**Table ES-2. Summary of Impacts and Mitigation Measures** 

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Surface Wate	er Resources			
Impact HYDF	RO-1: Reduce v	water supply for non-Site	s Storage Partner water users	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact HYDF	RO-2: Substant	ial increase in the rate or	ramount of surface runoff in a manner which would result in flooding on site or	off site
Ctti	No Project	NI/NE	-	-
Construction	1, 2, 3	LTS/NE	-	-
O .:	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/B	-	-
Impact HYDF	RO-3: Impede	or redirect flood flows		
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Surface Wate	er Quality			
Impact WQ-1 during constr	•	vater quality standards o	r waste discharge requirements or otherwise substantially degrade surface wate	r quality
Canatur, ati	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Mitigation Measure WQ-1.1: Methylmercury Management	SU/SA
Impact WQ-2	•	vater quality standards o	r waste discharge requirements or otherwise substantially degrade surface wate	r quality
Operation	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	S/SA	Mitigation Measure WQ-1.1: Methylmercury Management Mitigation Measure WQ-2.1: Prevent Metal Impacts in Stone Corral Creek Associated with Sites Reservoir Discharge Mitigation Measure WQ-2.2: Prevent Net Detrimental Metal and Pesticide Effects Associated with Moving Colusa Basin Drain Water Through the Yolo Bypass	SU/SA
Impact WQ-3 during mainte	=	• •	r waste discharge requirements or otherwise substantially degrade surface wate	r quality
On anatia :-	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact WQ-4	: Be placed in	a flood hazard or seiche	zone, risking release of pollutants due to Project inundation	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact WQ-5	: Conflict with	or obstruct implementat	tion of a water quality control plan	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
<u>-</u>		ntribute runoff water whi al sources of polluted rur	ch would exceed the capacity of existing or planned stormwater drainage systemoff	ms or
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Fluvial Geom	orphology			
<u>-</u>	gh the addition		ge pattern of the site or area, including through the alteration of the course of a in a manner which would result in a substantial increase or decrease in on- or o	
	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Construction and Operation	1, 2, 3	LTS/NE	-	-
-	-		orphic processes (i.e., flow regime, sediment transport, and bank erosion) and exadient, substrate composition, channel width and depth, and riparian vegetation	_
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
		alter the amount of instr vnstream of Sites Reserve	ream woody material, boulders, shaded riverine aquatic habitat, or spawning gra oir	avel in Funks
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact FLV-4	<b>!</b> : Substantially	alter geomorphic proces	sses upstream of the dam sites	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Groundwate	r Resources			
Impact GW-1 quality	: Violation of v	water quality standards o	r waste discharge requirements or otherwise substantial degradation of ground	water
Ctti	No Project	NI/NE	-	-
Construction	1, 2, 3	LTS/NE	-	-
Operation	No Project	NI/NE	-	-
Орегиноп	1, 2, 3	LTS/B	-	-
<del>-</del>		ecrease in groundwater sanagement of the basin	supplies or substantial interference with groundwater recharge that would impe	ede
Construction	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	LTS/NE	-	-
0	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/B	-	-
Impact GW-3	: Conflict with	or obstruct implementat	ion of a sustainable groundwater management plan	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Vegetation a	nd Wetland R	esources		
Wildlife or U.S	S. Fish and Wild No Project	dlife Service NI/NE	-	-
Construction	1, 2, 3	S/SA	Mitigation Measure VEG-1.1: Conduct Appropriately Timed Surveys for Special-Status Plant Species Prior to Construction Activities  Mitigation Measure VEG-1.2: Establish Activity Exclusion Zones Around Special-Status Plants in Temporary Impact Areas and Compensate for Permanent Impacts on Special-Status Plant Species	LTSM/NE
	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Mitigation Measure VEG-1.3: Establish Activity Exclusion Zones Around Special-Status Plants Prior to Vegetation Maintenance Activities	LTSM/NE
_			removal) on any riparian habitat or other sensitive natural community identification if removal) repartment of Fish and Wildlife or U.S. Fish and Wildlife Service	ed in local or
Construction	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	S/SA	Mitigation Measure VEG-2.1: Conduct Surveys for Sensitive Natural Communities and Oak Woodlands in the Project Area Prior to Construction Activities Mitigation Measure VEG-2.2: Avoid and Compensate for Adverse Effects on Sensitive Natural Communities	SU/SA
	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	<b>Mitigation Measure VEG-2.3</b> : Establish Activity Exclusion Zones Around Sensitive Natural Communities Prior to Vegetation Maintenance Activities	LTSM/NE
			r removal) on state or federally protected wetlands (including, but not limited to ng, hydrological interruption, or other means	o, marsh,
	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Mitigation Measure VEG-3.1: Avoid and Minimize Disturbance of Wetlands and Non-Wetland Waters During Construction Activities  Mitigation Measure VEG-3.2: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Wetlands  Mitigation Measure VEG-3.3: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Non-Wetland Waters	LTSM/NE
	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Mitigation Measure VEG-3.4: Establish Activity Exclusion Zones Around Wetlands and Non-Wetland Waters Prior to Vegetation Maintenance Activities	LTSM/NE
•	<b>4</b> : Conflict with ervation policy	•	inances protecting vegetation resources (including wetlands and non-wetland v	waters), such
	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Mitigation Measure VEG-1.2: Establish Activity Exclusion Zones Around Special-Status Plants in Temporary Impact Areas and Compensate for Permanent Impacts on Special-Status Plant Species	SU/SA

