

EXHIBIT A
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Resource Topic/Environmental Impact	Level of Significance before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Section 4.2: Delta Hydrology and Water Quality			
4.2.1: Alternative 4 would not adversely alter deliveries of water to other users.	Less Than Significant	None Required	Less Than Significant
4.2.2: Alternative 4 would not result in significant adverse changes in Delta water quality causing the violation of a water quality standard.	Less Than Significant	None Required	Less Than Significant
4.2.3: Alternative 4 would not result in changes to Delta water quality that would result in significant adverse effects on beneficial uses.	Less Than Significant	None Required	Less Than Significant
4.2.4: Diversions of Delta water under Alternative 4 would not result in a significant reduction of Delta water levels.	Less Than Significant	None Required	Less Than Significant
4.2.5: Alternative 4 would not result in a cumulatively considerable contribution to significant adverse cumulative effects on deliveries of water to other users, changes in Delta water quality, or change in Delta water levels.	Less Than Significant	None Required	Less Than Significant
Section 4.3: Delta Fisheries and Aquatic Resources			
4.3.6: Operation of Alternative 4 would not result in changes to Delta hydrologic conditions that affect Delta fish populations or quality and quantity of aquatic habitat within the Sacramento-San Joaquin River system, including the Delta.	Less Than Significant	None Required	Less Than Significant
4.3.7: Operation of the new screened intake, or changes to diversions at existing intakes, could affect direct entrainment or impingement of fish.	Less Than Significant	None Required	Less Than Significant
4.3.9: Alternative 4, when combined with other planned projects or projects under construction in the area, could cumulatively contribute to substantial adverse impacts to Delta fisheries and aquatic resources.	Less Than Significant	None Required	Less Than Significant

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Section 4.4: Geology, Soils and Seismicity			
<p>4.4.1: Alternative 4 facilities would be designed and engineered in accordance with seismic code requirements. As a result, Alternative 4 would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking or seismic-related ground failure, including liquefaction and landslides.</p>	Less Than Significant	None Required	Less Than Significant
<p>4.4.2: During construction and operations, Alternative 4 could result in substantial soil erosion or the loss of topsoil.</p>	Significant	Implement Mitigation Measures 4.5.1a and 4.5.1b; and 4.6.2a and 4.6.2b to Reduce Soil Erosion and Top Soil Loss Impacts During Construction	Less Than Significant
<p>4.4.3: Project components could be located on expansive or corrosive soils or on a geologic unit or soil that is unstable or could become unstable as a result of Alternative 4 or construction activities; however, those components would not likely result in onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse, and would not create substantial risks to life or property.</p>	Less Than Significant	None Required	Less Than Significant
<p>4.4.4: Alternative 4 would not make a cumulatively considerable contribution to cumulative effects associated with erosion, topsoil loss or increased exposure to seismic or other geohazard risks.</p>	Less Than Significant	None Required	Less Than Significant
Section 4.5: Local Hydrology, Drainage and Groundwater			
<p>4.5.1: During construction, Alternative 4 could violate water quality standards through increased erosion and sedimentation to local waterways, release of fuels or other hazardous materials during construction, or dewatering of excavated areas that could result in substantial water quality degradation.</p>	Significant	<p>Mitigation Measure 4.5.1a: Prepare and Implement a Stormwater Pollution Prevention Plan that Minimizes the Potential Contamination of Surface Waters (SWPPP), and Complies with Regional Water Quality Control Board Requirements (RWQCB) to Protect Water Quality</p> <p>Mitigation Measure 4.5.1b: Treat and Discharge Groundwater Extracted During Construction to Comply with the Requirements of RWQCB Order No. 5-00-175 and the SWPPP</p>	Less Than Significant

