

Table ES-3. Summary of Impacts and Mitigation Measures

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
AQ-1: Project-Generated Construction-Related Criteria Air Pollutant and Precursor Emissions that would Violate or Contribute Substantially to an Existing or Projected Violation, or Expose Sensitive Receptors to Substantial Pollutant Concentrations	Primary Study Area	No Action Alternative	NI	None Required AQ-1: Reduce Mobile-Source Exhaust Emissions	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
AQ-2: Project-Generated Construction-Related Toxic Air Contaminant Emissions that would Expose Sensitive Receptors to Substantial Pollutant Concentrations and Increased Health Risks	Primary Study Area	No Action Alternative	NI	None Required AQ-2: Implement Mitigation Measure AQ-1, Reduce Mobile-Source Exhaust Emissions	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
AQ-3: Project-Generated Operational Criteria Air Pollutant and Precursor Emissions that would Violate or Contribute Substantially to an Existing or Projected Violation, or Expose Sensitive Receptors to Substantial Pollutant Concentrations	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
AQ-4: Generation of Greenhouse Gas Emissions that would Significantly Impact the Environment	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-1: Loss of Riverine Habitat for Lotic Fish Species	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
FSH-2: Short-term Degradation of Aquatic Habitat from Accidental Spills or Seepage of Hazardous Materials during Construction of Temperance Flat RM 274 Dam and Other Facilities	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
FSH-3: Short-term Degradation of Aquatic Habitat from Increased Turbidity or Sedimentation during Construction of Temperance Flat RM 274 Dam and Other Facilities	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-4: Loss of Reservoir Fish Habitat Resulting from Changes in Water Temperature	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
FSH-5: Changes to Reservoir Fish Habitat Caused by Turbidity from Increased Surface Area of Exposed Shoreline	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-6: Loss of Reservoir Fish Caused by Entrainment	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
FSH-7: Change in Shallow-Water Habitat for Largemouth Bass, Spotted Bass, Smallmouth Bass, and Other Sport Fish Species	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	Beneficial		Beneficial
		Alternative Plan 2	Beneficial		Beneficial
		Alternative Plan 3	Beneficial		Beneficial
		Alternative Plan 4	Beneficial		Beneficial
		Alternative Plan 5	Beneficial		Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-8: Change in Open-Water Habitat for Striped Bass and American Shad	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	Beneficial		Beneficial
		Alternative Plan 2	Beneficial		Beneficial
		Alternative Plan 3	Beneficial		Beneficial
		Alternative Plan 4	Beneficial		Beneficial
		Alternative Plan 5	Beneficial		Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
FSH-9: Loss of Spawning Habitat of American Shad and Striped Bass	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-10: Change in Habitat Potential for Spring-Run Chinook Salmon	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	Beneficial	None Required	Beneficial
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
FSH-11: Change in Water Temperature Conditions Supporting Juvenile Salmon and Steelhead Migration	Primary Study Area	Alternative Plan 5	PS	None Available	PSU
		No Action Alternative	NI		NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
	Extended Study Area	Alternative Plan 5	NI	None Required	NI
		No Action Alternative	LTS		LTS
		Alternative Plan 1	S	None Available	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-12: Change to Habitat for Moderately Tolerant Native Fish Species from Altered Water Temperatures	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial	None Required	LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
FSH-13: Changes to Habitat for Highly Tolerant Native Fish Species from Altered Water Temperatures	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial	None Required	LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-14: Changes to Spawning and Rearing Habitat from Changes to Flood Pulses and Floodplain Connectivity	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS and Beneficial	None Required	PSU and Beneficial
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
FSH-15: Change in Fish Habitat and Migratory Behaviors from Changes in Water Temperatures	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-16: Change in Fish Habitat and Migratory Behaviors from Changes in Flows	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS and Beneficial	None Required	LTS and Beneficial