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
			Mitigation Measure VEG-2.1: Conduct Surveys for Sensitive Natural Communities and Oak Woodlands in the Project Area Prior to Construction Activities	
			<b>Mitigation Measure VEG-2.2</b> : Avoid and Compensate for Adverse Effects on Sensitive Natural Communities	
			<b>Mitigation Measure VEG-3.1</b> : Avoid and Minimize Disturbance of Wetlands and Non-Wetland Waters During Construction Activities	
			Mitigation Measure VEG-3.2: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Wetlands	
			Mitigation Measure VEG-3.3: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Non-Wetland Waters	
			<b>Mitigation Measure VEG-4.1</b> : Avoid and Minimize Potential Adverse Effects on Oak Woodlands During Construction	
			<b>Mitigation Measure VEG-4.2</b> : Compensate for Adverse Effects on Oak Woodlands	
	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Mitigation Measure VEG-4.3: Establish Activity Exclusion Zones Around Blue Oak Woodlands Prior to Vegetation Maintenance Activities	LTSM/NE
•		the provisions of an add at conservation plan	opted Habitat Conservation Plan, Natural Community Conservation Plan, or othe	er approved
	No Project	NI/NE	-	-
Construction			Mitigation Measure VEG-2.1: Conduct Surveys for Sensitive Natural Communities and Oak Woodlands in the Project Area Prior to Construction Activities	
	1, 2, 3	S/SA	Mitigation Measure VEG-2.2: Avoid and Compensate for Adverse Effects on Sensitive Natural Communities	LTSM/NE
			Mitigation Measure VEG-3.1: Avoid and Minimize Disturbance of Wetlands and Non-Wetland Waters During Construction Activities	

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
			Mitigation Measure VEG-3.2: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Wetlands	
			Mitigation Measure VEG-3.3: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Non-Wetland Waters	
			<b>Mitigation Measure VEG-4.1</b> : Avoid and Minimize Potential Adverse Effects on Oak Woodlands During Construction	
			<b>Mitigation Measure VEG-4.2</b> : Compensate for Adverse Effects on Oak Woodlands	
Operation	No Project	NI/NE	-	-
Орегипоп	1, 2, 3	NI/NE	-	-
Impact VEG-	<b>6</b> : Introduction	or increased spread of in	nvasive plant species	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Wildlife Reso	ources			
a candidate, s		ecial-status species in loc	or removal), either directly or through habitat modifications, on wildlife species al or regional plans, policies, or regulations, or by the California Department of	
	No Project	NI/NE	-	-
Construction	1, 3	S/SA	Mitigation Measure WILD-1.1: Assess Habitat Suitability and Survey Suitable Habitat for Vernal Pool Branchiopods  Mitigation Measure WILD-1.2: Avoid and Minimize Potential Effects on Vernal Pool Branchiopods and Western Spadefoot  Mitigation Measure WILD-1.3: Compensate for Impacts on Occupied Vernal Pool Branchiopod Habitat  Mitigation Measure WILD-1.6: Conduct Surveys for Suitable Valley Elderberry Longhorn Beetle Habitat  Mitigation Measure WILD-1.7: Fence Elderberry Shrubs to be Protected	SU/SA (golden eagle) LTSM/NE (other species)