EXHIBIT A
SUMMARY OF IMPACTS AND MITIGATION MEASURES

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4.5.2: Construction and operation of Alternative 4 would not deplete local groundwater supplies or interfere with groundwater recharge.	Less Than Significant	None Required	Less Than Significant
4.5.3: Alternative 4 would not substantially alter drainage patterns but reservoir expansion would increase the reservoir shoreline area subject to erosion.	Less Than Significant	None Required	Less Than Significant
4.5.4: Alternative 4 would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff during operation.	Significant	Mitigation Measure 4.5.4: Design Facilities to be consistent with the RWQCB's NPDES Municipal Stormwater Runoff Requirements and Prepare and Implement a Stormwater Facility Operation and Management Plan	Less Than Significant
4.5.5: Project Alternatives 4 would not place structures in the flood zone and the facilities constructed would not impede flood flows.	Less Than Significant	None Required	Less Than Significant
4.5.6: Alternative 4 would not substantially increase the exposure of people and/or structures to risks associated with inundation by dam or levee failure.	Less Than Significant	None Required	Less Than Significant
4.5.7: Construction and operation of Alternative 4 would not make a cumulatively considerable contribution to cumulative effects on drainage, flooding, groundwater recharge or water quality degradation in Alternative 4 area.	Less Than Significant	None Required	Less Than Significant
Section 4.6: Biological Resources			
4.6.1: Construction of Alternative 4 would affect the following NCCP habitat types (CDFG sensitive plant communities in parentheses): Natural Seasonal Wetland (i.e., bulrush-cattail series, northern claypan vernal pool, bush seepweed and saltgrass series), Valley/Foothill Riparian (i.e., Fremont cottonwood series and valley oak series), Grassland (i.e., purple needlegrass series) and Valley/Foothill Woodland Forest (i.e., blue oak series).	Significant	Mitigation Measure 4.6.1a: Implement Avoidance and Minimization Measures to Minimize Impacts to Sensitive Plant Communities Mitigation Measure 4.6.1b: Provide Compensation Through Habitat Creation where Avoidance of Sensitive Plant Communities is not Possible	Less Than Significant

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<p>4.6.2: Construction of Alternative 4 could affect potentially jurisdictional wetlands or waters, and streambeds and banks regulated by CDFG.</p>	Significant	<p>Mitigation Measure 4.6.2a: Avoid and Minimize the Fill of Wetlands and Other Waters</p> <p>Mitigation Measure 4.6.2b: Provide Restoration and Compensation Where Avoidance of Jurisdictional Wetlands and Other Waters is not Possible</p>	Less Than Significant
<p>4.6.3: Construction of Alternative 4 could affect Brewer's dwarf-flax.</p>	Significant	<p>Measure 4.6.3a: Design Facilities to Avoid Sensitive Plant Populations and Implement Protection Measures During Construction</p> <p>Measure 4.6.3b: Develop and Implement a Restoration and Mitigation Plan to Provide Compensation for the Loss of Brewer's dwarf-flax</p>	Less Than Significant
<p>4.6.4: Construction of Alternative 4 would result in impacts on California red-legged frog and California tiger salamander, including aquatic breeding habitat and upland aestivation habitat for these species.</p>	Significant	<p>Mitigation Measure 4.6.4a: Conduct Surveys and Implement Protective Measures, if needed, to Minimize Potential Effects on California red-legged frog and California tiger salamander</p> <p>Mitigation Measure 4.6.4b: Provide Compensation for Permanent and Temporary Impacts on California tiger salamander and California red-legged frog</p>	Less Than Significant
<p>4.6.5: Construction of Alternative 4 would result in direct and indirect impacts on existing populations of and habitat for the western pond turtle.</p>	Significant	<p>Mitigation Measure 4.6.5: Conduct Surveys and Implement Protective Measures to Minimize Potential Effects on Western Pond Turtle</p>	Less Than Significant
<p>4.6.7: Construction of Alternative 4 would have temporary and permanent impacts on potential San Joaquin kit fox habitat and permanently reduce potential regional movement opportunities in one location for this species.</p>	Significant and Unavoidable	<p>Mitigation Measure 4.6.7a: Implement Protection Measures to Minimize Impacts on San Joaquin Kit Fox Habitat and Potential Regional Movement Opportunities</p> <p>Mitigation Measure 4.6.7b: Provide Compensation for Affected Kit Fox Habitat Outside of Dedicated CDFG Conservation Easements</p> <p>Mitigation Measure 4.6.7c: Provide Compensation for Affected Acreage Within Existing Kit Fox Easement</p>	<p>Less than significant for habitat impacts except loss of the potential movement corridor on the western side of the reservoir, which would remain a significant and unavoidable effect of Alternative 4. Although the proposed mitigation program includes acquisition of habitat acres to compensate for the grassland acres affected by reservoir expansion, and the program also proposes acquisition of compensatory habitat in areas that preserve remaining movement corridors for the kit fox, these measures would not reduce or avoid the loss of the grassland along the western side of the reservoir. The loss of most of this grassland strip to inundation and therefore of this specific potential movement corridor is unavoidable.</p>