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
FSH-17: Loss of Fish Habitat from Changes in Tributary Flows	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-18: Effects on Delta Fish Habitat from Changes in Water Temperatures and Dissolved Oxygen Concentrations	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS	None Available	PSU
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
FSH-19: Loss of Suitable Fish Habitat from Salinity Changes in the Delta	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-20: Loss of Suitable Fish Habitat from Change in Flow Patterns in the South Delta	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
FSH-21: Reduction in Fish Abundance from Changes in Exports and Entrainment in the South Delta	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS	None Required	PSU
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FSH-22: Loss of Suitable Fish Habitat Resulting from Changes in X2	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS	None Required	PSU
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
BOT-1: Loss of Special-Status Plants and Loss or Degradation of Special-Status Plant Habitat	Primary Study Area	No Action Alternative	NI	None Required BOT-1: Relocate Special-Status Plant Populations	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
BOT-2: Loss of Riparian Habitat and Other Sensitive Communities	Primary Study Area	No Action Alternative	NI	None Required BOT-2: Compensate for Loss of Specific Habitats	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
BOT-3: Loss or Degradation of Waters of the United States, Including Wetlands, and Waters of the State	Primary Study Area	No Action Alternative	NI	None Required BOT-3: Ensure No Net Loss of Wetlands	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
BOT-4: Introduction and Spread of Invasive Plants	Primary Study Area	No Action Alternative	NI	None Required BOT-4: Implement a Weed Management Plan	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
	Extended Study Area	Alternative Plan 5	PS	None Required	LTS
		No Action Alternative	LTS		LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
BOT-5: Elimination of a Plant Community or Substantial Reduction in the Number or Restriction of the Range of an Endangered, Rare, or Threatened Plant Species	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
BOT-6: Conflict with Local or Regional Policies and Plans Protecting Wetland or Botanical Resources	Primary Study Area	No Action Alternative	NI	None Required BOT-6: Implement Mitigation Measures BOT-1, BOT-2, and BOT-3	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
BOT-7: Conflict with Provisions of an Adopted Habitat Conservation Plan Protecting Wetland or Botanical Resources	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 4	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-1: Substantial Impact on Special-Status Invertebrates	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	WLD-1a: Mitigate Impacts on VELB, WLD-1b: Mitigate Impacts on Pipevine Swallowtail, WLD-1c: Mitigate Impacts on Listed Vernal Pool Branchiopods	LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
WLD-2: Substantial Impact on Special-Status Amphibians and Reptiles	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	WLD-2a: Mitigate Impacts on California Tiger Salamander and Western Spadefoot, WLD-2b: Mitigate Impacts on Foothill Yellow-Legged Frog and California Red-Legged Frog, WLD-2c: Mitigate Impacts on Western Pond Turtle, WLD-2d: Mitigate Impacts on Coast Horned Lizard	LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
	Extended Study Area	Alternative Plan 5	S		LTS
		No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-3: Substantial Impact on Special-Status Raptors	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	WLD-3a: Mitigate Impacts on Bald Eagle and Golden Eagle, WLD-3b: Mitigate Impacts on California Spotted Owl, WLD-3c: Mitigate Impacts on Burrowing Owl WLD-3d: Mitigate Impacts on American Peregrine Falcon and Prairie Falcon, WLD-3e: Mitigate Impacts on Cooper's Hawk and Sharp-Shinned Hawk, WLD-3f: Mitigate Impacts on Osprey, WLD-3g: Mitigate Impacts on Northern Harrier	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
WLD-4: Substantial Impact on Special-Status Passerines or Birds Protected by the Migratory Bird Treaty Act	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	WLD-4a: Mitigate Impacts on Yellow Warbler, WLD-4b: Mitigate Impacts on Grasshopper Sparrow and California Horned Lark, WLD-4c: Mitigate Impacts on Loggerhead Shrike, WLD-4d: Mitigate Impacts on Bird Species Protected by the Migratory Bird Treaty Act	LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-5: Substantial Impact on Ringtail	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	WLD-5: Mitigate Impacts on Ringtail	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