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
			Mitigation Measure WILD-1.8: Transplant Permanently Affected Elderberry	
			Shrubs and Compensate for Loss of Valley Elderberry Longhorn Beetle and its Habitat	
			Mitigation Measure WILD-1.10: Assess Habitat Suitability and Survey for Presence of Monarch Butterfly Nectar and Larval Host Plants	
			Mitigation Measure WILD-1.11: Compensate for Loss of Monarch Butterfly Nectar and Larval Host Plants	
			Mitigation Measure WILD-1.12: Assess Habitat Suitability and Survey for Presence of Crotch Bumble Bee and Western Bumble Bee Food Plants	
			<b>Mitigation Measure WILD-1.13</b> : Compensate for Loss of Crotch Bumble Bee and Western Bumble Bee Habitat	
			<b>Mitigation Measure WILD-1.14</b> : Assess Habitat Suitability and Survey Suitable Habitat for Western Spadefoot, California Red-legged Frog, and Western Pond Turtle	
			Mitigation Measure VEG-2.2: Avoid and Compensate for Adverse Effects on Sensitive Natural Communities	
			Mitigation Measure VEG-3.2: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Wetlands	
			Mitigation Measure WILD-1.17: Implement California Red-legged Frog Protective Measures	
			Mitigation Measure WILD-1.18: Compensate for Permanent and Temporary Losses of Occupied California Red-legged Frog Aquatic and Upland Habitats	
			Mitigation Measure WILD-1.19: Conduct Preconstruction Surveys for Western Pond Turtle and Monitor Initial In-Water Work	
			Mitigation Measure VEG-3.1: Avoid and Minimize Disturbance of Wetlands and Non-Wetland Waters During Construction Activities	
			Mitigation Measure VEG-3.3: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Non-Wetland Waters	

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
			Mitigation Measure WILD-1.20: Implement Protective Measures for Giant Gartersnake	
			<b>Mitigation Measure WILD-1.21</b> : Compensate for Permanent and Temporary Losses of Giant Gartersnake Aquatic and Upland Habitats	
			Mitigation Measure WILD-1.22: Conduct Vegetation Removal During the Non-Breeding Season of Nesting Migratory Birds	
			Mitigation Measure WILD-1.23: Conduct Preconstruction Surveys for Non-Raptor Nesting Migratory Birds and Implement Protective Measures if Found Mitigation Measure WILD-1.24: Conduct Surveys for Western Burrowing	
			Owl Prior to Construction and Implement Avoidance and Minimization  Measures if Found	
			Mitigation Measure WILD-1.25: Restore Temporarily Disturbed Habitat and Compensate for the Permanent Loss of Occupied Burrowing Owl Habitat	
			Mitigation Measure WILD-1.28: Conduct Focused Surveys for Golden Eagle and Bald Eagle and Implement Protective Measures if Found	
			<b>Mitigation Measure WILD-1.29</b> : Compensate for the Loss of Eagle Nest Trees	
			<b>Mitigation Measure VEG-4.1</b> : Avoid and Minimize Potential Adverse Effects on Oak Woodlands During Construction	
			<b>Mitigation Measure VEG-4.2</b> : Compensate for Adverse Effects on Oak Woodlands	
			Mitigation Measure WILD-1.30: Conduct Focused Surveys for Nesting Swainson's Hawk, White-tailed Kite, and Other Raptors Prior to Construction and Implement Protective Measures During Construction	
			Mitigation Measure WILD-1.31: Compensate for the Permanent Loss of Foraging Habitat for Swainson's Hawk	
			Mitigation Measure AG-1.1: Purchase Agricultural Conservation Easements to Preserve Regional Important Farmland	

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
			Mitigation Measure WILD-1.32: Conduct Surveys and Implement Protection Measures for Special-Status Bat Species Prior to Building/Structure Demolition	
			Mitigation Measure WILD-1.33: Conduct Surveys and Implement Protection Measures for Special-Status Bat Species Prior to Tree Trimming and Removal	
			Mitigation Measure WILD-1.34: Compensate for Permanent Impacts on Occupied Roosting Habitat	
			<b>Mitigation Measure WILD-1.35</b> : Implement Protective Measures to Avoid and Minimize Potential Impacts on American Badger	
	2	S/SA	Same as Alternative 1, plus:  Mitigation Measure WILD-1.4: Evaluate and Survey Potential Habitat for Antioch Dunes Anthicid and Sacramento Anthicid Beetles and Implement Protective Measures	SU/SA (golden eagle), LTSM/NE
			Mitigation Measure WILD-1.5: Compensate for the Loss of Occupied Antioch Dunes Anthicid and Sacramento Anthicid Beetle Habitat	(other species)
	No Project	NI/NE	-	-
			Mitigation Measure WILD-1.9: Protect Special-Status Invertebrates and Their Host and Food Plants from Herbicide and Pesticide Use  Mitigation Measure WILD-1.15: Design and Construct Wildlife Crossings	
Operation	1, 2, 3	S/SA	for New Roadways at Suitable Locations  Mitigation Measure WILD-1.16: Monitor and Maintain Wildlife Crossings  Mitigation Measure WILD-1.26: Protect Special-Status Wildlife from Rodenticide Use  Mitigation Measure WILD-1.27: Construct Overhead Power Lines and Associated Equipment Following Suggested Practices to Reduce Bird Collisions with Power Lines  Mitigation Measure WQ-1.1: Methylmercury Management	LTSM/NE

