

Kopta Slough Multi-Benefit Project

Mitigation, Monitoring, and Reporting Program
under the California Environmental Quality Act

December 2022



1.0 Introduction

The California Environmental Quality Act (CEQA) requires the adoption of feasible mitigation measures to reduce the severity and magnitude of potentially significant environmental impacts associated with the project. As set forth in the 2022 Mitigated Negative Declaration (MND), implementation of the Kopta Slough Multi-Benefit Project (project) could result in potentially significant adverse environmental impacts to the physical environment and feasible mitigation measures within the jurisdiction of the California Department of Water Resources (DWR) are included that avoid or substantially lessen the significant impacts.

CEQA Guidelines Sections 15091(d) and 15097(a), as well as Public Resources Code (PRC) Section 21081.6 (a), require the public agency to adopt a reporting or monitoring program to ensure that measures to mitigate or avoid significant effects on the environment are implemented. This Mitigation, Monitoring, and Reporting Program (MMRP) has been prepared to ensure that all required CEQA mitigation measures are implemented and completed according to schedule during project construction and implementation.

The lead agency has the primary responsibility for monitoring the implementation of the MMRP. Unless otherwise specified, DWR is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. DWR, at its discretion, may delegate implementation of its responsibility or portions thereof, as it deems appropriate to other agencies or consultants and shall enter into any necessary agreements or carry out other measures to ensure all actions are fully enforceable per PRC Section 21081.6.

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2.0 Summary of Findings

Based on the findings in the project's 2022 mitigated negative declaration, implementation of the proposed project would have no impact on the following resources:

- Energy
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation

Implementation of the proposed project would result in a less-than-significant impact on the following resources:

- Aesthetics
- Agriculture and Forestry Resources
- Greenhouse Gas Emissions
- Noise
- Transportation
- Utilities and Service Systems

Implementation of the proposed project would result in a less-than-significant impact with mitigation incorporated on the following resources:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Tribal Cultural Resources
- Wildfire

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3.0 MMRP Summary Table

The MMRP Summary Table (on the following pages) identifies individual mitigation measures, implementation and monitoring responsibility, and mitigation timing. Numbering of mitigation measures follows the numbering sequence used in the project's Initial Study.

Mitigation Monitoring and Reporting Program Summary Table

Air Quality

Impact	Mitigation Measure	Responsible Party	Timing
<p>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard?</p>	<p>Air Quality-1: Implement Fugitive Dust Prevention and Control Measures</p> <p>The construction contractor shall prepare an air quality control plan in compliance with the project’s fugitive dust permit and implement fugitive dust prevention and control measures, which may include the following:</p> <ul style="list-style-type: none"> • All ground-disturbing operations shall be suspended when winds exceed 20 miles per hour (mph), or when winds carry dust beyond the property line despite implementation of all feasible dust control measures. • An operational water truck should be available at all times. All areas subject to ground disturbance shall be watered as necessary to prevent fugitive dust violations. • On-site dirt piles or other stockpiled particulate matter shall be covered, wind breaks installed, and water or soil stabilizers employed as necessary to reduce windblown dust emissions. • All transfer processes involving a free-fall of soil or other particulate matter shall be operated in such a manner as to minimize the free-fall distance and fugitive dust emissions. • Traffic and equipment speeds on all unpaved surfaces shall be reduced to 15 mph or less, and unnecessary vehicle traffic 	<p>Construction contractor</p>	<p>Before and during construction</p>

Impact	Mitigation Measure	Responsible Party	Timing
	<p>shall be reduced by restricting access.</p> <ul style="list-style-type: none"> • Measures shall be implemented to reduce or eliminate carryout and trackout of fugitive dust or soil on construction vehicles, such as sweeping and picking up any trackout on adjacent public streets as needed. • A publicly visible sign shall be posted with the telephone number and contact person’s name regarding dust complaints. This person shall respond and take corrective action within 24 hours. The telephone number of the Tehama County Air Pollution Control District (TCAPCD) shall also be provided to ensure compliance with District rules. • Unpaved roads may be graveled to reduce dust emissions. 		
	<p>Air Quality-2: Implement Construction Equipment Exhaust Minimization Measures</p> <p>The construction contractor shall implement construction equipment exhaust minimization measures, which may include the following:</p> <ul style="list-style-type: none"> • All construction equipment shall be maintained in proper tune according to manufacturer’s specifications. • To the extent practicable, the use of diesel construction equipment meeting current California Air Resources Board (CARB) certification standards for off-road heavy-duty diesel engines shall be maximized. • Unnecessary vehicle idling shall be restricted to five minutes 	<p>Construction contractor</p>	<p>Before and during construction</p>