WLD-6: Substantial Impact on American Badger	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
	Extended Study Area	No Action Alternative	NI	WLD-6: Mitigate Impacts on American Badger	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-7: Substantial Impact on San Joaquin Pocket Mouse	Primary Study Area	No Action Alternative	NI	None Required WLD-7: Mitigate Impacts on San Joaquin Pocket Mouse	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
WLD-8: Substantial Impact on Special-Status Bat Species	Primary Study Area	No Action Alternative	NI	None Required WLD-8: Mitigate Impacts on Special-Status Bat Species	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-9: Substantial Impact on Migratory and Wintering Deer Herds	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
WLD-10: Potential Conflict with Fresno County and Madera County General Plan Objectives and Guidelines	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-11: Potential Reduction in Habitat or Populations of Special-Status Invertebrates	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
WLD-12: Potential Reduction in Habitat or Populations of Special-Status Amphibians and Reptiles	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-13: Potential Reduction in Habitat or Populations of Special-Status Bird Species	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
WLD-14: Potential Reduction in Habitat or Populations of Special-Status Mammal Species	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-15: Potential Interference with Migratory Corridors or Nursery Sites	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
WLD-16: Potential Impact on Riparian Habitat for Special-Status Bird Species	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required WLD-16: Monitor and Manage Riparian Vegetation Structure Within Extended Study Area	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
WLD-17: Conflict with Local or Regional Policies Protecting Wildlife Resources	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
WLD-18: Potential Conflict with Adopted Conservation Plans	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
CUL-1: Disturbance or Destruction of Known or Previously Undiscovered Prehistoric Resources Due to Construction, Inundation, and Project Operation	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	S	CUL-1: Precautions for Limiting Post-Construction Vandalism to Cultural Resources	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
CUL-2: Disturbance or Destruction of Known or Previously Undiscovered Historic-Era Resources Due to Construction, Inundation, and Project Operation	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	S	CUL 2: Implement Mitigation Measure CUL-1, Precautions for Limiting Post-Construction Vandalism to Cultural Resources	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
CUL-3: Construction and Management of Project Components That would Cause a Substantial Adverse Change in the Significance of a Historical and/or Unique Archaeological Resource, Historic Property, or Historic District	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	S	CUL 3: Implement Mitigation Measure CUL-1, Precautions for Limiting Post-Construction Vandalism to Cultural Resources	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
CUL-4 Destruction or Damage to Traditional Cultural Properties	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	CUL 4: Implement Mitigation Measure CUL-1, Precautions for Limiting Post-Construction Vandalism to Cultural Resources	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
CUL-5 Destruction or Damage to Indian Sacred Sites	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	CUL 5: Implement Mitigation Measure CUL-1, Precautions for Limiting Post-Construction Vandalism to Cultural Resources	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
ENJ-1: Disproportionately High and Adverse Impacts on Minority and Low Income Populations	Primary Study Area	No Action Alternative	NDHA	None Required	NDHA
		Alternative Plan 1	DHA	ENJ-1: Implement Mitigation Measure CUL-1, Precautions for Limiting Post-Construction Vandalism to Cultural Resources	DHA
		Alternative Plan 2	DHA		DHA
		Alternative Plan 3	DHA		DHA
		Alternative Plan 4	DHA		DHA
		Alternative Plan 5	DHA		DHA
	Extended Study Area	No Action Alternative	NDHA	None Required	NDHA
		Alternative Plan 1	NDHA		NDHA
		Alternative Plan 2	NDHA		NDHA
		Alternative Plan 3	NDHA		NDHA
		Alternative Plan 4	NDHA		NDHA
		Alternative Plan 5	NDHA		NDHA