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
-			ovement of a native resident or migratory wildlife species or with established na use of native wildlife nursery sites	ative resident
Construction	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Same as for Impact WILD-1	SU/SA
0	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Same as for Impact WILD-1	SU/SA
Impact WILD	<b>-3</b> : Conflict wit	th any local policies or or	dinances protecting wildlife resources	
Comptumention	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Same as for Impacts WILD-1 and WILD-2	LTSM/NE
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Same as for Impacts WILD-1 and WILD-2	LTSM/NE
•		th the provisions of an ac state habitat conservatio	dopted Habitat Conservation Plan, Natural Community Conservation Plan, or ot n plan	her
Construction	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Same as for Impact WILD-1	LTSM/NE
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Same as for Impact WILD-1	LTSM/NE
<b>Aquatic Biolo</b>	ogical Resourc	es		
Impact FISH-	1: Constructio	n effects on special-statu	s fish	
Construction	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	S/SA	Mitigation Measure VEG-2.1: Conduct Surveys for Sensitive Natural Communities and Oak Woodlands in the Project Area Prior to Construction Activities Mitigation Measure VEG-2.2: Avoid and Compensate for Adverse Effects on Sensitive Natural Communities Mitigation Measure VEG-3.2: Compensate for Temporary and Permanent	LTSM/NE
			Impacts on State- or Federally Protected Wetlands  Mitigation Measure VEG-3.3: Compensate for Temporary and Permanent Impacts on State- or Federally Protected Non-Wetland Waters	
Impact FISH	-2: Operations	effects on winter-run Chi	nook salmon	
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-3: Operations	effects on spring-run Chi	nook salmon	
Operation	No Project	NI/NE	-	-
Орегипон	1, 2, 3	LTS/NE	-	-
Impact FISH	<b>-4</b> : Operations	effects on fall-run/late fa	II–run Chinook salmon	
Operation	No Project	NI/NE	-	-
Орегипон	1, 2, 3	LTS/NE	-	-
Impact FISH	<b>-5</b> : Operations	effects on Central Valley	steelhead	1
Operation	No Project	NI/NE	-	-
Орегипон	1, 2, 3	LTS/NE	-	-
Impact FISH	<b>-6</b> : Operations	effects on green sturgeo	n	
Operation	No Project	NI/NE	-	-
Эрегипон	1, 2, 3	LTS/NE	-	-
Impact FISH	<b>-7</b> : Operations	effects on white sturgeor	ו	
Operation	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	LTS/NE	-	-
Impact FISH	<b>-8</b> : Operations	effects on delta smelt		
	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Mitigation Measure FISH-8.1: Prevent Detrimental Dissolved Oxygen and Water Temperature Effects on Fish Associated with Moving Colusa Basin Drain Water Through the Yolo Bypass Mitigation Measure WQ-2.2: Prevent Net Detrimental Metal and Pesticide Effects Associated with Moving Colusa Basin Drain Water Through the Yolo Bypass	LTSM/NE
Impact FISH	<b>-9</b> : Operations	effects on longfin smelt		
Onovetion	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Mitigation Measure FISH-9.1: Tidal Habitat Restoration for Longfin Smelt	LTSM/NE
Impact FISH	-10: Operations	s effects on lampreys		
<u> </u>	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-11: Operations	s effects on native minno	ws (Sacramento splittail, Sacramento hitch, hardhead, and Central California ro	ach)
0	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-12: Operations	s effects on starry flound	er and northern anchovy	
0	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-13: Operations	effects on striped bass		
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-14: Operations	s effects on American sha	ad	
Operation	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	LTS/NE	-	-
Impact FISH	-15: Operations	effects on threadfin sha	nd	
Onovetion	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-16: Operations	effects on black bass (la	argemouth bass, smallmouth bass, and spotted bass)	
Onovetion	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	-17: Operations	effects on California ba	y shrimp	
0	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	_
Impact FISH	-18: Operations	effects on reservoir fish	species	
<u> </u>	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/B	-	-
Impact FISH	-19: Operations	effects on Southern Res	sident killer whale	
0 "	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact FISH	<b>-20</b> : Maintenan	ce effects on fish and aq	uatic biological resources	
0 "	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Geology and	l Soils			
a known eart	hquake fault, as		I substantial adverse effects, including the risk of loss, injury, or death involving recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologwn fault	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Impact GEO-	<b>1b</b> : Strong seis	smic ground shaking		
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact GEO-	<b>1c</b> : Seismic-rel	ated ground failure, inclu	iding liquefaction	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact GEO-	<b>1d</b> : Landslides			
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact GEO-	<b>2</b> : Result in res	ervoir-triggered seismicit	ty or be subject to a seiche	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact GEO-	3: Result in sub	ostantial soil erosion or th	ne loss of topsoil	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
			hat is unstable, or that would become unstable as a result of the Project, and possidence, liquefaction, or collapse	otentially
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
	<b>5</b> : Be located on to life or prope	• • • • • • • • • • • • • • • • • • •	ned in Table 18-1-B of the Uniform Building Code (1994), creating substantial di	rect or
Construction	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	NI/NE	-	-
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
		capable of adequately suposal of wastewater	upporting the use of septic tanks or alternative wastewater disposal systems wh	ere sewers
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact GEO-	<b>7</b> : Directly or ir	ndirectly destroy a unique	e paleontological resource or site or unique geologic feature	
	No Project	NI/NE	-	-
Construction	1, 3	S/SA	Mitigation Measure GEO-7.1: Retain a Qualified Paleontological Resource Specialist Prior to the Start of Construction  Mitigation Measure GEO-7.2: Consultation with the Paleontological Resource Specialist Prior to and During Project Construction  Mitigation Measure GEO-7.3: Prepare and Implement a Paleontological Resources Monitoring and Mitigation Plan  Mitigation Measure GEO-7.4: Conduct Monitoring During Project Construction and Prepare Monthly Reports  Mitigation Measure GEO-7.5: Ensure Implementation of the Paleontological Resources Monitoring and Mitigation Plan	SU/SA
	2	S/SA	Same as Alternative 1	LTSM/NE
Operation	No Project	NI/NE	-	-
Орегиноп	1, 2, 3	LTS/NE	-	-
Minerals				
Impact MIN-	1: Loss of avail	ability of a known minera	al resource that would be of value to the region and the residents of the state	
	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Construction and Operation	1, 2, 3	NI/NE	-	-
<b>Impact MIN</b> -land use plan	<b>2</b> : Loss of avail	ability of a locally import	ant mineral resource recovery site delineated on a local general plan, specific p	lan, or other
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	NI/NE	-	-
Land Use				
Impact LAND	<b>)-1</b> : Physical di	vision of an established o	community	
	No Project	NI/NE	-	-
Construction	1, 3	LTS/NE	-	-
	2	S/SA	No feasible mitigation measures identified	SU/SA
	No Project	NI/NE	-	-
Operation	1, 3	LTS/NE	-	-
	2	S/SA	-	SU/SA
		environmental impact d vironmental effect	ue to a conflict with a land use plan, policy, or regulation adopted for the purpo	se of
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Agriculture a	nd Forestry R	esources		
-		f Prime Farmland, Unique ia Resources Agency, to I	e Farmland, or Farmland of Statewide Importance, as shown on the maps prepar nonagricultural use.	red pursuant
Construction	No Project	NI	-	-
Construction	1, 2, 3	LTS	-	-
Operation	No Project	NI	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	S	Mitigation Measure AG-1.1: Purchase Agricultural Conservation Easements to Preserve Regional Important Farmland	SU
Impact AG-2	: Conflict with	existing zoning for agric	cultural use or a Williamson Act contract	
	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Mitigation Measure AG-1.1: Purchase Agricultural Conservation Easements to Preserve Regional Important Farmland  Mitigation Measure AG-2.1: Minimize Impacts on Williamson Act— Contracted Lands, Comply with Government Code Sections 51290–51293, and Coordinate with Landowners and Agricultural Operators	SU/SA
	No Project	NI/NE	-	-
Operation	1, 2, 3	S/SA	Mitigation Measure AG-1.1: Purchase Agricultural Conservation Easements to Preserve Regional Important Farmland  Mitigation Measure AG-2.1: Minimize Impacts on Williamson Act— Contracted Lands, Comply with Government Code Sections 51290–51293, and Coordinate with Landowners and Agricultural Operators	SU/SA
-		f Prime Farmland, Farml nagricultural use	and of Statewide Importance, or Unique Farmland, as designated under the fede	ral Farmland
Ctt	No Project	NE	-	_
Construction	1, 2, 3	NE	-	_
	No Project	NE	-	-
Operation	1, 2, 3	SA	Mitigation Measure AG-1.1: Purchase Agricultural Conservation Easements to Preserve Regional Important Farmland	SA
Farmland, Far	mland of State	3	environment, which, due to their location or nature, could result in the conversion cique Farmland, as designated under the FMMP of the California Resources Agent pricultural use	
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Recreation R	esources			
•		e of existing neighborho ation of those facilities	od and regional parks or other recreational facilities that would result in new o	r accelerated
Construction	No Project	NI/NE	-	-
Construction	1, 2, 3	LTS/NE	-	-
0	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE/B	-	-
Energy				
Impact EN-1: construction of	, .	gnificant environmental in	mpact due to wasteful, inefficient, or unnecessary consumption of energy resou	ırces during
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact EN-2:	: Conflict with o	or obstruct a state or loca	al plan for renewable energy or energy efficiency	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	NI/NE	-	-
	: Place a substa lectricity dema		al energy supply or require substantial additional capacity or substantially incre	ase peak and
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Navigation,	<b>Transportatio</b>	n, and Traffic		
Impact TRA- pedestrian fac		a program, plan, ordina	nce, or policy addressing the circulation system, including transit, roadway, bic	ycle, and
	No Project	NI/NE	-	-
	,	l .	1	1

