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

The Project area is not located near any tidally influenced water bodies nor is it near any large bodies of water that could be affected by a tsunami or seiche. Additionally, the Project area is a bridge replacement and would not require any modification to nearby slopes, limiting the possibility of a mudflow hazard to the Project area.

### 4.9.3 Mitigation Measures

**Mitigation Measure HYD-1: Protect Surface Water Quality.** If Project construction will disturb less than one acre of soil, the County will prepare a WPCP. If Project construction disturbs more than one acre of soil, the County will ensure that the Project contractor complies with the requirements of a National Pollution Discharge Elimination System (NPDES) permit from the RWQCB, Central Valley Region. As part of the permit, the contractor will be required to prepare and implement a SWPPP or a WPCP into their construction plans depending on the acreage of soil disturbed, prior to initiating construction activities. Either the WPCP or the SWPPP will identify BMPs to be used to avoid or minimize any adverse effects to
surface waters before, during, and after construction. The following BMPs will be incorporated into the Project as part of the construction specifications:

- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on applicable access roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.
- Fuel and maintain vehicles in a specified area that is designed to capture spills. All fueling and maintenance of vehicles and other equipment (including staging areas), will be located at least 20 meters from the Canal and any other drainages on site.
- Do not store fuels and hazardous materials on site.
- Inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids.
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are expected to begin in the winter of 2019. If rains are forecasted during construction, additional erosion and sedimentation control measures would be implemented.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in storm water pollution prevention practices.
- Revegetate disturbed areas in a timely manner to control erosion.
4.10 Land Use and Land Use Planning

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use and Land Use Planning – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Physically divide an established community?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

4.10.1 Setting

The Project is located in unincorporated Sutter County, and so is under the jurisdiction of the General Plan and the Sutter County Zoning Code (Zoning Code). Sutter County is also a member of the SACOG, and therefore SACOG regional plans are applicable to the Project site. The Project is not within the jurisdiction of the Sutter Pointe Specific Plan or any other specific plans within the County, and there are no local coastal programs, habitat conservation plans, or natural community conservation plans that have jurisdiction over the Project vicinity. There are no land use master plans that have jurisdiction and are applicable to the Project site.

4.10.2 Discussion

a) **No Impact.** The Project would consist of the replacement of an existing structurally deficient bridge structure, and so would not divide an established community.

b) **No Impact.** The reconstruction and widening of the Tisdale Road Bridge would not interfere with activity associated with any of the surrounding land uses. The Project does not propose any new land uses for the Project site and would result in operational activities similar to existing conditions. The Project would not result in any land use conflicts, and does not conflict with the General Plan, the Zoning Code, or any other applicable land use plan, policy, or regulations.

c) **No Impact.** The Project is not within the jurisdiction of an adopted habitat conservation plan or natural community conservation plan. Therefore, Project implementation would not conflict with the provisions of an adopted local, regional, or state habitat conservation plan. The closest habitat conservation plan jurisdiction to the Project site is the Natomas Basin Habitat Conservation Plan, which includes part of southeastern Sutter County.
4.11 Mineral Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Resources – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>j) 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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

4.11.1 Setting

The California Surface Mining and Reclamation Act (SMARA) was enacted by the California Legislature to regulate activities related to mineral resource extraction. The act requires the prevention of adverse environmental effects caused by mining, the reclamation of mined lands for alternative land uses, and the elimination of public health and safety hazards from the effects of mining activities. The California Geological Survey (formerly California Division of Mines and Geology) classifies the regional significance of mineral resources in accordance with SMARA. Mineral Resource Zones (MRZs) have been designated to indicate the significance of mineral deposits. A classification of MRZ-1 signifies an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence; MRZ-2 signifies an area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists; and MRZ-3 signifies an area where the significance of mineral deposits cannot be evaluated from existing data. These designations are intended to preserve known mineral resources for future mining, and to prevent encroachment of urban development that would compromise the resource’s value.

Sutter County has areas classified by the state geologist as having little likelihood to present significant mineral resources (MRZ-1) or having mineral deposits whose significance requires further evaluation (MRZ-3). There are no areas within Sutter County that are designated by the state Mining and Geology Board as having regional or statewide significance, and the Project site is not within the vicinity of any current mining operations within the County.

4.11.2 Discussion

a) Less-than-Significant Impact. The Project is a bridge replacement that would remove the existing bridge and construct a new bridge in the same location. Construction activities would be temporary and operation of the Project would not conflict with or limit access to mineral resources.

b) No Impact. There are no mineral resource recovery sites delineated on the General Plan or any other applicable land use plan within the vicinity of the Project site.
4.12 Noise

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
</tr>
<tr>
<td>d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
</tbody>
</table>

4.12.1 Setting

Noise is defined as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. A frequency weighting measure that simulates human perception is commonly used to describe noise environments and to assess impacts on noise-sensitive areas. It has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. The decibel notation used for sound levels describes a logarithmic relationship of acoustical energy, for example, a doubling of acoustical energy results in an increase of three dB, which is considered barely perceptible. A 10-fold increase in acoustical energy equals a 10 dB change, which is subjectively like a doubling of loudness. Table 3, Typical Noise Levels, identifies decibel levels for common sounds heard in the environment.
### Table 3. Typical Noise Levels