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
GEO-1: Exposure of Structures and People to Geologic Hazards Resulting from Seismic Conditions and Slope Instability	Primary Study Area	No Action Alternative	NI	None Required GEO-1: Develop and Implement a Seismic Action Plan	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
GEO-2: Alteration of Fluvial Geomorphology that would Adversely Affect Aquatic Habitat	Primary Study Area	No Action Alternative	NI	None Required None Available	NI
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
GEO-3: Loss or Diminished Availability of Known Mineral Resources that Would Be of Future Value to the Region or the State	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
GEO-4: Substantial Soil Erosion or Loss of Topsoil Due to Construction and Operations	Primary Study Area	No Action Alternative	NI	None Available	NI
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
GEO-5: Failure of Septic Tanks or Alternative Wastewater Disposal Systems Due to Soils that Are Unsuited to Land Application of Waste	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
FLD-1: Exposure of 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	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
FLD-2: Substantially Alter the Existing Drainage Pattern of the Site or Area, Including through the Alteration of the Course of a Stream or River, or Substantially Increase the Rate or Amount of Surface Runoff in a Manner which would Result in Onsite or Offsite Flooding	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
FLD-3: Place Within a 100-Year Flood Hazard Area Structures which would Impede or Redirect Flood Flows	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
GRW-1: Change in Groundwater Levels	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS	None Required	PSU
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
GRW-2: Change in Groundwater Quality	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS	None Required	PSU
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
SWS-1: Changes in Ability to Divert Water from Friant Dam	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
SWS-2: Changes in Ability to Divert Water from San Joaquin River	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
SWS-3: Change in Water Levels in the Old River near the Tracy Road Bridge	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
SWS-4: Change in Water Levels in the Grant Line Canal Above the Grant Line Canal Barrier	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
SWS-5: Change in Water Levels in the Middle River near the Howard Road Bridge	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Impact SWQ-1: Temporary Construction-Related Sediment Effects that would Violate Water Quality Standards or Adversely Affect Beneficial Uses	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
Impact SWQ-2: Temporary Construction-Related Water Temperature Effects that would Violate Water Quality Standards or Adversely Affect Beneficial Uses	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Impact SWQ-3: Temporary Construction-Related Water Quality Effects that would Violate Water Quality Standards or Adversely Affect Beneficial Uses	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
Impact SWQ-4: Long-Term Water Quality Effects that would Violate Water Quality Standards or Adversely Affect Beneficial Uses within the Primary Study Area and San Joaquin River	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	San Joaquin River from Friant Dam to the Merced River Confluence	No Action Alternative	LTS and Beneficial	SWQ-4: Prepare and Implement a Site-Specific Remediation Plan for Historic Mine Features Subject to Inundation	LTS and Beneficial
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	San Joaquin River from the Merced River Confluence to the Delta	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Impact SWQ-5: Long-Term Water Temperature Effects that would Violate Water Quality Standards or Adversely Affect Beneficial Uses	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
Impact SWQ-6: Long-Term Effects on Delta Salinity that would Violate D-1641 Salinity Objectives	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Impact SWQ-7: Long-Term Effects on Delta Salinity that would Violate the X2 Standard	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS		LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
Impact SWQ-8: Long-Term Effects on Water Quality that would Violate Existing Water Quality Standards or Adversely Affect Beneficial Uses in the CVP/SWP Water Service Areas	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS		LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
ITA-1: Interfere with the Exercise of a Federally Reserved Water Right, or Degrade Water Quality Where There is a Federally Reserved Water Right	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
ITA-2: Interfere with the Use, Value, Occupancy, Character or Enjoyment of an ITA	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
ITA-3: Failure to Protect ITAs from Loss, Damage, Waste, Depletion, or Other Negative Effects	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
LUP-1: Disruption of Existing Land Uses	Primary Study Area	No Action Alternative	NI	None Required LUP-1: Implement Mitigation Measure TRN-2, Implement a Traffic Management Plan	NI
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
LUP-2: Conflict with Adopted Plans	Primary Study Area	No Action Alternative	NI	None Required LUP-2: Conduct Conflict Resolution with Land Managers	NI
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
LUP-3: Conversion of Farmland to Nonagricultural Uses and Cancellation of Williamson Act Contracts	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
LUP-4: Conversion of Forest Land	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		PSU
		Alternative Plan 2	PS		PSU
		Alternative Plan 3	PS		PSU
		Alternative Plan 4	PS		PSU
		Alternative Plan 5	PS		PSU
	Extended Study Area	No Action Alternative	NI	None Available	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
NOI-1: Exposure of Sensitive Receptors to Noise Generated by Facility Construction	Primary Study Area	No Action Alternative	NI	None Required NOI-1: Implement Measures to Prevent Exposure of Sensitive Receptors to Temporary Construction Noise at Project Construction Sites	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
NOI-2: Construction-Generated Ground Vibration	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
NOI-3: Exposure of Sensitive Receptors in the Primary Study Area to Construction-Related Traffic Noise	Primary Study Area	No Action Alternative	NI	None Required NOI-3: Install Sound Barriers along County Road 211 and County Road 210, and Restrict Truck Hauling on Public Roads to the Less-Sensitive Daytime Hours	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
NOI-4: Long-Term Operational Stationary- and Area-Source Noise	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
NOI-5: Long-Term Increases in Traffic Noise	Primary Study Area	No Action Alternative	NI	None Required NOI-5: Implement Measures to Reduce Exposure to Operational Traffic Noise along Wellbarn Road and Smalley Road	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