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Construction and Operation	1, 2, 3	LTS/NE	-	-
Impact TRA-	<b>2</b> : Conflict or b	e inconsistent with CEQA	Guidelines Section 15064.3, Subdivision (b)	
0	No Project	NI/NE	-	-
Operation	1, 2, 3	NI/NE	-	-
_	<b>3</b> : Substantial in equipment)	ncrease in hazards due to	o a geometric design feature (e.g., sharp curves or dangerous intersections) or in	ncompatible
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact TRA-	<b>4</b> : Result in ina	dequate emergency acce	ess	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact TRA-	<b>5</b> : Substantially	affect school bus travel		
Canaturation	No Project	NI/NE	-	-
Construction	1, 2, 3	LTS/NE	-	-
	No Project	NI/NE	-	-
Operation	1, 3	LTS/NE	-	-
	2	S/SA	No feasible mitigation measures identified	-
Impact NAV	•1: Substantiall	y impair recreational and	commercial navigation during construction and operations	
Construction	No Project	NI/NE	-	-
	1, 3	NI/NE	-	-
	2	LTS/NE	-	-
Operation	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	NI/NE	-	-
Noise				
			y increase in ambient noise levels in the vicinity of the Project in excess of standace, or applicable standards of other agencies	dards
C	No Project	NI/NE	-	-
Construction	1, 2, 3	LTS/NE	-	-
_		•	nt increase in ambient noise levels in the vicinity of the Project in excess of stan nce, or applicable standards of other agencies	dards
Operation	No Project	NI/NE	-	_
Орегипон	1, 2, 3	LTS/NE	-	_
Impact NOI-	<b>3</b> : Generation o	of excessive groundborne	e vibration or groundborne noise levels	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Air Quality				
-			net increase of any criteria pollutant for which the Project region is nonattainment of during construction, or conflict with or obstruct implementation of the appli	
	No Project	NI	-	-
Construction	1, 2, 3	S	Mitigation Measure AQ-1.1: Zero Emission and/or Near Zero Emission Vehicles and Off-Road Equipment Mitigation Measure AQ-1.2: Offset Construction-Generated Criteria Pollutants in CCAPCD, GCAPCD, and YSAQMD	SU
•		•	net increase of any criteria pollutant for which the Project region is nonattainment of during operations, or conflict with or obstruct implementation of the application	
Operation	No Project	NI		