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Impact	Mitigation Measure	Responsible Party	Timing
	<p>or less.</p> <ul style="list-style-type: none"> • Visible emissions from stationary diesel-powered equipment shall not exceed 40-percent opacity for more than three minutes in any one hour. • Construction equipment shall be electrified where feasible. • Gasoline-powered construction equipment shall be substituted for diesel-powered equipment, where feasible. • All off-road heavy-duty diesel construction equipment greater than 50 horsepower shall be registered with CARB's Diesel Off-Road Online Reporting System and meet all applicable standards for replacement or retrofit. • All portable equipment, including generators and air compressors rated over 50 brake horsepower, shall be registered in the Portable Equipment Registration Program, or permitted through the TCAPCD. 		
c) Expose sensitive receptors to substantial pollutant concentrations?	Air Quality-1: Implement Fugitive Dust Prevention and Control Measures	Construction contractor	Before and during construction
	Air Quality-2: Implement Construction Equipment Exhaust Minimization Measures	Construction contractor	Before and during construction

Biological Resources – Fisheries Resources

Impact	Mitigation Measure	Responsible Party	Timing
<p>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?</p>	<p><i>Fish-1: Implement Measures to Minimize Injury or Mortality to Adult or Juvenile Fish Species</i></p> <p>To minimize injury or mortality to adult or juvenile fish species, the contractor shall implement the following measures:</p> <ul style="list-style-type: none"> • In-water construction activities shall be minimized to the greatest extent possible by restricting equipment to work from the river bank between August 1 and October 31. • In-water activities shall start at the downstream end of the rock revetment at the beginning of the construction window and proceed upstream. • Prior to beginning work within the river, the excavator bucket shall be operated to “tap” the surface of the water, or, where safe, a qualified biologist shall wade ahead of the equipment to scare fish away from the work area. • Operation of the excavator bucket within the river shall be conducted slowly and deliberately to allow fish time to seek refuge outside the work area. • In-river work shall occur for up to 12 hours per day to allow a 12-hour window of time for fish to migrate through without noise disturbance. • If water is drafted from the Sacramento River or Kopta Slough for construction purposes, water pump intakes shall be screened in compliance with California Department of Fish and 	<p>Qualified biologist; DWR or DWR delegate; Construction contractor</p>	<p>Before and during construction</p>

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Impact	Mitigation Measure	Responsible Party	Timing
	Wildlife (CDFW) and National Marine Fisheries Service salmonid-screening specifications.		
	<p><i>Water Quality-1: Implement a Stormwater Pollution Prevention Plan</i></p> <p>Refer to the “Hydrology and Water Quality” section.</p>	Construction contractor	Before and during construction
	<p><i>Hazards-1: Prepare and Implement a Spill Prevention and Control Plan</i></p> <p>Refer to the “Hazards and Hazardous Materials” section.</p>	Construction contractor	Before and during construction

Biological Resources – Wildlife

Impact	Mitigation Measure	Responsible Party	Timing
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or CDFW/USFWS regulations.	<p><i>Wildlife-1: Implement Bat Exclusion Measures Prior to Demolition of Existing Structures</i></p> <p>Prior to structure demolition, structures shall be inspected by a qualified biologist to determine if bats are present. If present, surveys shall be conducted to determine if the structure is being used as a day, night, or maternity roost. If a roost is present, appropriate bat exclusion measures shall be implemented at least five to seven days prior to structure demolition outside of the maternity season, which can range from mid-April through August 31, and outside of the winter months when bats could be hibernating. Bat exclusion measures could include one-way devices, such as polypropylene netting, plastic sheeting, or tube-</p>	DWR or DWR delegate	Before construction