PAL-1: Potential for Damage to or Destruction of Unique Paleontological Resources	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	PAL-1: Implement a Recovery Plan	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI	None Required	NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
PWR-1: Decrease in Kerckhoff Hydroelectric Project Energy Generation and Ancillary Services	Primary Study Area	No Action Alternative	PS	None Available	PSU
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
PWR-2: Change in Energy Generation at Friant Dam Powerhouses	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	Beneficial		Beneficial
		Alternative Plan 2	Beneficial		Beneficial
		Alternative Plan 3	Beneficial		Beneficial
		Alternative Plan 4	Beneficial		Beneficial
		Alternative Plan 5	Beneficial		Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
PWR-3: Change in Energy Generation and Use Within the Friant Division of the CVP Water Service Area	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	PS	None Required	PSU
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
PWR-4: Decrease in CVP System Energy Generation	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
PWR-5: Decrease in SWP System Energy Generation	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
PWR-6: Increase in CVP System Pumping Energy Use	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
PWR-7: Increase in SWP System Pumping Energy Use	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
HAZ-1: Potential for Exposure to Hazardous Materials	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
HAZ-2: Potential Emission of Hazardous Materials within 0.25 Mile of a School	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
HAZ-3: Increase Hazards from a Known Hazardous Materials Contamination Site	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
HAZ-4: Interfere with Evacuation Routes and Emergency Vehicle Access	Primary Study Area	No Action Alternative	LTS	None Required HAZ-4: Implement Mitigation Measure TRN-2, Implement a Traffic Management Plan	LTS
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
HAZ-5: Locate Electrical Transmission Facilities Near a School	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
HAZ-6: Increase Hazards of Wildland Fires	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
HAZ-7: Increase Hazards of West Nile Virus	Primary Study Area	No Action Alternative	LTS	None Required HAZ-7: Reduce Hazards of West Nile Virus	LTS
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
HAZ-8: Increase Hazards of Valley Fever	Primary Study Area	No Action Alternative	NI	None Required HAZ-8: Reduce Hazards of Valley Fever	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
HAZ-9: Increase Exposure to Damage from Acts of Terrorism	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
HAZ-10: Increase Exposure to Hazards Associated with Abandoned Mine Sites	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
HAZ-11: Increase Potential for Blast-Related Injury during Construction	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
REC-1: Permanent Loss or Closure of a Recreation Facility	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	REC-1a: Allow On- Boat Camping, REC-1b: Create New Shoreline Access Site	LTS
		Alternative Plan 2	S		LTS
		Alternative Plan 3	S		LTS
		Alternative Plan 4	S		LTS
		Alternative Plan 5	S		LTS
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
REC-2: Permanent Loss of a Resource Used for Recreation	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	REC-2: Preserve Fine Gold Creek Watershed Cave System	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
REC-3: Substantial or Long-Term Reduction or Elimination of Recreation Opportunities or Experiences	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	S	REC-3a: Limit Construction Activities near Recreation Areas, REC-3b: Instream Whitewater Boating Improvements, REC-3c: Extend the San Joaquin River Trail through the SJRG SRMA	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
REC-4: Loss of Access to a Locally Important Recreation Site or Area	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S	REC-4: Maintain Public Access	SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
REC-5: Increased Use of Existing Neighborhood and Regional Parks or Other Recreation Facilities such that Substantial Physical Deterioration of the Facilities Would Occur or Be Accelerated	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
REC-6: Impacts Associated with New or Expanded Recreation Facilities	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	Beneficial		Beneficial
		Alternative Plan 2	Beneficial		Beneficial
		Alternative Plan 3	Beneficial		Beneficial
		Alternative Plan 4	Beneficial		Beneficial
		Alternative Plan 5	Beneficial		Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation	Level of Significance After Mitigation
SOC-1: Temporary Increases in Employment and Personal Income Resulting from Construction	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
SOC-2: Temporary Increases in Population and Housing Demand Resulting from Construction	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation	Level of Significance After Mitigation
SOC-3: Temporary Increases in Business Income and Local Sales Tax Revenue Resulting from Construction	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
SOC-4: Increases in Employment and Personal Income Resulting from Operations and Maintenance	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation	Level of Significance After Mitigation
SOC-5: Increases in Spending, Employment, and Personal Income from Increased Recreational Visitation	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
SOC-6: Increases in Population and Housing Demand Resulting from Operations and Maintenance	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation	Level of Significance After Mitigation
SOC-7: Increases in Business Income and Local Sales Tax Revenue Associated with O&M and Recreation Visitation	Primary Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
SOC-8: Decreases in Property Tax Revenue from Acquisition of Privately Owned Land	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation	Level of Significance After Mitigation
SOC-9: Impacts on Agricultural Economics in the CVP and SWP Water Service Areas	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	S	None Required	SU
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
SOC-10: Increases in Population and Housing Demand Within the CVP and SWP Water Service Areas	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	LTS	None Required	LTS
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation	Level of Significance After Mitigation
SOC-11: Increases in Business Income and Local Sales Tax Revenue Within the CVP and SWP Water Service Areas	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	S	None Required	SU
		Alternative Plan 1	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 2	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 3	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 4	LTS and Beneficial		LTS and Beneficial
		Alternative Plan 5	LTS and Beneficial		LTS and Beneficial