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	S	Mitigation Measure AQ-2.1: Recreational Boat Emissions Minimization Plan Mitigation Measure AQ-2.2: Offset Operation-Generated Criteria Pollutants in CCAPCD and GCAPCD	SU
Impact AQ-3	: Result in impa	acts on Federal Air Quali	ty Conformity	
Construction	No Project	NE	-	-
and Operation	1, 2, 3	NE	-	-
Impact AQ-4	<b>a:</b> Expose sens	itive receptors to toxic a	ir contaminants	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact AQ-4	<b>b:</b> Expose sens	itive receptors to localiz	ed criteria pollutant emissions	
Construction	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	No feasible mitigation measures identified	SU/SA
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact AQ-4	<b>c:</b> Expose sens	itive receptors to asbest	os, lead-based paint, or fungal spores that cause Valley Fever	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact AQ-5	: Result in othe	er emissions (such as tho	se leading to odors) adversely affecting a substantial number of people	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Greenhouse	Gas Emissions			
•		<b>-</b>	, either directly or indirectly, that may have a significant impact on the environn adopted for the purpose of reducing the emissions of greenhouse gases	nent or
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	S/SA	<b>Mitigation Measure GHG-1.1</b> : Achieve Net-Zero Emissions Through a GHG Reduction Plan	LTSM/NE
Cultural Reso	ources			
Impact CUL-	1: Cause a subs	stantial adverse change i	n the significance of a historic built resource	
	No Project	NI/NE	-	-
Construction	1, 2, 3	S/SA	Mitigation Measure CUL-1.1: Identify NRHP/CRHR-Eligible Built Resources Mitigation Measure CUL-1.2: Avoid NRHP/CRHR-Eligible Built Resources Mitigation Measure CUL-1.3: Protect NRHP/CRHR-Eligible Built Resources Mitigation Measure CUL-1.4: NRHP/CRHR-Eligible Built Resources Treatment	SU/SA
o .:	No Project	NI/NE	-	-
Operation	1, 2, 3	NI/NE	-	-
Impact CUL-2	2: Cause a subs	stantial adverse change i	n the significance of an archaeological resource	
	No Project	NI/NE	-	-
Construction and Operation	1, 2, 3	S/SA	Mitigation Measure CUL-2.1: Identify NRHP/CRHR-Eligible Archaeological Resources  Mitigation Measure CUL-2.2: Avoid NRHP/CRHR-Eligible Archaeological Resources  Mitigation Measure CUL-2.3: Protect NRHP/CRHR-Eligible Archaeological Resources  Mitigation Measure CUL-2.4: NRHP/CRHR-Eligible Archaeological Resources Treatment	SU/SA