<table>
<thead>
<tr>
<th>Common Outdoor Activity</th>
<th>Noise Level (dBA)</th>
<th>Common Indoor Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet flyover at 1,000 feet</td>
<td>110</td>
<td>Rock band</td>
</tr>
<tr>
<td>Gas lawnmower at 3 feet</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Diesel truck at 50 feet at 50 mph</td>
<td>90</td>
<td>Food blender at 3 feet</td>
</tr>
<tr>
<td>Noisy urban area, daytime</td>
<td>80</td>
<td>Garbage disposal at 3 feet</td>
</tr>
<tr>
<td>Gas lawnmower, 100 feet</td>
<td>70</td>
<td>Vacuum cleaner at 10 feet</td>
</tr>
<tr>
<td>Commercial area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy traffic at 300 feet</td>
<td>60</td>
<td>Large business office</td>
</tr>
<tr>
<td>Quiet urban daytime</td>
<td>50</td>
<td>Dishwasher next room</td>
</tr>
<tr>
<td>Quiet urban nighttime</td>
<td>40</td>
<td>Theater, large conference room (background)</td>
</tr>
<tr>
<td>Quiet suburban nighttime</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quiet rural nighttime</td>
<td>30</td>
<td>Library</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Bedroom at night, concert hall (background)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Broadcast/recording studio</td>
</tr>
<tr>
<td>Lowest threshold of human hearing</td>
<td>0</td>
<td>Lowest threshold of human hearing</td>
</tr>
</tbody>
</table>

**Source:** Caltrans, 2013

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are equivalent A-weighted sound level over a given time period (Leq); average day-night 24 hour average sound level with a nighttime increase of 10 dBA to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL), also a 24 hour average that includes both an evening and a nighttime weighting. Noise levels are generally considered low when ambient levels are below 45 dBA, moderate in the 45 - 60 dBA range, and high above 60 dBA. Although people often accept the higher levels associated with very noisy urban residential and residential-commercial zones, they nevertheless are considered to be adverse levels of noise with respect to public health because of sleep interference.

Land use within and adjacent to the Project corridor is predominately agricultural with adjacent open space uses. During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise from construction activities generally attenuates at a rate of six to 7.5 dBA per doubling distance.

There are no noise-sensitive receptors (residential dwellings, daycares, schools, convalescent homes, or medical care facilities) within 1,000 feet of the Project site.

### 4.12.2 Discussion

a) **Less-than-Significant Impact with Mitigation.** Noise within the County is regulated by Chapter 11 of the General Plan. Chapter 11 states that exterior noise level standard for outdoor activity areas in agricultural land uses is 75 dBA. There are no applicable interior noise level standards of agricultural land uses listed in the General Plan. However, the Project does not (1) occur within an existing 60 dBA noise contour of an existing roadway; (2) occur within 750 feet of a railroad line, 500 feet of a principal arterial roadway, or 100 feet of a minor arterial roadway for which noise contours have not been mapped; (3) occur within an existing future 60 dBA CNEL aircraft noise contour; (4) occur within an area around a stationary noise source that may be subject to
noise levels higher than the standards appropriate to the new use, and; (5) has not been determined to have the potential to exceed established noise standards specified in the General Plan Noise Element by the Sutter County Community Services Director. Therefore, an acoustical study is not required under the General Plan.

Noise at the construction site would be intermittent and its intensity would vary. The degree of construction noise impacts may vary for different areas of the Project study area and also vary depending on the construction activities.

Roadway and/or bridge construction is accomplished in several different phases. General construction phases for typical roadway/highway projects and their estimated overall noise levels are summarized in Table 4 below.

<table>
<thead>
<tr>
<th>Construction phase</th>
<th>Noise level (dBA, Leq)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Clearing</td>
<td>84</td>
</tr>
<tr>
<td>Excavation</td>
<td>88/78</td>
</tr>
<tr>
<td>Foundations</td>
<td>88</td>
</tr>
<tr>
<td>Erection</td>
<td>79/78</td>
</tr>
<tr>
<td>Finishing</td>
<td>84</td>
</tr>
</tbody>
</table>


During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction and some of the sensitive receptors in residential developments surrounding the Project study area may be temporarily affected. The majority of construction noise would be from clearing of the Project site along with the placement of the new bridge abutments and structure. Pile driving is proposed as part of the Project.

Table 5 summarizes noise levels produced by construction equipment that is commonly used on bridge replacement projects and is representative of the equipment necessary for Project construction. Construction equipment is expected to generate noise levels ranging from 80 to 90 dB at a distance of 50 feet and noise produced by construction equipment would be reduced over distance at a rate of about six dB per doubling of distance.
Table 5. Typical Construction Equipment Noise Levels

<table>
<thead>
<tr>
<th>Construction equipment</th>
<th>Noise level (dBA, Leq at 50 feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrapers</td>
<td>85</td>
</tr>
<tr>
<td>Bulldozers</td>
<td>85</td>
</tr>
<tr>
<td>Heavy trucks</td>
<td>85</td>
</tr>
<tr>
<td>Backhoe</td>
<td>80</td>
</tr>
<tr>
<td>Pneumatic Tools</td>
<td>85</td>
</tr>
<tr>
<td>Concrete Pump</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: HMM&H, 2006