Impact	Mitigation Measure	Responsible Party	Timing
	type excluders, that would be placed at all active entry points.		
	<p><i>Wildlife-2: Implement Protective Measures During Removal of Trees that Provide Suitable Bat Roosting Habitat</i></p> <p>All removal of trees that provide suitable bat roosting (such as trees with deep bark crevices, snags, or holes) shall be conducted between August 31 and October 30, or earlier than October 30 if evening temperatures fall below 45 degrees Fahrenheit or more than half inch of rainfall occurs within 24 hours during the month of October. These dates correspond to the time period when bats would not be caring for non-volant young and have not yet entered torpor. A qualified biologist shall monitor removal and trimming of trees that provide suitable bat roosting habitat. Tree removal and trimming shall occur over two consecutive days. On the first day in the afternoon, limbs and branches shall be removed using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided, and only branches or limbs without those features shall be removed. On the second day, the entire tree shall be removed. Prior to tree removal and trimming, each tree shall be shaken gently and several minutes shall pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologist shall search downed vegetation for dead or injured bat species and report any dead or injured special-status bat species to CDFW.</p>	Construction contractor	During construction
	<p><i>Wildlife-3: Implement an Avoidance Work Window and Conduct Pre-Construction Nesting Bird Surveys</i></p> <p>Vegetation removal shall occur outside of the nesting season, which typically ranges from February 1 through August 31.</p> <p>All other construction activities shall also occur outside of the</p>	DWR or DWR delegate	Before and during construction

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Impact	Mitigation Measure	Responsible Party	Timing
	<p>nesting season. If construction activities must overlap with this period, a qualified biologist shall be retained to conduct preconstruction surveys for active bird nests. Nesting surveys shall be conducted in accordance with the recommended timing, methodology, or protocol for each bird species. Surveys shall also include a 0.25-mile radius outside of the project area for Swainson’s hawk, and a 500-foot radius outside of the project area for other nesting birds. Surveys shall be conducted within 14 days prior to the start of construction, or as prescribed by established survey protocols.</p>		
	<p><i>Wildlife-4: Establish Nest Protection Buffers for Active Bird Nests</i></p> <p>If an active bird nest is located within the survey area, a qualified biologist shall establish an appropriate nest protection buffer based on the bird species, type of construction activities, and line of sight to the work area. Under this measure, nesting birds and offspring would not be disturbed or killed, and nests and eggs would not be destroyed. Work shall be conducted no less than 500 feet from an active raptor nest and 100 feet from an active migratory bird nest, though buffer distances for all nesting birds may differ based on consultation with CDFW and the U.S. Fish and Wildlife Service (USFWS). To prevent encroachment, the established buffer(s) shall be clearly marked by high-visibility material if the qualified biologist determines that high-visibility material would not attract predators to the nest site. No construction activities, including tree removal, shall occur within the buffer zone until the young have fledged or the nest is no longer active, as confirmed by the qualified biologist.</p>	<p>DWR or DWR delegate</p>	<p>Before and during construction</p>

Impact	Mitigation Measure	Responsible Party	Timing
	<p><i>Wildlife-5: Monitor Active Nests Within the Nest Protection Buffer</i></p> <p>If project activities must occur within established buffer zones, a qualified biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. If birds are showing signs of distress within the established buffer(s), work activities shall be modified or the buffer(s) shall be expanded to prevent birds from abandoning their nests. At any time the biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to nest abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect nest success.</p>	DWR or DWR delegate	During construction
	<p><i>Wildlife-6: Conduct Daily Searches for Western Pond Turtle During Instream Activities</i></p> <p>On the day that instream activities commence, a qualified biologist (and/or a qualified person with permission from CDFW) will walk through the path of scheduled instream activity to assess the presence of turtles and herd them, if possible, into areas of lesser impact or moved by a permitted person to an area of safety out of harm's way.</p>	DWR or DWR delegate	During construction
	<p><i>Wildlife-7: Implement Protection Measures for Elderberry Shrubs</i></p> <p>The contractor shall implement protection measures around elderberry shrubs with stems greater than 1-inch diameter at ground level that are to be preserved during construction activities.</p>	Construction contractor	Before and during construction