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
TRN-1: Reduce Level of Service For Designated Roads	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
TRN-2: Increase Traffic Hazards on Local Roads	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
TRN-3: Interfere With Emergency Access	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance after Mitigation
TRN-4: Decrease Performance of Bicycle Or Pedestrian Facilities	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	PS	TRN-4: Implement Mitigation Measure TRN-2, Implement a Traffic Management Plan	LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTL-1: Result in Exceeding Wastewater Treatment Requirements or Requiring New or Expanded Wastewater Treatment Facilities	Primary Study Area	No Action Alternative	NI	None Required UTL-1: Prepare and Implement a Wastewater Management Plan	NI
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
UTL-2: Result in Exceeding Stormwater Drainage Infrastructure Capacity or Requiring New or Expanded Stormwater Drainage Facilities	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
UTL-3: Increase in Solid Waste Generation That Exceeds Permitted Landfill Capacity	Primary Study Area	No Action Alternative	LTS	None Required UTL-3: Prepare and Implement a Solid Waste Management Plan	LTS
		Alternative Plan 1	PS		LTS
		Alternative Plan 2	PS		LTS
		Alternative Plan 3	PS		LTS
		Alternative Plan 4	PS		LTS
		Alternative Plan 5	PS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
UTL-4: Damage to or Disruption of Utility or Service Systems	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	LTS		LTS
		Alternative Plan 2	LTS		LTS
		Alternative Plan 3	LTS		LTS
		Alternative Plan 4	LTS		LTS
		Alternative Plan 5	LTS		LTS
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
VIS-1: Consistency With Applicable Plans	Primary Study Area	No Action Alternative	NI	None Required None Available	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
VIS-2: Degradation and/or Obstruction of a Scenic View	Primary Study Area	No Action Alternative	NI	None Required VIS-2: Minimize Construction-Related Visual Impact on Scenic Views from KOPs	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Table ES-3. Summary of Impacts and Mitigation Measures (contd.)

Impact	Study Area	Alternative	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
VIS-3: Generation of Increased Daytime Glare and/or Nighttime Lighting	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	S		SU
		Alternative Plan 2	S		SU
		Alternative Plan 3	S		SU
		Alternative Plan 4	S		SU
		Alternative Plan 5	S		SU
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
VIS-4: Impacts on a Designated Scenic Highway	Primary Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI
	Extended Study Area	No Action Alternative	NI	None Required	NI
		Alternative Plan 1	NI		NI
		Alternative Plan 2	NI		NI
		Alternative Plan 3	NI		NI
		Alternative Plan 4	NI		NI
		Alternative Plan 5	NI		NI

Key:

- = Not Applicable

B = beneficial

LTS = less than significant

NDHA = not disproportionately high and adverse

NI = no impact

O&M = operation and maintenance

DHA = disproportionately high and adverse

PS = potentially significant

PSU = potentially significant and unavoidable

S = significant

SU = significant and unavoidable

TBD = to be determined