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02, applicable local noise standards, and control measures discussed below. Construction noise would be short-term and intermittent. Construction operations are anticipated to occur during daylight hours only (Monday to Friday, 7:00 AM to 6:00 PM and Saturdays 8:00 AM to 5:00 PM) and not on Sundays or holidays, pursuant to the General Plan. This impact would be less than significant with implementation of the Mitigation Measure NO-1.

b) Less-than-Significant Impact with Mitigation. Equipment associated with high vibration levels (pile drivers) would be used for the Project. The General Plan states that the threshold for groundborne vibrations within the land use category of the Project site (Category 3: institutional land uses with primary daytime uses) is 83 dBA for infrequent events. Construction of the Project would use bulldozers and other heavy tracked construction equipment, which may generate a groundborne vibration level of 90 “smoothed” root mean square vibration velocity level in decibels (VdB) at 50 feet from source. Noise levels for pile driving equipment can range from 80 to 100 dBA at 50 feet from the source, according to product specifications. The majority of construction noise would be from clearing of the Project work site along with the placement of the new bridge abutments and structure. Construction of the Project is expected to last four to six months. The Project is expected to have a less-than-significant impact with the implementation of Mitigation Measure NO-1.

c) Less-than-Significant Impact. The Project would have no long-term effects on noise levels. Noise levels would return to levels similar to the existing noise environment upon completion of the Project.

d) Less-than-Significant Impact with Mitigation. During construction, the Project would temporarily increase ambient noise levels in the Project vicinity. See the discussion regarding construction noise under (a) above. This impact would be less than significant with implementation of Mitigation Measure NO-1.
e) **No Impact.** The Project site is not within two miles of, and is located outside the noise contours of, the Sutter County Airport and any other public airport. The nearest public airport to the project site is the Sutter County Airport, which is located approximately 13 miles to the south. There would be no impact from airports upon people residing or working in the Project vicinity.

f) **No Impact.** There are no private airstrips within two miles of the Project. The nearest private airstrip to the Project is Moronis Airport located approximately 5.8 miles to the northwest. There would be no impact from airstrips upon people residing or working in the Project vicinity.

4.12.3 Mitigation Measures

**Mitigation Measure NO-1: Implement Noise Control Measures.** Implement the following control measures to minimize noise and vibration disturbances at sensitive receptors during periods of construction:

- Ensure construction only occurs Mondays to Fridays, from the hours of 7:00 AM to 6:00 PM and Saturdays from the hours of 8:00 AM to 5:00 PM. Ensure construction will not occur on Sundays or holidays.
- Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers’ recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment is generally quieter in operation than older equipment. Inspect all construction equipment at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Utilize construction methods or equipment that provide the lowest level of noise and ground vibration impact such as alternative low noise pile installation methods.
- Turn off idling equipment.
4.13 Population and Housing

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Housing – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Induce substantial 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)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

4.13.1 Setting

According to the 2010 Census and the 2010 American Community Survey, Sutter County has a population of 94,737 individuals and a total of 33,858 housing units. The Project site is located within census tract number 509, which has a population of 1,561 people and a total of 630 housing units (U.S. Census Bureau, 2010a; U.S. Census Bureau, 2010b).

4.13.2 Discussion

a) **Less-than-Significant Impact.** The Project would not result in the permanent creation of new jobs or housing that would induce substantial population growth. The bridge would remain two lanes and would not extend or increase capacity on Tisdale Road, and therefore would not indirectly induce substantial population growth in the surrounding community.

b) **No Impact.** The Project is the reconstruction of an existing structurally deficient bridge and would not result in the displacement of housing. Replacement housing would not be required.

c) **No Impact.** The Project is the reconstruction of an existing structurally deficient bridge and would not result in the displacement of people. Replacement housing would not be required.
4.14 Public Services

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Services – Would the project:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Fire protection?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>ii) Police protection?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>iii) Schools?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>iv) Parks?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>v) Other public facilities?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

4.14.1 Setting
Sutter County is currently divided into four fire county service areas (CSAs), two fire protection districts, and the Yuba City Fire Department for fire protection. The Project site is served by the Meridian Basin Fire Protection District, and is in the vicinity of the Sutter Basin Fire Protection District. The Project site and vicinity is served by the Sutter County Sheriff’s Department. The Winship-Robbins Elementary School District and Sutter High School District serve the Project site and vicinity. The Tisdale Bypass is located adjacent to the Project site and is part of Sutter Bypass Wildlife Area and the Sutter National Wildlife Refuge; it is discussed in more detail in the Recreation section of this document.

4.14.2 Discussion
a) Less-than-Significant Impact with Mitigation. Fire service is provided by the Meridian Basin Fire Protection District, and the Project site is in the vicinity of the Sutter Basin Fire Protection District. The Meridian Basin Fire Protection District provides response to fire, medical, and hazardous material emergencies in the Project area. The Meridian Fire Department serves the Project site and is located approximately 17 miles northwest of the Project at 1100 3rd St, Meridian, CA 95957.

Construction of the Project could result in accident or emergency incidents that would require emergency response, such as fire services; however, construction activities would be short-term and minimal. The Project is a bridge improvement project that would not create additional demands on the local fire district during operations.
Emergency access to the vicinity of the project site would continue during construction. The bridge would be closed during the removal of the existing bridge and the construction of the replacement bridge. The General Plan does not specific emergency response time standards for fire, medical, or hazardous materials response. Implementation of Mitigation Measure PUB-1 would ensure that impacts to emergency access would remain less than significant.

a) **Less-than-Significant Impact with Mitigation.** The Sutter County Sheriff’s Department provides law enforcement services to the Project vicinity. The headquarters of the Sutter County Sheriff’s Department is located approximately 20 miles northeast of the Project site at 1077 Civic Center Blvd, Yuba City, CA 95993.