	<p>The protection measures shall be developed during formal consultation with USFWS and may include the following (U.S. Fish and Wildlife Service 2017):</p> <ul style="list-style-type: none"> • Fencing. Elderberry shrubs within and immediately adjacent to the construction footprint will be fenced or flagged as close to the construction limits as feasible. • Avoidance area. Activities that may damage or kill an elderberry shrub (e.g., excavation, grading, etc.) may need an avoidance area of at least 10 feet from the dripline, depending on the type of activity. • Worker education. A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the status of the valley elderberry longhorn beetle (VELB), its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance. • Construction monitoring. A qualified biologist will monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the project specifics and should be discussed with the USFWS biologist. • Timing. As much as feasible, all activities that could occur adjacent to elderberry shrubs will be conducted outside of the flight season of the VELB (March through July). • Trimming. Trimming may remove or destroy VELB eggs or larvae and may reduce the health and vigor of the elderberry shrub. To avoid and minimize adverse effects to the VELB when 		
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Impact	Mitigation Measure	Responsible Party	Timing
	<p>trimming, trimming will occur between November and February and will avoid the removal of any branches or stems that are 1 inch or greater in diameter. Measures to address regular or large-scale maintenance (trimming) should be established in consultation with the USFWS.</p> <ul style="list-style-type: none"> • Chemical Usage. Herbicides will not be used within the dripline of the shrub. Insecticides will not be used within 98 feet of an elderberry shrub. All chemicals will be applied using a backpack sprayer or similar direct application method. • Mowing. Mechanical weed removal within the dripline of the shrub will be limited to the season when adults are not active (August through February) and will avoid damaging the elderberry. • Erosion Control and Revegetation. Erosion control will be implemented and the affected area will be revegetated with appropriate native plants. 		
	<p><i>Wildlife-8: Relocate Elderberry Shrubs that Must Be Removed</i></p> <p>The lead agency shall identify measures to relocate or replace elderberry shrubs with stems measuring 1 inch or greater in diameter at ground level if an adequate buffer cannot be provided, or if a shrub cannot be avoided during construction and must be removed. Transplantation procedures shall comply with USFWS's <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (U.S. Fish and Wildlife Service 2017) and approved by USFWS during formal consultation. Elderberry shrubs that cannot be avoided will be identified and transplanted</p>	<p>Construction contractor and DWR or DWR delegate</p>	<p>Before and during construction</p>

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	within the Kopta Slough property.		
	<p><i>Fish-1: Implement Measures to Minimize Injury or Mortality to Adult or Juvenile Fish Species</i></p> <p>Refer to the “Biological Resources – Fisheries Resources” section.</p>	<p>Qualified biologist; DWR or DWR delegate; Construction contractor</p>	<p>Before and during construction</p>
	<p><i>Air Quality-1: Implement Fugitive Dust Prevention and Control Measures</i></p> <p>Refer to the “Air Quality” section.</p>	<p>Construction contractor</p>	<p>Before and during construction</p>
<p>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?</p>	<p><i>Wildlife-2: Implement Protective Measures During Removal of Trees that Provide Suitable Bat Roosting Habitat</i></p>	<p>Construction contractor</p>	<p>During construction</p>

Biological Resources – Botanical Resources

Impact	Mitigation Measure	Responsible Party	Timing
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?</p>	<p>Botany-1: Develop and Implement a Weed Prevention and Control Plan</p> <p>Prior to the start of construction, the contractor shall prepare a weed prevention and control plan in coordination with the appropriate agency. The plan may include the following avoidance and minimization measures:</p> <ul style="list-style-type: none"> • Construction equipment shall be made weed-free prior to entering the project area (e.g., washing construction equipment and trucks before entering the area). • Equipment staging shall occur in areas that have been cleared of weeds. • Straw bales and other vegetative materials used for erosion control shall also be certified weed-free. • All revegetation materials (e.g., container plants, mulches, seed mixtures) shall be certified weed-free and come from locally adapted native plant materials to the extent practicable. • If areas require additional weed control, herbicides may be used consistent with federal, State, and local requirements, under advisement of a department or interagency pesticide control advisor (PCA). All herbicides shall be applied by a licensed operator. • Invasive plants removed during project construction (e.g., <i>Arundo donax</i>) shall be removed to an appropriate off-site 	<p>DWR or DWR delegate; construction contractor</p>	<p>Before and during construction</p>

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Impact	Mitigation Measure	Responsible Party	Timing
	<p>disposal area or otherwise properly disposed of out of the floodplain, or buried appropriately beneath spoiled material at a depth sufficient to prevent reintroduction and floating debris.</p> <ul style="list-style-type: none"> Construction practices shall comply with other recommendations of the PCA for invasive weed management. 		
	<p><i>Water Quality-1: Implement a Stormwater Pollution Prevention Plan</i> Refer to the “Hydrology and Water Quality” section.</p>	Construction contractor	Before and during construction

Biological Resources – Wetlands

Impact	Mitigation Measure	Responsible Party	Timing
<p>c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) or other Waters of the U.S. through direct removal, filling, hydrological interruption, or other means?</p>	<p><i>Water Quality-1: Implement a Stormwater Pollution Prevention Plan</i> Refer to the “Hydrology and Water Quality” section.</p>	Construction contractor	Before and during construction