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4.6.8: Construction of Alternative 4 would result in temporary and permanent loss of habitat for burrowing owls.	Significant	Mitigation Measure 4.6.8a: Conduct Surveys and Implement Protective Measures to Minimize Potential Effects on Burrowing Owl Mitigation Measure 4.6.8b: Provide Compensation for Permanent Loss of Burrowing Owl Habitat	Less Than Significant
4.6.9: Construction of Alternative 4 and operation activities would result in direct and indirect impacts on existing populations of and habitat for the golden eagle, bald eagle, and Swainson's hawk.	Significant	Mitigation Measure 4.6.9a: Conduct Surveys and Implement Protective Measures to Minimize Potential Effects on the Golden Eagle, Bald Eagle, and Swainson's Hawk Mitigation Measure 4.6.9b: Provide Restoration and Compensation for the Loss of Golden Eagle, Bald Eagle, and Swainson's Hawk Foraging Habitat	Less Than Significant Beneficial –Bald Eagle
4.6.10: Construction of Alternative 4 and increased reservoir water levels would result in temporary and permanent loss of potential and occupied habitat for Alameda whipsnakes.	Significant	Mitigation Measure 4.6.10a: Development and Implementation of An Alameda Whipsnake Protection and Monitoring Plan Mitigation Measure 4.6.10b: Provide Compensation for Loss of Upland Scrub Habitat That May Support the Alameda Whipsnake	Less Than Significant
4.6.11: Construction of Alternative 4 activities could result in direct and indirect impacts on the valley elderberry longhorn beetle and its habitat.	Significant	Mitigation Measure 4.6.11: Avoid, Minimize, and Mitigate Effects on the Valley Elderberry Longhorn Beetle	Less Than Significant
4.6.12: Construction of Alternative 4 activities could affect active breeding bird nest sites could affect migratory birds.	Significant	Mitigation Measure 4.6.12a: Conduct Surveys and Implement Protective Measures to Minimize Effects on Breeding and Migratory Birds Mitigation Measure 4.6.12c: Conduct Surveys and Implement Protective Measures to Reduce Impacts on Nesting Raptors	Less Than Significant
4.6.14: Construction of Alternative 4 activities could affect nonlisted special-status reptile species (San Joaquin coachwhip and coast horned lizard).	Significant	Mitigation Measure 4.6.14: Conduct Surveys and Implement Protective Measures to Reduce Impacts on Nonlisted Special-Status Reptile Species (San Joaquin Coachwhip and Coast Horned Lizard)	Less Than Significant
4.6.15: Construction of Alternative 4 activities could affect nonlisted special-status mammal species (American badger, special-status bats, and San Joaquin pocket mouse).	Significant	Mitigation Measure 4.6.15a: Conduct Pre-Construction Surveys and Implement Mitigation Measures as Needed to Reduce Impacts on Nonlisted Special-Status Mammal Species (American Badger, Special-Status Bats, and San Joaquin Pocket Mouse) Mitigation Measure 4.6.15b: Conduct Pre-Construction Surveys and Implement Mitigation Measures as Needed to Reduce Impacts on Special-Status Bats	Less Than Significant
4.6.18: Construction of Alternative 4 would not make a cumulatively considerable contribution to cumulative effects on special-status species and habitats.	Significant	Implement Mitigation Measures 4.6.1a and 4.6.1b; 4.6.2a and 4.6.2b; 4.6.3a and 4.6.3b; 4.6.4a and 4.6.4b; 4.6.5; 4.6.7a, 4.6.7b, and 4.6.7c; 4.6.8a and 4.6.8b; 4.6.9a and 4.6.9b; 4.6.10a and 4.6.10b; 4.6.11; 4.6.12a and 4.6.12c; 4.6.14; and 4.6.15a and 4.6.15b	Less Than Significant

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Section 4.7: Land Use			
4.7.2: Facility siting and operation under the proposed project and alternatives would not conflict with any applicable land use plans.	Less Than Significant	None Required	Less Than Significant
4.7.3: Construction activities within designated Airport Land Use Compatibility Zones near the Byron Airport could cause potential temporary height impacts by conflicting with FAR Part 77 surfaces during construction.	Less Than Significant	None Required	Less Than Significant
4.7.4: Construction activities within the AIA for Byron Airport could cause potential temporary flight hazards through the creation of glare or distracting lights; the generation of dust or smoke, which could impair pilot visibility; or could attract an increased number of birds.	Significant	Mitigation Measure 4.7.4a: Consult with Contra Costa County Airport Staff to Minimize Light and Glare Impacts to Byron Airport Mitigation Measure 4.7.4b: Prohibit Use of Temporary Sediment Ponds and Use Appropriate Seed Mixtures for Revegetation and Sediment/Erosion Control Measures During Construction to Minimize Attraction for Birds Mitigation Measure 4.10.1: Implement BAAQMD Measures to Control Construction-Generated Fugitive Dust Emissions	Less Than Significant
Section 4.8: Agriculture			
4.8.1: Construction of Alternative 4 would temporarily impact the agricultural use of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.	Less Than Significant	None Required	Less Than Significant
4.8.2: Alternative 4 would permanently convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use.	Less Than Significant	None Required	Less than Significant
4.8.4: Alternative 4 would involve changes in the environment that, due to their location or nature, could contribute to cumulative impacts from conversion of Important Farmland to nonagricultural uses.	Less Than Significant	None Required	Less Than Significant
Section 4.9: Transportation and Circulation			
4.9.1: Construction of Alternative 4 activities would intermittently and temporarily increase traffic congestion due to vehicle trips generated by construction workers and construction vehicles on area roadways.	Less Than Significant	None Required	Less Than Significant

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SUMMARY OF IMPACTS AND MITIGATION MEASURES

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4.9.2: Construction of Alternative 4 activities would intermittently and temporarily impede access to local streets or adjacent uses, including access for emergency vehicles and could substantially increase traffic hazards due to construction in or adjacent to roads or possible road wear.	Less Than Significant	None Required	Less Than Significant
4.9.3: Traffic associated with operation of project facilities, including the expanded recreation facilities, would not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.	Less Than Significant	None Required	Less Than Significant
4.9.4: Construction of Alternative 4, when combined with construction of other future projects, could contribute to construction-related short-term cumulative impacts to traffic and transportation (traffic congestion, access, and traffic safety).	Less Than Significant	None Required	Less Than Significant
Section 4.10: Air Quality			
4.10.1: Construction of Alternative 4 could generate short-term emissions of criteria air pollutants: ROG, NOx, CO, and PM10 that could contribute to existing nonattainment conditions and further degrade air quality. However, Alternative 4 would not exceed federal general conformity <i>de minimis</i> standards for emissions.	Significant	Mitigation Measure 4.10.1: Implement BAAQMD Measures to Control Construction-Generated Fugitive Dust Emissions	Less Than Significant
4.10.2: Operation of Alternative 4 would not result in emissions of criteria air pollutants at levels that would substantially contribute to a potential violation of applicable air quality standards or to nonattainment conditions.	Less Than Significant	None Required	Less Than Significant
4.10.3: Construction and/or operation of Alternative 4 would not expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant	None Required	Less Than Significant
4.10.4: Operation of Alternative 4 would not create objectionable odors affecting a substantial number of people.	Less Than Significant	None Required	Less Than Significant

EXHIBIT A
SUMMARY OF IMPACTS AND MITIGATION MEASURES

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4.10.5: Construction and operation of Alternative 4 would not result in a cumulatively considerable increase in greenhouse gas emissions.	Less Than Significant	None Required	Less Than Significant
4.10.6: Construction and operation of Alternative 4 could result in cumulatively considerable increases of criteria pollutant emissions.	Significant	Implement Mitigation Measure 4.10.1 to Control Construction-Generated Air Pollution Emissions	Less Than Significant
Section 4.11: Noise			
4.11.1: Construction of facilities under the proposed project and alternatives could generate noise levels that exceed the Contra Costa County or Alameda County noise standards at nearby sensitive receptors if construction activities are carried out during noise-sensitive hours, causing sleep disturbance and/or annoyance.	Significant	Mitigation Measure 4.11.1a: Limit Construction Activities During Noise-Sensitive Hours to Minimize Noise Impacts Mitigation Measure 4.11.1b: Post Construction-Related Information and Contact Information at all Construction Sites/Entrances to Construction Sites for the Public Mitigation Measure 4.11.1c: Implement Measures to Control Generation of Construction Noise Mitigation Measure 4.11.1d: Prohibit the Use of Amplified Noise Sources to Minimize Noise Impacts Mitigation Measure 4.11.1e: Implement "Quiet" Pile-Driving Technology to Minimize Pile Driving Noise Impacts	Less Than Significant
4.11.2: Operation of Alternative 4 and alternatives would generate traffic, stationary source, and area source noise similar to existing noise associated with operation of Los Vaqueros Reservoir system and would not exceed County noise requirements.	Less Than Significant	None Required	Less Than Significant
4.11.3: Construction of Alternative 4 would not expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.	Less Than Significant	None Required	Less Than Significant
4.11.4: The proposed project or alternatives would not make a cumulatively considerable contribution to noise levels during either construction or operation.	Less Than Significant	None Required	Less Than Significant

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Section 4.12: Utilities and Public Service Systems			
<p>4.12.1: Construction or operation of Alternative 4 could temporarily disrupt utilities and public service systems such that a public health hazard could be created or an extended service disruption could result.</p>	Significant	<p>Implement Mitigation Measure 4.9.2 to Minimize Traffic Impediments for Emergency Access</p> <p>Implement Mitigation Measure 4.12.1a to Minimize Temporary Disruption of Utilities and Public Service Systems</p> <p>Implement BMOs to Minimize Impacts from Accidental Fires (Mitigation Measure 4.13.3)</p>	Less Than Significant
<p>4.12.2: Alternative 4 would not require or result in construction of new or expanded utility infrastructure or public service facilities that would result in substantial adverse physical impacts.</p>	Less Than Significant	None Required	Less Than Significant
<p>4.12.3: Construction of Alternative 4 could increase solid waste generation such that the capacity of local landfills would be exceeded or Alternative 4 would not comply with state regulations related to solid waste.</p>	Significant	Mitigation Measure 4.12.3: Require the Contractor to Implement Solid Waste Reduction and Debris Recovery Practices	Less Than Significant
<p>4.12.4: Construction of Alternative 4 could make a cumulatively considerable contribution to cumulative effects on public services and utilities, or local landfill capacity.</p>	Significant	Implement Mitigation Measures 4.12.1a and 4.12.3 to Minimize Temporary Disruption of Utilities and Public Service Systems and Reduce Solid Waste Generation	Less Than Significant
Section 4.13: Hazardous Materials / Public Health			
<p>4.13.1: Construction of Alternative 4 and alternative components would disturb subsurface soils and groundwater; if hazardous substances are present in the disturbed areas, construction workers and the public could be exposed to these substances.</p>	Less Than Significant	None Required	Less Than Significant
<p>4.13.2: Construction of Alternative 4 and operation could, through routine transport, use or disposal, accidentally release hazardous materials, thereby exposing construction workers, project personnel, and the public to hazardous materials, or accidentally releasing hazardous materials into the soil, groundwater, and/or a nearby surface water body.</p>	Significant	<p>Implement Mitigation Measures 4.5.1a and 4.5.1b to Minimize the Potential Contamination of Surface Waters and Comply with Regional Water Quality Control Board Requirements.</p> <p>Mitigation Measure 4.13.2: Require Contractor to Enforce Strict Onsite BMPs to Minimize the Potential for Hazardous Materials Release</p>	Less Than Significant

EXHIBIT A
SUMMARY OF IMPACTS AND MITIGATION MEASURES

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4.13.3: Improper handling or use of flammable or combustible materials such as internal combustion equipment could result in wildland fires, exposing people or structures to a significant risk of loss, injury, or death.	Significant	Mitigation Measure 4.13.3: Require Contractor to Enforce Strict Onsite BMPs to Minimize the Potential for Accidental Fires	Less Than Significant
4.13.5: Alternative 4 would not contribute to cumulative impacts associated with release of hazardous materials or other hazards.	Less Than Significant	None Required	Less Than Significant
Section 4.14: Visual/Aesthetic Resources			
4.14.1: Alternative 4 would not have a substantial, demonstrable negative aesthetic effect on a scenic vista or from a county-designated scenic highway or route.	Less Than Significant	None Required	Less Than Significant
4.14.2: Alternative 4 would not substantially degrade the existing visual character or quality of the site and its surroundings, except Alternative 4 due to the borrow area in Kellogg Valley.	Significant	Mitigation Measure 4.14.2a: Develop and Implement a Site Restoration Plan for Borrow Areas	Less Than Significant
4.14.3: Alternative 4 would not create a new source of substantial light but Alternatives 1, 2, and 3 could create a new source of substantial glare that could adversely affect views in the area.	Less Than Significant	None Required	Less Than Significant
4.14.4: Alternative 4 would not make a cumulatively considerable contribution to adverse effects on visual/aesthetic resources in Alternative 4 area or broader region.	Less Than Significant	None Required	Less Than Significant
Section 4.15: Recreation			
4.15.1: Construction of Alternative 4 would result in a short-term reduction of recreational opportunities in Alternative 4 area due to construction activities outside the watershed and closure of the watershed to the public during the construction period, but would enhance recreational opportunities in the long-term.	Significant	Mitigation Measure 4.15.1a: Prepare and Implement a Public Outreach Program to Inform Current and Potential Recreational Users of Temporary Closures Mitigation Measure 4.15.1c: Replace Recreational Facilities Displaced By Reservoir Expansion Within One Year of Construction Completion	Less Than Significant

EXHIBIT A
SUMMARY OF IMPACTS AND MITIGATION MEASURES

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<p>4.15.2: Alternative 4 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.</p>	Less Than Significant	None Required	Less Than Significant
<p>4.15.3: No other reasonably foreseeable future projects would also reduce recreational opportunities in Alternative 4 area, similar to those opportunities affected by Alternative 4, or increase the use of existing neighborhood and regional parks or other recreational facilities; therefore, there does not appear to be the potential for Alternative 4 to contribute to a cumulative effect on recreation facilities, opportunities or experience.</p>	Less Than Significant	None Required	Less Than Significant
Section 4.16: Cultural and Paleontological Resources			
<p>4.16.1: Construction and management of project components would cause a substantial adverse change in the significance of a historical and/or unique archaeological resource as defined in Section 15064.5 or historic property or historic district, as defined in Section 106 of the NHPA (36 CFR 800), or in a previously undiscovered cultural resource.</p>	Significant	<p>Mitigation Measure 4.16.1a: If Feasible, Avoid Impacts to Known Cultural Resources through Project Design Modification</p> <p>Mitigation Measure 4.16.1b: Protect Cultural Resources In Place, if feasible; Implement Data Recovery Where Resources Cannot Be Protected In Place</p> <p>Mitigation Measure 4.16.1c: Conduct Subsurface Investigations Prior to Ground Disturbing Activities</p> <p>Mitigation Measure 4.16.1d: Restrict Ground-Disturbing Activities During Construction and Implement Protection Measures</p> <p>Mitigation Measure 4.16.1e: Provide Training For All Construction Personnel Regarding Cultural Resources and Relevant Regulations and Procedures</p> <p>Mitigation Measure 4.16.1f: Stop Work If Previously Undiscovered Cultural Resources are Discovered During Ground-Disturbing Activities</p> <p>Mitigation Measure 4.16.1g: Update the Cultural Resources Management Plan</p> <p>Mitigation Measure 4.16.1h: Prepare a Comprehensive Study of the Prehistory and History of CCWD</p> <p>Mitigation Measure 4.16.1i: In the Event of Inadvertent Archaeological or Burial Discovery within a State Right-of-Way, Contact Caltrans' Office of Cultural Resources Studies, District 4, Oakland, CA</p>	Less Than Significant

EXHIBIT A
SUMMARY OF IMPACTS AND MITIGATION MEASURES

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4.16.2: Ground-disturbing activities could encounter and destroy paleontological resources in certain geologic formations underlying Alternative 4 area.	Significant	Mitigation Measure 4.16.2a: Construction-Related Earth-Moving Activities in Areas Sensitive for Paleontological Resources Shall be Monitored by a Trained Paleontologist Mitigation Measure 4.16.2b: Provide Training for Construction Personnel Involved with Earth-Moving Activities in Areas with Low to Moderate Sensitivities Regarding Fossils and Notification Procedures	Less Than Significant
4.16.3: Construction and management of project components could disturb human remains, including those interred outside of formal cemeteries.	Significant	Mitigation Measure 4.16.3: Stop Work If Human Remains are Discovered During Construction	Less Than Significant
4.16.4: Construction and management of project components would contribute to adverse cumulative impacts to cultural and/or paleontological resources.	Significant	Implement Mitigation Measures 4.16.2a and 4.16.2b to Minimize Impacts on Cultural and Paleontological Resources	Less Than Significant
Section 4.17: Socioeconomic Effects			
4.17.1: Construction of Alternative 4 could temporarily generate new income and local employment that could benefit Contra Costa County's economy.	Beneficial	None Required	Beneficial
4.17.2: Loss of agricultural land use associated with construction of Alternative 4 and development could affect Contra Costa County and Alameda County's economy.	Less Than Significant	None Required	Less Than Significant
4.17.3: Short-term loss of recreation income associated with construction of Alternative 4 could affect Contra Costa County's economy.	Less Than Significant	None Required	Less Than Significant
4.17.4 Construction of Alternative 4, when combined with construction of other future projects, could have a potentially beneficial effect on income and local employment.	Beneficial	None Required	Beneficial
4.17.5: Construction of Alternative 4, when combined with construction of other future projects, could have a potential cumulative effect on Contra Costa County's economy as a result of temporary loss of agricultural land uses.	Less Than Significant	None Required	Less Than Significant

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<p>4.17.6 Construction of Alternative 4, when combined with construction of other future projects, could have a potential cumulative effect on Contra Costa County's economy as a result of temporary recreational impacts.</p>	<p>Less Than Significant</p>	<p>None Required</p>	<p>Less Than Significant</p>
<p>Section 4.18: Environmental Justice</p>			
<p>4.18.1: Construction and operation of Alternative 4 would result in air quality, noise, and/or other environmental impacts related to traffic and other construction activities that would not disproportionately affect nearby minority and/or low-income communities.</p>	<p>Less Than Significant</p>	<p>None Required</p>	<p>Less Than Significant</p>
<p>4.18.3: Construction and operation of Alternative 4 when combined with construction of other past, present, and probable future projects, would result in air quality, noise, and/or other environmental impacts related to traffic and other construction activities that would not disproportionately affect nearby minority and/or low-income communities.</p>	<p>Less Than Significant</p>	<p>None Required</p>	<p>Less Than Significant</p>