Construction of the Project may result in accident or emergency incidents that would require police services; however, construction activities would be short term and minimal. The Project is a bridge replacement project that would not create additional demands on the local police district during operations.

Emergency access to the vicinity of the Project site would continue during construction. The bridge would be closed during the removal of the existing bridge and the construction of the replacement bridge. The General Plan does not specific emergency response time standards for police or other law enforcement response. Implementation of Mitigation Measure PUB-1 would ensure that impacts to emergency access would remain less than significant.

a) **Less-than-Significant Impact.** The Project is located approximately four miles southwest of the Winship Elementary School, and is within the Winship-Robbins Elementary School District. The Project is a bridge replacement project and would not generate any additional demand for schools. Traffic would not be significantly impacted by either the Acme Road or Cole Road detour alternatives.

a) **Less-than-Significant Impact.** The Project site is adjacent to, but does not include the Sutter Bypass Wildlife Area and the Sutter National Wildlife Refuge. The Project would not require temporary or permanent right-of-way from either site. The Project would not otherwise affect the Tisdale Bypass, and there are no other parks in or adjacent to the Project site.

a) **No Impact.** The Project would not impact any other public services such as Sutter County Administrative Services.

**4.14.3 Mitigation Measures**

**Mitigation Measure PUB-1: Develop a Construction Period Standard Emergency Access Plan.** Prior to the start of construction, the contractor shall coordinate with the Meridian Basin Fire Protection District, the Sutter County Sheriff’s Department, and local public and private ambulance and paramedic providers in the area to prepare a Construction Period Emergency Access Plan. The Construction Period Emergency Access Plan shall identify phases of the project and construction scheduling and shall identify appropriate alternative emergency access routes.
4.15 Recreation

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

4.15.1 Setting

Tisdale Bypass is part of Sutter Bypass Wildlife Area and the Sutter National Wildlife Refuge, and is located to the north and adjacent to the Project site. The Sutter Bypass Wildlife Area consists of 3,200 acres and was designated as a wildlife area by the Fish and Game Commission in 1968. The Sutter National Wildlife Refuge offers fishing, wildlife viewing, and hunting as recreation activities.

4.15.2 Discussion

a) **No Impact.** The Project is a bridge replacement project; it would not contribute to an increase in the local population, nor would it increase demand on existing neighborhoods. No additional regional parks would be required to be created, and the Project would have no impact on the use of existing neighborhood and regional parks.

b) **Less-than-Significant Impact.** The Project site is adjacent to, but does not include the Sutter Bypass Wildlife Area and the Sutter National Wildlife Refuge. The Project would not require temporary or permanent right-of-way in either facility.
4.16 Transportation and Traffic

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation and Traffic – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the City congestion management agency for designated roads or highways?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e) Result in inadequate emergency access?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

4.16.1 Setting

Tisdale Road is classified as a rural local road in the General Plan. The General Plan defines rural local roads as roads that “(1) serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems.” The intersecting Cranmore Road and the planned detour roadways Acme and Cole Roads are also classified as rural local roads in the General Plan. The Project site is also under the jurisdiction of the County of Sutter Pedestrian & Bicycle Master Plan (2012), the Yuba-Sutter Bikeway Master Plan (1995), and the SACOG Metropolitan Transportation Plan for 2035. The average daily traffic (ADT) on Tisdale Road at the Project site in 2013 was 200 and the projected 2023 ADT is 300 (FHWA, 2017b).

4.16.2 Discussion

a.b) Less-than-Significant Impact. The purpose of the Project is to provide adequate and safe vehicle access and provide a structure that would meet current design standards for the traffic utilizing this bridge. The Project would not create additional lanes, so the ADT is expected to
be consistent with current volumes on the existing bridge. The Project is not anticipated to create any long term impacts to traffic circulation in the area, as the Project would not increase roadway capacity or change traffic patterns. The Project would not conflict with any plan or policy established for measuring the performance of the circulation system, and would not result in impacts to Level of Service (LOS) along Tisdale or Cranmore Roads.

c) **No Impact.** The Project does not include structures or uses that would affect air traffic patterns, nor is an airport located in proximity to the Project site.

d) **Less-than-Significant Impact.** One of the primary purposes of the Project is to improve safe transit on the Tisdale Bridge for all bridge users. The new bridge would replace the existing structurally-deficient bridge and have a width of 35 feet, eight feet wider than the existing bridge. The bridge would be closed during the removal of the existing bridge and the construction of the replacement bridge. No new structural or design features would be added that would increase traffic hazards as a result of the Project.

e) **Less-than-Significant Impact with Mitigation.** The Tisdale Bridge would be closed during the removal of the existing bridge and the construction of the replacement bridge. The bridge would be closed during the other segment of construction, but the detour route alternatives planned on Acme Road and Coles Road would not significantly impact emergency response times. In addition, the General Plan does not specific emergency response time standards for police, fire, medical, or hazardous materials response. Implementation of Mitigation Measure PUB-1 would ensure that impact to emergency access would remain less than significant.

f) **No Impact.** The Project would increase safety for all users of the Tisdale Bridge, including pedestrians and bicyclists, by making it structurally sufficient, increasing the width of the bridge, and installing guardrails. For this reason, the Project would not conflict with the General Plan Mobility Element, the County of Sutter Pedestrian & Bicycle Master Plan (2012), the Yuba-Sutter Bikeway Master Plan (1995), the SACOG Metropolitan Transportation Plan for 2035, or any other applicable adopted policy, plan, or program supporting alternative transportation.