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Impact CUL-3	3: Disturb any	human remains, including	g those interred outside of formal cemeteries	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	S/SA	Mitigation Measure CUL-3.1: Cemetery Relocation Plan Mitigation Measure CUL-3.2: Avoid, Protect, and Treat Human Remains	SU/SA
Tribal Cultura	al Resources			
Register of Hi	storical Resou	2 2	nificance of a tribal cultural resource that is listed or eligible for listing in the Caer or that the Authority has determined to be significant pursuant to criteria set 4.1.	
Construction and Operation	1, 2, 3	S	Mitigation Measure TCR-1.1: Implement Mitigation Measures Recommended in Public Resources Code Section 21084.3 to Avoid Damaging Effects on Tribal Cultural Resources Mitigation Measure TCR-1.2: Tribal Monitoring Mitigation Measure TCR-1.3: Implement Agreed-Upon Protocol for the Treatment of Human Remains and Cultural Items Mitigation Measure CUL-2.1: Identify NRHP/CRHR-Eligible Archaeological Resources Mitigation Measure CUL-2.2: Avoid NRHP/CRHR-Eligible Archaeological Resources Mitigation Measure CUL-2.3: Protect NRHP/CRHR-Eligible Archaeological Resources Mitigation Measure CUL-2.4: NRHP/CRHR-Eligible Archaeological Resources Treatment Mitigation Measure CUL-3.1: Cemetery Relocation Plan Mitigation Measure CUL-3.2: Avoid, Protect, and Treat Human Remains	SU
Visual Resou				
<b>-</b>	,	<u> </u>	ual character or quality of public views of the site and its surroundings	
Construction	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
	1, 2, 3	S/SA	No feasible mitigation measures identified	SU/SA
Operation	No Project	NI/NE	-	-
Operation	1, 2, 3	LTS/NE	-	-
Impact VIS-2	: Create a new	source of substantial ligh	nt or glare which would adversely affect day or nighttime views in the area	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Population a	nd Housing			
Impact POP-	1: Induce subst	tantial unplanned popula	ition growth in an area, either directly or indirectly	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact POP-	<b>2</b> : Displace sub	stantial numbers of exist	ing people or housing, necessitating the construction of replacement housing e	elsewhere
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Public Service	es and Utilitie	s		
need for new	or physically a	ltered governmental facil	I impacts associated with the provision of new or physically altered government lities, the construction of which could cause significant environmental impacts, in or other performance objectives for fire protection, police protection, schools, or	n order to
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
<b>Impact UTIL-2</b> : Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects				
	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Construction and Operation	1, 2, 3	LTS/NE	-	-
<b>Impact UTIL</b> -dry, and multi		cient water supplies avail	able to serve the Project and reasonably foreseeable future development during	g normal,
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
			tewater treatment provider which serves or may serve the Project that it has ina ddition to the provider's existing commitments	dequate
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
-		lid waste in excess of sta e reduction goals	te or local standards, or in excess of the capacity of local infrastructure, or other	wise impair
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
<b>Public Health</b>	and Environi	mental Hazards		
Impact HAZ- materials	<b>1</b> : Create a sig	nificant hazard to the pul	olic or the environment through the routine transport, use, or disposal of hazard	dous
Construction and Operation	No Project	NI/NE	-	-
	1, 2, 3	LTS/NE	-	-
_	_	nificant hazard to the pul ardous materials into the	olic or the environment through reasonably foreseeable upset and accident con environment	ditions
	No Project	NI/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Construction and Operation	1, 2, 3	LTS/NE	-	-
•			d on a list of hazardous materials sites compiled pursuant to California Governm ficant hazard to the public or the environment	ent Code
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact HAZ-	<b>4</b> : Impair imple	ementation of or physica	lly interfere with adopted emergency response plan or emergency evacuation p	lan
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
analysis is sub	divided into lette	ered components to address	bility Areas or lands classified as very high fire hazard severity zones and (the foll sthe varied fire hazards associated with this threshold): ergency response plan or emergency evacuation plan	owing impact
Construction	No Project	NI/NE	-	_
and Operation	1, 2, 3	LTS/NE	-	-
•		pe, prevailing winds, and re or the uncontrolled sp	other factors, exacerbate wildfire risks and expose Project occupants to pollutar pread of a wildfire	nt
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
•	•		ance of associated infrastructure (such as roads, fuel breaks, emergency water so e risk or that may result in temporary or ongoing impacts to the environment	urces,
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
			gnificant risk, loss, injury or death involving wildland fires or significant risks, inc a result of runoff, post-fire slope instability, or drainage changes	luding
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact HAZ-	<b>6</b> : Result in an	impact on public health	related to methylmercury bioaccumulation in fish	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact HAZ-	<b>7</b> : Result in an	impact on public health	due to an increase in harmful algal blooms	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Impact HAZ-	8: Result in sub	ostantial exposure of hun	nans to mosquito-borne illnesses	
Construction	No Project	NI/NE	-	-
and Operation	1, 2, 3	LTS/NE	-	-
Climate Char	nge			
Effect CC-1:	Project-related	climate change effects		
	No Project	NE	-	-
Operation	1A, 2	NE	-	-
	1B, 3	NE	-	-
Indian Trust	Assets			
Effect ITA-1:	Affect current	activities within an ITA		
Construction	No Project	NE	-	-
and Operation	1, 2, 3	NE	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation
Environment	al Justice and	Socioeconomics		
Effect EJ-1: D	isproportionat	e and adverse effects on	minority populations	
	No Project	NE	-	-
Construction		SA	<b>Mitigation Measure AQ-1.1</b> : Zero Emission and/or Near Zero Emission Vehicles and Off-Road Equipment	
and Operation	1, 2, 3		Mitigation Measure AQ-1.2: Offset Construction-Generated Criteria Pollutants in CCAPCD, GCAPCD, and YSAQMD	SA
			Mitigation Measure AQ-2.1: Recreational Boat Emissions Minimization Plan Mitigation Measure AQ-2.2: Offset Operation-Generated Criteria Pollutants in CCAPCD and GCAPCD	
Effect EJ-2: D	isproportionat	e and adverse effects on	low-income populations	
	No Project	NE	-	-
Construction	1, 2, 3	SA	Mitigation Measure AQ-1.1: Zero Emission and/or Near Zero Emission Vehicles and Off-Road Equipment	
and Operation			<b>Mitigation Measure AQ-1.2</b> : Offset Construction-Generated Criteria Pollutants in CCAPCD, GCAPCD, and YSAQMD	SA
Operation			Mitigation Measure AQ-2.1: Recreational Boat Emissions Minimization Plan Mitigation Measure AQ-2.2: Offset Operation-Generated Criteria Pollutants in CCAPCD and GCAPCD	
Effect SOC-1	: Substantial ac	lverse effects on regiona	ll economics	
Construction	No Project	NE	-	-
and Operation	1, 2, 3	NE, B	-	-
Effect SOC-2	: Substantial ac	lverse effects on local ec	onomics (local government fiscal conditions and recreational economics)	
Construction	No Project	NE	-	-
and Operation	1, 2, 3	NE, B	-	-