Cultural Resources

Impact	Mitigation Measure	Responsible Party	Timing
<p>b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</p>	<p><i>Cultural-1: Protect Newly Discovered Archaeological, Prehistoric, Historic, or Tribal Cultural Resources</i></p> <p>Prior to the start of construction, DWR will provide an environmental tailgate training including an overview of the types of cultural resources, including tribal cultural resources (which could occur in the project area), a statement of confidentiality, and a review of the steps that must occur if any potential cultural resources are identified in the project area.</p> <p>If any potential historical or archaeological materials are discovered during construction activities, work must be halted within 100 feet of the find until an archaeologist who meets U.S. Secretary of Interior’s Professional Qualification Standards for Archaeology or personnel working under their direction evaluates the find. If the discovered materials are potential tribal cultural resources, affiliated Native American tribes will be notified and provided an opportunity to participate in the evaluation of the find. Work may continue on other parts of the proposed project while evaluation and, if necessary, mitigation, take place (CEQA Guidelines Section 15064.5 [f]). After the assessment is completed, the archaeologist shall submit a report to DWR describing the significance of the discovery with management recommendations. If the find is determined by DWR to be an historical, unique archaeological, or tribal cultural resource, time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available.</p> <p>Should significant archaeological resources be found, the resources shall be treated in compliance with PRC Section 21083.2. If the project can be modified to accommodate</p>	<p>DWR or DWR delegate</p>	<p>Before and during construction</p>

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Impact	Mitigation Measure	Responsible Party	Timing
	avoidance, preservation of the site is the preferred alternative. Data recovery of the damaged portion of the site also shall be performed pursuant to PRC Section 20183.2(d).		
c) Disturb any human remains, including those interred outside of formal cemeteries?	<p><i>Cultural-2: If Human Remains are Found, Cease Construction Activities and Implement Appropriate Procedures for the Treatment of Remains</i></p> <p>If remains or potential human remains are discovered, all work in the vicinity of the find must stop immediately. DWR or their designated representative will immediately notify the Tehama County coroner. If the coroner determines the remains to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) by phone within 24 hours. Pursuant to California PRC Section 5097.98, DWR will open consultation with the individual(s) identified by the NAHC as the most likely descendants (MLDs). MLDs shall be provided the opportunity to inspect the site of discovery and make recommendations regarding the treatment of the remains and any items associated with the burial, including preservation and avoidance, relinquishment to MLDs, or dignified removal and reinterment in a location not subject to future disturbance. The professionally qualified archaeologist shall record the site, or the location of reburial, with the NAHC. DWR will direct work to recommence after the human remains have been investigated and recommendations have been made for the appropriate treatment and disposition of the remains.</p>	DWR or DWR delegate	During construction

Geology and Soils

Impact	Mitigation Measure	Responsible Party	Timing
b) Result in substantial soil erosion or the loss of topsoil?	Water Quality-1: Implement a Stormwater Pollution Prevention Plan Refer to the “Hydrology and Water Quality” section.	Construction contractor	Before and during construction

Greenhouse Gas Emissions and Climate Change

Impact	Mitigation Measure	Responsible Party	Timing
Environmental Commitment	<p>The proposed project will incorporate the following applicable best management practices (BMPs) from DWR’s <i>Climate Action Plan-Phase I: Greenhouse Gas Emissions Reduction Plan</i> to avoid and minimize impacts related to greenhouse gas emissions (California Department of Water Resources 2012a, 2012b).</p> <ul style="list-style-type: none"> • Evaluate project characteristics, including location, project work flow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drivetrains, or other high-efficiency technologies are appropriate and feasible for the project or specific elements of the project. • Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines. • Ensure that all feasible avenues have been explored for providing an electrical service drop to the construction site for temporary construction power. When generators must be used, use alternative fuels, such as propane or solar, to power generators to the maximum extent feasible. 	Construction contractor	Before and during construction

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Impact	Mitigation Measure	Responsible Party	Timing
	<ul style="list-style-type: none"> • Limit deliveries of materials and equipment to the site to off-peak traffic congestion hours. • Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure California Code of Regulations, Title 13, Section 2485). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement. • Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer’s recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an air quality control plan prior to commencement of construction. • Implement a tire inflation program on the jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on site and every two weeks for equipment that remains on site. Check vehicles used for hauling materials off site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an air quality management plan prior to commencement of construction. • Develop a project-specific rideshare program to encourage carpools, shuttle vans, transit passes, and secure bicycle parking for construction worker commutes. • Reduce electricity use in temporary construction offices by using high-efficiency lighting and requiring that heating and cooling units be Energy Star compliant. Require that all contractors develop and implement procedures for turning off 		

Impact	Mitigation Measure	Responsible Party	Timing
	<p>computers, lights, air conditioners, heaters, and other equipment each day at close of business.</p> <ul style="list-style-type: none"> • For deliveries to project sites where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box-type trailer is used for hauling, a SmartWay2-certified truck will be used to the maximum extent feasible. • Develop a project-specific construction debris recycling and diversion program to achieve a documented 50-percent diversion of construction waste. • Evaluate the feasibility of restricting all material hauling on public roadways to off-peak traffic congestion hours. During construction scheduling and execution, minimize, to the extent possible, uses of public roadways that would increase traffic congestion. 		

Hazards and Hazardous Materials

Impact	Mitigation Measure	Responsible Party	Timing
<p>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</p>	<p>Hazards-1: Prepare and Implement a Spill Prevention and Control Plan</p> <p>The contractor shall be required to prepare and implement a spill prevention and control plan prior to construction, which will contain measures to avoid or minimize potential chemical contamination within the Sacramento River and its floodplain. The plan shall include the following construction BMPs:</p> <ul style="list-style-type: none"> • All personnel involved in use of hazardous materials shall be trained in emergency response and spill control. 	<p>Construction contractor</p>	<p>Before and during construction</p>

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Impact	Mitigation Measure	Responsible Party	Timing
	<ul style="list-style-type: none"> • Contractors shall have oil-absorbent and spill-containment materials on site when mechanical equipment is in operation within 100 feet of the river or slough and shall adhere to all required State and federal standards. If a spill occurs, no additional work shall commence in-channel until (1) the mechanical equipment is inspected by the contractor and the leak has been repaired, (2) the spill has been contained, and (3) the appropriate agencies have been contacted and have evaluated the impacts of the spill. • Staging, storage, servicing, and refueling of vehicles and equipment shall take place outside the river channel. Any equipment that may leak shall be stored over impermeable surfaces, if available, and drip pans (or any other type of impermeable containment measure) will be placed under parked machinery and checked and replaced when necessary, to prevent drips and leaks from entering the environment. • Machinery that enters the river during work shall be steam cleaned, inspected daily, and properly maintained to avoid water quality contamination from the release of grease, oil, petroleum products, or other hazardous materials. • Every reasonable precaution will be exercised to protect streams and other waters from pollution with fuels, oils, and other harmful materials. Safer alternative products (such as biodegradable hydraulic fluids) will be used where feasible. • The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into the river or Kopta Slough. • Any fuel stored within the project area shall be stored outside the channel in a double-walled contained vessel surrounded by 		

Impact	Mitigation Measure	Responsible Party	Timing
	<p>a berm appropriately sized for the volume.</p> <ul style="list-style-type: none"> Spill containment kits shall be on site at all times. 		
	<p>Hazards-2: Identify and Properly Dispose of Contaminated Soils</p> <p>Soils in areas where hazardous materials storage could have resulted in leaks or spills shall be tested for contamination. If found, contaminated soils shall be excavated to a depth that when tested meets California Department of Toxic Substances Control and State Water Resources Control Board approvals as clean. Only a trained professional will remove the hazardous materials pursuant to the <i>Hazardous Waste Operations and Emergency Response</i> standards (Occupational Safety and Health Administration 2022). Any contaminated soils shall be disposed of at an approved facility.</p>	DWR or DWR delegate	During construction
<p>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?</p>	<p>Hazards-3: Implement DWR Standards for the Proper Abandonment or Destruction of Wells</p> <p>DWR’s Water Well Standards (California Department of Water Resources 2022) state that a well is considered “abandoned” or permanently inactive if it has not been used for one year, unless the owner demonstrates intention to use the well again. Inactive wells intended for future use must be properly maintained to meet well standard requirements, which include providing a secure cover, marking the location of the well, and clearing brush, debris and waste materials surrounding the well.</p> <p>A well that is no longer useful must be destroyed to assure that the existing groundwater quality is protected and preserved for further use, and to eliminate any potential physical hazard. Destruction of a well shall consist of completely filling and sealing</p>	Construction contractor	During construction

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Impact	Mitigation Measure	Responsible Party	Timing
	the well in accordance with the procedures described in DWR Water Well Standards, Section 23 (California Department of Water Resources 2022). Permits for well destruction shall also be obtained from the Tehama County Environmental Health Department.		
c) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<p>Hazards-4: Develop a Fire Protection and Prevention Plan</p> <p>The project contractor shall be required to develop a fire protection and prevention plan. The plan shall include the following requirements: fire safety training for all construction employees; proper maintenance (e.g., working spark arresters) and operation (e.g., restrictions on the use of gasoline-powered tools around flammable vegetation) of construction equipment; mowing of the parking areas to keep vegetation from coming in contact with the hot undercarriage of employee and construction vehicles; on-site fire suppression tools (e.g., shovels, fire extinguishers) for each construction vehicle; and proper disposal of flammable vegetative waste material during dry weather periods.</p>	Construction contractor	Before and during construction

Hydrology and Water Quality

Impact	Mitigation Measure	Responsible Party	Timing
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<p>Mitigation Measure Water Quality-1: Implement a Stormwater Pollution Prevention Plan</p> <p>The contractor shall be required to prepare a stormwater pollution prevention plan (SWPPP) and receive approval from the lead agency prior to the start of construction. The BMPs specified by the SWPPP shall be implemented to monitor, minimize, and prevent construction dirt, debris, stormwater runoff, and miscellaneous by-products from entering the Sacramento River.</p>	Construction contractor	Before and during construction

Impact	Mitigation Measure	Responsible Party	Timing
	<p>BMPs may include the following:</p> <ul style="list-style-type: none"> • Disturbed areas shall be minimized to the extent practicable, and sensitive areas (e.g., steep slopes and natural watercourses) shall be avoided where construction activities are not required or could be avoided. • Temporary stabilization of disturbed soils shall be provided whenever active construction is not occurring on a portion of the site. • Temporary water pollution control measures, such as sandbags, silt fences, application of straw and seed, and other erosion control devices, shall be placed along the disturbed river bank to minimize sediment from entering the river. • Erosion control materials, such as coir rolls or erosion control blankets, will not contain plastic netting that could entrain wildlife. • Sediment shall be removed from sediment control materials once it has reached one-third of the exposed height of the control, and placed in an upland location where it cannot be washed into the river. • Spoils shall be hauled away from river as soon as possible to minimize sediment delivery to the river. • Temporary stock piles shall be in areas a sufficient distance from watercourses, where it cannot enter the river or watercourse. • Spoil areas containing erodible material shall be stabilized at the end of the construction season or when rain is possible. • Silt curtains or other methods may be utilized to minimize turbidity within the Sacramento River when performing any in-water work or work immediately adjacent to the river. 		

Mitigation, Monitoring, and Reporting Program under CEQA

Impact	Mitigation Measure	Responsible Party	Timing
	<ul style="list-style-type: none"> Water quality monitoring, which shall be conducted during all periods of in-water work, may include observations of visible sediment plumes in surface waters, and turbidity measurement, settleable solids measurement, and visual observations for construction related pollutants, both upstream from construction activities and downstream of the active work area pursuant to permit requirements. Water quality monitoring shall inform construction activities, and temporary cessation of in-water work shall be implemented when the project's issued Clean Water Act Section 401 or Section 1600 permit thresholds are exceeded. In-water work may resume when water quality parameters decrease to levels below permit requirements. Following construction and prior to the onset of winter rains, the disturbed areas along the river bank shall be reseeded with a mix of native grasses and forbs to control soil erosion. 		
	<p>Hazards-1: Prepare and Implement a Spill Prevention and Control Plan</p> <p>Refer to the "Hazards and Hazardous Materials" section.</p>	Construction contractor	Before and during construction
	<p>Hazards-3: Implement DWR Standards for the Proper Abandonment or Destruction of Wells</p> <p>Refer to the "Hazards and Hazardous Materials" section.</p>	Construction contractor	During construction
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a	<p>Water Quality-1: Implement a Stormwater Pollution Prevention Plan</p>	Construction contractor	Before and during construction

Impact	Mitigation Measure	Responsible Party	Timing
<p>stream or river or through the addition of impervious surfaces, in a manner which would:</p> <p>i) result in substantial erosion or siltation on- or off-site?</p> <p>–and–</p> <p>ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</p>			
<p>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</p>	<p><i>Water Quality-1: Implement a Stormwater Pollution Prevention Plan</i></p>	<p>Construction contractor</p>	<p>Before and during construction</p>
	<p><i>Hazards-1: Prepare and Implement a Spill Prevention and Control Plan</i></p> <p>Refer to the “Hazards and Hazardous Materials” section.</p>	<p>Construction contractor</p>	<p>Before and during construction</p>

Mitigation, Monitoring, and Reporting Program under CEQA

Impact	Mitigation Measure	Responsible Party	Timing
	<p>Hazards-3: Implement DWR Standards for the Proper Abandonment or Destruction of Wells</p> <p>Refer to the “Hazards and Hazardous Materials” section.</p>	Construction contractor	During construction

Noise

Impact	Mitigation Measure	Responsible Party	Timing
<p>a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p>	<p>Noise-1: Implement BMPs to Minimize Construction-Related Noise Effects on Sensitive Receptors</p> <p>The contractor shall implement BMPs to minimize construction-related noise in the vicinity of sensitive receptors. BMPs shall include the following:</p> <ul style="list-style-type: none"> • All construction equipment shall be equipped with manufacturer’s specified noise-muffling devices that are properly operated and maintained. • All construction equipment shall be stored in a designated staging area during the construction phase to eliminate daily heavy-duty truck trips on local roadways. • All stationary noise-generating equipment shall be placed as far away as feasibly possible from sensitive noise receptors and in an orientation that minimizes noise impacts, such as behind existing barriers, storage piles, or unused equipment. • Speed limits shall be established and enforced for construction vehicle traffic on Dale Road to minimize traffic noise. • All construction activities shall be limited to the daytime weekday hours of 7:00 a.m. to 7:00 p.m. and daytime Saturday hours of 8:00 a.m. to 5:00 p.m. to the extent feasible. Construction outside of normal construction hours shall be minimized or avoided completely when located adjacent to 	Construction contractor	Before and during construction

Impact	Mitigation Measure	Responsible Party	Timing
	sensitive receptors. The contractor shall notify Tehama County and immediate residents when work is scheduled to extend outside of normal construction times.		

Tribal Cultural Resources

Impact	Mitigation Measure	Responsible Party	Timing
<p>a) 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 5020.1 (k)</p> <p>–or–</p> <p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.</p>	<p><i>Cultural-1: Protect Newly Discovered Archaeological, Prehistoric, Historic, or Tribal Cultural Resources</i></p> <p>Refer to the “Cultural Resources” section.</p>	<p>DWR or DWR delegate</p>	<p>Before and during construction</p>

Mitigation, Monitoring, and Reporting Program under CEQA

Impact	Mitigation Measure	Responsible Party	Timing
<p>In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?</p>			
	<p><i>Cultural-2: If Human Remains are Found, Cease Construction Activities and Implement Appropriate Procedures for the Treatment of Remains</i> Refer to the “Cultural Resources” section.</p>	<p>DWR or DWR delegate</p>	<p>During construction</p>

Wildfire

Impact	Mitigation Measure	Responsible Party	Timing
<p>b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant</p>	<p><i>Mitigation Measure Hazards-4: Develop a Fire Protection and Prevention Plan</i> Refer to the “Hazards and Hazardous Materials” section.</p>	<p>Construction contractor</p>	<p>Before and during construction</p>

Impact	Mitigation Measure	Responsible Party	Timing
concentrations from a wildfire or the uncontrolled spread of a wildfire?			

References

California Department of Water Resources. 2022. "California Well Standards, Combined. Part III. Destruction of Water Wells." [Webpage.] Viewed online at: <https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction>. Accessed: Jan. 12, 2022.

_____. 2012a. *Climate Action Plan Phase 1: Greenhouse Gas Emissions Reduction Plan*. Sacramento, CA. 103 pp.

_____. 2012b. *Initial Study for the California Department of Water Resources Draft Climate Action Plan Phase 1: Greenhouse Gas Emissions Reduction Plan*. SCH# 2012032002.

Occupational Safety and Health Administration. 2022. "Hazardous Waste Operations and Emergency Response (HAZWOPER)." [Webpage.] Viewed online at: <https://www.osha.gov/emergency-preparedness/hazardous-waste-operations/standards>. Accessed: Mar. 7, 2022.

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Useful Web Links

Portable Equipment Registration Program

<http://www.arb.ca.gov/portable/portable.htm>