4.16.3 Mitigation Measures

**Mitigation Measure PUB-1:** Please see the Public Services section of this document for information about this mitigation measure.
4.17 Tribal Cultural Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribal Cultural Resources – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>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</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision C, of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

4.17.1 Setting

Assembly Bill 52 (AB 52) went into effect on July 1, 2015 and establishes a consultation process with all California Native American tribes on the Native American Heritage Commission (NAHC) List for Federal and Non-Federal Tribes. Once the tribe is notified of the Project, the tribe has 30 days to request consultation. The consultation process ends when either the parties agree to mitigation measures or avoid a significant effect on tribal cultural resources or a party, acting in good faith and after reasonable effect concludes that mutual agreement cannot be reached.

4.17.2 Discussion

i) Less-than-Significant Impact. As a part of the effort to identify potentially significant historical and traditional cultural resources that may fall within the Project area, a letter was sent on June 30, 2017 to the NAHC requesting a search of the sacred lands file and contacts with individuals of Native American descent who might hold information concerning the Project and its vicinity. The search of the sacred lands file returned negative, indicating an absence of specific site information about listed, eligible, and currently-known tribal cultural resources at the Project site. The NAHC and the County responded with a list of seven individuals and Native American organizations who were contacted via letter on September 8, 2017 and follow-up telephone calls were made on September 15, 2017. Results of consultation are presented below in question ii).

There is no evidence to indicate presence of Native American tribal cultural resources in the immediate area that are listed on or eligible for listing on the California Register of Historical Resources or a local register of historical resources. Therefore, the Project would result in less-than-significant impact on tribal cultural resources that are listed or eligible for listing on a register of historical resources.
ii) Less-than-Significant Impact with Mitigation. A representative of the Estom Yumeka Maidu, Tribe of the Enterprise Rancheria states that they had not received the consultation letter and requested it by email. The consultation letter was sent to the tribe, and no further information was provided by the tribe. A representative from the United Auburn Indian Rancheria requested additional materials and materials related to the Project, that a tribal monitor be present, and that a site visit be conducted.

On October 30, 2017, representatives of the County and Drake Haglan & Associates met with United Auburn Indian Community Cultural Resources Manager, Marcos Guerrero, to discuss details of the project and tribal concerns. Mr. Guerrero identified several native plants in the Project that have historical uses for the tribe. He requested that any native plants removed as part of the construction be reestablished on site and also wished to perform a post-construction visit to see if mitigation measures had been applied. Implementation of Mitigation Measure TCR-1 would reduce the impact to lead agency recognized tribal cultural resources to a less-than-significant level with mitigation.

In the event that tribal cultural resources or human remains are discovered during construction activities, implementation of Mitigation Measure TCR-2 would reduce the impact to less than significant with mitigation.

4.17.3 Mitigation Measures

Mitigation Measure TCR-1: Avoid or replant vegetation significant to the United Auburn Indian Community. Avoid Jimsonweed (Datura wrightii) and Tule (Schoenoplectus acutus) and place high visibility fencing around the vegetation identified by a Tribal representative as needing to be protected. If impacts to the identified vegetation cannot be avoided, replant the identified vegetation at a 3:1 ratio within the replanting areas specified in the Mitigation Monitoring and Reporting Program (MMRP) for the Project.

Mitigation Measure TCR-2: Mitigation Measure TCR-2: Follow Protocol for the Inadvertent Discovery of a Tribal Cultural Resources or Human Remains. If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR’s to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the
project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur.
4.18 Utilities and Service Systems

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities and Service Systems – Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>g) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

4.18.1 Setting

The Project vicinity is served by privately-owned septic systems for wastewater treatment; the Sutter County Development Services Department – Water Resource Division provides wastewater services to the Robbins and Rio Ramaza communities. Stormwater drainage at the Project site and within the Project vicinity is collected in roadside ditches and agricultural drains; there is also a number of drainage facilities owned and operated by a variety of agencies (e.g. the County, reclamation districts, cities, the state of California, etc.) that serve other areas of the County. Potable water service within the Project vicinity is served by privately-owned wells; the Sutter Community Services District provides potable water to the community of Sutter, the Water Works District #1 provides potable water to the community of Robins and is managed by the Sutter County Public Works Department, and the East Nicolaus Mutual Water Company provides potable water to the community of East Nicolaus. Solid waste services within the Project vicinity are provided by Yuba-Sutter Regional Waste Management Authority in collaboration with Recology Yuba-Sutter. Pacific Gas & Electric provides electricity to the County and natural gas to Nicolaus, Yuba City, and Live Oak. Telecommunications infrastructure is provided by AT&T and Comcast.
4.18.2 Discussion

a) No Impact. The Project would not generate any wastewater.

b) No Impact. The Project would not require the construction of additional wastewater or water treatment facilities.

c) No Impact. The Project would not require construction of new storm water facilities or require the expansion of existing facilities.