Impact	Alternative	CEQA/ NEPA Finding	Mitigation Measure	Finding with Mitigation		
Effect SOC-3	Effect SOC-3: Substantial adverse effects on agricultural economics					
<b>.</b> :	No Project	NE	-	-		
Construction	1, 2, 3	NE	-	-		
O ''	No Project	NE	-	-		
Operation	1, 2, 3	NE, B	-	-		
Effect SOC-4	Effect SOC-4: Substantial adverse effects on municipal and industrial economics					
Construction	No Project	NE	-	-		
	1, 2, 3	NE	-	-		
Operation	No Project	NE	-	-		
	1, 2, 3	В	<del>-</del>	-		

## Notes:

There are no NEPA conclusions for Impact AG-1, Impact AQ-1, Impact AQ-2, or Impact TCR-1.

There are no CEQA conclusions for Impact AG-3, Impact AQ-3, Effect CC-1, Effect ITA-1, Effect EJ-1, Effect EJ-2, Effect SOC-1, Effect SOC-3, or Effect SOC-4.

Authority = Sites Project Authority

CCAPCD = Colusa County Air Pollution Control District

CEQA = California Environmental Quality Act

CRHR = California Register of Historical Resources

FMMP = Farmland Mapping and Monitoring Program

GCAPCD = Glenn County Air Pollution Control District

GHG = greenhouse gas

ITA = Indian trust asset

NEPA = National Environmental Policy Act

NRHP = National Register of Historic Places

Project = Sites Reservoir Project

YSAQMD = Yolo-Solano Air Quality Management District

NI = CEQA determination of no impact

LTS = CEQA determination of less-than-significant impact

LTSM = CEQA determination of less than significant with mitigation

S = CEQA determination of significant impact

SU = CEQA determination of significant and unavoidable

B = NEPA conclusion of beneficial effects

NE = NEPA conclusion of no effect or no adverse effect

AE = NEPA conclusion of adverse effect

SA = NEPA conclusion of substantial adverse effect