d) Less-than-Significant Impact. The Project would not require water supply. Some non-potable water use would be required for fugitive dust control during construction activities of the Project.

e) No Impact. The Project would not require wastewater treatment services.

f) Less-than-Significant Impact. The Project would generate waste from the temporary construction activities and demolition of the Tisdale Road Bridge. Solid waste associated from construction activities would be handled by the Ostrom Road Landfill, located at 5900 Ostrom Road Wheatland, CA 95692. The Ostrom Road Landfill has the capacity to accept waste generated by the Project, and the Project would not result in long-term demands for solid waste disposal services. All recyclables and organics collected from the Project site by Yuba-Sutter Regional Waste Management Authority in collaboration with Recology Yuba-Sutter would be taken to the appropriate facilities.

g) No Impact. The Project would comply with all federal, state, and local statutes and regulations related to solid waste.
### 4.19 Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandatory Findings of Significance – Would the project:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Have the potential to 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 a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) 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)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>f) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

#### 4.19.1 Setting

Per CEQA regulations and guidelines, the Lead Agency must summarize the finding of significance from earlier sections and must consider potential cumulatively considerable effects for environmental impact reports (EIRs) and in the discussion section below. Even though this environmental document is an IS/MND and not an EIR, the potential for cumulatively considerable effects are analyzed below.

#### 4.19.2 Discussion

a) **Less-than-Significant Impact with Mitigation.** Per the impact discussions in the Biological Resources section, the potential of the Project to substantially degrade the environment would be less than significant with incorporated mitigation measures.

b) **Less-than-Significant Impact.** The Project site is located within Sutter County. The purpose of the Project is to provide safer vehicular access through and meet current design standards for the Tisdale Road Bridge. The impacts of the Project are mitigated to a less-than-significant level, limited to the construction phase of the Project, and generally site specific. No other projects are proposed that would overlap or interact with the Project.

c) **Less-than-Significant Impact.** The Project would not cause substantial adverse effects on human beings. Effects related to hazards and hazardous materials, cultural resources, noise, public services, transportation and traffic, and tribal cultural resources are discussed above, and would not result in any significant and unavoidable impacts.
5 LIST OF PREPARERS AND REVIEWERS

This initial study (IS) was prepared by DHA in cooperation with the other members of the environmental study team. DHA was responsible for project management and IS preparation. The IS technical team and other environmental study team members provided technical expertise, as presented below.

CEQA Lead Agency
Sutter County Development Services

Drake Haglan and Associates
Principal in Charge .......................................................... Dennis Haglan
Project Manager ........................................................... Leslie Haglan
Technical Review ............................................................... Jennifer Hildebrandt
Senior Biologist/Environmental Planner ......................... Lindsay Tisch
Cultural Resources/Environmental Planner ..................... Anna M. Starkey, M.A., RPA
Environmental Planner .................................................. Amanda Dworkin

PAR Environmental, Inc.
6 REFERENCES


California Department of Transportation (Caltrans), 2016. Local Agency Bridge List. October 2016.


California Department of Transportation (Caltrans), 2017b. Tisdale Road Bridge Replacement Project Biological Assessment (BRLO 5918[087]). October 2017. Prepared for Sutter County by Drake Haglan & Associates.

California Department of Transportation (Caltrans), 2017c. Tisdale Road Bridge Replacement Project Natural Environmental Study (BRLO 5918[087]). December 2017. Prepared for Sutter County by Drake Haglan & Associates.

California Department of Transportation (Caltrans), 2017d. Tisdale Road Bridge over Westside Canal Replacement Project Initial Site Assessment (BRLO 5918[087]). July 2017. Prepared for Sutter County by Drake Haglan & Associates.


Harris Miller & Hanson (HMM&H); 2006. Transit noise and vibration impact assessment (FTA-VA-90-1003-06). Prepared for the U.S. Department of Transportation, Federal Transit Administration.


Post, Buckley, Mooney & Schuh (PBS&J); 2010b. 2030 Sutter County General Plan Final Environmental Impact Report, Chapter 6.8. Prepared for Sutter County.


Sutter County, 2011a. 2030 Sutter County General Plan.

Sutter County, 2011b. 2030 Sutter County General Plan, Housing Element.


U.S. Census Bureau, 2010b. 2010 Census.


Western Regional Climate Center (WRCC), 2016. Recent Climate in the West. Available at: https://wrcc.dri.edu/. Accessed December 20, 2017.
APPENDIX A: Comment Received and Response to Public Comment
RESPONSES TO PUBLIC COMMENT

This section provides a summary of comments received during the public review period for the Initial Study and Mitigated Negative Declaration (IS/MND) for the Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project. The public review period for this project was from January 10, 2019 to February 9, 2019. One comment letter was received during the public review period. Section A provides a list of all written correspondences received during the public review period; Section B provides a written response to individual comments; and Section C contains a copy of each Correspondence that was received.

A. Agencies, Organizations, and Individuals Who Have Commented of the Draft Initial Study/ Mitigated Negative Declaration (IS/MND)

Letter 1: Central Valley Regional Water Quality Control Board, Jordan Hensley, Environmental Scientist, February 1, 2019.
Letter 3: Governor’s Office of Planning and Research State Clearinghouse, Scott Morgan, Director, February 11, 2019.

B. Responses to Written Comments

Responses to comments submitted by Central Valley Regional Water Quality Control Board, Jordan Hensley, February 1, 2019 (Letter #1)

<table>
<thead>
<tr>
<th>NO</th>
<th>Comment/ Recommendation</th>
<th>Response</th>
</tr>
</thead>
</table>
| 1  | Comment letter states that the Central Valley Regional Water Quality Control Board is delegated the responsibility of protecting the quality of surface and groundwaters of the state. Indicates that the project may require various permits related to surface and groundwaters of the state including Construction Storm Water General Permit, Phase I and II Municipal Separate Storm Sewer System Permits, Industrial Storm Water General Permit, Clean Water Act Section 404 Permit, Clean Water Act Section 401 Permit-Water Quality Certification, Dewatering Permit, Limited Threat General NPDES Permit, and NPDES Permit.* | Construction documents being prepared for this project include requirements for the contractor to prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to starting construction activities and the use of best management practices during construction to prevent the runoff of pollutants from the work site. Regulatory agency and jurisdictional permits that will be secured for this project prior to the start of construction include:  
* Construction Storm Water General Permit  
* Section 404 Permit  
* Section 401 Permit-Water Quality Certification  
* NPDES Permit  
* California Dept of Fish and Wildlife Section 1602 (Streambed Alteration Agreement)  

*Synopsis of comment, for the full comment see copy of comment letter in Part C.
Responses to comments submitted by United Auburn Indian Community, Cherilyn Neider, Tribal Historic Preservation, February 12, 2019 (Letter #2)

<table>
<thead>
<tr>
<th>NO</th>
<th>Comment/ Recommendation</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Comment letter recommends mitigation measures that specifically address inadvertent discoveries of tribal cultural resources and to require a stop work within 100 feet of the find in the event of an inadvertent discovery.</td>
<td>Added Mitigation Measure TCR-2 to Follow Protocol for the Unanticipated Discovery of a Tribal Cultural Resources or Human Remains to the Final IS/MND.</td>
</tr>
</tbody>
</table>

Responses to comments submitted by Governor’s Office of Planning and Research State Clearinghouse, Scott Morgan, Director, February 11, 2019 (Letter #3)

<table>
<thead>
<tr>
<th>NO</th>
<th>Comment/ Recommendation</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Comment letter states that the State Clearinghouse submitted the IS/MND to selected state agencies for review. No comments were received by the State Clearinghouse by February 11, 2019. The letter acknowledges that the County has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA.</td>
<td>All comments received are provided in this Final IS/MND and have been responded to in accordance with the requirements of CEQA. The Final IS/MND will be provided to the County decision makers.</td>
</tr>
</tbody>
</table>

C. Conclusion
The lead agency has carefully considered the public comment, and has determined that neither the comment received, nor the responses thereto, identify any new significant impacts created by the proposed project. Therefore, no new information has been added to the Mitigated Negative Declaration (MND) in response to the public comment; as defined by Section 15073.5(a) of CEQA, the environmental document will not require any “substantial revisions.” Pursuant to Section 15073.5(c) of CEQA, the environmental document does not require recirculation.

D. Letters Received
A copy of the letter that was received during the public circulation period follows this section.
Central Valley Regional Water Quality Control Board

1 February 2019

Doug Libby
Sutter County
Department of Development Services
1130 Civic Center Boulevard
Yuba City, CA 95993

CERTIFIED MAIL
7018 1830 0001 0062 3954

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, TISDALE ROAD BRIDGE (18C-0057) OVER WESTSIDE CANAL REPLACEMENT PROJECT, SCH#2019012019, SUTTER COUNTY

Pursuant to the State Clearinghouse’s 10 January 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the Request for Review for the Mitigated Negative Declaration for the Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project, located in Sutter County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan
The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State’s water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan...
amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/bashould_plan/

**Antidegradation Considerations**

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

**II. Permitting Requirements**

**Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to
restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtm

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtm

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtm

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that

---

1 Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.
discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-6250.

**Clean Water Act Section 401 Permit – Water Quality Certification**
If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

**Waste Discharge Requirements – Discharges to Waters of the State**
If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

**Dewatering Permit**
If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

**Regulatory Compliance for Commercially Irrigated Agriculture**
If the property will be used for commercial irrigated agriculture, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board’s website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_landsofficial_notices/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

**Limited Threat General NPDES Permit**
If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for Limited Threat Discharges to Surface Water (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.
For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/5-2016-0076-01.pdf

**NPDES Permit**

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

[Signature]

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento
Good afternoon Mr. Doug Libby,

Thank you for your recent letter providing us with a copy of the draft IS/MND for the Tisdale Road bridge Replacement project.

We have reviewed the document and have a couple of recommendations in order to ensure the protections of tribal cultural resources in the event of inadvertent discoveries. After reviewing these measures, it is our recommendation that measures specifically addressing inadvertent discoveries of tribal cultural resources is included in the document as TCR – 2. Attached is the UAIC’s preferred language for inadvertent discoveries of tribal cultural resources. We see that a measure addressing inadvertent discovery of paleontological resources is included as CUL-1 and CUL-2. At the least, a reference to CUL – 1 and CUL - 2 could be included in the tribal cultural resources section to ensure protection of these resources in the event of inadvertent discoveries.

Secondly, it is our recommendation that the language in CUL – 1 and CUL – 2 is updated to require a stop work within 100 ft of the find in the event of an inadvertent discovery. As the language is, “in the vicinity” leaves room for on-the-spot interpretation and can potentially impact resources that otherwise could have been avoided. The recommended change to a defined 100 ft buffer gives specific guidance to workers in the field and provides additional protections to tribal cultural, cultural, and paleontological resources by ensuring a large buffer in the event of an inadvertent discovery.

Thank you for your consideration and your commitment to protecting tribal cultural resources by addressing these concerns.

Respectfully,
Cherilyn

Cherilyn Neider
Tribal Historic Preservation
United Auburn Indian Community
530.883.2394

Nothing in this e-mail is intended to constitute an electronic signature for purposes of the Electronic Signatures in Global and National Commerce Act (E-Sign Act), 15, U.S.C. §§ 7001 to 7006 or the Uniform Electronic Transactions Act of any state or the federal government unless a specific statement to the contrary is included in this e-mail
Inadvertent Discoveries Mitigation Measure

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCR’s to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.
February 11, 2019

Doug Libby
Sutter County
1130 Civic Center Boulevard
Yuba City, CA 95993

Subject: Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project
SCH#: 2019012019

Dear Doug Libby:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on February 8, 2019, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project’s ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

[Signature]
Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency
Document Details Report  
State Clearinghouse Data Base

<table>
<thead>
<tr>
<th>SCH#</th>
<th>2019012019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Title</td>
<td>Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project</td>
</tr>
<tr>
<td>Lead Agency</td>
<td>Sutter County</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>MND Mitigated Negative Declaration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>The County proposes to construct a replacement bridge for the Tisdale Road Bridge (No. 18C-0057) over the Westside Canal. The proposed project would minimize impacts to the adjacent gate structure and improve safety in the existing roadway curve. The replacement bridge would be 60 ft in length with a roadway width of approx 33 ft (two 11 ft lanes, 4-ft shoulders and 1.5 ft railings). The purpose of the proposed project is to replace the structurally deficient bridge. The need for this project is to prevent bridge failure and improve mobility for the traveling public.</td>
</tr>
</tbody>
</table>

**Lead Agency Contact**

<table>
<thead>
<tr>
<th>Name</th>
<th>Doug Libby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency</td>
<td>Sutter County</td>
</tr>
<tr>
<td>Phone</td>
<td>(530) 822-7400</td>
</tr>
<tr>
<td>Fax</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td>1130 Civic Center Boulevard</td>
</tr>
<tr>
<td>City</td>
<td>Yuba City</td>
</tr>
<tr>
<td>State</td>
<td>CA</td>
</tr>
<tr>
<td>Zip</td>
<td>95993</td>
</tr>
</tbody>
</table>

**Project Location**

<table>
<thead>
<tr>
<th>County</th>
<th>Sutter</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Yuba City</td>
</tr>
<tr>
<td>Region</td>
<td></td>
</tr>
<tr>
<td>Lat / Long</td>
<td>39° 01' 25.95&quot; N / 121° 48' 57.8&quot; W</td>
</tr>
<tr>
<td>Cross Streets</td>
<td>Tisdale Rd and Cranmore Rd</td>
</tr>
<tr>
<td>Parcel No.</td>
<td>Township 14N Range 1E Section 36 Base</td>
</tr>
</tbody>
</table>

**Proximity to:**

- Highways
- Airports
- Railways
- Waterways: Westside Canal; Main Canal; Sacramento River
- Schools
- Land Use: roadway (including bridge) and AG Land/Z; AG/Gen plan: AG-80

**Project Issues**

 Archaeologic-Historic; Biological Resources; Noise; Public Services; Toxic/Hazardous; Traffic/Circulation; Water Quality

**Reviewing Agencies**

- Resources Agency; Central Valley Flood Protection Board; Department of Fish and Wildlife, Region 2; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, District 3 N; State Water Resources Control Board; Division of Drinking Water; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; State Lands Commission

**Date Received** 01/10/2019  **Start of Review** 01/10/2019  **End of Review** 02/08/2019
Central Valley Regional Water Quality Control Board

1 February 2019

Doug Libby
Sutter County
Department of Development Services
1130 Civic Center Boulevard
Yuba City, CA 95993

CERTIFIED MAIL
7018 1830 0001 0062 3954

COMMENTS TO REQUEST FOR REVIEW FOR THE MITIGATED NEGATIVE DECLARATION, TISDALE ROAD BRIDGE (18C-0057) OVER WESTSIDE CANAL REPLACEMENT PROJECT, SCH#2019012019, SUTTER COUNTY

Pursuant to the State Clearinghouse’s 10 January 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the Request for Review for the Mitigated Negative Declaration for the Tisdale Road Bridge (18C-0057) over Westside Canal Replacement Project, located in Sutter County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan
The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State’s water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan...
amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

**Antidegradation Considerations**

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

**II. Permitting Requirements**

**Construction Storm Water General Permit**
Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to
restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

**Phase I and II Municipal Separate Storm Sewer System (MS4) Permits**
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

**Industrial Storm Water General Permit**
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

**Clean Water Act Section 404 Permit**
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that

---

1 Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.
discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

**Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

**Waste Discharge Requirements – Discharges to Waters of the State**

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

**Dewatering Permit**

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board’s Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

**Regulatory Compliance for Commercially Irrigated Agriculture**

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board’s website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

**Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for **Limited Threat Discharges to Surface Water** (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.
For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento