Draft Two Rivers Trail (Phase II) Environmental Impact Report



Prepared by:



Draft

Two Rivers Trail (Phase II) Environmental Impact Report

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Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
AIA	Airport Influence Area
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
AP Act	Alquist-Priolo Fault Zoning Act
APE	Area of Potential Effect
ARCFD	applicable local maintaining agency
ARPP	American River Parkway Plan
ASTM	American Society for Testing and Materials
Basin Plan	Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin
BAT	Best Available Technology Economically Achievable
BMPs	best Management Practices
BSA	Biological Study Area
Buena Vista	Buena Vista Rancheria of Me-Wuk Indians
BUS 80	Capital City Freeway
CAA	Clean Air Act
CAL ARP	California Accidental Release Prevention
CAL EMA	California Emergency Management Agency
CAL EPA	California EPA
CALFIRE	California Department of Forestry and Fire Protection
CalRecycle	California's Department of Resource Recycling and Recovery
Caltrans	California Department of Transportation
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CHSC	California Health and Safety Code
City	City of Sacramento

CNDDB	CDFW Natural Diversity Database
CNPS	California Native Plant Society's
CPRR	Central Pacific Railroad
CRHR	California Register of Historical Resources
CSO	Cultural Services Office
CSUS	California State University at Sacramento
CUPAs	Certified Unified Program Agencies
CVFPB	Central Valley Flood Protection Board
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
су	cubic yards
dB	decibels
DOSH	Division of Occupational Safety and Health
DOU	Department of Utilities
DPR	Department of Parks and Recreation
DPS	Distinct Population Segment
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EA	Environmental Assessment
EC	Environmental Constraints
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EOP	Emergency Operations Plan
ER	Environmental Resources
ERC	Education, Recreation, and Culture
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRMs	Flood Insurance Rate Maps
FTA	Federal Transit Administration
GEI	GEI Consultants, Inc.
GPS	global positioning system
GRR	general reevaluation
HazMat	Hazardous Materials Program
HCR	Historic and Cultural Resources
HMRTs	Hazardous Materials Response Teams
HMTA	Hazardous Materials Transportation Act
HSC	Health and Safety Code

IBC	International Building Code
IPAC	Information, Planning, and Conservation System
IS/MND	initial study/mitigated negative declaration
ITE	Institute of Transportation Engineers
JFP	Joint Federal Project
Ldn	Day/Night Average Sound Level
LID	Low Impact Development
LU	Land Use and Urban Design Element
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Plan
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NFIP	National Flood Insurance Program
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
OHWM	ordinary high water mark
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Parkway	American River Parkway
PCBs	polychlorinated biphenyls
PG&E	Pacific Gas & Electric Company
PHS	Public Health and Safety
Porter-Cologne	Porter-Cologne Water Quality Control Act
PRC	Public Resources Code
proposed project	Two Rivers Trail Phase II Project
RCRA	Resources Conservation and Recovery Act
ROW	right of way
RWQCB	Central Valley Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SacRT	Sacramento Regional Transit
SAFCA	Sacramento Area Flood Control Agency
SASD	Sacramento Area Sewer District

SCEMD	Sacramento County Environmental Management Department
SEMS	Standardized Emergency Management System
SGDR	Supplemental Geotechnical Data Report
Shingle Springs	Shingle Springs Band of Miwok Indians
SMARA	Surface Mining and Reclamation Act
SMUD	Sacramento Municipal Utility District
SPD	Sacramento Police
SQIP	Stormwater Quality Improvement Program
SR	State Route
SR 80	Capital City Freeway
SRAs	State Responsibility Areas
SRCSD	Sacramento Regional County Sanitation District
SRFCP	Sacramento River Flood Control Project
SRWTP	Sacramento Regional Wastewater Treatment Plant
SSC	Species of Special Concern
SWA	Solid Waste Authority
SWRCB	State Water Resources Control Board
TCRs	Tribal Cultural Resources
UAIC	United Auburn Indian Community
UBC	Uniform Building Code
ULDC	Urban Levee Design Criteria
ULE	Urban Levee Evaluation
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VELB	valley elderberry longhorn beetles
WCM	Water Control Manual
WDRs	Waste Discharge Requirements
Wilton	Wilton Rancheria
WOTUS	Waters of the United States
WPCP	Water Pollution Control Plan
WQC	Water Quality Certification
WRDA	Water Resources Development Act
WTP	water treatment plants

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ES.1. Introduction

The City of Sacramento (City) proposes to construct approximately 3.4 miles of new Class 1 bicycle and pedestrian trail comprising 6 segments (proposed project) along the south bank of the American River that extends from Tiscornia Park at Jibboom Street to the H Street Bridge in Sacramento, California (see **Figure ES-1**).

The California Environmental Quality Act (CEQA) requires public agencies to identify, disclose, and consider the potential environmental impacts of proposed discretionary actions that an agency is considering for approval. A project that may have a significant impact on the environment cannot be approved unless the Lead Agency makes the approval contingent upon the implementation of mitigation measures that would reduce or avoid that impact to the extent feasible. When a project may have significant environmental impacts, the Lead Agency must prepare an environmental impact report (EIR) before it considers whether to approve the project.

ES.2. Proposed Project

The proposed multi-use trail design would meet California Department of Transportation (Caltrans) Class 1 bikeway design criteria and would also be based on the State Water Code Title 23 standards for recreation trails on levees and the ARFCD Recreational Trails Policy (ARFCD 2002). The trail would generally consist of an 8-foot-wide paved path with a 2-foot-wide compacted shoulder on the inner side and a similar 6-foot-wide shoulder on the waterside to provide space for walking and jogging adjacent to the paved portion of the trail, bringing the total trail cross section along most of its length to 16 feet wide. However, due to space limitations in some locations, the waterside shoulder of the trail would be narrowed to 4 feet wide. The trail would be paved and engineered to be load-bearing.

The proposed project is comprising of 6 segments which are briefly described below and shown in **Figures ES-2** and **ES-3**.

Segment 1 is approximately 0.4 miles long. It begins at the existing Sacramento Northern Bikeway Trail at North 18th Street and ends 0.3 miles west of Sutter's Landing Park (see **Figure ES-2**). At North 18th Street, the trail would run along the toe of the levee crossing under the Union Pacific Railroad (UPRR) and continue for another 0.3 miles.

Segment 2 is approximately 0.6 miles long. This segment begins at the eastern terminus of Segment 1 and continues to Sutter's Landing Regional Park (see **Figure ES-2**). Two trail alignments are under consideration for Segment 2. The preferred trail alignment, Alternative 1, which is approximately 0.7 miles in length, would diverge from the levee immediately at the end of the first segment and extend south for approximately 0.3 mile and then turn southeast and extend another approximately 0.4 mile to 28th Street at the entrance to Sutter's Landing Regional Park across the street from McKinley Village Way. The other alignment for Segment 2 (Alternative 2) is approximately 0.55 miles in length. It would extend east from the end of the first segment for another approximately 0.15 mile before diverging from the levee to the south. This leg of Segment 2 would then continue south approximately 0.25 mile, until it

intersected with the preferred alignment, or would turn southeast 0.1 mile sooner and follow the north side of an existing solar array for approximately 0.15 mile before terminating in the parking lot adjacent to the dog park and across the street from the existing trail within Sutter's Landing Regional Park.

Segment 3 is approximately 0.3 miles long and begins on the east side of Sutter's Landing Park at the end of the recently completed trail segment. From here, the trail would run along an existing bench at the toe of the levee, first crossing under another portion of the UPRR and eventually under the Capital City Freeway (SR 80) where Segment 4 begins (see Figure ES-3).

Segment 4 is also approximately 0.25 miles long (see **Figure ES-3**) and would begin just east of the Capital City Freeway. This segment is proposed as a "levee-top" trail alignment, which may extend past the current boundary of Segment 5 should the ARFCD be able to grant additional trail variances to the waterside toe alignment proposed for the remaining portions of the trail.

Segment 5 is 1.4 miles long and passes Paradise Beach and Glenn Hall Park (see Figure ES-3).

Segment 6 begins at the east end of Segment 5 along the levee toe, is approximately 0.3 miles long, and includes a transition back to the levee crown where the trail would connect to the existing paved trail near the H Street Bridge (see **Figure ES-3**). While there is a bench along the toe in this segment, the bench is much narrower than in other locations requiring a reduced path width to limit impacts.

ES.3. Project Objectives

The objectives of the proposed project are to:

- Provide a vital recreation link between the Jedediah Smith Trail on the north side of the American River Parkway, the Sacramento River Parkway, the Sacramento Northern Bikeway Trail, the future Ueda Parkway trails, and the 20th Street bike connection to the Central City;
- Provide alternative transportation access for commuters and residents in the eastern part of the City, CSUS, Central City, North Sacramento, East Sacramento, and Richards Boulevard area;
- Provide opportunities for educating trail users through interpretive signage, establishing a connection to the river, and the Parkway;
- Provide an acceptable project to all authoritative agencies;
- Complete the project in a manner that minimizes environmental impacts to the Parkway, given the proposed project's location within the environmentally sensitive Parkway; and
- Where feasible, design trail access points to comply with the requirements of the Americans with Disabilities Act (ADA).

ES.4. Project Alternatives

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to a project or to the location of a project that would feasibly attain most of the basic project objectives and avoid or substantially lessen significant project impacts (CEQA Guidelines section 15126.6). The alternatives to the proposed project considered in this Draft EIR were developed based on information gathered during the development of the proposed project and during the EIR scoping process.



Source: GEI Consultants, 2019

Figure ES-2. Proposed Trail Alignment - Western Segments



Source: GEI Consultants, 2019

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Source: GEI Consultants, 2019

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Alternative 1: October 2018 Initial Study Alternative

This alternative was analyzed in the October 2018 Initial Study and includes 3.4 miles of new Class 1 bicycle and pedestrian trail comprised of 6 segments. The trail would generally consist of an 8-foot-wide paved path with a 2-foot-wide compacted shoulder on the inner side and a similar 6-foot-wide shoulder on the waterside to provide space for walking and jogging adjacent to the paved portion of the trail, bringing the total trail cross section along most of its length to 16 feet wide. However, due to space limitations in some locations, the waterside shoulder of the trail would be narrowed to 4 feet wide. The trail would be paved and engineered to be load-bearing.

Alternative 2: Top of Levee Construction – Segments 4 through 6

This alternative includes 3.4 miles of new Class 1 bicycle and pedestrian trail comprised of 6 segments along the same alignment as described in Alternative 1, however, under this alternative, the entire length of Segments 4 - 6 would be constructed along the levee crown.

Alternative 3: Extended Top of Levee Segment Alternative

This alternative was suggested during the June 2019 EIR Public Scoping Meeting and is identical to the proposed project, except for a portion of Segment 4. Under this alternative, the trail would move from the levee toe to the top of levee near Jerome Way (approximately RM 5), rather than near Bevil Street, resulting in a top of levee segment approximately 3x longer than what is included in the proposed project.

Alternative 4: Align Trail Outside of the American River Parkway

This alternative was suggested during review of the IS/MND and during the June 2019 EIR Public Scoping Meeting. Under this alternative, no trail would be developed within the American River Parkway. Existing trail use along developed portions of the Two Rivers Trail (Phase I) would use existing City streets to travel between 16th Street or the current trail terminus at Sutter's Landing Park to reach the East Sacramento/River Park neighborhoods and CSUS. Public comments suggested using the Elvas Avenue Corridor and Carlson Driver as possible travel corridors for bicycles and pedestrians.

ES.5. Agency Roles and Responsibilities

This environmental document is prepared in conformance with the requirements of the California Environmental Quality Act (CEQA) Public Resources Code (PRC) 21000-21178. The City is the Lead Agency, as defined by CEQA, for this Draft EIR, and has the principal responsibility to ensure that the requirements of CEQA have been met. After the EIR public review process is complete, the City Council is the party responsible for certifying that the EIR adequately evaluates the environmental impacts of the proposed project. The City Council has the authority to approve, approve with modifications, or reject the proposed project.

Caltrans is preparing a separate environmental document for the proposed project consistent with the requirements of the National Environmental Policy Act (NEPA) 40 CFR 1500-1508. Compliance with NEPA is required because the proposed project intends to use Federal funding for implementation. Caltrans is the NEPA Lead Agency for the proposed project.

ES.6. Permits

The following agencies may have permitting or approval authority over the proposed project:

- American River Flood Control District (ARFCD) Encroachment permit for portions of the trail located on or extending across ARFCD facilities; easements for trails over lands owned by ARFCD in fee title.
- National Marine Fisheries Service (NMFS) Federal Endangered Species Act Section 7 Consultation for potential effects to federally listed and proposed (endangered and threatened) anadromous fish species.
- **Public Utilities Commission** Permission for railroad crossings.
- United States Army Corps of Engineers (USACE) Rivers and Harbors Act Section 14 (408) authorization for alterations to a Federal project levee; Clean Water Act (CWA) Section 404 permit for dredge or fill of waters of the U.S.
- United States Fish and Wildlife Service (USFWS) Federal Endangered Species Act Section 7 Consultation for potential effects to federally listed and proposed (endangered and threatened) plant and wildlife species.
- Union Pacific Railroad (UPRR) Encroachment permit for the portions of the trail passing under a Union Pacific Railroad Bridge.
- **California Department of Transportation (Caltrans)** Encroachment permit for the portion of the trail passing under SR 80.
- **California Department of Fish & Wildlife (CDFW)** California Fish and Game Code Section 1602 Streambed Alteration Agreement for construction and alterations within riparian areas.
- **Central Valley Flood Protection Board (CVFPB)** Encroachment permit for work within the flood control easement.
- Central Valley Regional Water Quality Control Board (RWQCB) CWA Section 401 Water Quality Certification for discharge to surface waters.
- **County of Sacramento, Department of Regional Parks** –approval of 100% construction drawings; Lease Agreement for staging and construction within the Parkway; Map Amendment to convert the trail from future to active status; and Joint Use Agreement.

ES.7. Areas of Controversy

The City issued a Notice of Preparation (NOP) for this Draft EIR on May 21, 2019 in compliance with CEQA and the State CEQA Guidelines (see **Appendix B** of this Draft EIR). The City provided the NOP to local, State, and Federal agencies, organizations, and individuals that requested receipt of the City's public notices. The NOP was circulated for comment for 30 days, ending on June 19, 2019.

During the NOP comment period, the public and various government agencies have identified areas of controversy that pertain to the proposed project. General topics raised included: biological resources,

water quality, recreation, visual resources, public safety, and land use consistency, as well as general permitting concerns. Specific topics raised included:

- Biological resource impacts to species (Valley Elderberry Longhorn Beetle) and habitats within the American River Parkway.
- Visual impacts of the proposed developed trail.
- Tree removal.
- Public safety and recreation impacts resulting from additional use generated by a developed trail.
- Consideration of alternatives.

ES.8. Issues to Be Resolved

The discussion of environmental impacts, mitigation measures, and project alternatives as evaluated in detail in this Draft EIR constitutes the identification of issues to be resolved as required for compliance with CEQA Guidelines Section 15123(b)(2). In addition, a summary of Environmental Impacts and Mitigation Measures is provided below in **Table ES-1**.

ES.9. Next Steps for the EIR

This Draft EIR will be circulated and made available to local, State, and Federal agencies and to organizations and individuals who may want to review and comment on the adequacy of the analysis included in this Draft EIR. The period for public review and comment is August 1, 2019 through September 16, 2019 [established in the Notice of Availability (NOA)], which is filed with the Sacramento County Clerk and posted on the Community Development Department website at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.

Written comments or questions concerning the Draft EIR must be directed to the name and address below via postal mail or email by no later than 4:00 p.m. on September 16, 2019:

Ron Bess, Assistant Planner City of Sacramento Community Development Department 300 Richards Blvd., Third Floor Sacramento, CA 95811 Telephone: (916) 808-8272 E-mail: <u>Rbess@cityofsacramento.org</u>

Copies of this Draft EIR are also available to review at the City of Sacramento Community Development Department on any business day between the hours of 9:00 a.m. and 4:00 p.m. at the address below or on the project website at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.

City of Sacramento Community Development Department 300 Richards Blvd., Third Floor Sacramento, CA 95811 The Draft EIR is also available for review at the following location:

City of Sacramento Public Library 915 I Street Sacramento, CA 95814

Please indicate "Two Rivers Trail Project EIR" in the subject line. For comments by agencies and organizations, please include the name of a contact person for your agency or organization. All comments received, including names and addresses, will become part of the official administrative record and may be available to the public.

ES.10. Final EIR

Upon completion of the public review period, the City will review the comments received and prepare written responses to all environmental issues raised and, if necessary, revise the Draft EIR. Comments received, the responses to comments, and any necessary text revisions to the Draft EIR will be included as part of the Final EIR record for consideration of the proposed project. Responses will be made available for review by the commenting agencies at least 10 days prior to any public hearing on the proposed project, at which time the certification of the complete EIR would be considered.

The Final EIR will be considered by the City Council when acting on the proposed project. If the proposed project is approved, CEQA requires the City to adopt findings describing how each of the significant impacts identified in the EIR is being mitigated. The findings will also describe the reasons why project alternatives that were analyzed in the EIR have not been adopted if the City Council chooses not to adopt a project alternative. Finally, the City will adopt a Mitigation Monitoring and Reporting Plan (MMRP) that describes how it will ensure the mitigation measures being required of the proposed Project will be carried out.

ES.11. Summary of Potential Impacts and Mitigation

CEQA requires that the environmental analysis contained in the Draft EIR also include a summary of the proposed project and its consequences, including an identification of each potentially significant effect of the proposed project, the level of effect the proposed project may have, as well as any proposed mitigation measures. A full description of each of the proposed impacts and mitigation measures is found in **Chapter 3.0**, with a summary provided below in **Table ES-1**.

Table ES-1. Summary of Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigatio	on Measure	Significance After Mitigation
3.1 Aesthetics				_
Impact AES-1: Adverse Effect on Scenic Vista or Scenic Quality	ic LTS	No mitigation required		LTS
Impact AES-2: New Sources of Light and Glare	LTS	No mitigation required		LTS
Air Quality and Greenhouse Gas Emissions (from I	S/MND)			
Impact AIR-1: Potential for Construction-Related Emissions	LTS	Mitigation Measure AIR-1 Implen Control Practices:	nent Construction-related Emissio	n LTS
		The City shall ensure that the con basic construction emission cont SMAQMD Rule 403 during trail c following:	nstruction contractor implement al rol practices and requirements of onstruction activities, including the	e
		Water all exposed surfaces two t include, but are not limited to soil parking areas, staging areas, and	imes daily. Exposed surfaces piles, graded areas, unpaved d access roads.	
		Cover or maintain at least two fee trucks transporting soil, sand, or Any haul trucks that would be tra roadways should be covered.	et of free board space on haul other loose material on the site. veling along freeways or major	
	1	Use wet power vacuum street sw track-out mud or dirt onto adjace Use of dry power sweeping is pro	reepers to remove any visible nt public roads at least once a day phibited.	1.
		Limit vehicle speeds on unpaved	roads to 15 miles per hour.	
		Minimize idling time either by shu use or reducing the time of idling California Code of Regulations, 7 2485]. Provide clear signage that at the entrances to the site.	utting equipment off when not in to 5 minutes [required by Title 13, sections 2449(d)(3) and t posts this requirement for worker	S
		Maintain all equipment in proper manufacturer's specifications. Th a certified mechanic and determi condition before it is operated.	working condition according to le equipment must be checked by ne to be running in proper	
3.2 Biological Resources				
Impact BIO-1: Potential to have a substantial adverse effect, either directly or through habitat modifications, o any species in local or regional plans, policies, or	PS n	Mitigation Measure BIO-1: Condu Training Regarding Special-statu prior to Construction	uct Environmental Awareness is Species and Sensitive Habitats	LTS
regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	of	Mitigation Measure BIO-2: Install Environmentally Sensitive Habita	Temporary Fencing around t	
NI = No Impact B = Beneficial LTS = Less	than Significant	S = Significant PS = P	otentially Significant SU = Sigr	nificant and Unavoidab

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
· · · · · · · · · · · · · · · · · · ·		Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices	-
		Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions	
		Mitigation Measure BIO-5: Avoid the Spread of Invasive Plant Species	
		Mitigation Measure BIO-6: Compensate for Permanent Impacts to Riparian Habitat and Protected Trees	
		Mitigation Measure BIO-7: Monitor During Ground Disturbance and Vegetation Removal	
		Mitigation Measure BIO-8: Avoid Construction Activities within 165 feet of Elderberry Shrubs During Valley Elderberry Longhorn Beetle Flight Season	
		Mitigation Measure BIO-9: Implement Dust Control Measure	
		Mitigation Measure BIO-10: Prohibit Use of Herbicides and Mowing near Elderberry Shrubs	
		Mitigation Measure BIO-11: Compensate for the Permanent Removal and Temporary Disturbance of Valley Elderberry Longhorn Beetle Habitat	
		Mitigation Measure BIO-12: Transplant Elderberry Shrubs	
		Mitigation Measure BIO-13: Provide Escape Ramps or Cover Open Trenches	
		Mitigation Measure BIO-14: Conduct Preconstruction Surveys	
		Mitigation Measure BIO-15: Avoid Loss of Swainson's Hawk Nests	
		Mitigation Measure BIO-16: Obtain Preliminary Jurisdictional Determination and Compensate for Impacts to Waters of the U.S. and State	
Impact BIO-2: Potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies,	PS	Mitigation Measure BIO-1: Conduct Environmental Awareness Training Regarding Special-status Species and Sensitive Habitats prior to Construction	LTS
and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	t of Fish	Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat	
		Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices	
		Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions	

Table ES-1. Summary of Impacts and Mitigation Measures

NI = No Impact

Table ES-1. **Summary of Impacts and Mitigation Measures**

Impact	Significance Before Mitigation	e Mitigation Measure	Significance After Mitigation
Impact BIO-3: Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not	PS	Mitigation Measure BIO-1: Conduct Environmental Awareness Training Regarding Special-status Species and Sensitive Habitats prior to Construction	LTS
limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	t	Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat	
		Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices	
		Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions	
		Mitigation Measure BIO-16: Obtain Preliminary Jurisdictional Determination and Compensate for Impacts to Waters of the U.S. and State	
Impact BIO-4: Potential to impact protected trees	PS	Mitigation Measure BIO-1: Conduct Environmental Awareness Training Regarding Special-status Species and Sensitive Habitats prior to Construction	LTS
		Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat	
		Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices	
		Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions	
		Mitigation Measure BIO-5: Avoid the Spread of Invasive Plant Species	
		Mitigation Measure BIO-6: Compensate for Permanent Impacts to Riparian Habitat and Protected Trees	
		Mitigation Measure BIO-7: Monitor During Ground Disturbance and Vegetation Removal	
3.3 Cultural and Tribal Resources			
Impact CTR-1: Damage to or Destruction of Built Environment Historic Properties	LTS	No mitigation required	LTS
Impact CTR-2: Potential Damage to or Destruction of Previously Undiscovered Archaeological Sites or Tribal Cultural Resources	PS	Mitigation Measure CTR-1: Conduct Cultural Resources and Tribal Cultural Resources Sensitivity and Awareness Training Program Prior to Ground-Disturbing Activities	LTS
NI = No Impact B = Beneficial LTS = Less that	n Significant	S = Significant PS = Potentially Significant SU = Signif	icant and Unavoidable

Table ES-1. Summary of Impacts and Mitigation Measures

Impact	Significance Before Mitigation	Mitigation Measure	Significance Afte Mitigation
		Mitigation Measure CTR-2: Implement Avoidance, Minimization, and Preservation Measures Should Cultural or Tribal Cultural Resources Be Discovered During Construction	
Impact CTR-3: Potential Damage to or Destruction of Human Remains During Construction	PS	Mitigation Measure CTR-3: Implement Post Discovery Procedures in the Event of the Inadvertent Discovery of Human Remains	LTS
3.4 Geology and Soils			
Impact GEO-1: Cause Adverse Effects Related to Earthquake Fault Rupture, Seismic Ground Shaking, Seismic-Related Ground Failure (including landslide, subsidence, or liquefaction, or Be Located On Expansive Soils	PS	Mitigation Measure GEO-1: Perform Final Geotechnical Investigation and Implement Report Recommendations	
3.5 Hazards and Hazardous Materials			
Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	PS	Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices	LTS
Impact HAZ-2: Potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment	PS	Mitigation Measure HAZ-1: Prepare a Worker Health and Safety Plan and Implement Appropriate Measures to Minimize Potential Exposure of the Public to Hazardous Materials	LTS
		Closure Requirements for Past Disposal Sites	
3.6 Hydrology, Water Quality, and Drainage			
Impact HWQ-1: Violate Water Quality Standards or Waster Discharge Standards, Degrade Surface Water Quality, Conflict With Implementation of a Water Quality Control Plan, or Release Pollutants During Flooding	PS	Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices.	LTS
Impact HWQ-2: Result in Erosion or Flood Impacts	LTS	No mitigation required	LTS
3.7 Land Use and Planning			
Impact LUP-1: Conflict with Land Use Plans: American River Parkway Plan	NI	No mitigation required	NI
3.8 Noise			
Impact NOS-1: Cause A Temporary or Permanent Increase in Ambient Noise Levels In Excess Of Applicable Standards	LTS	No mitigation required	LTS

B = Beneficial

SU = Significant and Unavoidable

Table ES-1. Summary of Impacts and Mitigation Measures

Impact	Significance Befo Mitigation	ore Mitigation Measure	Significance After Mitigation
Impact NOS-2: Generate Excessive Groundborne Vibration or Groundborne Noise Levels	LTS	No mitigation required	LTS
3.9 Public Services, Recreation, and Utilities			
Impact PSR-1: Public Services: Fire Protection and Emergency Medical Service	LTS	No mitigation required	LTS
Impact PSR-2: Public Services: Police Protection	LTS	No mitigation required	LTS
Impact PSR-3: Recreation: Cause Deterioration of Existing Facilities	LTS	No mitigation required	LTS
3.10 Transportation and Circulation			
Impact TRC-1: Conflict with Plans or Standards: Congestion and Transit Operations	LTS	No mitigation required	LTS
Impact TRC-2: Conflict with Plans or Standards: Pedestrian and Bicycle Circulation	LTS/B	No mitigation required	LTS/B

ES-16

NI = No Impact

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Chapter 1. Introduction

Two Rivers Trail is a planned Class 1 bicycle and pedestrian trail along the south bank of the American River that extends from Tiscornia Park at Jibboom Street to the H Street Bridge in Sacramento, California (see **Figure 1-1**). Phase I of this trail has been completed and includes the segment from Tiscornia Park to the intersection of North 12th Street and State Route (SR) 160. Phase II (proposed project) includes the section from the Sacramento Northern Bikeway Trail at North 18th Street through Sutter's Landing Regional Park to the H Street bridge.

This environmental document is prepared in conformance with the requirements of the California Environmental Quality Act (CEQA) Public Resources Code (PRC) 21000-21178. The California Department of Transportation (Caltrans) is preparing a separate environmental document for the proposed project consistent with the requirements of the National Environmental Policy Act (NEPA) 40 CFR 1500-1508. Compliance with NEPA is required because the proposed project intends to use Federal funding for implementation. The City is the CEQA Lead Agency and Caltrans is the NEPA Lead Agency for the proposed project.

This Environmental Impact Report (EIR) has been prepared to provide decision makers, the public, and reviewing agencies a complete description of the proposed project and a description of how it has the potential to impact the natural and human environment. The EIR provides an overview of the proposed project (including identifying the project objectives and other anticipated regulatory approvals) in **Chapter 2**, evaluates each environmental resource for potential impacts and measures to reduce those impacts in **Chapter 3**, and analyzes proposed project alternatives in **Chapter 4**.

1.1 CEQA Purpose and Authority

This EIR has been prepared pursuant to the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that State and local government agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects (PRC 21000 et seq.).

The purpose of this EIR is to analyze the environmental impacts of the proposed project and identify ways to reduce or avoid these potential impacts. Additionally, this EIR identifies alternatives to the proposed project that would meet most project objectives and reduce one or more potential environmental impacts.

CEQA requires that each public agency mitigate or avoid the significant environmental effects of projects it approves or implements, whenever feasible. An EIR is an informational document used in State, regional, and local planning and decision-making processes to disclose potential environmental effects. The purpose of this EIR is not to recommend approval or denial of a project. However, the public agency's decision whether to approve or to deny the proposed project must take into consideration the information provided by the EIR.

When considering the proposed project, the public agency may grant approval even if it would result in significant and unavoidable environmental impacts so long as the EIR discloses the project's environmental effects, including:

- Effects that cannot be avoided;
- Growth inducing effects;
- Effects found not to be significant; and
- Cumulative impacts.

CEQA provides that a Lead Agency that intends to approve a project with significant and unavoidable effects must identify the "[s]specific economic, legal, social, technological, or other considerations..." that make infeasible mitigation measures or alternatives identified in the EIR. In addition, the Lead Agency in such a case must identify the benefits of the project that outweigh the significant effects on the environment (Statement of Overriding Considerations).

Accordingly, this EIR describes and evaluates the potential impacts associated with the proposed project. Additional resource-specific studies, such as biological and cultural resources have been prepared for this EIR to provide detailed information about the proposed project's potential impacts on the environment. These technical studies are available for review at the City of Sacramento Community Development Center and at the project website at: <u>http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.</u>

The mitigation measures identified in this EIR are designed to include enough detail and specificity to ensure that they would be effectively carried out to reduce the proposed project's impacts.

1.2 Project Location and Background

Two Rivers Trail is a planned Class 1 bicycle and pedestrian trail along the south bank of the American River that extends from Tiscornia Park at Jibboom Street to the H Street Bridge in Sacramento, California (**Figure 1-1**). Phase I of this trail includes the segment from Tiscornia Park to the intersection of North 12th Street and State Route (SR) 160. Phase II includes the section from the Sacramento Northern Bikeway Trail at North 18th Street through Sutter's Landing Regional Park to the H Street bridge.

Phase I of the trail is complete and the City of Sacramento (City) recently completed a small section of the Phase II Trail within Sutter's Landing Regional Park, which was determined by the City in July 2018 to be exempt from review under CEQA (CEQA Guidelines §15304 and §15333).

The proposed project would construct the remainder of Phase II by extending the Class 1 trail west from Sutter's Landing Regional Park to the Sacramento Northern Bikeway Trail at North 18th Street, and east from the eastern terminus of Sutter's Landing Regional Park to the H Street Bridge (see **Figure 1-1**). This would result in a nearly continuous trail alignment along the south side of the American River that links the downtown area of Sacramento to the residential neighborhoods and California State University at Sacramento (CSUS) near the eastern boundary of the City.

The proposed project lies entirely within the City and the planning areas of the American River Parkway Plan (ARPP), which was adopted by the City Council on March 25, 1986 and updated by the County of Sacramento in 2008 (Sacramento County, 2008). In addition to the City, several other local agencies are responsible for management of the American River Parkway. Within the project study area, the



Source: GEI Consultants, Inc. 2019

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GEI Consultants, Inc. Introduction

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American River Flood Control District (ARFCD) is responsible for maintenance of levee infrastructure and the Sacramento County Regional Parks Department is also responsible for parkway maintenance and security.

The ARPP is a policy and implementation guide developed to promote the preservation of the American River's natural environment while providing limited development for human enjoyment of the parkway. The American River Parkway (Parkway) is an open space greenbelt approximately 29 miles long extending west/southwest along the north and south sides of the Lower American River from Folsom Dam to its confluence with the Sacramento River. The ARPP divides the Parkway into smaller area plans that include specific guidelines and descriptions for individual segments of the Parkway. The proposed project is located within the Woodlake and Paradise Beach ARPP areas (see **Figure 1-1**). These areas are predominately designated as Protected Areas under the ARPP, with habitat preservation and recreation-related activities being the primary uses. The proposed trail is consistent with the ARPP.

In addition to the plans and policies of the ARPP, the Two Rivers Trail Concept Plan Report (Concept Plan Report) was prepared to provide specific guidance on development of the multiuse trail (Jones & Stokes 2001). This concept plan documented existing conditions, the purpose of the Two Rivers Trail project, and the steps and costs needed to implement the project, which, at that time, identified the development of a paved trail along the top of the American River south levee, including access to the landside street system and connections to other existing and proposed trails, that would minimize environmental impacts to the Parkway. However, in response to agency concerns regarding potential conflicts between trail users and levee maintenance equipment along with neighborhood concerns for homeowner privacy and visibility to the residences in the River Park neighborhood, a lower bench alignment would separate the trail users from levee maintenance operations, limit visibility to neighboring residences on the landside of the levee and have little or no effect on levee stability.

A mid-height bench alignment along the waterside levee slope of the entire length of the proposed trail segments was more recently considered to minimize habitat impacts along the waterside toe of the levee and to address visibility and privacy concerns raised by residents of the River Park neighborhood. However, because the U.S. Army Corps of Engineers (USACE) considered placement of the trail on a mid-height bench on the waterside levee slope to be a risk to levee performance and potentially increase the cost of levee operations and maintenance costs, the mid-levee alignment was determined to be infeasible where adequate space along the levee toe to accommodate the trail was present (Erik James, USACE District Levee Safety Program Manager, Pers. Comm. 2018).

On March 29, 2019, the ARFCD Board granted the City a variance to construct a "levee-top" trail along a 0.25-mile section just east of the Capital City Freeway. With no defined bench on the water side of the existing levee in this area, the "levee-top" alignment (for a portion of the trail) would minimize the risk to levee performance by removing the need to construct the trail on an artificial bench offset from the top of the levee. The move to a levee top alignment in this location would also reduce the project's overall biological resource impacts.

1.3 The Environmental Review Process

CEQA requires public agencies to identify, disclose, and consider the potential environmental impacts of proposed discretionary actions that an agency is considering for approval. A project that may have a significant impact on the environment cannot be approved unless the Lead Agency makes the approval contingent upon the implementation of mitigation measures that would reduce or avoid that impact to the extent feasible. When a project may have significant environmental impacts, the Lead Agency must prepare an EIR before it considers whether to approve the project.

The City, as the CEQA Lead Agency for the proposed project, has prepared this Draft EIR for public review and comment. In preparing this EIR and considering approval of the proposed project, the City conducted (or will complete) the following activities:

- Draft Initial Study/Mitigated Negative Declaration
- Notice of Preparation and Public Scoping
- Draft EIR
- Public Review of the Draft EIR
- Final EIR and EIR Certification
- Mitigation Monitoring and Reporting

Each of these activities is briefly described below.

1.3.1 Draft Initial Study/Mitigated Negative Declaration

As previously described above in **Section 1.3 "Project Location and Background**" the proposed project was originally conceived as a paved trail along the top of the American River south levee. However, in response to agency and public concerns, the proposed project's alignment was modified as a lower bench alignment mostly along the waterside toe of the easterly segment of the levee. To comply with CEQA, the City prepared an initial study/mitigated negative declaration (IS/MND) in the Fall of 2018 and released the draft IS/MND for a 30-day review period beginning on October 23, 2018 and ending November 30, 2018.

In response to comments received on the IS/MND, the City has been working with the ARFCD to modify a portion of the trail alignment that would allow construction of a "levee-top" trail along a 0.25mile section just east of the Capital City Freeway. This change to the trail alignment addresses several comments received on the IS/MND including minimizing the risk to levee performance and reducing the project's overall biological resource impacts to trees and vegetation. As a result of these and other comments (interest in project alternatives) received during review of the IS/MND, the City has determined that preparation of an EIR is appropriate to provide expanded discussion of these issues and to address the environmental impacts of this modified trail alignment (see **Chapter 2** for a complete description of the modified trail alignment or the proposed project, as referred to in this Draft EIR). A summary of the comments received on the IS/MND is provided below in **Section 1.5** "**Scope and Focus of this EIR**" and the comment letters are included in **Appendix A** of this Draft EIR.

1.3.2 Notice of Preparation and Public Scoping

The CEQA Guidelines do not require formal hearings at any stage of the environmental review process (CEQA Guidelines Section 15202[a]). However, they do encourage "wide public involvement, formal and informal, to receive and evaluate public reactions to environmental issues" (CEQA Guidelines Section 15201).

In accordance with the CEQA Guidelines, the City distributed a Notice of Preparation (NOP) of a Draft EIR for the proposed project on May 21, 2019 and gave responsible agencies and the public an opportunity to provide comment on the scope of the analysis that should be included in the Draft EIR. The NOP comment period closed on June 19, 2019. A public scoping meeting for the proposed project was held on June 8, 2019 at the Fremont Presbyterian Church in Sacramento, CA. The comments

received by the City on the NOP and at the public scoping meeting were considered in the preparation of the Draft EIR. The scope of the Draft EIR included the potential environmental impacts identified in the NOP, as well as any issues raised by agencies and the public in response to the NOP and public scoping meeting. The NOP and comments received during the NOP comment period and at the public scoping meeting are contained in **Appendix B** of this Draft EIR and a summary of the comments received on the NOP and at the public scoping meeting is provided below in **Section 1.5 "Scope and Focus of this EIR"**.

1.3.3 Draft EIR

This document constitutes the Draft EIR. The Draft EIR includes a description of the proposed project and provides a description of the environmental setting, project impacts, mitigation measures (or measures to be implemented to mitigate impacts found to be significant), as well as an analysis of several project alternatives.

As required by CEQA, this Draft EIR focuses on significant or potentially significant environmental effects (CEQA Guidelines, Section 15143). As described above, the NOP was prepared for the proposed project to identify issues to be evaluated in the Draft EIR and comments received on the NOP and at the public scoping meeting (see **Appendix B**) helped to further refine the list of environmental issues to be evaluated in this EIR.

1.3.4 Public Review of the Draft EIR

This document will be circulated to responsible agencies, trustee agencies, agencies with jurisdiction over the project and those who request the document for a 45-day review period. A public notice will be posted in a local newspaper and sent to all previous commenters that have requested information regarding the proposed project. Written comments or questions concerning the Draft EIR must be directed to the name and address below via email postal mail or email by no later than 4:00 p.m. on September 16, 2019:

Ron Bess, Assistant Planner City of Sacramento Community Development Department 300 Richards Blvd., Third Floor Sacramento, CA 95811 Telephone: (916) 808-8272 E-mail: Rbess@cityofsacramento.org

Copies of this Draft EIR are also available to review at the City of Sacramento Community Development Department on any business day between the hours of 9:00 a.m. and 4:00 p.m. at the address below or on the project website at: http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.

City of Sacramento Community Development Department 300 Richards Blvd., Third Floor Sacramento, CA 95811

A public informational meeting will be held on **August 10, 2019**. Public comment is encouraged during the 45-day public review period and at all public hearings before the City Council.

1.3.5 Final EIR and EIR Certification

Comments regarding environmental issues received in response to the Draft EIR will be addressed in a response to comments document, which, together with the Draft EIR and any changes to the text made in response to comments, or initiated by staff, will constitute the Final EIR. After a public hearing on the proposed project, the City will review the Final EIR, staff recommendations, and public testimony prior to certifying the EIR and deciding whether to approve or deny the proposed project.

If the City approves the project, even though significant impacts identified by the EIR cannot be mitigated, the City must state in writing the reasons for its actions. A Statement of Overriding Considerations must be included in the record of the project approval and mentioned in the notice of determination (CEQA Guidelines, Section 15093(c)).

1.3.6 Mitigation Monitoring and Reporting

Throughout this Draft EIR, mitigation measures have been clearly identified and presented in language that will facilitate establishment of a mitigation monitoring and reporting program. A complete list of these mitigation measures is provided in **Table ES-1** in the **Executive Summary** of this EIR. CEQA (Section 21081.6(a)(1) of the Public Resources Code) requires public agencies, as part of the certification of an EIR, to prepare and approve a mitigation monitoring and reporting program (MMRP). The MMRP must be structured to ensure that changes to the project that the lead agency has adopted to mitigate or avoid significant environmental impacts are carried out during project implementation. A MMRP will be prepared at the time of the Final EIR for this project and will identify the specific timing, roles, and responsibilities for the implementation of mitigation measures.

1.4 Scope and Focus of this EIR

The analysis included in **Chapter 3.0** focuses on the specific environmental resource topics that require further evaluation to determine if they have a potential impact. The City has considered comments submitted in response to the Notice of Preparation for this EIR, comments received at the scoping meeting, as well as comments received regarding the previously-proposed Mitigated Negative Declaration. For ease of reference, **Tables 1-1** through **1-4** (shown below) identifying written comments include both those submitted for the MND, as well as the NOP for this EIR. All comment letters received are provided in **Appendix A** and **B** of this EIR.

1.4.1 Summary of IS/MND and NOP Comments

A summary and comparison of the comment letters received during the IS/MND and NOP scoping reviews is provided below.

1.4.2 Environmental Issues Determined Not to Be Significant

Pursuant to CEQA Guidelines, the discussion of the potential impacts on the physical environment can be focused on those impacts that may be significant or potentially significant. CEQA Guidelines allow a Lead Agency to limit the details of discussion of the environmental effects (impacts) that are not considered potentially significant (PRC Section 21100, CCR Sections 15126.2[a] and 15128). The CEQA Guidelines also require that the discussion of any significant effects on the environment be limited to substantial or potentially substantial adverse changes in physical conditions that exist within the affected area, as defined in PRC Section 21060.5 (Statutory definition of "environment").
Commenting Entity	IS/MND (Date Received)	NOP (Date Received)
Regional SAN	September 25, 2018	May 22, 2019
	Key Issues: Consider existing utility infrastructure during project planning and construction.	Key Issues: Same
County of Sacramento Environmental	None Received	May 31, 2019
Management Division		Key Issues: Coordination with Local Enforcement Agency for activities within a closed and ongoing landfill facility.
California Native American Heritage	None Received	June 7, 2019
Commission		Key Issues: <i>Describes compliance</i> <i>with AB 52 and SB 18.</i>
County of Sacramento Regional Parks	November 5, 2018	June 11, 2019
	Key Issues: Tree Removal and Trail Enforcement.	Key Issues: Same MND comment treated as NOP comment at request of agency.
American River Flood Control District	November 9, 2018	None Received
	Key Issues: Letter of Support	
Central Valley Regional Water Quality	November 21, 2018	None Received
Control Board	Key Issues: Defines project regulatory setting and identifies potential water quality permitting requirements.	
California Department of	November 21, 2018	June 19, 2019
Iransportation	Key Issues: Identifies need for encroachment permit for work within State right-of-way.	Key Issues: Identifies cumulative transportation projects and encroachment permit for work within State right-of-way.
California Department of Fish and	None Received	June 20, 2019
Wildlife		Key Issues: Describes role of agency and provides guidance for setting, impacts and mitigation measure analysis. Identifies the Lake and Streambed Alteration Agreement Program.
Sacramento Metropolitan Air Quality	None Received	June 21, 2019
Management District		Key Issues: Compliance with Construction-Generated Criteria Air Pollutant and Precursor Emissions policies from the Guide to Air Quality Assessment in Sacramento County should construction-related emission thresholds be exceeded.
State of California – Office of Planning	December 3, 2018	None Received
and Kesearch	Key Issues: <i>List of State Agencies that reviewed and provided comments on the IS/MND.</i>	

Table 1-1. Summary of Agency Comment Letters

Commenting Entity	IS/MND (Date Received)	NOP (Date Received)
Pacific Gas and Electricity (PG&E)	October 23, 2018	None Received
	Key Issues: Outlines utility coordination procedures for work near utility infrastructure or PG&E easements.	
Sacramento Municipal Utility District	November 21, 2018	June 19, 2019
(SMUD)	Key Issues: Describes existing utility infrastructure near the trail alignment and describes the utility easement encroachment process.	Key Issues: Same
Friends of Sutter's Landing Park	November 29, 2018	None Received
(FOSL) and Friends of the River Banks (FORB)	Key Issues: Oppose the current proposal which would place a new paved bike trail at the toe of the levee slope and or incised into the levee bank between Sutter's Landing Park and H street. Offsite biological resource mitigation not appropriate to maintain onsite wildlife corridor function. The current bike trail location needs to consider the pending work on the NRMP and BPWG. Trail impacts related to high water flow flooding. Construction staging areas need to be outside the American River Parkway to avoid impacts. White- tailed Kites and other raptor impacts. Riparian, tree and Valley Elderberry impacts. Post-construction impacts of increased recreation in an area of the Parkway.	
Save the American River Association	November 29, 2018	June 19, 2019
	Key Issues: Proposed project is inconsistent with the Concepts, Goals and Policies of the American River Parkway Plan. Project impacts to riparian habitat, trees, and Valley Elderberry are also inconsistent with the intent of the American River Parkway Plan. Address the use of excavated materials (vegetation) for use in habitat restoration activities in the Parkway. Offsite habitat mitigation also not consistent with Parkway Plan. Project to address the need for bicycle racks at Glen Hall Park. Adequate law enforcement and police patrols for new trail.	Key Issues: Same. The EIR must also include the impacts of the loss of specific riparian resources on Climate Change. The EIR should also account for future City and County projects impacting the American River Parkway's natural resources. Cumulative Impacts.
Habitat 2020	November 30, 2018	None Received
	Key Issues: <i>EIR</i> should be prepared for project. Consider alternatives to the proposed toe of levee trail alignment. Consider a narrow trail to further minimize impacts. Impacts to habitats and wildlife from increased recreation activity. Impacts to nesting birds (distance to nests) resulting from trail construction and maintenance. MND misrepresents the applicable tree ordinance. 1 to 1 mitigation requirement for riparian impacts is considered	

Table 1-2. Summary of Organization Comment Letters

Commenting Entity	IS/MND (Date Received)	NOP (Date Received)	
	inadequate. Offsite mitigation is considered inadequate.		
Save Don't Pave (Soluri Meserve)	November 30, 2018	June 19, 2019	
	Key Issues: Project description inadequate, fails to cover increased maintenance activities for the trail; Use of the trail by bikes, inadequate description of location vis a vis natural habitat and resources, including valley elderberry (VELB), and existing walking trails; Crime Prevention Through Environmental Design (CPTED) actions would remove vegetation with aesthetic impacts; Project is in conflict with land use policies and plans, including 2035 General Plan, American River Parkway Plan, the City Bikeway Master Plan and designation of the American River as a Wild and Scenic River; Parkway policy 10.4.2 calls for trail on top of levee where feasible; Failure to disclose baseline recreational use; Air quality impacts include emissions from vehicles searching for parking; Impacts to VELB and VELB habitat; Impacts to protected trees; Erosion; Hydrological; Increases in fecal coliform; Noise; Illegal camping; Public services; Transportation/traffic; Failure to address cumulative impacts.	Key Issues: Previous comment letter dated November 30, 2018 (Soluri Meserve) is reference and attached. Additional issue: The Draft EIR should analyze the needs of commuters and residents in the named areas identified in the project objectives.	
Save Don't Pave (Soluri Meserve) Errata	December 4, 2018 Key Issues: <i>Errata identifying corrections to</i> <i>November 30, 2018 letter.</i>	None Received	

Table 1-2. Summary of Organization Comment Letters

	Table 1-3.	Summar	of Individual Comment Letters on the IS/MND
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Commenter	Date Received	Summary Of Key Issues
Julie Lincoln (Comment Card)	October 27, 2018	Key Issues: Of the Glen Hall Park access options, supports selection of Alternative #3, as presented at the October 27, 2018 public workshop.
Jim Scrivner (Comment Card)	October 27, 2018	Key Issues: Letter of support for the proposed project.
Carol V. Michael (Comment Card)	October 31, 2018	Key Issues: No specific environmental issue. Suggests replacing the proposed project with a bicycle bridge near <i>I</i> -80.
Michael O'Brien	November 1, 2018	Key Issues: Letter of support for the proposed project.
Leland H. Ruth (Comment Card)	November 2, 2018	Key Issues: Of the Glen Hall Park access options, supports selection of Alternative #3, as presented at the October 27, 2018 public workshop.
Robert Montgomery (Comment Card)	November 5, 2018	Key Issues: Letter of support for the proposed project.
Jason Lynch (3 emails)	November 12, 2018	Key Issues: Suggests raising the trail grade under the UPRR and I-80 structures to minimize trail closures during flood events. Suggestions for trail design to minimize

Table 1-3.	Summary of Individual Comment Letters on the IS/MND
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Commenter	Date Received	Summary Of Key Issues
		shoulder erosion. Suggestions for Trail Segment #2 to minimize spot flooding.
Eric Schranz (Comment Card)	November 13, 2018	Key Issues: Paved trail will increase pedestrian/cyclist conflicts in the area.
Alison French-Tubo	November 20, 2018	Key Issues: Letter of support for the proposed project.
Thomas Cordano	November 21, 2018	Key Issues: Aesthetics – IS/MND understates impacts. Geology & Soils – Geotechnical Report should be prepared for the project and not as mitigation. Recreation – trail will affect the existing open space nature of the area and result in user conflicts. Transportation – should address conflicts between current users and users introduced by the project. Adequate Environmental Review and Response to Comments – EIR should be prepared for the project.
Mark Heilman	November 22, 2018	Key Issues: Same as those provided by Thomas Cordano (see above). In addition: Biological Resources – riparian habitat, protected trees, and threatened & endangered species impact analysis not complete or rigorous enough. VELB impacts underestimated and offsite mitigation inadequate and uncertain.
Susan Hausmann	November 26, 2018	Key Issues: Opposition to trail for its impacts to the natural landscape and habitats of the area.
Steve Anderson	November 28, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Cheryl Franzi and Gregory Jamnetski	November 28, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Emmy Mignano	November 28, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Gregory Mignano	November 29, 2018	Key Issues: Opposition to trail for its impacts to the natural landscape and habitats of the area.
Tracy Keith	November 29, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
David Moffatt	November 29, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above). In addition: Water Quality/Stormwater Runoff – no discussion regarding stormwater runoff from impervious surfaces and additional water quality impacts,
Sean O'Brien	November 29, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Pam Kennedy	November 29, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Nancy MacKenzie	November 29, 2018	Key Issues: No analysis of the Glen Hall Park access option, Aesthetic impacts. No invasive species prevention measures in Mitigation Measure 3-5. Offsite habitat mitigation should be replaced by onsite mitigation.
Stuart Reeves	November 30, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Horacio Porath	November 30, 2018	Key Issues: Potential fire impacts resulting from cyclists smoking cigarettes on paved trails.

Commenter	Date Received	Summary Of Key Issues
Horacio Porath	November 30, 2018	Key Issues: Cyclist and pedestrian user conflicts from increased use of a paved trail.
Kate Riley	November 30, 2018	Key Issues: Supports "No Project", as existing options available including Guy West Bridge, Carlson Drive Improvements, etc. Flood danger from risk to levee performance. Compliance with the American River Parkway Plan. Consistency issue between the proposed project and the City of Sacramento Bicycle Master Plan. Loss of trees. Cultural resource impacts to the levee. Consistency with the Caltrans Capital City Corridor.
Alex Burt	November 30, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Sidney Scheideman	November 30, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Robert Scheideman	November 30, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Eve Martinez	November 30, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Sheri Opp	November 30, 2018	Key Issues: Same as those provided by Thomas Cordano and Mark Heilman (see above).
Jane Hunter	November 30, 2018	Key Issues: <i>Impacts to levee integrity resulting from cutting into the levee for the benched trail and retaining walls.</i>

Table 1-3. Summary of Individual Comment Letters on the IS/MND

Table 1-4.Summary of Individual Comment Letters during the NOP Scoping
Period

Commenter	Date Received	Summary Of Key Issues
Trevor Neely	May 21, 2019	Key Issues: Letter of support for the proposed project.
Dan Ruiz	May 21, 2019	Key Issues: Paved trail will increase homeless within the River Park levee area.
Pam Kennedy	May 28, 2019	Key Issues: General opposition to the project. Paved trail will escalate bike use and illegal camping which will increase demands on law enforcement services.
Patrick Brown	June 8, 2019	Key Issues: Supports extending the levee top trail further to the levee's location near Jerome Way (in the River Park neighborhood) to minimize biological resource impacts.
Daniel Thomas	June 8, 2019	Key Issues: Paved trail will increase homeless within the River Park levee area.
Matt Mitchell	June 11, 2019	Key Issues: Letter of support for the proposed project.
Toni Pizetti (Comment Card)	June 11, 2019	Key Issues: Assess flood-related damage impacts to trail. Paved trail will increase homeless within the River Park levee area. Consider the Elvas Corridor as an alternative to the proposed project.
J. Scott Coatsworth	June 12, 2019	Key Issues: Letter of support for the proposed project.
Jason Grefrath	June 13, 2019	Key Issues: Letter of support for the proposed project.
Mark Guzman	June 13, 2019	Key Issues: Letter of support for the proposed project.

Commenter	Date Received	Summary Of Key Issues
Steven Andrews (Comment Card)	June 17, 2019	Key Issues: <i>Paved trail will increase homeless within the River Park levee area.</i>
Carla DuCray	June 17, 2019	Key Issues: Opposed to proposed project. Cutting into levee would affect levee integrity. Project is expensive and other alternative routes are available. Trail will be flooded and require maintenance.
Barbara Debert (Comment Card)	June 17, 2019	Key Issues: Concerned about informal access and parking near Moddison Avenue.
Patrick Brown (Comment Card)	June 17, 2019	Key Issues: Supports extending the levee top trail further to the levee's location near Jerome Way (in the River Park neighborhood) to minimize biological resource impacts.
Sheri Opp	June 18, 2019	Key Issues: General opposition to the project. Supports a levee top trail.
Stephanie Shelley	June 18, 2019	Key Issues: Opposed to levee top alternative due to increased noise. Paved trail will require increased law enforcement and waste management services. Project should include call boxes and speed limit signs should be posted along trail.
Brian Nowicki	June 19, 2019	Key Issues: Changing the alignment of Segment 5A would avoid most impacts to the narrowest and most sensitive section of riparian area and habitat. Mitigation for the impacts to the riparian area and VELB should be sited along the project area. Leaving some areas unpaved could satisfy the needs of the project while avoiding the greatest negative environmental impacts. The aerial photos of the project fail to accurately present the current condition of the project area. Crime Prevention Through Environmental Design can result in substantial and ongoing environmental impacts.
Stephanie Jentsch	June 19, 2019	Key Issues: Same as those provided by Brian Nowicki (see above).
Irene Gotta (Comment Card)	June 19, 2019	Key Issues: General opposition to the project.
Susan Hausmann	June 19, 2019	Key Issues: Speed of bikes is a concern. Supports incorporating speed bumps or turnstiles to insure bikes adhere to the speed limit as this is a heavily used pedestrian trail.
Stuart Reeves	June 19, 2019	Key Issues: General opposition to the project.
Jack Sales	June 22, 2019	Key Issues: Concerns regarding artificial lighting impacts on Salmon predation in the study area.

Table 1-4.Summary of Individual Comment Letters during the NOP Scoping
Period

Impacts dismissed in an analysis as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the Lead Agency subsequently receives information inconsistent with the finding (CCR Section 15143). As part of the IS/MND it was determined that implementation of the project identified in the IS/MND (dated October 23, 2018) would result in **less than significant** or **no impact** (i.e., not significant) to the resources identified in **Table 1-5**. In reviewing the proposed project analyzed in this EIR compared to the project analyzed in the IS/MND, it was determined that the proposed project would result in similar impact conclusions to those issues identified in **Table 1-5**. These similar impact conclusions are primarily due to the project's location within the same study area or to the proposed project's reduced construction footprint (levee top versus benched levee, for a portion

of the trail) resulting in reduced construction activities affecting project-related energy use and air quality emissions. Consequently, the issues identified in **Table 1-5** are not discussed at further length in this EIR:

Initial Study Issue Area		
(From IS/MND, October 23, 2018)	Checklist Status	Findings
Agricultural Resources	No Impact	The project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance). (FMMP 2016) The site traverses an area zoned Agricultural-Open Space, but this area (a portion of Sutter's Landing Regional Park) is not currently in agricultural use, and there are no Williamson Act contracts that affect the project site. No existing agricultural or timber-harvest uses are located on or near the project site.
Mineral Resources	No Impact	Within the City, projects near mining activities are required to be compatible with such activities, and buffers and setbacks are required from areas classified as MRZ-2 (mineral resource zone with significant existing or likely mineral deposits). No existing mining activities are located within the project site or vicinity. There are no areas designated as MRZ-2 within the project site or vicinity.
Energy	No Impact	Project construction would be typical of trail construction practices. There are no unusual features of the trail construction that would result in inefficient or unnecessary consumption of energy or obstruct implementation of plans related to energy. Operation of the trail would have no significant energy impacts, and potential for the trail to increase usage of bicycle and pedestrian transportation in nearby neighborhoods and the City could potentially reduce energy use.
Water Supply	No Impact	The proposed project consists of constructing a bicycle and pedestrian trail. The project would not involve construction of any housing, commercial or public buildings, facilities or landscaping that would require connection to existing water conveyance pipelines or require additional connections to the regional water supply system.
Solid Waste	No Impact	The proposed project would be served by the Sacramento Solid Waste Authority (SWA). The 2035 General Plan Master EIR does not include analysis regarding waste generation for public park or trail facilities, however the proposed project does not include residential or business facilities, thus solid waste generation would be limited to trash generated by trail users. Because the project was accounted for in the City's General Plan and Master EIR, and the project is consistent with the General Plan land use designation, this increase in solid waste production would not exhaust the remaining landfill capacity.
Electricity and Natural Gas	No Impact	Electrical service is provided to the project area by SMUD's network of overhead lines. However, in compliance with ARPP Policy 5.27 "Prohibited Activities and Facilities" which prohibits permanent lighting facilities in the Parkway, the proposed trail would not be constructed with electrical lighting along the alignment and no connections to the regional electricity grid would be required. The proposed project would also not require connection to the PG&E natural gas distribution system.
Telecommunications	No Impact	Construction of the proposed project would not affect the use of the existing telecommunications system. Additionally, the

Table 1-5.Issues Not Analyzed in Detail in This EIR

Initial Study Issue Area		
(From IS/MND, October 23, 2018)	Checklist Status	Findings
		project would not result in the need for additional capacity within the existing system.
Wastewater and Stormwater	No Impact	The proposed project would not involve construction of any public restrooms or other wastewater-generating facilities along the project alignment. Therefore, additional wastewater treatment and conveyance capacity or connections to the regional wastewater management system would not be required to implement the proposed project. The bike trail footprint is not large enough to create a substantial increase in runoff from impervious surfaces and overall stormwater runoff patterns would not change along the project alignment. In Segments 1 and 2, stormwater is expected to infiltrate into the ground before entering the City's stormwater conveyance system. In Segments 3-6, all stormwater would continue to flow to the American River. The trail would be slightly sloped away from the levee crown (toward the river) to encourage sheet flow of stormwater over the ground surface. In areas where trail design may cause minor ponding of water, small drain inlets would be installed to carry water under the bike trail to outlets on the river side of the trail. Outlets would discharge out of a flared end section and onto a small area of rock which would reduce stormwater velocity and disperse the water in a way that reduces the possibility of erosion around the outlet. Therefore, project construction and operation would not contribute to a need for additional stormwater facilities or additional connections to existing facilities.
Wildfire	No Impact	The proposed project is not located within or near a State responsibility area or lands classified as very high fire hazard severity zones according to CalFire (Calfire 2007, 2008). Additionally, standard construction practices and trail usage would not increase the risk of wildfire or the possibility of uncontrolled spread of wildfire, reduce the effectiveness of emergency evacuation routes, interfere with an adopted emergency response or evacuation plan, or require the installation or maintenance of wildfire prevention or management infrastructure as part of normal trail maintenance.

Table 1-5.Issues Not Analyzed in Detail in This EIR

1.4.3 Environmental Issues Determined to be Potentially Significant

The NOP and Project scoping process identified the environmental issues presented below as having potential environmental impacts that require further analysis in the EIR:

Aesthetics	Biological Resources	Cultural Resources
Geology/Soils	Hazards	Hydrology/Water Quality
Land Use/Planning	Noise	Public Services
Recreation	Transportation	Tribal Cultural Resources

In reviewing the proposed project analyzed in this EIR compared to the project analyzed in the IS/MND, it was determined that the proposed project would result in similar construction-related air quality emissions, primarily due to the project's similar construction footprint, use of equipment, and project duration, with the potential that the currently proposed project may result in fewer construction emissions due to the construction of the levee top segment (versus the benched waterside alignment, east

of the Capital City Freeway) which would requiring less imported/exported construction materials and less construction related truck/equipment trips. Consequently, the air quality and related greenhouse gas emissions analysis and impact conclusions (potentially significant with mitigation measures required) provided in the IS/MND were determined applicable to the proposed project and incorporated by reference into this EIR (see **Executive Summary**).

1.5 Documents Incorporated by Reference

This EIR incorporates, by reference, the environmental analysis and other information contained in the City of Sacramento 2035 General Plan (2015) and the Final City of Sacramento Bicycle Master Plan (2018). The full text of the City of Sacramento 2035 General Plan is available online at: https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan.

The full text of the Final City of Sacramento Bicycle Master Plan is available online at: https://www.cityofsacramento.org/Public-Works/Transportation/Programs-and-Services/Bicycling-Program

1.6 Public Outreach and Participation

The City is dedicated to public and stakeholder outreach and ongoing public communications beyond that required by the CEQA Guidelines for the proposed project. Public outreach efforts have included the organization of a stakeholder committee, community survey, and regular updates to the community at the River Park Neighborhood Association Board meetings. Additionally, a publicly accessible page on the City's website was developed for the proposed project that provides a project timeline, updates, and links to related technical documents. The address is: <u>http://www.cityofsacramento.org/Public-Works/Engineering-Services/Projects/Current-Projects/Two-Rivers-Trail-Phase-II</u>

Community meetings included updates at River Park Neighborhood Association Board meetings and several topic specific public workshops. At the workshops, members of the public submitted questions and comments on comment cards, which were reviewed and considered as part of the project planning and environmental compliance phases of the project. A brief summary of these meetings is provided below.

April 7, 2018 – River Park Neighborhood Association General Meeting

Caleb Greenwood K-6 School 5457 Carlson Dr, Sacramento, CA, 95819 10:00 a.m.-12:00 a.m.

In April 2018, City staff (Adam Randolph) and Council Member Jeff Harris attended the River Park Neighborhood Association General Meeting to present on the current status of the project and answer questions from residents. Representatives from the City and the project team presented the current project design, answered questions, and collected contact information for inclusion in the project outreach database.

October 6, 2018 – River Park Neighborhood Association General Meeting

Caleb Greenwood K-6 School 5457 Carlson Dr, Sacramento, CA, 95819 10:00 a.m.-12:00 a.m.

In October 2018, City staff (Adam Randolph) and Council Member Jeff Harris attended the River Park Neighborhood Association General Meeting to present on the current status of the project and answer questions from residents. Representatives from the City and the project team presented the current project design, answered questions, and collected contact information for inclusion in the project outreach database.

October 27, 2018 – IS/MND Informational Workshop

Caleb Greenwood K-6 School 5457 Carlson Dr, Sacramento, CA, 95819 10:00 a.m.-12:00 a.m.

City staff hosted a public meeting on the morning of Saturday October 27, 2018 at Caleb Greenwood K-6 School. City staff and consultants answered questions on the recently released IS/MND and general project information. Public comments were received during the period between October 23 and November 30, 2018. Approximately 70 people attended the workshop and several information stations were provided including a habitat impacts map, typical trail cross sections, and options for the Glen Hall Park access route.

May 11, 2019 – River Park Neighborhood Association General Meeting

Caleb Greenwood K-6 School 5457 Carlson Dr, Sacramento, CA, 95819 10:00 a.m.-12:00 a.m.

City staff and Council Member Harris attended the River Park Neighborhood Association General Meeting to present on the status of the project. As part of the meeting, City staff informed residents that an Environmental Impact Report would be prepared for the project, and that there is a planned "scoping meeting" to be held in June 2019.

June 8, 2019 – NOP Public Scoping Meeting

Fremont Presbyterian Church, Ferguson Hall 5770 Carlson Dr, Sacramento, CA, 95819 10:00 a.m.-12:00 a.m.

City staff and project team members hosted a public scoping meeting on the morning of Saturday June 8, 2019 at Caleb Greenwood K-6 School. The session addressed general questions about the proposed project, as well as questions regarding trail use (including motorized bicycle use), trail alternatives, safety, and project funding. Public comments were received during the period between May 21, 2019 and June 19, 2019. Approximately 30 people attended the workshop and several information stations were provided including a habitat impacts map, typical trail cross sections, and options for the Glen Hall Park access route.

1.7 Organization of this EIR and Standard Terminology

In accordance with CEQA Guidelines Section 15126.2, this Draft EIR identifies and focuses on the significant direct and indirect environmental effects (impacts) of the proposed project, considering both its short-term and long-term effects. Short-term effects are generally those associated with project construction, while long-term effects are generally those associated with operation of the proposed project.

1.7.1 Organization of Environmental Issue Assessment

Each environmental issue analyzed in Chapter 3.0 contains the following components:

Environmental Setting presents the existing environmental conditions within the proposed Project boundaries and within the surrounding Project area, as appropriate, to establish baseline conditions, in accordance with CEQA Guidelines Section 15125. The extent of the environmental setting area evaluated (the Project study area) differs among resources, depending on the locations where impacts would be expected. For example, water or air quality impacts are assessed for the basin (macro-scale), as well as the site vicinity (micro-scale), whereas aesthetic impacts are assessed for the project vicinity only.

Regulatory Framework presents the laws, regulations, plans, and policies that are relevant to each issue area. Regulations originating from the Federal, State, and/or local levels are each discussed, as appropriate.

Methodology of Analysis includes the methodology to determine what constitutes a significant impact, the Thresholds of Significance used to determine the level of significance of the environmental impacts for each resource topic, in accordance with CEQA Guidelines Sections 15126, 15126.2, and 15143, and the Project Impact Analysis and documentation of any required mitigation measures. The Thresholds of Significance used in this Draft EIR were developed using criteria from the CEQA Guidelines (see Appendix A); Federal, State, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Project Impacts identify the level of each environmental impact by comparing the effects of the proposed Project to the environmental setting. Project impacts are organized numerically in each subsection (e.g., Impact BIO-1, Impact BIO-2, Impact BIO-3). A bold-font environmental impact statement precedes the discussion of each impact while its level of significance follows the discussion of each impact summary includes the substantial evidence supporting the impact significance conclusion.

Required Mitigation includes specific details of the mitigation identified in the Environmental Impacts with performance standards, timing, and responsible parties identified.

1.7.2 Format Used for Impact Analysis and Mitigation Measures

The format adopted in this Draft EIR to present the evaluation of environmental impacts is described and illustrated below.

Summary Heading of Impact (Example)

Impact BIO-1:An impact summary heading appears immediately preceding the impact
description (Summary Heading of Impact in this example). The impact
abbreviation identifies the section of the report (BIO for Biological Resources
in this example) and the sequential order of the impact (1 in this example)
within that section. To the right of the impact number is the impact statement,
which identifies the potential impact.

Narrative Analysis: A narrative analysis follows the impact statement assessing the baseline condition of the proposed project compared to the established Threshold of Significance. This analysis identifies any potential mitigation required and explains how the mitigation would mitigate the potential impact. The analysis concludes with what the Level of Significance is with all factors considered.

Level of Significance: Less than Significant with Mitigation (the evaluated Level of Significance concluded in the analysis is included here, such as Less than Significant with Mitigation in this example).

This section describes the determination of the severity of project impacts. This is fundamental to achieving the objectives of CEQA. The CEQA Guidelines Section 15091 requires that decision-makers mitigate, as completely as is feasible, the significant impacts identified in the Draft and Final EIRs. Levels of significance can fall into four categories: No Impact; Less Than Significant; Less Than Significant With Mitigation; or Significant Unmitigated Impact. If the EIR identifies any significant unmitigated impacts, the CEQA Guidelines Section 15093 requires decision-makers to adopt a statement of overriding considerations that explains why the benefits of the Project outweigh the adverse environmental consequences identified in the EIR.

The Level of Significance for each impact examined in this Draft EIR is determined by considering the predicted magnitude of the impact against the applicable threshold. This section also identifies the resulting level of significance of the impact, including the implementation of mitigation measures (if required).

Mitigation Required: Mitigation Required lists any feasible measures that could avoid, minimize, rectify, reduce, or compensate for significant adverse impacts, with measures having to be fully enforceable through incorporation into the Project (PRC Section 21081.6[b]) as discussed under the impact analysis.

Mitigation measures are not required for environmental impacts that are found to be less than significant. Mitigation for a significant environmental impact is described following the impact, where feasible and available. If sufficient feasible mitigation was not available to reduce environmental impacts to a less than significant level, or where the Lead Agency lacked the authority to ensure that the mitigation be implemented when needed, the impacts would be identified as significant and unavoidable. None of the impacts identified for the proposed project have been identified as significant and unavoidable.

2.1 Introduction

The identification of clear and concise project objectives establishes a foundation for the environmental impact analysis and assists in identifying the range of feasible project alternatives. This chapter provides the key objectives of the proposed project and identifies the primary components of the proposed Two Rivers Trail Phase II Project (proposed project), including project characteristics, construction activities, project maintenance, and discretionary actions and approvals that may be required.

2.2 Project Objectives

The objectives of the proposed project are to:

- Provide a vital recreation link between the Jedediah Smith Trail on the north side of the American River Parkway, the Sacramento River Parkway, the Sacramento Northern Bikeway Trail, the future Ueda Parkway trails, and the 20th Street bike connection to the Central City;
- Provide alternative transportation access for commuters and residents in the eastern part of the City, CSUS, Central City, North Sacramento, East Sacramento, and Richards Boulevard area;
- Provide opportunities for educating trail users through interpretive signage, establishing a connection to the river, and the Parkway;
- Provide an acceptable project to all authoritative agencies;
- Complete the project in a manner that minimizes environmental impacts to the Parkway, given the proposed project's location within the environmentally sensitive Parkway; and
- Where feasible, design trail access points to comply with the requirements of the Americans with Disabilities Act (ADA).

2.3 **Project Description**

2.3.1 Trail Alignment

The proposed project would create approximately 3.4 miles of new Class 1 bicycle and pedestrian trail comprising 6 segments (**Figures 2-1** and **2-2**).

Segment 1 is approximately 0.4 miles long. It begins at the existing Sacramento Northern Bikeway Trail at North 18th Street and ends 0.3 miles west of Sutter's Landing Park (see Figure 2-1). At North 18th Street, the trail would run along the toe of the levee crossing under the Union Pacific Railroad (UPRR) and continue for another 0.3 miles.

Segment 2 is approximately 0.6 miles long. This segment begins at the eastern terminus of Segment 1 and continues to Sutter's Landing Regional Park (see Figure 2-1). Two trail alignments are under consideration

for Segment 2. The preferred trail alignment, Alternative 1, which is approximately 0.7 miles in length, would diverge from the levee immediately at the end of the first segment and extend south for approximately 0.3 mile and then turn southeast and extend another approximately 0.4 mile to 28th Street at the entrance to Sutter's Landing Regional Park across the street from McKinley Village Way. The other alignment for Segment 2 (Alternative 2) is approximately 0.55 miles in length. It would extend east from the end of the first segment for another approximately 0.15 mile before diverging from the levee to the south. This leg of Segment 2 would then continue south approximately 0.25 mile, until it intersected with the preferred alignment, or would turn southeast 0.1 mile sooner and follow the north side of an existing solar array for approximately 0.15 mile before terminating in the parking lot adjacent to the dog park and across the street from the existing trail within Sutter's Landing Regional Park.

Segment 3 is approximately 0.3 miles long and begins on the east side of Sutter's Landing Park at the end of the recently completed trail segment. From here, the trail would run along an existing bench at the toe of the levee, first crossing under another portion of the UPRR and eventually under the Capital City Freeway (SR 80) where Segment 4 begins (see Figure 2-2).

Segment 4 is also approximately 0.25 miles long (see **Figure 2-2**) and would begin just east of the Capital City Freeway. This segment is proposed as a "levee-top" trail alignment, which may extend past the current boundary of Segment 5 should the ARFCD be able to grant additional trail variances to the waterside toe alignment proposed for the remaining portions of the trail. Extending a levee top trail past the Segment 4 boundary would further reduce biological resource impacts within the study area. **Figure 2-3** provides a comparison of the top of levee cross section and the toe of typical levee cross section proposed for segments 3, 5, and 6.

Segment 5 is 1.4 miles long and passes Paradise Beach and Glenn Hall Park (see **Figure 2-2**). This trail segment has a bench all along the waterside toe where the trail would be aligned, but bench width varies such that this segment has been subdivided into three subsegments (to accommodate topographic conditions). Subsegment 5A is approximately 2,900 feet in length, and the waterside bench, although well-defined, is narrower in this area than in Subsegment 5B. Subsegment 5B is approximately 4,300 feet in length and has a well-defined, much wider and flatter, bench to accommodate the trail.

Subsegment 5C is approximately 500 feet in length and its waterside bench characteristics are similar to Subsegment 5A.

Segment 6 begins at the east end of Subsegment 5C along the levee toe, is approximately 0.3 miles long, and includes a transition back to the levee crown where the trail would connect to the existing paved trail near the H Street Bridge (see **Figure 2-2**). While there is a bench along the toe in this segment, the bench is much narrower than in other locations requiring a reduced path width to limit impacts.

2.3.2 Trail Design

The proposed multi-use trail design would meet California Department of Transportation (Caltrans) Class 1 bikeway design criteria and would also be based on the State Water Code Title 23 standards for recreation trails on levees and the ARFCD Recreational Trails Policy (ARFCD 2002). The trail would generally consist of an 8-foot-wide paved path with a 2-foot-wide compacted shoulder on the inner side and a similar 6-foot-wide shoulder on the waterside to provide space for walking and jogging adjacent to the paved portion of the trail, bringing the total trail cross section along most of its length to 16 feet wide. However, due to space limitations in some locations, the waterside shoulder of the trail would be narrowed to 4 feet wide. The trail would be paved and engineered to be load-bearing (**Figure 2-3**).

Figure 2-1. Proposed Trail Alignment - Western Segments



Source: GEI Consultants, Inc., 2019

010CT2018 BMC Z:\Projects\1610789_TwoRiversTrail\1610789_G012_No_APE_Seg1-2.mxd

Figure 2-2. Proposed Trail Alignment - Eastern Segments



Source: GEI Consultants, Inc., 2019

25May2018 BMC Z:\Projects\1610789_TwoRiversTrail\1610789_G013_No_APE_Seg3-5.mxd





Source: Quincy Engineering Inc., 2019

Note: Figure 2-3 is intended as a conceptual illustration, with actual trail location to be coordinated with CVFPB and USACE to ensure top of levee section is as close to waterside as possible.

In Segments 1 and 2, where the trail would be located landward of the levee, storm water is expected to infiltrate into the ground before entering the City's storm water conveyance system. In Segments 3-6 and where the trail would be along the levee crown or on the waterside of the levee in Segments 1 and 2, the trail would be slightly sloped toward the American River to maintain existing runoff patterns. In areas where trail design may cause minor ponding of water, small drain inlets would be installed to carry water under the bike trail to outlets on the river side of the trail. Outlets would discharge out of a flared end section and onto a small area of rock designed to reduce storm water velocity and disperse the water to prevent erosion at the outlet.

2.3.3 Union Pacific Rail Road Crossings

The trail in Segments 1 and 3 would cross under active railway lines. In these locations fencing would be constructed to prevent trail users from accessing the UPRR right-of-way. Fencing would be placed near the tops of the levee, directly adjacent (but not connecting) to the ends of the existing railroad bridges on one end and existing fences on the land side of the levees. The fences would be designed to meet UPRR requirements. Gates would be placed at the tops of the levee near the existing at-grade

crossings to allow levee maintenance and patrol vehicles to use the crossings. Protective covers similar to the one depicted in **Figure 2-4** may also be constructed to protect trail users crossing under the railroad bridges from potential falling debris from above. The protective cover is anticipated to be a free-standing canopy supported on a cantilever structure that would extend up to 30 feet out perpendicular to each side of the railroad structure but would not extend below the railroad structure.



Figure 2-4. Typical Railroad Undercrossing Cross Section

Source: GEI Consultants, Inc., 2019

2.3.4 Public Access, Trail Connections, and Lighting

The proposed project has been designed to ensure access and connectivity with City neighborhoods, regional and local park facilities (Sutter's Landing Regional Park, Glenn Hall Park), and other regional trails (Jedediah Smith Memorial Trail). Four potential points of access have been identified and are described below. Directional and interpretive signage is also proposed at these locations. Signage would conform to the Parkway Trail & Parks Sign Manual (Sacramento County 2018). No lighting is proposed as part of the proposed project.

Sacramento Northern Bikeway Trail (North 18th Street)

With the proposed project commencing just west of the Sacramento Northern Bikeway Trail, this access point in Segment 1 would facilitate connections to existing City neighborhoods (including New Era Park, Boulevard Park, and Alkali Flats) and newly developing areas of the City (including the Railyards) (see **Figure 2-2**). Trail users at this location could also access the larger regional trail system (Jedediah Smith Memorial Trail) via the Sacramento Northern Bikeway Bridge.

Sutter's Landing Regional Park (28th Street)

Access to the trail would also occur at Sutter's Landing Regional Park in Segment 2 (see **Figure 2-1**) near the terminus of 28th Street by the entrance to the park. This location would also provide access from the trail south to on-street bike lanes connecting the trail to central city commercial, employment, and residential areas including the New Era Park, Marshall School, East Sacramento, and McKinley Park neighborhoods.

Glenn Hall Park

In Segment 5, access within the River Park neighborhood is proposed at Glenn Hall Park (see **Figure 2-2** and **Figure 2-5**). This point would provide ADA trail access to residents of the River Park neighborhood and would provide a connection to Carlson Avenue, Elvas Avenue, the CSUS campus, and surrounding commercial/residential areas.

H Street Bridge

The proposed project would connect to the existing paved trail along the south bank of the American River near the H Street Bridge at the terminus of Segment 6 (see **Figure 2-2**). This point provides an important connection linking the proposed project with the CSUS campus, the existing Jedediah Smith Trail on the north side of the Lower American River via the H Street Bridge, and the existing paved trail along the south side of the Lower American River west of the H Street Bridge. This point would also provide access to east/west on-street bike lanes connecting the central city, the CSU Sacramento and the Campus Commons neighborhoods.

2.3.5 Project Construction

Construction Schedule

Construction of Segments 1 and 2 would take approximately 2 to 3 months to complete while Segments 3 through 6 would require approximately 5 to 6 months to complete. The City currently has construction funding to complete Segments 3 through 6 and proposes to complete construction of these four segments in 2020 between April 15 and November 1, in accordance with Title 23 requirements. Construction of Segments 1 and 2 would be completed at a future date, contingent on the availability of funding and landfill remediation activities in the area.

Construction Methods

Trail construction would begin with clearing and grubbing any trees, shrubs and other organic material from within the construction limits. The alignment, including trail access points, would then be excavated, filled, and/or graded and compacted, as needed, to achieve a suitable base and ADA-compliant grades. All trail segments would only require minor excavation and fill to prepare for the Class I trail, with quantity estimates of these materials shown below in **Table 2-1**. The trail will



Figure 2-5. Glenn Hall Park Trail Access Alignment

Source: Quincy Engineering Inc., 2019

transition from the toe of the levee to the top in a couple of locations (including the transitions between Segments 3 to 4 and 4 to 5, access at Glen Hall Park, and the end of Segment 6), with some cut and fill involved to allow the trail to transition and have ADA compliant gradients. Imported materials would include aggregate base rock and pavement materials that would be placed on top of the aggregate base to create the smooth finished paved surface of the trail. The materials, dimensions, and methods used would accommodate sufficient load-bearing capacity for heavy equipment used for levee maintenance and emergency operations, while maintaining the integrity of the pavement for recreational use.

Trail Segments	Material Type	Quantity Estimates (cy – cubic yards)
Segments 1 & 2	Excavation Amount	2,500 cy
	Import Fill Material	1,000 cy
	Import Aggregate Base Material	2,500 cy
	Import Pavement Material	650 cy
	Total Imported Materials	4,150 cy
Segments 3 through 6	Excavation Amount	3,710 cy
	Import Fill Material	3,375 cy
	Import Aggregate Base Material	4,940 cy
	Import Pavement Material	940 cy
	Total Imported Materials	9,255 cy

Table 2-1. Estimates of Excavation and Import Fill for the Project

Following construction, the contractor would remove any construction materials and restore all disturbed surfaces to their pre-project condition, including replacing fences, repairing asphalt roadway surfaces, restoring existing slopes and grades, and revegetating affected surfaces through means such as hydroseeding. All hard surfaces would be cleaned of dirt, dust, or other construction materials.

Construction Equipment and Work Force

Equipment used for the project would include typical pieces of general construction equipment including backhoes, bulldozers, excavators, graders and compactors (**Table 2-2**). Some haul trucks may also be required including those with water (dust control) and seed sprayers (revegetation activities). All equipment types would be below legal limits for operating on local streets and would be staged as close to the project site as possible.

Equipment	Construction Purpose
Backhoe	Soil manipulation
Bobcat	Fill distribution
Bulldozer/Loader	Earthwork construction, cleaning and grubbing
Excavator	Soil manipulation
Front-end Loader	Dirt or gravel manipulation
Grader	Ground leveling
Haul Truck	Earthwork construction; clearing and grubbing
Paver	Roadway paving
Roller	Earthwork and compacting
Scraper	Earthwork construction; clearing and grubbing
Truck with Seed Sprayer (hydroseeded)	Erosion control and landscaping
Water Truck	Earthwork construction; clearing and grubbing

Table 2-2. Proposed Construction Equipment

An estimated 10 to 20 workers, which could vary based on specific trail development activity, would be onsite each day during construction activities. Construction activities would be limited to daylight hours, typically the hours from 7:00 a.m. to 6:00 p.m., Monday through Saturday, and possibly 9:00 a.m. to 6:00 p.m. Sunday. Construction-related noise during these hours is exempt from the City Noise Ordinance (City Code 8.68.080).

Construction Access and Staging Areas

Construction access would be via local roadways, including 28th Street (a local roadway), Carlson Drive (a minor collector), Camellia Drive (a local roadway) and H Street (an arterial east of Camellia Drive and major collector west of Camellia Drive) (City of Sacramento 2015).

Given the linear nature of the proposed project, several equipment staging areas would be required along the trail alignment (see **Figures 2-1** and **2-2**). The location of these staging areas has been planned to minimize construction activity/staging near residential/commercial areas to the extent feasible. Additionally, by distributing the staging areas at multiple locations along the project alignment/site, construction activity would also be distributed along the entire trail alignment resulting in shorter construction timeframes at individual locations and allowing for sections of the trail to remain open during construction.

Equipment staging areas may be located at the following locations:

- City-owned properties west and south of Sutter's Landing Park (001-0160-018, 003-0010-001) (see Figure 2-2).
- City-owned property between UPRR Bridge and SR 80 (001-0170-006) (see Figure 2-3).
- Area northeast of Glenn Hall Park on the waterside of the levee (005-0010-002) (see Figure 2-3).
- Scottish Rite Center parking lot (005-0232-003) (see Figure 2-3).

The City Code (City Code 12.20.030) establishes requirements for a construction traffic control plan for projects which include street closures. Although street closures during construction are not anticipated, a modified construction traffic control plan would be implemented to minimize impacts associated with construction traffic and trail closures. This plan would be prepared by the construction contractor and subject to review by the City Traffic Engineer and all affected agencies. All work performed during construction would be required to conform to the conditions and requirements of the approved plan. At a minimum, the plan would include the following:

- Safe and efficient access routes for emergency vehicles;
- Provisions for pedestrian safety;
- Provisions for pedestrian and bicycle detours, where necessary, including signage;
- Use of manual traffic control when necessary;
- Number of anticipated truck trips, and time of day of arrival and departure of trucks; and

• Provision of a truck circulation pattern and staging area with a limitation on the number of trucks that can be waiting and any limitations on the size and type of trucks appropriate for the surrounding transportation network.

The plan would be required to be available at the project site for inspection by the City representative during all work.

2.3.6 Trail Operations and Maintenance

Upon completion, the trail would be operated as a recreational Class 1 trail by the City of Sacramento. The trail operator would implement several operation and maintenance (O&M) measures, including but not limited to public safety, litter control, graffiti control, signage, access control, security, compliance enforcement, repair, rehabilitation, replacement, and removal of recreational trails facilities. Typical maintenance activities would include routine inspections, debris removal, and repair of cracks and slope failures.

In addition to the maintenance tasks listed above, typical vegetation management activities would routinely occur, including the following:

- Mowing Mowing activities would occur up to 4 times annually, performed by ARFCD. Mowing would generally occur within a 4-foot area on each side of the trail. Mowing within the drip-line of elderberry shrubs would be limited to the season when adult valley elderberry longhorn beetles (VELB) are not active (August February) and would avoid damaging the elderberry shrub.
- Trimming –Trimming of vegetation and hazard tree/limb removal along the trail would occur once annually. Woody vegetation would be trimmed back up to 4 feet from the sides of the trail, with a 12-foot vertical clearance. Vegetation less than 3 inches in diameter would be cleared by hand or small engine weed-eaters or chainsaws. Small material or grasses would be mowed close to the ground with low impact rubber-tired tractors. Vegetation over 3 inches in diameter may require larger equipment such as telescoping chainsaws, hoe-mounted flail mowers, bucket machines to hoist the crew and equipment, and climbing crew with chainsaws.
- Removal of Vegetation from Trail Surfaces The removal of invasive vegetation would be eradicated through very limited and selective application of herbicides. Per U.S. Fish and Wildlife Service (USFWS) recommendations, the use of insecticides, herbicides, fertilizers, or other chemicals would not be used within 98 feet of elderberry shrubs.

As much as feasible, all O&M activities that could occur within 165 feet of an elderberry shrub, would be conducted outside of the flight season of the VELB (March - July) to minimize impacts to VELB. However, it is assumed that up to 5 elderberry shrubs may be affected as part of maintenance activities.

High river flow events, and some levee, railroad, and trail maintenance activities may also require temporary closure of sections of trail from time to time. During such closures, signs would be placed by the trail operator or ARFCD crew at access points to the trail alerting users of the closure and designating alternate routes.

2.4 **Project Permits and Approvals**

The following agencies may have permitting or approval authority over the proposed project:

- American River Flood Control District (ARFCD) Encroachment permit for portions of the trail located on or extending across ARFCD facilities; easements for trails over lands owned by ARFCD in fee title.
- National Marine Fisheries Service (NMFS) Federal Endangered Species Act Section 7 Consultation for potential effects to federally listed and proposed (endangered and threatened) anadromous fish species.
- **Public Utilities Commission** Permission for railroad crossings.
- United States Army Corps of Engineers (USACE) Rivers and Harbors Act Section 14 (408) authorization for alterations to a Federal project levee; Clean Water Act (CWA) Section 404 permit for dredge or fill of waters of the U.S.
- United States Fish and Wildlife Service (USFWS) Federal Endangered Species Act Section 7 Consultation for potential effects to federally listed and proposed (endangered and threatened) plant and wildlife species.
- Union Pacific Railroad (UPRR) Encroachment permit for the portions of the trail passing under a Union Pacific Railroad Bridge.
- **California Department of Transportation (Caltrans)** Encroachment permit for the portion of the trail passing under SR 80.
- **California Department of Fish & Wildlife (CDFW)** California Fish and Game Code Section 1602 Streambed Alteration Agreement for construction and alterations within riparian areas.
- Central Valley Flood Protection Board (CVFPB) Encroachment permit for work within the flood control easement.
- Central Valley Regional Water Quality Control Board (RWQCB) CWA Section 401 Water Quality Certification for discharge to surface waters.
- **County of Sacramento, Department of Regional Parks** –approval of 100% construction drawings; Lease Agreement for staging and construction within the Parkway; Map Amendment to convert the trail from future to active status; and Joint Use Agreement.

Chapter 3. Environmental Setting, Impacts, and Mitigation Measures

3.1 Aesthetics

3.1.1 Introduction

This section provides an overview of the existing aesthetic (or visual/scenic resources) within the proposed project study area, identifies the regulatory framework, and provides an analysis of the potential aesthetic impacts that would result from implementation of the proposed project. During preparation of the IS/MND and as a result of the proposed project's NOP scoping period, the following comments related to aesthetic resources were received and considered during preparation of the impact analysis:

- The project will substantially interfere with an important scenic resource and substantially degrade the view of this existing scenic resource.
- An EIR needs to be prepared to look at what the before and after aesthetics of the project will be, using existing, comparable trails and the recently constructed Phase I of the Two Rivers Trail as a base line of comparison.

As more fully described in **Chapter 2.0 "Project Description**" design details (including trail width and composition) of the proposed project are provided to enable the following impact analysis. Trail design is consistent with other portions of the Two Rivers Trail and the larger network of multi-use trails located within the American River Parkway (see **Figures 3.1e** and **3.1f** under **Impact AES-1**, below).

Related impacts to the study area's vegetation and habitats from the effects of project construction and operation are provided in **Section 3.2**, "**Biological Resources**".

3.1.2 Environmental Setting

An overview of the project study area is shown in **Figure 1-1** "**Project Location Map**" provided in Chapter 1 of this Draft EIR. The project site extends along the south bank of the American River from the Sacramento Northern Bikeway to Sutter's Landing Regional Park, and along the waterside of the levee from the eastern terminus of Sutter's Landing Regional Park through the Paradise Beach area, to the H Street Bridge crossing the American River near California State University – Sacramento (CSUS).

In Segments 1 and 2, the visual character is formed by riparian vegetation along the riverbank, with upland areas characterized by ruderal vegetation, small structures, and chain link fencing. Nearby industrial facilities, the Union Pacific Railroad, and solar panels in Sutter's Landing Regional Park are also visible. **Figure 3.1-1a** contains a photo illustrating a typical view facing west across an upland area of Segment 2 near Sutter's Landing Regional Park

Segments 3 through 6 are generally characterized by riparian vegetation between the levee toe and the riverbank. A dirt or gravel track or road extends along most of the levee toe, and the levee slopes are kept clear of vegetation other than grass and ruderal vegetation. A gravel maintenance road extends along the crown of the levee. Single family residences are present on the land side of the levee in Segments 3 through 6, and visible from the levee crown, although not from the toe or levee shoulder where the proposed project would be constructed. **Figures 3.1-1a**, **3.1-1b**, **3.1-1c**, and **3.1-1d** provide photos illustrating existing visual conditions along the project site. Views of the river, typically framed by a mix of trees and smaller vegetation, are characteristic of Segment 1 and Segments 3 through 6.

3.1.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

No Federal plans, policies, regulations, or laws related to aesthetics are relevant to the analysis of land use and planning impacts for the project.

State Plans, Policies, Regulations, Laws

No State plans, policies, regulations, or laws related to aesthetics are relevant to the analysis of land use and planning impacts for the project.

Regional and Local Plans, Policies, Regulations, and Ordinances

City of Sacramento 2035 General Plan

The following goals and policies from the Land Use and Urban Design (LU) Element and the Environmental Resources (ER) Element related to aesthetics, light, and glare are relevant to the proposed project (City of Sacramento 2015).

- **GOAL LU 2.3:** City of Trees and Open Spaces. Maintain a multi-functional "green infrastructure" consisting of natural areas, open space, urban forest, and parkland, which serves as a defining physical feature of the City of Sacramento, provides visitors and residents with access to open space and recreation, and is designed for environmental sustainability.
- **Policy LU 2.3.1 Open Space System.** The City shall strive to create a comprehensive and integrated system of parks, open space, and urban forests that frames and complements the City's urbanized areas.
- **GOAL LU 2.4:** City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect the City of Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life.
- **Policy LU 2.4.1 Unique Sense of Place.** The City shall promote quality site, architectural and landscape designs that incorporate those qualities and characteristics that make the City of Sacramento desirable and memorable, including walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles.













Policy LU 2.4.2 Responsiveness to Context. The City shall promote building designs that respect
and respond to the local context, including use of local materials, responsiveness to the City of
Sacramento's climate, and in consideration of the cultural and historic context of the City's
neighborhoods and centers.

GOAL ER 7.1: Visual Resource Preservation. Maintain and protect significant visual resources and aesthetics that define the City of Sacramento.

• **Policy ER 7.1.1 Protect Scenic Views.** The City shall seek to protect views from public places to the Sacramento and American rivers and adjacent greenways, landmarks, and urban views of the downtown skyline and the State Capitol along Capitol Mall.

American River Parkway Plan

The American River Parkway Plan (ARPP, Sacramento County 2008) is a policy and implementation guide developed to promote the preservation of the American River's natural environment while providing limited development for human enjoyment of the parkway. The American River Parkway (Parkway) is an open space greenbelt approximately 29 miles long extending west/southwest along the north and south sides of the Lower American River from Folsom Dam to its confluence with the Sacramento River. The ARPP establishes aesthetic values for the Parkway and identifies policies to reduce visual impacts within the Parkway (Sacramento County 2008, p. 3-77, p. 7-111—112).

The following policies from the ARPP are relevant to analysis of aesthetic impacts of the project:

- 7.22 Structures that are in the parkway shall be of a design, color, texture and scale that minimizes adverse visual impacts within the parkway.
- 7.22.1 Structures shall be located so that neither they, nor activities associated with them, cause damage to native plants or wildlife, without appropriate mitigation.
- 7.22.2 Structures shall be constructed of naturalistic materials which blend with the natural environment.
- 7.22.3 Colors shall be earth tones or shall blend with the colors of surrounding vegetation.
- 7.22.4 Structures may emulate authentic historic design but shall be unobtrusive.
- 7.22.5 To the extent possible, structures shall be screened from view by native landscaping or other naturally occurring features.

The ARPP also identifies aspects of the Parkway experience that should be considered as part of the aesthetic values of the Parkway:

- the clean, transparent waters of the American River,
- the American River as a designated Wild and Scenic River,
- the life that the river supports, such as mammals, fish, birds, beneficial insects, vegetation, and other wildlife,

- habitat diversity, riparian zone, woodland, upland, vegetation,
- presence of wildlife and their movement, visibility, grace,
- sounds of nature, including birds, wildlife, the flowing river,
- seasonal changes,
- feeling of peace and tranquility experienced by the people who visit and use the Parkway,
- feeling and experience of harmony that prevails between what is natural in the Parkway and the animals that live in it,
- the land form, exposed geological compositions,
- islands,
- views of the river—at various flow levels,
- views from within the Parkway at different vantage points,
- views from the Parkway outward, and
- minimal urban or ambient noise and light.

3.1.4 Environmental Impacts and Mitigation Measures *Thresholds of Significance*

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.
- Conflict with applicable zoning and other regulations governing scenic quality.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Issues Not Discussed Further in this EIR

Damage Scenic Resources within a Scenic Highway

Only three roadways have views of the project site (Interstate Highway Business 80, 28th Street, and H Street), and none of these roadways is designated as a local or State scenic highway.

Impact Analysis

Impact AES-1: Adverse Effect on Scenic Vista or Scenic Quality

The project would be constructed consistent with American River Parkway Plan policies concerning aesthetics. [Less than Significant]

The proposed project includes construction of a paved trail. As part of the construction of the trail, some existing vegetation, including trees, would be removed to provide a sufficient clear width along the levee toe for construction of the trail. Two overhead structures would be constructed where the trail would pass beneath the Union Pacific Railroad bridges.

The existing visual character of the project site is generally formed by scrubby, riparian vegetation between the toe of the levee and the river, levee slopes covered by grassy vegetation, and upland uses including vacant lands, a former landfill, and (in Segments 3 through 6) single-family residences. There are numerous existing unpaved and gravel tracks and roadways along the levee crown and toes in the project vicinity.

This visual character of the proposed project area would not be significantly degraded by construction of the project. During construction activities, equipment would be staged at locations illustrated on Figures 2-2 and 2-3 in Chapter 2, "Project Description." These locations generally include vacant areas west of Interstate 80 Business, an area adjacent to Glenn Hall Park, and a parking lot located at H Street and Carlson Drive. Although construction activities and construction equipment staging would affect the visual character, this impact would be temporary, with impacts in any given area lasting less than a single construction season.

Several commenters have expressed concern regarding the difference in appearance between the existing views along the levee and those associated with a proposed paved bicycle path. After completion of the project construction activities, although an existing dirt toe road would be paved, and some small and local improvements would be constructed (i.e., the overhead structures), the overall visual character of the project site would remain. Implementation of the proposed project would be constructed consistent with ARPP policies concerning aesthetics, including Policy 7.22, which requires that the overhead structures be designed with color, texture, and scale that blends in with their surroundings. Outside of the UPRR overhead structures, construction of the trail would not include any other structures that would affect background views or the overall visual character of the study area. **Figures 3.1e** and **3.1f** provide a comparison of existing views along the proposed trail alignment with example views from similar developed trails (including Top of Levee and waterside Toe of Levee segments) within the American River Parkway. As shown in the figures, the proposed project would be developed in a manner similar to other multi-use trails in the Parkway and would not include structures or improvements that would affect the visual character of the study area outside of the immediate trail corridor.

This impact would be **less than significant** due to the temporary nature of construction disturbances, consistency with ARPP policies, and the minor changes in visual character following implementation of the project.

Mitigation Measure: No mitigation is required.

Impact AES-2: New Sources of Light and Glare

The project would not include any new lighting, and all finishes would be matte. [Less than Significant]

The proposed project would not introduce any new sources of light or glare to the project site. For the majority of the trail alignment, the trail would be paved, with gravel or aggregate shoulders. Where the trail crosses under the two Union Pacific Railroad bridges, overhead structures may be required. However, the overhead structures would be designed in compliance with ARPP Policy 7.22, which require that structures be constructed of naturalistic materials and earth tones, and blend with surrounding vegetation. No lighting is proposed as part of the project. Therefore, this impact would be **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Residual Significant Impacts

There would be no residual significant impacts related to aesthetics.
3.2 Biological Resources

3.2.1 Introduction

This section provides an overview of the existing biological resource conditions within the project study area, identifies the regulatory framework, and provides and analysis of the potential biological impacts that would result from implementation of the proposed project. A Natural Environment Study (Area West Environmental, Inc. 2018) (NES) was prepared, for the City and Caltrans, that included a biological evaluation and field surveys of the study area to evaluate site conditions and potential impacts to biological resources from project activities. Other primary references consulted include species lists and information gathered using USFWS, Information, Planning, and Conservation System (IPAC), CDFW Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) list of rare and endangered plants, and a literature review.

During preparation of the IS/MND and as a result of the proposed project's NOP scoping period, the following comments related to biological resources were received and considered during preparation of the impact analysis:

- Impacts to nesting birds (distance to nests), raptors riparian areas, trees and Valley Elderberry Longhorn Beetle (VELB) resulting from trail construction and maintenance are not considered complete or rigorous enough. VELB impacts underestimated and offsite mitigation inadequate and uncertain.
- 1 to 1 mitigation requirement for riparian impacts is considered inadequate.
- Offsite biological resource mitigation not appropriate to maintain onsite wildlife corridor function.
- Construction staging areas need to be outside the American River Parkway to avoid impacts.

Preparation of this EIR provides a detailed and complete analysis of the potential impacts to biological resources as identified in **Impacts BIO-1** through **BIO-4**. As more fully described below in **Section 3.2.4**, extensive and complete field surveys for both plant and wildlife resources were conducted at the appropriate times of year and within a study area that greatly exceeded the project footprint. For example, VELB surveys were conducted within 165 feet of the project footprint, consistent with the most current USFWS guidelines.

Mitigation requirements (including location, compensation ratios, etc.) will ultimately be determined following consultation with key regulatory agencies having responsibility over the management of affected resources (including the CDFW and USFWS) within the study area. While onsite mitigation may be the preferred option, implementation of this mitigation strategy is contingent on the availability of onsite locations and the feasibility of managing/monitoring the mitigation sites once they are in place.

As more fully described in **Chapter 2.0** "**Project Description**", a number of design features have been incorporated into the proposed project to minimize biological resource impacts. Design features include a levee top trail within Segment 4 of the trail alignment and the placement of most construction staging areas outside of the Parkway or proposed for disturbed areas within the study area.

3.2.2 Environmental Setting

The Biological Study Area (BSA) for the project site is approximately 238 acres (see **Table 3.2-1**), which is comprised of the project footprint (including Segments 1 through 6, access points, and staging areas) and a 165-foot buffer. Elevation ranges from approximately 20 to 60 feet above mean sea level (amsl), with topography consistent with the surrounding landscape of the lower American River area, consisting of low rolling foothills, floodplain areas, and a relatively flat valley floor. The flood control levee and slopes down to the river are the most significant topographic relief in the BSA. Natural features within the BSA include the American River and its riparian vegetation.

Acres within the Project Study Area
93.39
16.60
59.66
6.83
34.16
27.03
237.67

Table 3.2-1. Habitat Community Types

Notes: ¹ Acreages presented are subject to verification by the U.S. Army Corps of Engineers. Modifications of the riverine acreage would increase or decrease the acreage of other vegetation communities accordingly.

Source: Area West Environmental, Inc., 2019

Biological field surveys of the BSA (or project study area) were conducted on May 6 and 10, 2014; July 21, 2014; April 3, 4, 5, 11, and 12, 2017; June 21 and 22, 2017; February 27 and 28, 2018; March 14, 2018; and June 21, 2019. All vegetation and habitat types within the BSA were noted, mapped, and evaluated, and VELB habitat assessments were conducted in accordance with USFWS 1999 guidance and 2017 framework (USFWS 1999, 2017). Prior to field work, literature research was conducted through the USFWS Species List, the CDFW-maintained CNDDB, and the CNPS Electronic Inventory of Rare and Endangered Plants to identify habitats and special status species having the potential to occur within the BSA (CNDDB 2017; CNPS 2017; USFWS 2017b; and NMFS 2017).

Habitat and Land Cover Types

The BSA supports six generalized vegetation community types consisting of four upland communities (urban, ruderal, annual grassland, mixed scrub, and valley foothill riparian) and one aquatic community (Riverine [American River]). **Table 3.2-1** presents habitat information for the BSA. Habitat maps using collected field data for the BSA are included in **Appendix C** of this EIR and identify the location of the proposed project in relation to the mapped habitats.

Urban

The urban vegetation community consists of residential homes, industrial facilities, paved and graveled roadways, dirt trail, and train tracks. Vegetation within the urban community is regularly maintained with mowing, vegetation trimming and herbicide. Where residential homes with landscaped yards are present, horticultural species often included privet (*Ligustrum japonicum*), oleander (*Nerium oleander*), redwood (*Sequoia sempervirens*), interior live oak, and numerous cultivars of herbaceous garden plants.

The urban community may provide habitat for nesting migratory birds and raptors, one large stick nest was observed in the top of a redwood tree located in a backyard in the eastern segment of the project alignment. Residential homes may provide nest boxes for birds and bird feeders to attract foraging birds. Other species that may use urban habitats for foraging include raccoon (*Procyon lotor*) and coyote (*Canis latrans*). Other areas like the graveled levee road and dirt trail consist of bare ground and are devoid of vegetation, and typically do not provide habitat for any special-status plants or wildlife species. Although killdeer (*Charadrius vociferus*) was observed using this habitat for nesting, and other wildlife, such as small lizards like western fence lizard (*Sceloporus occidentalis*) will use the roadway for basking.

Ruderal

The ruderal vegetation community consists of non-native annual grasses and forbs that are regularly maintained (mowed, sprayed with herbicide, etc.) along the fringes of the levee road (mainly the southern side), rail road right-of-way, or vacant lots. In the ruderal areas, annual grasses included foxtail barley (*Hordeum murinum*), soft brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), and wild oats (*Avena fatua*). Annual forbs included filaree (*Erodium spp.*), smooth cat's ears (*Hypochaeris glabra*), English plantain (*Plantago lanceolata*), wild geranium (*Geranium dissectum*), and burclover (*Medicago polymorpha*). Shrubs such as California blackberry (*Rubus ursinus*) and coyote brush (*Baccharis pilularis*) were also observed in scattered patches in this habitat.

Due to continual disturbance, this vegetation community does not provide suitable habitat for specialstatus plant or wildlife species. However, this ruderal habitat may support various species of wildlife including small rodent species that forage on seeds or herbaceous growth such as California vole (*Microtus californicus*) and Botta's pocket gopher (*Thomomys bottae*). These prey species, along with insects supported by this habitat attract a variety of wildlife that forage in annual grassland including species such as western meadowlark (*Sturnella neglecta*), American kestrel (*Falco sparverius*), redtailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus leucurus*), and gopher snake (*Pituophis catenifeer*).

Annual Grassland

Annual grassland is found throughout the BSA and consists of non-native annual grasses and forbs. Species present in the annual grassland community are identical to species found in the ruderal community; the only exception between the two communities is that the ruderal community is regularly managed. In addition to annual grasses, forbs, and shrubs, the annual grassland community also consists of scattered occurrences of shrubs and trees.

The same wildlife species described as having potential to use the ruderal habitat would be the same species to use the annual grassland habitat. Additionally, a white-tailed kite was observed foraging in annual grasslands within the BSA near the 16th Street Bridge on April 12, 2017, and then a pair was observed in the same area on February 27, 2018.

Mixed Scrub

The mixed scrub community occurs in scattered patches, intermixed with annual grassland in the western segment of the BSA. While similar to riparian vegetation growing on the south side of the American River (between the levee and river), the mixed scrub community is not influenced by the river. As the name suggests, this community is not dominated by any one species. The main shrubs and trees contributing to the canopy layer are blue elderberry (*Sambucus nigra*), tree of heaven (*Ailanthus*

altissima), domestic almond (*Prunus dulcis*), valley oak, and coyote brush. The understory of this community consists of species found in the ruderal and annual grassland communities.

The mixed scrub community is highly disturbed by human activity in the vicinity of Segments 1 and 2. Vegetation in this area has been altered to establish camps and trash piles are scattered throughout the area.

As previously mentioned, blue elderberry shrubs are the obligate host for VELB larvae. Focused surveys identified VELB habitat (elderberry shrubs) within the elderberry savanna community in the BSA. Additionally, larger shrubs and trees in these areas could provide habitat for nesting raptors or migratory songbirds.

Valley Foothill Riparian

Valley foothill riparian is present along the south side of the American River. Dominant species in the canopy layer are valley oak, Fremont cottonwood (*Populus fremontii*), arroyo willow (*Salix lasiolepis*), Northern California black walnut (*Juglans hindsii*), and black locust (*Robinia pseudoacacia*). Subcanopy trees present include boxelder (*Acer negundo*), white alder (*Alnus rhombifolia*), Oregon ash (*Fraxinus latifolia*), and blue elderberry. Typical understory shrub layer plants include wild grape (*Vitis californica*), wild rose (*Rosa californica*), willows (*Salix sp.*), and blackberry. The herbaceous layer consists mainly of bedstraw (*Galium sp.*), man-root (*Marah fabacea*), and non-native grasses. In a section of this habitat located in the Paradise Beach Park area, the vegetation opens up and is less dense. This area has sandier soils and is dominated by herbaceous species such as California tule pea (*Lathyrus jepsonii var. californica*), hairy vetch (*Vicia villosa*), and non-native grasses, along with scattered silver bush lupines (*Lupinus albifrons*), shrubs, and trees.

The valley foothill riparian community is also highly disturbed by human activity. There are many trails that have been established throughout this habitat type that provide access down to the river. During the 2017 and 2018 surveys there was evidence of trail maintenance activities along the current trail (trimmed back vegetation).

Focused surveys identified VELB habitat within the valley foothill riparian community in the BSA. During the 2014 VELB surveys, a single female VELB was documented within this community type in the BSA. Trees in riparian habitat with cavities or tree hollows could provide habitat for cavity nesting birds. Habitat is also present for other migratory nesting birds and raptors. Red-shouldered hawk (*Buteo lineatus*) and red-tailed hawk were observed nesting in riparian habitat and foraging in adjacent annual grasslands. Thick brambles within the understory of the riparian habitat provide habitat cover along the banks for species such as American beaver (*Castor canadensis*) and river otter (*Lontra canadensis*).

American River (Riverine)

The American River occurs in the BSA and conveys water from the surrounding foothills of the Sierra Nevada Mountains to the southwest. The river flows into the Sacramento River which drains to San Francisco Bay. The riverine community supports riparian wetland vegetation outside of the ordinary high water mark (OHWM). Rocky erosion controls (e.g. riprap) have been placed along sections of riverbank within the BSA to protect the levee from erosion. In most areas with riprap, riparian vegetation has reestablished and includes alders, willows, and blue elderberries.

The American River provides habitat for anadromous fish species, such as Central Valley steelhead (*Oncorhynchus mykiss irideus*) and chinook salmon (*Oncorhynchus tshawytscha*). The American River

also provides habitat for a multitude of bird species, such as Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*) and several other species. The river provides habitat for reptiles such as western pond turtle (*Actinemys marmorata*), which could occur basking along the banks or on emergent logs or laying eggs along the bank. Amphibian species observed included Sierran tree frog (*Pseudacris sierra*).

Common Animal Species

The BSA provides habitat for an assemblage of wildlife species that are commonly found within stream/riparian corridors and valley grassland communities, as described above under each vegetation community description. During field surveys of the site, observations of wildlife were made, including raptors, great blue heron, egret, mallards and other waterfowl, beaver, and numerous species of birds. Cavity nesting birds, such as tree swallow (*Tachycineta bicolor*), were observed and could use tree hollows present throughout the BSA. Species such as cliff swallow (*Petrochelidon pyrrhonota*) and/or black phoebe (*Sayornis nigricans*) could nest under bridges.

Native and Non-Native Trees

Throughout the BSA there are numerous native and non-native tree species. Trees provide habitat for various wildlife including nesting birds and squirrels. Trees also provide shade over the American River which is essential for fish and aquatic species. Dominant tree species within the BSA included Fremont cottonwood, Oregon ash, Valley oak, arroyo willow, northern California black walnut, and black locust. Additional trees located within the BSA occur within residential neighborhoods adjacent to the levee; these are dominated by non-native horticultural trees, such as maples (*Acer sp.*), Eucalyptus (*Eucalyptus sp.*), privet, olive (*Olea europaea*), and various fruit and citrus trees (*Citrus sp.*).

Fish and Wildlife Migration Corridors

River/riparian corridors, such as that found along the lower American River, are commonly used by wildlife as migration and movement corridors. Striped skunk (*Mephitas mephitis*), Virginia opossum (*Didelphis virginiana*), black-tailed deer (*Odocoileus heminonus*) and song birds are commonly found traversing river/riparian corridors. Species of special concern that could use the American River as a migration corridor include ringtail (*Bassariscus astutus*) and western pond turtle. The Lower American River Watershed supports numerous species of native and nonnative fish species, including naturally spawning fish species of concern such as fall-run Chinook salmon and Central Valley steelhead.

Special-Status Species

Special status species are plants and animals in the following categories:

- Species that are listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- Species considered as candidates and proposed for state or Federal listing as threatened or endangered;
- Wildlife designated by CDFW as species of special concern; and
- Plants ranked by CDFW as "rare, threatened, or endangered" in California.

Tables (provided in **Appendix C**) list the special-status plant, wildlife, and fish species that are known to occur or have the potential to occur in the geographic region. These species were identified based on

the species lists provided by United States Fish and Wildlife Service (USFWS) (2018), National Marine Fisheries Service (NMFS) species list (2018), California Natural Diversity Database (CNDDB) records search (2018), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (2018), and species distribution and habitat requirements data. **Appendix C** shows CNDDB results within 5 miles of the BSA. A 10-mile CNDDB search was not completed for the proposed project so as not to capture Delta species that would not have the potential to occur within the BSA.

Special-status Plants

During the pre-field investigation, 16 special-status plant species were identified during the pre-field review as potentially occurring in the vicinity of the BSA. Based on the lack of suitable habitat (i.e., vernal pools, alkaline, and brackish soils), only 6 of the 16 special-status plant species (bristly sedge *[Carex comosa]*, Peruvian dodder *[Cuscuta obtusiflora var. glandulosa]*, Mason's lilaeopsis *[Lilaeopsis masonii]*, Sanford's arrowhead *[Sagittaria sanfordii]*, woolly rose mallow *[Hibiscus lasiocarpos var. occidentalis]*, and Northern California black walnut have potential to occur in the BSA.

Scattered occurrences of Northern California black walnut trees were observed within the BSA. Black walnut trees occur within riparian forests and woodlands throughout Northern California. Historically, native varieties of black walnut trees were used as rootstock for English walnut (*Juglans regia*), resulting in hybridized trees. Over time, cultivated trees escaped and have become widely naturalized in parts of California. CNPS lists Northern California black walnut as 1B.1, and as such, is rare and endangered elsewhere, and seriously endangered in California. The CNPS designation only refers to the remaining native, un-hybridized stands of black walnuts. According to CNPS' Inventory of Rare and Endangered Plants, the current presumed extent of native trees only occurs within Contra Costa, Napa, and possibly Lake counties (CNPS 2018). Since the native species of black walnut is considered to be extirpated from Sacramento County (CNPS 2018), it is highly unlikely that the black walnut trees observed within the BSA belong to a remaining native stand.

Special-status Wildlife

Based on the results of the field surveys and review of existing information including a search of the CNDDB, USFWS and NMFS species lists, and species distribution and habitat requirements data, 34 special-status wildlife species were identified during the pre-field review as occurring or having the potential to occur within the vicinity of the proposed project.

Of the 34 special-status wildlife species, 16 species would not occur in the BSA or have the potential to be affected by the proposed project because: 1) the BSA lacks suitable habitat for the species, 2) the BSA is outside the species' known range, and/or 3) field surveys determined that the species is not present. The remaining 17 species identified below have potential to occur within the BSA:

- *Green Sturgeon Southern Distinct Population Segment (DPS)*, federally threatened species and state species of special concern;
- *Central Valley steelhead DPS*, federally threatened species;
- *Central Valley fall/late-fall-run Chinook salmon Evolutionarily Significant Unit (ESU)*, NMFS and state species of special concern;
- Central Valley spring-run Chinook salmon ESU, federally threatened species;

- Sacramento splittail, state species of special concern;
- *Valley elderberry longhorn beetle*, federally threatened species;
- *Western pond turtle*, state species of special concern;
- Burrowing owl, state species of special concern;
- *Swainson's hawk*, state threatened species;
- *White-tailed kite*, state fully protected species;
- *Bald eagle*, state endangered and state fully protected species;
- *Song sparrow* "Modesto population", state species of special concern;
- *Purple martin*, state species of special concern;
- Bank swallow, state threatened species;
- Least Bell's vireo, federally endangered species and state endangered species;
- *Ringtail*, state fully protected species; and
- *Western red bat*, state species of special concern.

Special-status Species Critical Habitat

Based on the results of the field surveys and review of existing information, the BSA falls within designated critical habitat for Central Valley steelhead and Central Valley spring-run Chinook salmon.

Other Protected Wildlife Species

In addition to the wildlife species listed above, the BSA was also evaluated for its potential to support migratory birds and raptors which are not special-status species. Trees and shrubs within and adjacent to the BSA could provide nesting habitat for migratory birds and raptors.

Additionally, Chinook salmon Essential Fish Habitat (EFH) and groundfish EFH are mapped and listed by NMFS within the BSA. These EFHs are managed under the Magnuson-Stevens Fishery Conservation and Management Act.

3.2.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

Endangered Species Act

Under the Federal Endangered Species Act (FESA), the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered (16 United States Code [USC] Section 1533[c]). Pursuant to the requirements of the FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the project area and determine whether the project would result in

"take" of any such species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 United States Code [USC] Section 1536[3], [4]). Section 7 of the FESA provides a means for authorizing incidental take of federally endangered or threatened species that result from federally conducted, permitted, or funded projects. Similarly, Section 10 authorizes incidental take of federally endangered or threatened species that result from non-federal projects.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) (16 USC, Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs. The MBTA is administered by the USFWS and special permits from the agency are generally required for the take of any migratory birds. This act applies to all persons and agencies in the U.S., including federal agencies.

Clean Water Act: Section 401

The United States Environmental Protection Agency (USEPA) regulates surface water quality in Waters of the United States (WOTUS) under Section 401 of the State Clean Water Act (CWA). CWA Section 401 Water Quality Certification (WQC) provides states and authorized tribes with an effective tool to help protect the physical, chemical, and biological integrity of water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. CWA 401 compliance is required for any project that produces a federal action with construction that could have an impact to surface water quality (USEPA 2017).

Clean Water Act: Section 404

CWA Section 404 regulates the discharge of dredged and fill materials into waters of the United States. Waters of the United States refers to oceans, bays, rivers, streams, lakes, ponds, and wetlands, including any or all of the following: areas within ordinary high water mark of a stream, including non-perennial streams with a defined bed and bank and any stream channel that conveys natural runoff, even if it has been realigned; and seasonal and perennial wetlands, including coastal wetlands. If a project discharges any fill materials into WOTUS, including wetlands, before and after the project actions, then a CWA 404 compliance must be met with the USACE.

The USACE has primary federal responsibility for administering regulations that concern waters of the U.S., including wetlands and drainages. The USACE acts under two statutory authorities: the Rivers and Harbors Act (Sections 9 and 10), which governs specified activities in "navigable waters of the U.S.," and the CWA Section 404, which governs specified activities in waters of the U.S. The USACE requires that a permit be obtained if a project proposes placing structures within, over, or under navigable waters and/or discharging dredged or fill material into waters of the U.S., including wetlands. Additionally, Rivers and Harbors Act (Section 14 [33 U.S.C. 408]) allows for the temporary occupation or use of levees built by USACE. The USEPA, USFWS, NMFS, and several other agencies provide comment on USACE permit applications.

Invasive Species Regulation – Executive Order 13112

Executive Order 13112 directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. Executive Order 13112 established a national Invasive Species Council made up of federal agencies and departments and a supporting

Invasive Species Advisory Committee composed of state, local, and private entities. The Invasive Species Council and Advisory Committee oversee and facilitate implementation of the Executive Order, including preparation of a National Invasive Species Management Plan. The Management Plan recommends objectives and measures to implement the Executive Order and to prevent the introduction and spread of invasive species. The Executive Order and directives from the FHWA require consideration of invasive species in NEPA analyses, including the identification and distribution of species, their potential impacts, and measures to prevent or eradicate them.

Floodplain Policies – Executive Order 11988

Executive Order 11988 is a flood hazard policy for all federal agencies that manage federal lands, sponsor federal projects, or provide federal funds to state or local projects. It requires that all federal agencies take necessary action to reduce the risk of flood loss; restore and preserve the natural and beneficial values served by floodplains; and minimize the impact of floods on human safety, health, and welfare. Specifically, Executive Order 11988 dictates that all federal agencies avoid construction or management practice that would adversely affect floodplains unless that agency finds that there is no practical alternative and the proposed action has been designed or modified to minimize harm to or within the floodplain.

State Plans, Policies, Regulations and Laws

California Endangered Species Act

Under the CESA, the CDFW has the responsibility for maintaining a list of threatened and endangered species designated under state law (California Fish and Game Code [CFGC] Section 2070). Pursuant to the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project area and determine whether the proposed project would result in take of any such species. Under CESA, "take" is defined as the action of or attempt to "pursue, hunt, shoot, capture, collect, or kill." The CDFW may authorize the incidental take of a state-listed species under Section 2081 of the CFGC. For species that are listed as threatened or endangered under both the FESA and CESA, and for which an incidental take permit has been issued in accordance with Section 7 or Section 10 of the FESA, CDFW may authorize take after certifying that the federal incidental take permit is consistent with CESA, pursuant to Section 2080.1 of the CFGC.

California Fish and Game Code

The CFGC provides protection for migratory birds and raptors. Raptors and raptor nests or eggs are protected from take under CFGC Section 3503.5. Migratory birds are expressly prohibited from take under CFGC Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGC Sections 3511 4700, 5050, and 5515.

California Environmental Quality Act Guidelines: Section 15380

Pursuant to CEQA Guidelines Section 15380, CEQA provides protection for Federal and/or State listed species, as well as species not listed Federally or by the State that may be considered rare, threatened, or endangered. Accordingly, "A species not included in any listing identified in subdivision (c) [FESA and CESA listed species] shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subdivision (b)" (CEQA Guidelines section 15380(d)). Subdivision (b) states, "A species of animal or plant is:

- 1. 'Endangered' when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or
- 2. 'Rare' when either:
 - a) Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
 - b) The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the Federal Endangered Species Act" (CEQA Guidelines 15380(b)).
 - c) Indicates that species of special concern should be included in an analysis of Project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

The CDFW designates Species of Special Concern (SSC) as wildlife and plant species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, and/or educational values qualifying SSC as "special status species" meeting the criteria under subdivision (b) of section 15380 of the CEQA Guidelines. Plants appearing on the CNPS's California Rare Plant Rank (CRPR) as well as species considered rare or protected under other applicable list are also considered to meet CEQA's Section 15380 criteria.

For the purposes of this Draft EIR, the following parameters define "special-status species":

- Plant and Wildlife species listed, or proposed for listing, as threatened, or endangered under the FESA (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register for proposed species);
- Plant and wildlife species that are listed or proposed for listing by the State as threatened or endangered under the CESA (14 CCR 670.5);
- Plant and wildlife species that meet the definitions of "rare" or "endangered" under CEQA Guidelines, Section 15380;
- Plant and wildlife species that are designated as "special animals" or "those of greatest conservation need", by CDFW through the CNDDB;
- Wildlife Species of Special Concern to CDFW;
- Wildlife listed as "Fully Protected" in California under the CDFG Code;
- Plants listed as rare under the State Native Plant Protection Act (NPPA) of 1977 (CDFG Code 1900 et seq.);
- Plants considered by the CNPS to be Rank 1A- "plants presumed extirpated in California and either rare or extinct elsewhere", or Rank 1B- "rare, threatened, or endangered in California and elsewhere";

- Plants considered by CNPS to be a Rank 2A- Plants presumed extirpated in California, but common elsewhere", or Rank 2B- "rare, threatened, or endangered in California and common elsewhere";
- Plants considered by CNPS to be a Rank 3- "plants about which more information is needed" and cannot be yet be excluded from review"; and
- Plants considered by CNPS to be a Rank 4- "plants with limited distribution".

The CEQA provision enables an agency to protect a species from potential significant Project impacts until the respective government agencies have had an opportunity to list the species as protected, if warranted (CDFW 2017b). To asses "impact significance" to populations of non-listed species as well as listed species CDFW recommends population-level effects, proportion of the taxon's range affected by a Project, regional effects, and impacts to habitat features are all considered (CDFW 2017b).

Native Plant Protection Act: California Department of Fish and Game Code Section 1900 et seq.

The NPPA was enacted in 1977 and is administered by CDFW (CDFG Code, Section 1900 et seq.). The NPPA prohibits "take" of endangered, threatened, or rare plant species native to the State, with the exception of special criteria identified in the NPPA CDFG Code. A "native plant" means a plant growing in a wild uncultivated state which is normally found native to the plant life of the state. "Rare" species can be defined as species that are: broadly distributed but never abundant where found, narrowly distributed, or clumped yet abundant where found, and/or narrowly distributed or clumped and not abundant where found. If potential impacts are identified for a proposed Project activity, then consultation with CDFW, permitting, and/or other mitigation may be required (CNPS 2017a).

Nesting Migratory Birds and Raptors: California Department of Fish and Game Code Sections 3503, 3503.5, and 3800

Nesting migratory birds and raptors are protected under CDFG Code, Sections 3503, 3503.5, and 3800; which prohibit the "take", possession, or destruction of birds, their nests, or eggs. Implementation of "take" provisions require that any potential Project-related disturbance, within active nesting territories, be reduced or eliminated during critical phases of the nesting cycle (i.e., approximately February 15 through August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young), or the loss of habitat upon which birds are dependent, is considered "taking", and is potentially punishable by fines and/or imprisonment (CLI 2017). Such taking would also violate federal law protecting migratory birds under the MBTA.

Porter-Cologne Water Quality Control Act: California Department of Fish and Game Code Section 1601-1602

The Porter-Cologne Water Quality Act, CDFG Code sections 1601-1607, is administered by the California State Water Resources Control Board (SWRCB). This act and associated codes pertain to Projects with potential impacts to water quality or waterways (SWRCB 2017).

Regional and Local Plans, Policies, Regulations, and Ordinances

City of Sacramento 2035 General Plan

The following goals and policies from the Environmental Resources (ER) and Land Use and Urban Design Element (LU) Elements are relevant to the proposed project (City of Sacramento 2015).

- **GOAL ER 1.1:** Water Quality Protection: Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American Rivers, and their shorelines.
- Policy ER 1.1.1 Conservation of Open Space Areas. The City shall conserve and where feasible create or restore areas that provide important water quality benefits such as riparian corridors, buffer zones, wetlands, undeveloped open space areas, levees, and drainage canals for the purpose of protecting water resources in the City's watershed, creeks, and the Sacramento and American Rivers.
- **Policy ER 1.1.3 Stormwater Quality.** The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City's National Pollution Discharge Elimination System (NPDES) Permit.
- Policy ER 1.1.4 New Development. The City shall require new development to protect the quality
 of water bodies and natural drainage systems through site design (e.g., cluster development), source
 controls, storm water treatment, runoff reduction measures, best management practices (BMPs) and
 Low Impact Development (LID), and hydromodification strategies consistent with the city's NPDES
 Permit.
- **Policy ER 1.1.5 Limit Stormwater Peak Flows.** The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.
- **Policy ER 1.1.6 Post-Development Runoff.** The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development projects to prevent or reduce downstream erosion and protect stream habitat.
- Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.
- Policy ER 1.1.8 Clean Watershed. The City shall continue ongoing Sacramento and American River source water protection efforts (e.g., Keep Our Waters Clean), based on watershed sanitary survey recommendations.
- **GOAL ER 2.1:** Natural and Open Space Protection. Protect and enhance open space, natural areas, and significant wildlife and vegetation in the city as integral parts of a sustainable environment within a larger regional ecosystem.
- **Policy ER 2.1.1 Resource Preservation.** The City shall encourage new development to preserve onsite natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character.
- Policy ER 2.1.2 Conservation of Open Space. The City shall continue to preserve, protect, and provide appropriate access to designated open space areas along the American and Sacramento Rivers, floodways, and undevelopable floodplains, provided access would not disturb sensitive habitats or species.

- **Policy ER 2.1.3 Natural Lands Management.** The City shall promote the preservation and restoration of contiguous areas of natural habitat throughout the city and support their integration with existing and future regional preserves.
- **Policy ER 2.1.4 Retain Habitat Areas.** The City shall retain plant and wildlife habitat areas where there are known sensitive resources (e.g., sensitive habitats, special-status, threatened, endangered, candidate species, and species of concern). Particular attention shall be focused on retaining habitat areas that are contiguous with other existing natural areas and/or wildlife movement corridors.
- **Policy ER 2.1.5 Riparian Habitat Integrity.** The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing invasive nonnative plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat in compliance with State and Federal regulations or at a minimum 1:1 ratio, in perpetuity.
- Policy ER 2.1.6 Wetland Protection. The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetlands, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City shall require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no net loss of value and/or function.
- Policy ER 2.1.7 Annual Grasslands. The City shall preserve and protect native grasslands and vernal pools that provide habitat for rare and endangered species. If not feasible, the mitigation of all adverse impacts on annual grasslands shall comply with State and Federal regulations protecting foraging habitat for those species known to utilize this habitat.
- Policy ER 2.1.8 Oak Woodlands. The City shall preserve and protect oak woodlands, heritage
 oaks, and/or significant stands of oak trees in the city that provide habitat for common native, and
 special-status wildlife species, and shall address all adverse impacts on oak woodlands in accordance
 with the City's Heritage Tree Ordinance.
- **Policy ER 2.1.9 Wildlife Corridors.** The City shall preserve, protect, and avoid impacts to natural, undisturbed habitats that provides movement corridors for sensitive wildlife species. If corridors are adversely affected, damaged habitat shall, be replaced with habitat of equivalent value or enhanced to enable the continued movement of species.
- **Policy ER 2.1.10 Habitat Assessments.** The City shall consider the potential impact on sensitive plants and wildlife for each project requiring discretionary approval. If site conditions are such that potential habitat for sensitive plant and/or wildlife species may be present, the City shall require habitat assessments, prepared by a qualified biologist, for sensitive plant and wildlife species. If the habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level surveys shall be conducted (where survey protocol has been established by a resource agency), or, in the absence of established survey protocol, a focused survey shall be conducted consistent with industry-recognized best practices; or (2) suitable habitat and presence of the species shall be assumed to occur within all potential habitat locations identified on the project site. Survey Reports shall be prepared and submitted to the City and CDFW or the

USFWS (depending on the species) for further consultation and development of avoidance and/ or mitigation measures consistent with state and federal law.

• **Policy ER 2.1.11 Agency Coordination.** The City shall coordinate with State and Federal resource agencies (e.g., CDFW, USACE, and USFWS to protect areas containing rare or endangered species of plants and animals).

- Policy ER 3.1.2 Manage and Enhance the City's Tree Canopy. The City shall continue to plant new trees, ensure new developments have sufficient right-of-way width for tree plantings, manage and care for all publicly owned trees, and work to retain healthy trees. The City shall monitor, evaluate and report, by community plan area and city wide, on the entire tree canopy in order to maintain and enhance trees throughout the City and to identify opportunities for new plantings.
- **Policy ER 3.1.3 Trees of Significance.** The City shall require the retention of City trees and Heritage Trees by promoting stewardship of such trees and ensuring that the design of development projects provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or appropriate remediation.

County of Sacramento Tree Preservation Ordinance

The County of Sacramento Tree Preservation Ordinance protects trees and the driplines of trees. Trees are defined as any living native oak tree having at least one trunk of 6 inches or more DBH, or a multi-trunked native oak tree having an aggregate diameter of 10 inches or more DBH (County Code 19.2.040). County Code 19.12.060 states:

No person shall trench, grade or fill within the dripline of any tree or destroy, kill or remove any tree as defined, in the designated urban area of the unincorporated area of Sacramento County, on any property, public or private, without a tree permit, or unless authorized as a condition of a discretionary project approval by the Board of Supervisors, County Planning Commission, Zoning Board of Appeals, the Zoning Administrator or the Subdivision Review Committee. (SCC 1400 § 23, 2008; SCC 480 § 1, 1981.) The jurisdiction that subject to the code is as follows:

19.12.070 Jurisdiction.

- a) Private Land Not in Conjunction with Other Discretionary Development. The preservation or removal of trees within privately owned land and not in conjunction with a previously approved discretionary development project shall be the responsibility of the Director of Public Works.
- b) Discretionary Project. The preservation or removal of trees as a condition of approval of a discretionary project shall be the sole and continuing responsibility of the approving body which granted approval of the project.
- c) Parks. The preservation or removal of trees within parks, parkways, and public recreation easements, shall be the responsibility of the Director of Parks and Recreation.
- d) Other Public Land. Preservation or removal of trees within other County owned lands or public easements shall be the responsibility of the Director of Public Works. (SCC 480 § 1, 1981.)

GOAL ER 3.1: Urban Forest. Manage the City's urban forest as an environmental, economic and aesthetic resource to improve Sacramento residents' quality of life.

Discretionary projects shall include but are not limited to: a special development permit, a parcel map, a parking reduction permit, a rezone, a site plan approval permit, a subdivision map, a variance, or a conditional use permit.

Specific control measures within the code describing measures that could be used if a tree permit is required and granted are included below:

19.12.130 Development Control Measures.

The approving body may mandate any or all of the following control measures to mitigate damage to oak trees caused by land development:

- a) No grade cuts greater than one foot shall occur within the driplines of oak trees, and no grade cuts whatsoever shall occur within 5 feet of their trunks;
- b) No fill greater than one foot shall be placed within the driplines of oak trees and no fill whatsoever shall be placed within 5 feet of their trunks;
- c) No trenching whatsoever shall be allowed within the driplines of oak trees. If it is absolutely necessary to install underground utilities within the driplines of an oak tree, the trench shall be either bored or drilled;
- d) No irrigation system shall be installed within the driplines of oak tree(s) which may be detrimental to the preservation of the oak tree(s) unless specifically authorized by the approving body or the Director of Public Works.
- e) Landscaping beneath oak trees may include non-plant materials such as boulders, cobbles, wood chips, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants. Permitted plants include:
 - 1. Iris douglasiana hydrids (native iris)
 - 2. Heuchera species (coral bells)
 - 3. Aloe species
 - 4. Dudleya species
 - 5. Sisyrinchium bellum (blue-eyed grass)
 - 6. Hemerocallis hybrids (day lily)
 - 7. Cyclamen neopolitanum
 - 8. Mimulus aurantiacus and hybrids (monkey flowers)
 - 9. Artemisia species
 - 10. Achillea tomentosa (woolly yarrow)
 - 11. Symphoricarpos mollis (prostrate snowberry)
 - 12. Mahonia repens (creeping Mahonia)

- 13. Mahonia nervosa (long leaf Mahonia)
- 14. Mahonia aquifolium compacta (compact Oregon grape)
- 15. Arctostaphylos edmundsii "Carmel Sur" (Sur manzanita)
- 16. Arctostaphylos hookeri "Monterey Carpet"
- 17. Sollya heterophylla (Australian bluebell creeper)
- 18. Ribes viburnifolium (Catalina currant)
- 19. Daphne odorata (winter daphne)
- 20. Arctostaphylos hookeri "Wayside"
- 21. Arctostaphylos densiflora "Howard McMinn"
- 22. Symphoricarpos rivularis (snowberry)
- 23. Rhamnus californica "Eve Case" (California coffeeberry)
- 24. Heteromeles arbutifolia (toyon)
- 25. Choisya ternata (Mexican orange or mock orange)
- f) Paving within the driplines of oak trees should be stringently minimized. When it is absolutely necessary, porous material should be used. (SCC 480 § 1, 1981.)

American River Parkway Plan

The American River Parkway Plan (Sacramento County 2008) was developed by the County of Sacramento to guide the County's administration and management of the American River Parkway. Policies set forth in the ARPP include protecting and preserving the biological resources of the Parkway, with the following policies considered relevant to the analysis of biological resource impacts of the project:

Section 3.0 Terrestrial Resource Policies.

Terrestrial Resource Policies:

- 3.1 Any development of facilities within the Parkway, including but not limited to buildings, roads, turfed areas, trails, bridges, tunnels, pipelines, overhead electrical lines, levees and parking areas, shall be designed and located such that any impact upon native vegetation is minimized and appropriate mitigation measures are incorporated into the project.
- 3.1.1 Parkway facilities are those necessary for the operations, management, and permitted uses within the Parkway.
- 3.1.2 Development of non-Parkway facilities must have a compelling regional need, meet all applicable statutory requirements and provide mitigation and enhancements to the Parkway's natural, recreational, or interpretive resources.
- 3.2 Agencies managing the Parkway shall protect, enhance and expand the Parkway's native willow, cottonwood, and valley oak-dominated riparian and upland woodlands that provide important

shaded riverine aquatic habitat, seasonal floodplain, and riparian habitats; and the native live oak and blue oak woodlands and grasslands that provide important terrestrial and upland habitats.

- 3.2.1 Vegetation plantings shall be consistent with the approved list of trees, shrubs, and herbaceous plants native to the Parkway. This list shall be approved by the Recreation and Parks Commission, upon recommendation by the Director of the Department of Regional Parks, working in cooperation with resource and flood control managers, and organizations with native vegetation expertise. This list shall include species appropriate to the plant communities and habitats within the Parkway. Only plants on this approved list shall be planted within the Parkway, the exception being grass in permitted locations.
- 3.2.2 Native vegetation shall be reintroduced in areas of the Parkway where the substrate will support it, especially in areas that have been disturbed by construction, past gravel mining and agricultural activity, except in sites of human historical value.
- 3.2.3 Non-native trees and shrubs can be beneficial for native wildlife or be benign to the ecosystem. Non-native trees and shrubs may be removed over time if they:
 - a) constitute a hazard to the users of the Parkway,
 - b) the removal is a part of the on-going normal maintenance practices of the Parkway by its managers, or
 - c) the vegetation was approved to be removed as a part of a discretionary project in accordance with the policies of this Plan.
- 3.2.4 Agencies managing the Parkway shall remove invasive non-native vegetation species that conflict with habitat management goals, recreation uses, flood control or water supply conveyance.
- 3.2.5 New turf planting and associated irrigation within the dripline of existing mature native oaks shall be prohibited. Turf areas can be placed where there are immature native trees, provided the trees are not damaged by turf maintenance activities, such as summer watering, mowing, and string trimming.
- 3.3 The Parkway shall be managed to create habitat connectivity and wildlife travel corridors that provide for the habitat needs of the endangered valley elderberry longhorn beetle and other important native wildlife species, without compromising the integrity of flood control facilities, the flood conveyance capacity of the Parkway, or other Parkway management goals.
- 3.4 Management of the Parkway shall ensure the protection of the Parkway's resources, its environmental quality and natural values. A resource impact monitoring plan shall be developed that clearly defines criteria and standards to monitor, evaluate and protect the Parkway's resources from overuse, and provides steps to be taken to restore areas that have been overused.
- 3.5 Agencies managing the Parkway should develop and implement an Integrated Vegetation and Wildlife Management Plan to accommodate native wildlife species and minimize adverse effects of non-native species.

- 3.6 Excavation of aggregate/soil material should not be permitted except as a part of a flood control, environmental restoration or recreation improvement project approved in accordance with the provisions of this Plan. Objectives of the project will:
 - a) result in a net improvement to the health of the Parkway ecosystems,
 - b) not cause "harm" to the Parkway,
 - c) utilize material within the Parkway, where feasible, prior to being transferred out of the Parkway, and d prohibit commercial mining.

Aquatic Communities Policies:

- 3.7 The Parkway shall be managed to preserve, protect and/or restore riparian and in-channel habitat necessary for spawning and rearing of fish species, including native Chinook salmon (fall-run), steelhead, and Sacramento splittail, and recreational non-native striped bass and American shad. Priority shall be on providing diversity and complexity of habitat, consistent with recreational safety needs.
- 3.8 It is the intent of this Plan that available water provide adequate seasonal river flows and water temperatures to achieve and maintain viable populations and life stages of federal or state listed species, such as the Central Valley steelhead trout. In addition, species of primary concern include: naturally spawning Chinook salmon (fall-run) and Sacramento splittail; non-native American shad and striped bass; and their macroinvertebrate food sources in the lower American River.
- 3.9 Responsible local and state agencies shall, and federal agencies should, discourage introductions of invasive non-native aquatic plants and animals.
- 3.11 Agencies managing the Parkway shall identify, enhance and protect:
 - a) areas where maintaining riparian vegetation will benefit the aquatic and terrestrial resources;
 - b) current shaded riverine aquatic habitat; and
 - c) other areas that can support a shaded riverine aquatic habitat, as time and resources permit, especially as associated with flood control or federally/state mandated species protection projects.

Section 4.0 Water Flows, Water Quality and Flood Control Policies.

Water Quality Policies:

4.4 Water quality in the lower American River shall be maintained to provide for beneficial uses of the river, including: municipal and domestic water supply; industrial service water supply; irrigation; water contact and non-contact recreation; freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development of fish; and wildlife habitat.

- 4.5 Local, regional, state and federal agencies with jurisdiction over water quality of the American River should work together to maintain and protect a high level of water quality, manage and monitor discharges, and enforce existing water quality regulations.
- 4.6 Due to the unique urban setting of the lower American River, urban run-off containing a variety of contaminants has the potential to further degrade the river and Parkway resources. Therefore, agencies responsible for protecting water quality should take steps to minimize such contaminants.

Flood Control Policies:

- 4.10 Flood control projects, including levee protection projects and vegetation removal for flood control purposes, shall be designed to avoid or minimize adverse impacts on the Parkway, including impacts to wildlife and wildlife corridors. To the extent that adverse impacts are unavoidable, appropriate feasible compensatory mitigation shall be part of the project. Such mitigation should be close to the site of the adverse impact, unless such mitigation creates other undesirable impacts.
- 4.16 Bank scour and erosion shall be proactively managed to protect public levees and infrastructure, such as bridges, piers, power lines, habitat and recreational resources. These erosion control projects, which may include efforts to anchor berms and banks with rock revetment, shall be designed to minimize damage to riparian vegetation and wildlife habitat, and should include a revegetation program that screens the project from public view, provides for a naturalistic appearance to the site, and restores affected habitat values.
- 4.18 It is recognized that flood control agencies have the authority to take action(s) to prevent or respond to flood emergencies occurring in or adjacent to the Parkway. In the event that these action(s) have an adverse impact on biological resources in excess of the estimated impacts of the projected flood damage to such resources, the agency(ies) undertaking the emergency work will implement feasible compensatory mitigation measures pursuant to Policies 3.1 and 3.2. Nothing in this Policy shall be construed to interfere with the existing authority of flood control agencies to prevent or respond to an emergency situation occurring in or adjacent to the Parkway.

3.2.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to biological resources are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to biological resource issues would occur if the project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Analysis Methodology

Methods involved with documenting botanical, wildlife, and aquatic resources are described below.

Botanical Resources

During the field surveys, biologists conducted botanical surveys, assessed habitat for special-status plants, and identified noxious weeds. Except where constrained by limitations of private property and right to access, all areas within the BSA were walked and all plants observed were identified to species level when applicable. Species not readily identifiable in the field were collected and later identified using *The Jepson Manual: Vascular Plants of California, 2nd Edition* (Baldwin 2012). Vegetation communities in the BSA were also identified and mapped during the botanical survey.

Wildlife Resources

During the field surveys, wildlife biologists conducted general wildlife surveys within the BSA. The surveys focused on identifying and evaluating biological communities in and adjacent to the BSA and determining their suitability for common and special-status wildlife species. Visual surveys of undeveloped habitats adjacent to the BSA (where access was not obtained) were also conducted using binoculars to identify sensitive resources (i.e., raptor nests) that could be indirectly affected by the proposed project.

Valley Elderberry Longhorn Beetle Habitat Assessment

On May 6 and 10, 2014 and July 21, 2014, biologists conducted surveys to identify habitat for valley elderberry longhorn beetle (elderberry shrubs). Valley elderberry longhorn beetle is closely associated with the blue elderberry plant (Sambucus ssp.), an obligate host for beetle larvae (USFWS 2017). The 2014 surveys were conducted per the USFWS's Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999). Survey results are only valid for a period of two years.

Since the 2014 surveys, changes to the trail alignment were made and USFWS developed updated guidelines for evaluating potential effects of projects on valley elderberry longhorn beetle, in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017). On April

3, 4, 5, 11, and 12, 2017 and February 28 and 29, 2018, biologists conducted focus surveys to identify habitat for Valley elderberry longhorn beetle (elderberry shrubs) for the new trail alignment.

Surveys were conducted at the time of year when elderberry shrubs were easily identifiable (shrubs had abundant live foliage). The 2014 elderberry shrub surveys were conducted according to the USFWS 1999 Guidance and the 2018 surveys were conducted in accordance with the 2017 Framework, which took place throughout the BSA where property access was granted (which excluded private property adjacent to the Project area). To look for elderberry shrubs, biologists walked the BSA in meandering transects. When an elderberry shrub was located, its position was collected using a sub-meter accurate Trimble GeoXT global positioning system (GPS) unit. Each individual elderberry shrub was given a unique identification number. Because elderberry shrubs spread through underground rhizomes, elderberry plants occurring within five feet of each other were considered a single shrub and were given a single identifying number.

Stem diameters were measured at ground level using a pocket tree caliper. All elderberry stems measuring 1-inch (or greater) diameter at ground level were recorded. Stems measuring less than 1-inch in diameter at ground level are unlikely to be habitat for Valley elderberry longhorn beetle (USFWS 1999) and were not recorded during this survey. Stems were thoroughly searched for beetle exit holes. The number of exit holes was recorded for each shrub. For elderberry shrubs that were partially inaccessible due to dense vegetation cover that prevented exit hole examination, only stem counts were recorded. When shrubs were completely inaccessible due to dense vegetation that completely obscured the bases of the shrubs, stem counts were estimated based on shrub size and height, but holes were not recorded.

Data on the number and size of live stems (dead stems were not counted), presence or absence of Valley elderberry longhorn beetle exit holes (evidence of beetle presence), and habitat associations for each shrub in the BSA was collected and recorded on standardized data forms.

Trees

Construction of the proposed project would likely result in trimming and/or the removal of trees along the trail. Concurrent with other surveys, trees with a DBH of 6 inches or greater located within the Project footprint were identified and mapped. Tree location information was recorded with a GPS and trees were identified to species. Trees were not tagged during surveys.

Aquatic Resources

On June 22, 2017, biologists conducted field mapping of potential waters of the U.S. and state, including wetlands, within the proposed Project footprint. Wetlands were delineated using the U.S. Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (Corps 2008a). The ordinary high water mark (OHWM) of potential other waters of the U.S. was delineated using A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (Corps 2008b) and using the guidance identified in the Corps Regulatory Guidance Letter No. 05-05 Subject: Ordinary High Water Mark Identification (Corps 2005). Features that did not meet the hydrophytic vegetation wetland criteria were reviewed to determine if they met the definition of other waters of the U.S. (i.e., had evidence of an OHWM).

Where accessible, the OHWM of the American River was recorded using a GPS unit with sub-meter accuracy. Data was collected in latitude/longitude in the WGS84 datum. The OHWM was evidenced by

a natural line impressed on the bank, shelving, a change in vegetation community and the changes in the character of the soil. Approximately 40 GPS points were collected along the OHWM. OHWM data was used to create maps showing habitat types present in the BSA, specifically the Riverine (American River) habitat type, and are shown on maps provided in **Appendix C**.

Impact Analysis

Impact BIO-1: Potential to have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

> Construction-related activity from the proposed project may affect either directly or through habitat modifications species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (Less than Significant With Mitigation)

Special-status Plants

No special-status plant species were observed during the botanical surveys, which were conducted during the appropriate bloom period. Therefore, the proposed project would have **no impact** on special-status plant species.

Special-status Fish

The proposed project would require no in-water work and would not result in direct impacts to riverine habitat (American River). Construction activities would result in impacts to riparian habitat, however no riparian trees or shrubs located at or near the banks of the river would be removed. Therefore, the project would not result in the loss of shaded riverine aquatic habitat. There would be no direct impact related to special-status fish or fish habitat, including green sturgeon, Central Valley steelhead, Sacramento splittail, or Central Valley spring-run or fall/late-fall-run Chinook salmon. There would be no direct habitat effects, including to EFH for Chinook salmon or critical habitat for Central Valley steelhead and Chinook salmon. Indirect construction effects to habitat, EFH, and critical habitat for these species, including the potential for sediment or contaminants to affect the American River, would be potentially significant. Implementation of wildlife avoidance and best management practices for water quality and erosion prevention provided under **Mitigation Measures BIO-1**, **BIO-2**, and **BIO-3** would ensure that indirect construction impacts to the aquatic environment in the American River through siltation or contamination would be **less than significant** by requiring training, fencing, BMPs to avoid sediment transport, and restoring disturbed areas to pre-project conditions. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1** through **BIO-3**.

Special-status Wildlife

Valley Elderberry Longhorn Beetle

Elderberry shrubs are present and abundant within the BSA. There are various CNDDB records within a 5-mile radius of the BSA and several elderberry shrubs within the BSA have exit holes on the stems which indicate that VELB is present within the BSA. The USFWS 2017 Framework states that if elderberry shrubs occur on or within 165 feet of the project area, adverse effects to VELB may occur as a result of project implementation. Therefore, surveys for VELB habitat (elderberry shrubs) were

conducted within 165 feet of the project footprint. A total of 494 elderberry shrubs were identified within 165 feet of the project footprint.

Table 3.2-2 summarizes elderberry shrub impacts. The placement of the proposed project under Segments 1-2 Alternative 1 would result in the permanent removal of 22 elderberry shrubs (105 stems, 32 of which had exit holes). Segments 1-2 Alternative 2 would result in the permanent removal of 14 elderberry shrubs (88 stems, 16 of which had exit holes). Segments 3-6 would result in the permanent removal of 13 elderberry shrubs (45 stems, 3 of which had exit holes). Annual operations and maintenance along the trail would not result in the permanent loss (removal) of elderberry shrubs.

			Numbe (by Dian	er of Sten neter) (in	m(s) iches)	Total	Number Stem(s) (of Exit H (by Dian inches)	oles in neter)	Total number of Stems
lte	m	Number of Shrubs	1" - 3"	3" - 5"	>5"	number of Stems	1" - 3"	3" - 5"	>5"	with Exit Holes
Segments 1-2 Alternative 1	Shrubs with stems 1 inch or greater to be trimmed	2	5	1	5	11	5	0	1	6
	Shrubs with stems 1 inch or greater to be removed	22	43	33	29	105	2	11	19	32
Segments 1-2 Alternative 2	Shrubs with stems 1 inch or greater to be trimmed	1	5	1	4	10	5	0	0	5
	Shrubs with stems 1 inch or greater to be removed	14	43	24	21	88	2	3	11	16
Segments 3-6	Shrubs with stems 1 inch or greater to be trimmed	48	200	41	24	265	9	9	14	32
	Shrubs with stems 1 inch or greater to be removed	13	25	11	9	45	1	2	0	3
Maintenance ¹	Shrubs with stems 1 inch or greater to be trimmed	5	5	-	-	-	-	-	-	-

Table 3.2-2.	Summary	of Elderberry	Shrub Impacts

Note:

Actual maintenance impacts are unknown. Impacts from maintenance are assumed to be 5 shrubs and 5 1-3" stems.

The placement of the proposed project under Segments 1-2 Alternative 1 would require trimming of an additional 2 elderberry shrubs (11 stems, 6 of which had exit holes), resulting in temporary impacts. Segments 1-2 Alternative 2 would require trimming of an additional 1 elderberry shrub (10 stems, 5 of which had exit holes). Segments 3-6 would result in the trimming of 48 elderberry shrubs (200 stems, 32

of which had exit holes). During trail maintenance in future years, temporary impacts would occur from trimming of up to 5 elderberry shrubs.

Although VELB were not observed during the 2018 surveys, one female VELB was observed during a previous survey of the project area on May 6, 2014 and the presence of exit holes in many of the shrubs indicates that VELB occupy the riparian habitat in the BSA. No critical habitat for VELB is located within the BSA. However critical habitat is located approximately 0.45-mile northeast of the VELB habitat (elderberry shrubs). Permanent impacts to VELB habitat (elderberry shrubs) would occur from removal of elderberry shrubs during construction of the proposed trail. Temporary impacts would occur as a result of vegetation clearing, grubbing, or trimming required to provide construction crews and equipment access to the project, and as part of maintenance from clearing debris, removing hazard vegetation, and mowing. **Table 3.2-3** summarizes impacts to VELB habitat.

Segments 1-2 Alternative 1 would result in the permanent removal of approximately 0.95 acre of VELB, riparian, and mixed scrub habitat. Segments 1-2 Alternative 2 would result in the permanent removal of approximately 0.97 acre. Segments 3-6 would result in the permanent removal of approximately 0.42 acre. No permanent impacts would occur as a result of maintenance activities.

Maintenance activities would trim vegetation that grows to overhang the trail and results in a hazard to cyclists. Additionally, maintenance would include work within 165 feet of riparian habitat, mixed scrub habitat, and the elderberry shrubs within that habitat. Maintenance activities may temporarily affect up to 0.205 acre (approximately 5 elderberry shrubs). This acreage is included in the temporary impact acreage presented for construction in **Table 3.2-3** but would occur later in time. These maintenance areas correspond with (are the same as) the temporary loss area described above for construction.

-			Direct Impacts to	Potential Habitat		
		Permanent (acre	s)	т	emporary (acres)	
Habitat Type	Segments 1-2 Alt. #1	Segments 1-2 Alt. #2	Segments 3-6	Segments 1-2 Alt. #1	Segments 1-2 Alt. #2	Segments 3-6
Mixed Scrub	0.35	0.37	0.12	0.24	0.21	0.02
Valley Foothill Riparian	0.60	0.60	0.30	0.05	0.05	1.45
Total	0.95	0.97	0.42	0.29	0.26	1.47

Table 3.2-3. Direct Impacts to Valley Elderberry Longhorn Beetle Habitat

The project would result in **potentially significant** temporary and permanent impacts to VELB and VELB habitat. Implementing the wildlife avoidance measures provided in **Mitigation Measures BIO-1**, **BIO-2**, and **BIO-4** through **BIO-12** would reduce impacts to a **less than significant** level by requiring training, monitoring, fencing, restoring disturbed areas to pre-project conditions, compensating for the loss of habitat, constructing outside sensitive seasons, and controls on dust, herbicides, and mowing near shrubs. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1**, **BIO-2**, and **BIO-4** through **BIO-12**.

Western Pond Turtle

Potential aquatic and upland habitat for western pond turtle is present within the BSA. If western pond turtles are present within the project footprint during construction, the movement of equipment within the project footprint could crush pond turtles or nests containing eggs or young. The project would result in a permanent impact of approximately 0.60 acre in Segments 1-2 (Alternative 1 or 2) and 0.30 acre in Segments 3-6, and a temporary impact of approximately 0.05 acre in Segments 1-2 and 1.45 acres in Segments 3-6 of potential upland western pond turtle habitat (Valley foothill riparian habitat). Impacts to western pond turtle would be **potentially significant**. Implementing wildlife species avoidance and erosion/water quality BMPs provided in **Mitigation Measures BIO-1** through **BIO-5**, **BIO-7**, **BIO-13**, and **BIO-14** would reduce these impacts to a less than significant level by requiring training, monitoring, fencing, restoring disturbed areas to pre-project conditions, water quality BMPs, providing escape ramps during trenching, and preconstruction surveys to avoid the species. Therefore, this impact would be less than significant with the incorporation of **Mitigation Measures BIO-1** through **BIO-5**, **BIO-7**, **BIO-5**, **BIO-7**, **BIO-14**.

Burrowing Owl

Removal of vegetation within the project footprint could directly affect burrowing owl, if present. Additionally, noise associated with construction and maintenance activities and vegetation removal involving heavy equipment operation that occurs during the breeding season (generally from February to March) could disturb nesting burrowing owl if an active nest is located near these activities. Vegetation removal and soil disturbance could result in alteration of burrowing owl nesting or foraging habitat. Segments 1-2 Alternative 1 would result in a permanent impact of approximately 1.55 acres in Segments 1-2 and a temporary impact of approximately 1.16 acres to annual grasslands in the BSA. Segment 1-2 Alternative 2 would result in a permanent impact of approximately 1.68 acres and temporary impact of approximately 0.85 acre to annual grasslands in the BSA. Segments 3-6 would result in a permanent impact of approximately 2.66 acres and a temporary impact of approximately 7.18 acres to annual grasslands in the BSA. No additional acreage is anticipated to be affected by operations and maintenance activities. Impacts to burrowing owl would be **potentially significant**. Implementing wildlife species avoidance measures provided in Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-5, BIO-7, BIO-9, and BIO-14 would reduce these impacts to a less than significant level by requiring training, monitoring, fencing, dust control, restoring disturbed areas to pre-project conditions, and preconstruction surveys to avoid the species. Therefore, this impact would be less than significant with the incorporation of Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-5, BIO-7, BIO-9, and BIO-14

Swainson's Hawk

Segments 1-2 Alternative 1 would result in a permanent impact to approximately 1.55 acres of annual grassland habitat and approximately 0.58 acre of ruderal habitat which could be used by Swainson's hawk as foraging habitat. Segments 1-2 Alternative 2 would result in a permanent impact to approximately 1.68 acres of annual grassland habitat and approximately 0.67 acre of ruderal habitat which could be used by Swainson's hawk as foraging habitat. Segments 3-6 would result in a permanent impact to approximately 2.66 acres of annual grassland habitat and approximately 0.51 acre of ruderal habitat which could be used by Swainson's hawk as foraging habitat. Segments 3-6 would result in a permanent impact to approximately 2.66 acres of annual grassland habitat and approximately 0.51 acre of ruderal habitat which could be used by Swainson's hawk as foraging habitat. However, the habitat affected by the project is disturbed, fragmented, and set in an urban area, providing low-quality habitat for Swainson's hawk.

Suitable large trees within the Valley foothill riparian habitat along the American River within the BSA could provide nesting habitat for Swainson's hawk. Segments 1-2 (Alternative 1 or 2) would result in a

permanent impact to approximately 0.60 acre and a temporary impact of approximately 0.05 acre of Valley foothill riparian habitat which could provide nesting habitat for Swainson's hawk. Segments 3-6 would result in a permanent impact to approximately 0.30 acre and a temporary impact of approximately 1.45 acres of Valley foothill riparian habitat which could provide nesting habitat for Swainson's hawk. No additional acreage is anticipated to be affected by maintenance activities.

Noise associated with construction activities involving heavy equipment operation that occurs during the breeding season (generally between March 1 and August 31) could disturb nesting Swainson's hawk if an active nest is located near these activities. Within urban areas, CDFW considers 0.25 mile to be a sufficient buffer to avoid disturbance of nesting Swainson's hawks (CDFW 1994).

Impacts to Swainson's hawk would be **potentially significant**. Implementing the wildlife species avoidance measures provided in **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-5**, **BIO-7**, **BIO-9**, **BIO-14**, and **BIO-15** would reduce these impacts to a **less than significant** level by requiring training, monitoring, fencing, dust control, restoring disturbed areas to pre-project conditions, preconstruction surveys to avoid the species, and avoiding loss of nests. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-5**, **BIO-7**, **BIO-9**, **BIO-14**, and **BIO-15**.

White-tailed Kite

Segments 1-2 Alternative 1 would result in a permanent impact to approximately 1.55 acres of annual grassland habitat and approximately 0.58 acre of ruderal habitat which could be used by white-tailed kite as foraging habitat. Segments 1-2 Alternative 2 would result in a permanent impact to approximately 1.68 acres of annual grassland habitat and approximately 0.67 acre of ruderal habitat which could be used by white-tailed kite as foraging habitat. Segments 3-6 would result in a permanent impact to approximately 2.66 acres of annual grassland habitat and approximately 0.51 acre of ruderal habitat which could be used by white-tailed kite as foraging habitat. Segments 3-6 would result in a permanent impact to approximately 2.66 acres of annual grassland habitat and approximately 0.51 acre of ruderal habitat which could be used by white-tailed kite as foraging habitat. No additional acreage is anticipated to be affected by operations and maintenance activities. However, the habitat affected by the project is disturbed, fragmented, and set in an urban area, providing low-quality habitat for white-tailed kite.

Suitable large trees within the Valley foothill riparian habitat along the American River within the BSA could provide nesting habitat for white-tailed kite. Segments 1-2 (Alternative 1 or 2) would result in a permanent impact to approximately 0.60 acre and a temporary impact of approximately 0.05 acre of Valley foothill riparian habitat which could provide nesting habitat for white-tailed kite. Segments 3-6 would result in a permanent impact to approximately 0.30 acre and a temporary impact of approximately 1.45 acres of Valley foothill riparian habitat which could provide nesting habitat for white-tailed kit. No additional acreage is anticipated to be affected by operations and maintenance activities.

Noise associated with construction activities involving heavy equipment operation that occurs during the breeding season (generally between February 1 and August 31) could disturb nesting white-tailed kite if an active nest is located near these activities. Within urban areas, CDFW considers 0.25 mile to be a sufficient buffer to avoid disturbance of nesting white-tailed kites (CDFW 1994).

Impacts to white-tailed kite would be **potentially significant**. Implementing the wildlife species avoidance measures provided in **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-5**, **BIO-7**, **BIO-9**, and **BIO-14** would reduce these impacts to a **less than significant** level by requiring training, monitoring, fencing, dust control, restoring disturbed areas to pre-project conditions, and

preconstruction surveys to avoid the species. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-5**, **BIO-7**, **BIO-9**, and **BIO-14**.

Bald Eagle

No riverine habitat would be directly impacted by construction activities. Construction-related soil disturbance could indirectly result in temporary impacts to water quality in aquatic foraging habitat for bald eagle in the watershed.

Suitable large trees within the Valley foothill riparian habitat along the American River within the BSA could provide nesting habitat for bald eagle. Segments 1-2 (Alternative 1 or 2) would result in a permanent impact to approximately 0.60 acre and a temporary impact of approximately 0.05 acre of Valley foothill riparian habitat which could provide nesting habitat for Bald eagle. Segments 3-6 would result in a permanent impact to approximately 0.30 acre and a temporary impact of approximately 1.45 acres of Valley foothill riparian habitat which could provide nesting habitat for Bald eagle. No additional acreage is anticipated to be affected by operations and maintenance activities.

Noise associated with construction activities involving heavy equipment operation that occurs during the breeding season (generally between February 1 and August 31) could disturb nesting bald eagle if an active nest is located near these activities. Within urban areas, CDFW considers 0.25 mile to be a sufficient buffer to avoid disturbance of nesting bald eagle.

Impacts to bald eagle would be **potentially significant**. Implementing the wildlife species avoidance measures provided in **Mitigation Measures BIO-1** through **BIO-5**, **BIO-7**, **BIO-9**, and **BIO-14** would reduce these impacts to a **less than significant** level by requiring training, monitoring, water quality BMPs, fencing, dust control, restoring disturbed areas to pre-project conditions, and preconstruction surveys to avoid the species. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1** through **BIO-5**, **BIO-7**, **BIO-9**, and **BIO-14**.

Other Protected Birds and Raptors

Removal of trees and shrubs within the project footprint could directly affect nesting birds. Additionally, noise associated with construction or maintenance activities involving heavy equipment operation that occurs during the breeding season (generally between March 1 and August 31) could disturb nesting birds and raptors if an active nest is located near these activities.

Impacts to other protected birds and raptors, including song sparrow, purple martin, least Bell's vireo, and other migratory birds, would be **potentially significant**. Implementing the wildlife species avoidance measures provided in **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-5**, **BIO-7**, **BIO-9**, and **BIO-14** would reduce these impacts to a **less than significant** level by requiring training, monitoring, fencing, dust control, restoring disturbed areas to pre-project conditions, and preconstruction surveys to avoid the species. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1**, **BIO-2**, **BIO-5**, **BIO-7**, **BIO-9**, and **BIO-14**.

Ringtail

Potential foraging and den habitat for ringtail occurs within large trees in the riparian woodland habitat in the BSA. Forage that is present includes berries from Himalayan blackberry, insects, and small vertebrate prey such as mice or lizards. Other food sources available in the BSA include mistletoe (*Viscum album*) and other berry producing vegetation is present but is not abundant. Although this species may avoid urban areas, the BSA is located along an expansive riparian corridor which could be used by ringtail to pass through the area to different locations along the American and Sacramento River.

Ringtail are nocturnal and would not likely be foraging in the project footprint during daylight hours. However, because the project area includes potential den and foraging habitat for ringtail, and the area could be used by ringtail as a movement corridor, project-related construction or maintenance activities and related noise could cause short-term, temporary disturbance to ringtail, or could have a direct permanent effect on ringtail through removal of mature trees and riparian vegetation that could represent potential foraging and/or den habitat for this species.

Impacts to ringtail would be **potentially significant**. Implementing the wildlife species avoidance measures provided in **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-7**, **BIO-9**, and **BIO-13** would reduce these impacts to a **less than significant** level by requiring training, monitoring, fencing, dust control, restoring disturbed areas to pre-project conditions, and escape ramps or covers for trenches. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-7**, **BIO-7**, **BIO-9**, and **BIO-13**.

Roosting Bats

The proposed project may have a direct permanent effect on bats through removal of mature trees that could support roosting bat colonies. Additionally, noise associated with construction or maintenance activities involving heavy equipment operation could disturb roosting bats if a roosting colony is located near these activities.

Impacts to bats, including western red bats, would be potentially significant. Implementing the wildlife species avoidance measures provide in **Mitigation Measures BIO-1**, **BIO-2**, **BIO-4**, **BIO-7**, and **BIO-14** would reduce these impacts to a **less than significant** level by requiring training, monitoring, fencing, dust control, restoring disturbed areas to pre-project conditions, and preconstruction surveys to avoid the species. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1**, **BIO-2**, **BIO-1**, **BIO-2**, **BIO-4**, **BIO-7**, and **BIO-1**4.

Mitigation Measures

Mitigation Measure BIO-1: Conduct Environmental Awareness Training Regarding Special-status Species and Sensitive Habitats prior to Construction

The City shall ensure the construction contractor will implement the following actions before and during construction activities:

Before any work occurs in the proposed project footprint, including grading and equipment staging, all construction personnel shall participate in an environmental awareness training regarding special-status species and sensitive habitats present in the project limits. The training shall describe sensitive resources (i.e., waters of the U.S. and state, riparian habitat, special-status species and habitat, nesting birds/raptors) to be avoided during project construction and applicable permit conditions identified by state and federal agencies to protect these resources. If new construction personnel are added to the project, they must receive the mandatory training before starting work. After being trained, each construction person shall sign-in to document they received the training.

Timing:Before and During Construction Activities

Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat

The City shall ensure the construction contractor will implement the following actions before and during construction activities:

Before any ground-disturbing activity occurs within the project footprint, the City shall ensure that temporary construction barrier fencing, silt fencing, and/or flagging is installed between the work area and environmentally sensitive habitat areas (i.e., waters of the U.S. and state, riparian vegetation, special-status species habitat, active bird/raptor nests to be avoided), as appropriate. Construction/maintenance personnel and construction/maintenance activity shall avoid fenced environmentally sensitive areas. The exact location of the fencing and/or flagging shall be determined by the resident engineer coordinating with a qualified biologist, with the goal of protecting sensitive biological habitat and water quality. No ground disturbance or vegetation removal activity shall be allowed until this condition is satisfied. The fencing/flagging shall be checked regularly and maintained until all work is complete. For construction, any required barrier or sediment fencing and a note reflecting this condition shall be shown on the final construction documents.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before and During Construction Activities

Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices

The City shall require that the construction contractor implement the following BMPs to protect water quality within the American River:

- Conduct ground-disturbing activities adjacent to the American River during the low-flow period (generally between June 1 and October 15).
- Install sediment fencing, fiber rolls, or other equivalent erosion and sediment control
 measures between the designated work area and the American River, as necessary, to ensure
 that construction debris and sediment does not inadvertently enter the drainage. The City
 shall also cover or otherwise stabilize all exposed soil 48 hours prior to potential precipitation
 events of greater than 0.5 inch.
- Immediately after trail construction is complete, all exposed soil shall be stabilized. Soil stabilization may include, but is not limited to, seeding with a native grass seed mix, planting native plants and placement of rock.
- No refueling, storage, servicing, or maintenance of equipment shall take place within 100 feet of waters of the U.S. and State.

- All machinery used during construction of the project shall be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water.
- Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) shall be cleaned up in accordance with applicable local, state, and/or federal regulations.
- Tightly woven fiber netting (no monofilament netting) or similar material shall be used for erosion control or other purposes within the project footprint to ensure that wildlife are not trapped. This limitation shall be communicated to the contractor through the special provisions included in the bid solicitation package. Coconut coir matting and burlapcontaining fiber rolls are an example of acceptable erosion control materials.
- Before any construction-related ground-disturbing activities, the City shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP; as required under the SWRCB's General Construction Permit Order 2009-0009-DWQ [and as amended by most current order(s)]) or a Water Pollution Control Plan (WPCP), as applicable, that includes erosion control measures and construction waste containment measures to ensure that waters of the State are protected during and after project construction. The Plan (a SWPPP or WPCP) shall include site design to minimize offsite storm water runoff that might otherwise affect adjacent waters of the U.S. and State.
- The Plan (a SWPPP or WPCP) shall be prepared with the following objectives: (a) to identify pollutant sources, including sources of sediment, that may affect the quality of storm water discharges from the construction of the proposed project; (b) to identify BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the project during construction; (c) to outline and provide guidance for BMP monitoring; (d) to identify proposed project discharge points and receiving waters; to address post-construction BMP implementation and monitoring; and (f) to address sedimentation, siltation, and turbidity.
- The SWPPP or WPCP shall also include a spill prevention, control, and countermeasure plan, and applicable hazardous materials business plans, and shall identify the types of materials used for equipment operation (including fuel and hydraulic fluids), and measures to prevent, and materials available to clean up, hazardous material and waste spills. The SWPPP or WPCP shall also identify emergency procedures for responding to spills.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before and During Construction Activities

Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions

The City shall ensure the construction contractor will implement the following actions before and during construction activities:

All temporarily disturbed areas shall be returned to pre-project conditions within one year following completion of construction/maintenance. These areas shall be properly protected from

washout and erosion using appropriate erosion control devices including coir netting, hydroseeding, and revegetation.

Responsibility:	City of Sacramento / Construction Contractor		
Timing:	Before and During Construction Activities		

Mitigation Measure BIO-5: Avoid the Spread of Invasive Plant Species

The City shall ensure the following mitigation measures shall be implemented, as appropriate, to avoid the spreading of invasive plant species throughout the project site during construction and maintenance activities, particularly in riparian areas:

- All hay, straw, hay bales, straw bales, seed, mulch, or other material used for erosion control
 or landscaping on the project site, and all material brought to the site, including rock, gravel,
 road base, sand, and top soil, shall be free of noxious weed seeds and propagules. Noxious
 weeds are defined in Title 3, Division 4, Chapter 6, Section 4500 of the California Code of
 Regulations and the California Quarantine Policy Weeds. (Food and Agriculture Code,
 Sections 6305, 6341 and 6461)
- All equipment brought to the project site for construction shall be thoroughly cleaned of all dirt and vegetation prior to entering the site to prevent importing noxious weeds. (Food and Agriculture Code, Section 5401)

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before and During Construction and Maintenance Activities

Mitigation Measure BIO-6: Compensate for Permanent Impacts to Riparian Habitat and Protected Trees

The City shall implement the following actions at the completion of construction activities:

In accordance with policies stated in the City's General Plan, to compensate for the permanent removal of riparian vegetation associated with the trail construction, the City shall purchase offsite credits at a mitigation bank or replant riparian trees and shrubs at a 1:1 ratio (e.g., 1 acre planted for every 1 acre removed). The replacement plantings shall consist of a variety of native tree species that occur within the riparian vegetative community along the American River corridor such as live oak, Fremont cottonwood, Oregon ash, boxelder, white alder, arroyo willow, and native shrub species such as narrowleaf willow, California rose, and California blackberry. No long-term management of landscaping or watering beyond that needed to initially establish the plants is anticipated to occur.

If an onsite or offsite City-responsible mitigation site is used, the City shall accomplish riparian habitat compensation by implementing the following: after completion of the trail design, the City shall total the number, type, and size of all trees and shrubs to be removed and prepare a planting plan that identifies the location of the riparian mitigation plantings and the number, type, and size of plants. The planting plan shall also describe the irrigation and maintenance required to establish and monitor the planting area. Mitigation plantings will be completed between October 15 and December 31 of the year immediately following when impacts occur.

All mitigation plantings will be monitored for 3 years. The survival goals established by CDFW will be adhered to, and if the goals are not met, then the City will be responsible for installing replacement plantings. Replacement plants shall be monitored with the same survival and growth requirements for 3 years following planting. The City will be responsible for planting, replanting, watering, weeding, invasive exotic eradication, and any other practice needed to ensure this goal. An annual status report on the mitigation will be provided to CDFW by December 31 of each year. The report will include the survival, percent cover, and height of both tree and shrub species. The number by species of plants and trees replaced, and overview of the re-vegetation effort, and the method used to assess these parameters will also be included. Photographs of the mitigation area will also be included. To ensure success of the mitigation plantings, the City shall prepare and implement an adaptive management plan that identifies specific monitoring tasks, success criteria, and reporting requirements.

If mitigation bank credits are purchased, the credits must be purchased at a CDFW-approved site.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	At the completion of Construction Activities

Mitigation Measure BIO-7: Monitor During Ground Disturbance and Vegetation Removal

The City shall ensure the construction contractor implement the following actions during construction activities:

A qualified biological monitor shall be present during all project activities requiring ground disturbance or vegetation removal within the construction area and shall make weekly monitoring visits to construction/active maintenance areas occurring in or adjacent to environmentally sensitive habitat areas, (i.e., waters of the U.S. and State, riparian vegetation, special-status species habitat, active bird/raptor nests). The biologist shall be responsible for ensuring that the contractor maintains the fencing/flagging protecting sensitive biological resources. Additionally, the biologist shall assist the City and the construction crew in complying with all proposed project implementation restrictions and guidelines as needed.

Vegetation less than 3 inches in diameter shall be cleared by hand or small engine weed-eaters or chainsaws. Small material or grasses shall be mowed close to ground with low impact rubbertired tractors. Vegetation over 3 inches in diameter may require larger equipment such as telescoping chainsaws, hoe-mounted flail mowers, bucket machines to hoist crews and equipment, and crews climbing with chainsaws.

To qualify for approval from the USFWS, the biological monitor must be a biologist with demonstrated knowledge of VELB natural history, ecology, and identifying characteristics, as well as demonstrated field experience identifying other listed species. The monitor will be approved by the Sacramento USFWS Office in writing prior to the start of any ground-disturbing activities.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	During Construction Activities

Mitigation Measure BIO-8: Avoid Construction Activities within 165 feet of Elderberry Shrubs During Valley Elderberry Longhorn Beetle Flight Season

The City shall ensure the construction contractor implement the following actions during construction activities:

As much as feasible, all construction activities that could occur within 165 feet (50 meters) of an elderberry shrub, will be conducted outside of the flight season of the VELB (March - July).

Responsibility:	City of Sacramento / Construction Contracto		
Timing:	During Construction Activities		

Mitigation Measure BIO-9: Implement Dust Control Measures

The City shall ensure the construction contractor implement the following actions during construction activities:

The City shall require that the construction contractor implement dust-control measures during all construction activities. These measures may include application of water to graded and disturbed areas that are un-vegetated. To avoid attracting Argentine ants, at no time shall water be sprayed within the driplines of elderberry shrubs).

Responsibility:	City of Sacramento / Construction Contractor			
Timing:	During Construction Activities			

Mitigation Measure BIO-10: Prohibit Use of Herbicides and Mowing near Elderberry Shrubs

The City shall ensure the construction contractor implement the following actions during construction and maintenance activities:

The City shall prohibit the contractor from using insecticides, herbicides, fertilizers, or other chemicals within 95 feet of elderberry shrubs. The City shall prohibit the contractor from conducting mechanical weed removal within the drip-line of the elderberry shrub during the season when adults are active (February - August) and will avoid damaging the elderberry.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	During Construction and Maintenance Activities

Mitigation Measure BIO-11: Compensate for the Permanent Removal and Temporary Disturbance of Valley Elderberry Longhorn Beetle Habitat

The City will purchase mitigation credits for impacts to potential valley longhorn elderberry beetle riparian and mixed scrub habitat in accordance with the USFWS 2017 Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017). The City will coordinate with USFWS to determine the appropriate type and amount of compensatory mitigation for all unavoidable adverse impacts to VELB or its habitat.

<u>Compensation for Permanent Loss of Habitat:</u> Per the 2017 Framework, the USFWS recommends that the permanent loss of VELB habitat be replaced with habitat that is commensurate with the type (riparian or non-riparian) and amount of habitat lost. Suitable riparian habitat may be replaced, at a minimum of 3:1 for all acres that will be permanently impacted by the project (**Table 3.2-4**). The USFWS typically recommends that any shrub that will be adversely impacted by the project be transplanted to a USFWS-approved location.

		Approximate Direct Impacts to Potential Habitat					
		Approximate Permanent (acres) of Disturbance			Acres of Credits / Total Credit Purchase ²		
Habitat Type	Compensation Ratio ¹	Segments 1-2 Alt. 1	Segments 1-2 Alt. 2	Segments 3-6	Segments 1-2 Alt. 1	Segments 1-2 Alt. 2	Segments 3-6
Mixed Scrub	3:1	0.35	0.37	0.12	1.05 / 25.61	1.11 / 27.07	0.36 / 8.78
Valley Foothill Riparian	-	0.60	0.60	0.30	1.8 / 43.90	1.80 / 43.90	0.90 / 21.95
	Total	0.95	0.97	0.42	2.85 / 69.51	2.91 / 70.97	1.26 / 30.73

Table 3.2-4.Potential Valley Elderberry Longhorn Beetle Habitat-level
Compensation Ratios

Notes:

¹ acre(s) of credit: acre(s) of disturbance

² one crédit (unit) = 1,800 square feet (0.041 acre)

For the purpose of this analysis, both the Valley foothill riparian and mixed scrub community types were considered to be potential riparian habitat for this species. Therefore, the acres of disturbance to these two community types will be mitigated at the 3:1 ratio stated in the USFWS 2017 Framework (as shown in **Table 3.2-4**).

<u>Temporary Loss of Valley Elderberry Longhorn Beetle Habitat:</u> To appropriately compensate for all individual shrubs that will be impacted by the project, the City shall first consider the location of the plant (riparian or non-riparian) and the potential for the plant to be occupied by VELB (exit holes present, likely occupied). For direct effects to individual shrubs, the City may consider replacing habitat based on the amount of effects that occur, the location of the shrub (riparian or non-riparian), and the presence of exit holes (non-riparian only). Impacts to individual shrubs in riparian areas may be replaced by the purchase of 2 credits at an USFWS-approved bank for each shrub that will be trimmed regardless of the presence of exit holes.

For purposes of this analysis, impacts to individual elderberry shrub that result from temporary trimming activities were considered as riparian, and therefore would be mitigated at the 2:1 ratio stated in the USFWS 2017 guidelines. The number of elderberry shrubs requiring transplantation as shown in Table 3.2-5 are included in the amounts described in Mitigation Measure BIO-13: Transplant Elderberry Shrubs.

Responsibility:	City of Sacramento		
Timing:	Before Construction Activities		

	Habitat	Compensation Ratio	# of Shrubs to be Trimmed	Compensation	Total Credit Purchase ²
Segments 1-2 Alternative 1	Riparian	2:1	2	Transplant the shrub + 2:1 compensation	2 shrubs transplanted + 4 credits
Segments 1-2 Alternative 2	Riparian	2:1	1	Transplant the shrub + 2:1 compensation	1 shrub transplanted + 2 credits
Segments 3-6	Riparian	2:1	48	Transplant the shrub + 2:1 compensation	49 shrubs transplanted + 98 credits
Maintenance	Riparian	2:1	5	Transplant the shrub + 2:1 compensation	5 shrubs transplanted + 10 credits

Table 3.2-5. Valley Elderberry Longhorn Beetle Shrub-level Impact Ratios

Notes:

¹ number of credits: number of shrubs trimmed

² one credit (unit) = 1,800 square feet (0.041 acre)

Mitigation Measure BIO-12: Transplant Elderberry Shrubs

The City shall ensure the construction contractor implement the following actions during construction activities:

USFWS recommends that all loss of elderberry longhorn beetle habitat be replaced with habitat that is commensurate with the type and amount lost under the following conditions:

- If the elderberry shrub cannot be avoided.
- If indirect effects will result in the death of stems or the entire shrub.

If the shrub can be avoided, and indirect effects will not result in the death of the entire shrub, individual shrub-level impact compensation is recommended. Placement of the proposed project under Segments 1-2 Alternative 1 would result in temporary impacts (trimming) to 2 elderberry shrubs requiring both to be transplanted according to the 2017 Framework. Segments 1-2 Alternative 2 would result in temporary impacts (trimming) to 1 elderberry shrub (**Table 3.2-2**), requiring one to be transplanted according to the 2017 Framework. Segments 3-6 would result in temporary impacts (trimming) to 48 shrubs (**Table 3.2-2**), requiring 48 shrubs to be transplanted according to the 2017 Framework. Segments 3-6 would result in temporary impacts (trimming) to 48 shrubs (**Table 3.2-2**), requiring 48 shrubs to be transplanted according to the 2017 Framework. Segments 3-6 would result in temporary impacts (trimming) to 48 shrubs (**Table 3.2-2**), requiring 48 shrubs to be transplanted according to the 2017 Framework. Segments 3-6 would result in temporary impacts (trimming) to 48 shrubs (**Table 3.2-2**), requiring 48 shrubs to be transplanted according to the 2017 Framework. Dependence would potentially impact up to 5 shrubs throughout all segments (**Table 3.2-2**), requiring 5 additional shrubs be transplanted.

Removal of entire elderberry plants without disturbance to the surrounding habitat is uncommon but may occur. The removal may either include the roots or just the removal of the aboveground portion of the plant. When possible, the City shall attempt to remove the entire root ball and transplant the shrub. To minimize the fragmentation of VELB habitat, the City will relocate elderberry shrubs as close as possible to their original location. Elderberry shrubs may be relocated adjacent to the project footprint if: 1) the planting location is suitable for elderberry growth and reproduction; and 2) the City is able to protect the shrub and ensure that the shrub becomes reestablished. If these criteria cannot be met, the shrub may be transplanted to an appropriate USFWS-approved mitigation site.

Any elderberry shrub that is unlikely to survive transplanting because of poor condition or location, or a shrub that would be extremely difficult to move because of access limitations, may not be appropriate for transplanting. The following transplanting guidelines may be used by the City:

- Monitor A qualified biologist will be on-site for the duration of transplanting activities to assure compliance with avoidance and minimization measures and other conservation measures.
- Exit Holes Exit-hole surveys will be completed immediately before transplanting. The number of exit holes found, global positioning system (GPS) location of the plant to be relocated, and the GPS location of where the plant is transplanted will be reported to the USFWS and to the CNDDB.
- **Timing** Elderberry shrubs will be transplanted when the shrubs are dormant (November through the first two weeks in February) and after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the shrub and increase transplantation success.
- **Transplanting Procedure** Transplanting will follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (http://www.tcia.org/).
- **Trimming Procedure** Trimming will occur between November and February and should minimize the removal of branches or stems that exceed 1 inch in diameter. (USFWS 2017)

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before and During Construction Activities

Mitigation Measure BIO-13: Provide Escape Ramps or Cover Open Trenches

The City shall ensure the construction contractor implement the following actions during construction activities:

To avoid entrapment of wildlife, all excavated steep-walled holes or trenches more than two feet deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday. If escape ramps cannot be provided, then holes or trenches will be covered with plywood or similar materials. Providing escape ramps or covering open trenches will prevent injury or mortality of wildlife resulting from falling into trenches and becoming trapped. The trenches will be thoroughly inspected for the presence of federally listed species at the beginning of each workday. Any species observed shall be allowed to voluntarily move outside of the work area on its own.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before and During Construction Activities
Mitigation Measure BIO-14: Conduct Preconstruction Surveys

The City shall ensure the construction contractor implement the following actions prior to construction activities:

Western Pond Turtle: A qualified biologist shall conduct a preconstruction clearance survey for western pond turtles within 48 hours prior to any ground disturbance within the project footprint. Any western pond turtles found within the construction work area shall be allowed to voluntarily move out of this area or shall be captured and held by a qualified biologist for the minimum amount of time necessary to release them into suitable aquatic habitat outside the construction work area. If a western pond turtle nest containing eggs or young is identified within the construction work area, the biologist shall consult with CDFW to determine an appropriate no-disturbance buffer to ensure avoidance of the nest.

Burrowing Owl: A qualified biologist shall conduct a preconstruction survey to locate any active burrowing owl burrows within the BSA or within a 500-foot-wide buffer around the BSA, if feasible. The preconstruction survey shall be conducted in accordance with recommendations provided in CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012) and no more than 14 days before the start of construction activities. If no burrowing owls or burrows exhibiting burrowing owl use (i.e., whitewash, owl pellets, feathers, or egg fragments) are detected, then construction may proceed. Preconstruction surveys must be reinitiated if more than 30 days lapse between the survey dates and construction or maintenance activities.

If active burrowing owls or occupied burrows are detected in the survey area, occupied burrows shall not be disturbed during the nesting season (generally February 1–August 31) or the wintering season (September 1–January 31). A no-disturbance buffer shall be established around the burrow to avoid disturbance of nesting burrowing owls until a qualified biologist, coordinating with CDFW, determines that the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist (coordinating with the CDFW) and shall depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.

Raptors/Nesting Birds: If construction/maintenance or vegetation removal occur during the breeding season for migratory birds and raptors (generally February through August), the City shall retain a qualified biologist to conduct a preconstruction nesting bird and raptor survey prior to the start of construction activities (including equipment staging). The preconstruction nesting bird and raptor surveys shall be conducted between February 1 and August 31 within suitable habitat within the designated project footprint. Surveys for raptors' nests shall also extend 250 feet from the project footprint to ensure that nesting raptors are not affected by construction disturbances. For raptor surveys outside the project footprint where property access has not been granted, the surveying biologist shall use binoculars to scan any suitable nesting substrate for potential raptor nests. The preconstruction survey shall be conducted no more than 14 days before the initiation of construction activities.

If an active bird or raptor nest is identified within the construction or maintenance work area or an active raptor nest is identified within 250 feet from the construction work area, a nodisturbance buffer shall be established around the nest to avoid disturbance of the nesting birds or raptors until a qualified biologist determines that the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist (coordinating with the CDFW) and shall depend on the species identified, level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. In addition to the establishment of buffers, other avoidance measures (determined during CDFW coordination) may include monitoring of the nest during construction and restricting the type of work that can be conducted near the nest site. If no active nests are found during the preconstruction surveys, then no additional mitigation is required

Bats: During April–September before construction begins, a qualified biologist will survey trees and structures within the project footprint and identify any snags, hollow trees, voids or other trees with cavities that may provide suitable roosting habitat for bats. If evidence of bat usage is observed, a focused species acoustic survey shall be performed to determine the presence and type of bat roost. If no suitable roosting trees are found or the acoustic survey findings are negative, construction may proceed. If bats are found or evidence of use by bats is present, the qualified biologist will work with the City and CDFW to implement measures to avoid or minimize disturbance. Avoidance measures may include excluding bats from the tree before their hibernation period (mid-October to mid-March) and before construction or maintenance begins.

Mitigation Measure BIO-15: Avoid Loss of Swainson's Hawk Nests

The City shall ensure the construction contractor implement the following actions prior to construction activities:

- For construction or maintenance activities (including vegetation removal and/or other ground disturbance) that need to be conducted during the breeding season (March 1 July 31), Swainson's hawk surveys shall include all suitable nesting habitat within line of sight of construction activities within a 0.5-mile radius of the project site. One survey following the guidelines provided in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley (Swainson's Hawk Technical Advisory Committee 2000) shall be followed for surveys for Swainson's hawk.
- If active Swainson's hawk nests are identified within the project area, preconstruction activity shall cease and CDFW will be contacted. If a Swainson's hawk nest is identified a no-disturbance buffer shall be established around the nest to avoid disturbance of the nesting Swainson's hawk until a qualified biologist determines that the young have fledged and are foraging on their own. The extent of these buffers shall be determined by the biologist (coordinating with the CDFW), level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. In addition to the establishment of buffers, other avoidance measures (determined during CDFW coordination) may include monitoring of the nest during construction and restricting the type of work that can be conducted near the nest site. If no active nests are found during the preconstruction surveys, then no additional mitigation is required.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before Construction Activities

Mitigation Measure BIO-16: Obtain Preliminary Jurisdictional Determination and Compensate for Impacts to Waters of the U.S. and State

The City shall obtain a Jurisdictional Determination or Preliminary Jurisdictional Determination from the USACE. Based on the determination, the City shall finalize the acreage of impacts to Waters of the U.S. and State based on project footprint and USACE-verified OHWM. If no impacts would occur, no compensation is required. If impacts would occur, the City shall compensate for impacts to Waters of the U.S. and State by purchasing credits from a State Water Resources Control Board (SWRCB)- and/or USACE-approved mitigation bank at a minimum ratio of 1:1, or in-lieu fees shall be paid to a SWRCB- and/or USACE-approved fund at a 1:1 replacement ratio to ensure the project would not result in a net loss of Waters of the U.S. and State.

Responsibility:	City of Sacramento		
Timing:	Before Construction Activities		

Impact BIO-2: Potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

Construction-related activity from the proposed project may affect riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (Less than Significant With Mitigation)

American River Habitat

The proposed project could result in indirect impacts to the American River related to increased sediment loads from earth moving activities during construction or the accidental introduction of wash water, solvents, oil, cement, or other pollutants during construction or maintenance. This impact would be **potentially significant**. Implementing the water quality and erosion BMPs provided in **Mitigation Measures BIO-1** through **BIO-5** would reduce this impact to a **less than significant** level by requiring training, fencing, BMPs to avoid sediment transport, and restoring disturbed areas to pre-project conditions. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1** through **BIO-5**.

Valley Foothill Riparian Habitat

Construction of the proposed trail would affect the Valley foothill riparian habitat. Although the proposed project has been designed to minimize impacts on mixed riparian woodland habitat by using developed areas and annual grassland where possible, construction of the proposed trail would result in approximately 0.05 acre of temporary impacts in Segments 1-2 and 1.45 acres in Segments 3-6, and approximately 0.60 acre of permanent impacts in Segments 1-2 and 0.30 acre in Segments 3-6 to Valley foothill riparian habitat. Temporary impacts would occur as a result of vegetation clearing, grubbing, or trimming of tree canopy required in order to provide construction crews and equipment access to the project alignment and as part of maintenance activities. Permanent impacts to Valley foothill riparian habitat would occur from operation and maintenance activities. Impacts to Valley foothill riparian

habitat would be **potentially significant**. Implementing species avoidance and water quality/erosion BMPs provided in **Mitigation Measures BIO-1** through **BIO-7** would reduce impacts to a **less than significant** level by requiring training, monitoring, fencing, restoring disturbed areas to pre-project conditions, avoiding the spread of invasive species, and compensating for the loss of habitat and protected trees. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1** through **BIO-7**.

Impact BIO-3: Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

Construction-related activity from the proposed project may affect federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (Less than Significant With Mitigation)

USACE has not determined the OHWM of the American River in the project vicinity. If the USACE determines that the OHWM of the American River extends into the project footprint, the project would have a **potentially significant** impact related to waters of the U.S. and State. Implementing the avoidance and water quality/erosion BMPs provided in **Mitigation Measures BIO-1** through **BIO-4** and **BIO-16** would reduce this impact to a **less than significant** level by requiring training, fencing, BMPs to avoid sediment transport, restoring disturbed areas to pre-project conditions, obtaining a jurisdictional determination or preliminary jurisdictional determination from USACE, and purchasing credits to ensure that the project would not result in a net loss of Waters of the U.S. and State. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1** through **BIO-16**.

Impact BIO-4: Potential to impact protected trees

Construction or operation-related activity from the proposed project may affect protected trees. (Less than Significant With Mitigation)

Construction of the proposed trail would result in the removal of trees. The project would also adversely affect trees by requiring tree trimming for equipment access and conducting ground-disturbing activities within the dripline of protected trees.

The number of trees removed and trimmed within Segments 1-2 has not been determined. These Segments would be constructed in the future; therefore, the size of trees and portions of trees overhanging the project footprint may differ from current conditions. The trees within Segments 1-2 are within riparian habitat and co-occur with elderberry shrubs.

Segments 3-6 of the proposed project would permanently affect (remove) 25 trees and temporarily affect (trim) approximately 72 additional trees located within the project footprint. All trees identified for removal are located within the valley foothill riparian vegetation community. During operations and maintenance, dead, dying, and hazard trees may be trimmed or removed.

Impacts related to protected trees would be **potentially significant**. Implementing the avoidance and restoration measures provide in **Mitigation Measures BIO-1** through **BIO-7** would reduce impacts to a **less than significant** level by requiring training, monitoring, fencing, restoring disturbed areas to pre-project conditions, and compensating for the loss of habitat and protected trees. Additionally, the City will obtain a Streambed Alteration Agreement from the CDFW, which will include riparian/tree compensation requirements. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures BIO-1** through **BIO-7**.

Residual Significant Impacts

Mitigation that would reduce potential biological and water quality impacts to a less-than-significant level have been identified and therefore there would be no residual significant impacts to Biological Resource conditions.

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3.3 Cultural and Tribal Resources

3.3.1 Introduction

This section describes the environmental and regulatory setting for cultural resources and Tribal Cultural Resources (TCRs). It also describes potential impacts on cultural resources and TCRs that could result from implementation of the proposed project. Mitigation measures for potentially significant impacts are also described below.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comment related to cultural resources was received and considered during preparation of the impact analysis:

 Analysis should address how the "character-defining features" of the Levee Unit 118 Part 1 (American River South Levee) would be affected by the proposed project, as the levee is considered significant under National Register of Historic Places.

Impacts to the character defining features of the American River South Levee are described below in **Impact CTR-1** "Damage to or Destruction of Built Environment Historic Properties".

3.3.2 Environmental Setting

Prehistoric and Ethnographic Context

Archaeological research in the Central Valley has revealed almost 14,000 years of occupation, which has been organized into a chronology called the Archaic-Emergent System (Bennyhoff and Fredrickson 1969), built on the work of Lillard et al. (1939) and Beardsley (1948).

The earliest well-documented entry and spread of humans into California occurred at the beginning of the Paleo-Indian Period (13,500-8,000 B.P.). Little evidence from this period has been found in the Sacramento area, but sites typically include hunting implements such as fluted projectile points and chipped stone crescent forms. Social units are thought to have been small and highly mobile.

Human populations grew and occupied more diverse settings during the Middle Archaic Period (5,000-2,500 B.P). Permanent villages were established, primarily along major waterways. Sedentary settlements led to more intensive subsistence strategies, including the introduction of acorn processing technology. By the Upper Archaic Period (2,500-1000 B.P.), increased population density led to status differentiations and sociopolitical complexity. Exchange systems become more complex and formalized. Evidence of regular, sustained trade between groups was seen for the first time.

During the Emergent Period (1,000 B.P. to Historic), socioeconomic complexity continued to develop, with extensive exchange networks, social status associated with acquired wealth, and increasing territorial circumscription. The bow and arrow were introduced, replacing the atlatl. In the latter portion of this period (450-150 B.P.), the clamshell disk bead became a monetary unit for exchange and increasing quantities of goods moved greater distances. Specialists arose to govern various aspects of production and exchange.

The City of Sacramento and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the City. Human burials outside of formal

cemeteries often occur in prehistoric contexts. Areas of high sensitivity for tribal cultural resources are located within close proximity to the Sacramento and American rivers and other watercourses.

The proposed project area is situated within the lands traditionally occupied by the Valley Nisenan, or Southern Maidu. Valley Nisenan territory was divided into politically autonomous "tribelet" areas, each including several large villages (Kroeber 1925, Moratto 1984). Two important villages were located near the project area, on the south bank of the American River, Momol, to the west of the project area, and Yalisumni, to the east (Wilson and Towne 1978:388). Valley Nisenan people lived in small, domed houses (10–15 feet in diameter) covered with earth and tule or grass and followed a seasonal round of food gathering (Wilson and Towne 1978).

Euro-American contact with the Nisenan began with infrequent excursions by Spanish explorers and Hudson's Bay Company trappers traveling through the Sacramento-San Joaquin Valley in the early 1800s (Wilson and Towne 1978). With the coming of Russian trappers, Spanish missionaries, and Euro-American settlers, traditional lifeways were threatened by competition for land and resources, and by the introduction of new diseases. The malaria epidemic of 1833 decimated the Valley Nisenan population, killing an estimated 75 percent of the population. The influx of Euro-Americans during the Gold Rushera further reduced the population due to forced relocations and violent retribution from the miners for real or imagined affronts (Madley 2016).

Despite these setbacks, today many Native Americans in the proposed project area are maintaining traditional cultural practices. Sometimes supported by thriving business enterprises, Tribal groups maintain governments, historic preservation programs, education programs, cultural events, and numerous other programs that sustain a vibrant culture (Johnson 2018).

Historic Context

City of Sacramento

The City of Sacramento—named after the river that runs beside it—was built on 4 square miles of John Sutter's New Helvetia land grant in 1849 and officially incorporated in 1850 (McGowan and Willis 1983:21, 28). Sacramento served as an important gateway to California's gold fields during the Gold Rush years. By 1854, Sacramento had grown and matured as a city and secured the title of state capitol (McGowan and Willis 1983:49, 51–52). In 1861, the Central Pacific Railroad (CPRR) formed and groundbreaking for the transcontinental railroad commenced in 1863 in downtown Sacramento. The CPRR had a tremendous impact on Sacramento's economy as people were enticed to come to the region by the cheap rail fare and promise of rich agricultural land. The railroad also enabled easier transport of materials and goods from nearby communities to markets throughout the U.S. (McGowan and Willis 1983:56, 59).

Residential development continued into the early 20th century, slowing down only briefly during the Great Depression and World War II. Following World War II, the local economy boomed as the region adjusted to a post-war economy. Development spilled into the surrounding areas as the suburban lifestyle became more appealing to homeowners. In December 1964, the city merged with North Sacramento. Throughout the 1970s and 1980s, improvements were made to the area's infrastructure and roads (Page & Turnbull 2013: 6.3-16). Sacramento continues to grow in the present day as its suburbs expand to keep pace with an ever-increasing population.

Flood Management

The California Legislature tried to coordinate a levee system and control levee construction by creating the Swamp Land Commission in 1861. The Commission gave California drainage districts the power to construct levees. It would become the responsibility of state engineers to design the levees for each district. By the end of 1861, there were 28 drainage districts in the Sacramento and San Joaquin Valleys and the San Francisco Bay-Delta. The California Legislature enhanced the levee district powers in 1864, which spurred additional levee construction (O'Neill 2006:81).

Captain Thomas Jackson of the USACE came to California in 1905 and began studying Sacramento's rivers. He understood that there was a linkage between the mining debris, making the river navigable, and flood control. Jackson undertook a comprehensive flood management plan for the Sacramento Valley. In 1910, Jackson's plan, known as the Jackson Report became the foundation for the Sacramento River Flood Control Project (SRFCP) (Russo 2010:20; Kelley 1989:278, 280).

During the first half of the 20th century, Congress passed a handful of flood control acts, including the Flood Control Acts of 1917, 1928, 1936, and 1941. The Flood Control Committee was tasked with regulating and controlling the flood waters of the United States through levees, land reclamation, swampland reclamation, and storage for water power. In 1933, USACE planned to raise and strengthen approximately 2.5 miles of the American River south bank levee, from the Sacramento River to approximately the foot of C Street in Sacramento. Before the improvements, the levee was very uneven in both the cross-section and height, but USACE did not expect to introduce a lot of new material to make the necessary improvements, which ARFCD partially funded (Drinkwater 1933:1).

The American River levees were upgraded to USACEs' standards in three stages. The levee protecting the City of Sacramento (Levee Unit 118, Part 1) was finished in 1948 as part of the SRFCP. The north bank levee, which was designed to protect the City of North Sacramento, also was constructed as part of the SRFCP and was completed in 1955. This levee extended from the high ground near present-day Cal Expo, downstream to the east bank of Natomas Canal. A non-project levee was constructed on the north bank of the American River from the eastern end of Arden Way, downstream to the H Street Bridge. At the time it was constructed, if the river overtopped the levee, it would have flooded a hop field. In 1956, USACE brought this levee up to its standards as part of the American River project levee; the improvements extended upstream to the Carmichael Bluffs (McClurg and Haupt 1991:1–2).

3.3.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

National Historic Preservation Act – Section 106 of the NHPA and its implementing regulations (36 Code of Federal Regulations [CFR] 800, as amended in 1999) require Federal agencies to consider the potential effects of their proposed undertakings, or those they fund or permit, on properties that may be eligible for listing, or that are listed in, the NRHP, and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the proposed undertaking. The proposed project will be partially funded using Caltrans Active Transportation Program Cycle 2 funds; therefore, Caltrans is the lead agency for compliance with Section 106 of the NHPA.

Pursuant to the X.B.1 of the January 2014 First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (Section 106 PA), as well as under Public

Resources Code 5024 and pursuant to the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92 (5024 MOU), the Caltrans District may make a finding of "No Adverse Effect with Standard Conditions" when standard conditions that will avoid adverse effects to historic properties are imposed in accordance with Attachment 5 of the Section 106 PA. The Caltrans District shall submit its finding and supporting documentation to the Caltrans Cultural Services Office (CSO) for review. Should CSO approve the finding, the undertaking shall not be subject to further review under the Section 106 PA.

National Register of Historic Places

A property may be listed in the NRHP if it meets criteria for evaluation as defined in 36 CFR 60.4 and as described below.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and meets one or more of the following criteria:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

State Plans, Policies, Regulations and Laws

California Environmental Quality Act (CEQA)

CEQA includes provisions that specifically address the consideration of cultural resources. CEQA states that if a project would have significant impacts on important cultural resources, then alternative plans or mitigation measures must be considered. However, only significant cultural resources (termed "historical resources") need to be addressed. CEQA defines an historical resource as "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources [CRHR]" (California PRC Section 21084.1). Applies to the consideration of cultural resources in the project APE.

California Register of Historical Resources (CRHR)

The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California Historical Landmarks and Points of Historical Interest. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (California PRC Section 5024.1, 14 California Code of Regulations [CCR] Section 4850). The eligibility criteria for listing in the CRHR are similar to those for

NRHP listing but focus on importance of the resources to California history and heritage. A cultural resource may be eligible for listing on the CRHR if it:

- 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- 2. is associated with the lives of persons important in our past;
- 3. embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values; or
- 4. has yielded, or may be likely to yield, information important in prehistory or history.

The State CEQA Guidelines also require consideration of unique archaeological resources (CCR Section 15064.5). As used in California PRC Section 21083.2, the term "unique archaeological resource" refers to an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information,
- has a special and particular quality such as being the oldest of its type or the best available example of its type, or
- is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition to meeting one or more of the above criteria, resources eligible for listing in the CRHR must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (Office of Historic Preservation [OHP] 1999). These regulations apply to the eligibility determination of cultural resources in the project Area of Potential Effect (APE).

Assembly Bill 52 (AB 52)

AB 52, effective on July 1, 2015, amends CEQA and adds new sections relating to Native American consultation and certain types of cultural resources, TCRs. TCRs are either (1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that is either on or eligible for inclusion in the CRHR or a local historic register; or (2) the lead agency (in this case, DWR), at its discretion and supported by substantial evidence, chooses to treat the resource as a TCR. Additionally, a cultural landscape may also qualify as a TCR if it meets the criteria to be eligible for inclusion in the CRHR and is geographically defined in terms of the size and scope of the landscape. Other historical resources (as described in California PRC 21083.2[g]), or non-unique archaeological resources (as described in California PRC 21083.2[h]) may also be TCRs if they conform to the criteria to be eligible for inclusion in the CRHR.

AB 52 provides that a project with an effect that may cause a substantial adverse change in the significance of a TCR may have a significant effect on the environment. AB 52 requires the lead agency (in this case, the City) to begin consultation with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project if the tribe requests the lead agency, in writing, to be informed by the lead agency through formal notification of projects that are proposed in that geographic area and the tribe subsequently requests consultation. California PRC Section 21084.3 states that "public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource."

AB 52 explicitly recognizes "that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because the California Environmental Quality Act calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources." AB 52 therefore includes a requirement for meaningful consultation with culturally and geographically affiliated Tribes to identify TCRs and to develop avoidance or mitigation as appropriate.

Discovery of Human Remains

Section 7050.5 of the California Health and Safety Code (CHSC) states the following regarding the discovery of human remains:

- a. Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [PRC]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (1) of Section 5097.94 of the [PRC] or to any person authorized to implement Section 5097.98 of the [PRC].
- b. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the California Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the CGC or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.
- c. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) (CHSC Section 7050.5).

d. Of particular note to cultural resources is subsection (c), which requires the coroner to contact the NAHC within 24 hours if discovered human remains are determined to be Native American in origin. After notification, NAHC will follow the procedures outlined in PRC Section 5097.98, which include notification of most likely descendants (MLDs), if possible, and recommendations for treatment of the remains. The MLD will have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).

Local Plans, Policies, Regulations and Ordinances

City of Sacramento 2035 General Plan (2015)

The following goal and policies from the Historic and Cultural Resources (HCR) Element, related to cultural resources are relevant to the proposed project.

- **GOAL HCR 2.1: Identification and Preservation of Historic and Cultural Resources.** Identify and preserve the City's historic and cultural resources to enrich our sense of place and our understanding of the city's prehistory and history.
- **Policy HCR 2.1.1 Identification.** The City shall identify historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) to provide adequate protection of these resources.
- Policy HCR 2.1.2 Applicable Laws and Regulations. The City shall ensure compliance with City, State, and Federal historic preservation laws, regulations, and codes to protect and assist in the preservation of historic and archaeological resources, including the use of the California Historical Building Code as applicable. Unless listed in the Sacramento, California, or National registers, the City shall require discretionary Projects involving resources 50 years and older to evaluate their eligibility for inclusion on the California or Sacramento registers for compliance with the California Environmental Quality Act.
- Policy HCR 2.1.3 Consultation. The City shall consult with appropriate organizations and individuals (e.g., California Historical Resources Information System (CHRIS) Information Centers, the NAHC, the CA Office of Planning and Research (OPR) "Tribal Consultation Guidelines", etc.,) and shall establish a public outreach policy to minimize potential impacts to historic and cultural resources.
- **Policy HCR 2.1.10 Early Consultation.** The City shall minimize potential impacts to historic and cultural resources by consulting with property owners, land developers, and the building industry early in the development review process.
- Policy HCR 2.1.11 Compatibility with Historic Context. The City shall review proposed new development, alterations, and rehabilitation/remodels for compatibility with the surrounding historic context. The City shall pay special attention to the scale, massing, and relationship of proposed new development to surrounding historic resources.
- **Policy HCR 2.1.13 Historic Surveys and Context Statements.** Where historic resource surveys may no longer be valid, or for areas that have not been surveyed, the City shall seek funding to

prepare new historic context surveys. In these surveys, the potential eligibility of all properties 45 years and older for listing in National, California, or Sacramento registers shall be evaluated.

• **Policy HCR 2.1.16 Archaeological and Cultural Resources.** The City shall develop or ensure compliance with protocols that protect or mitigate impacts to archaeological and cultural resources including prehistoric resources.

Historic Preservation Zoning Ordinance

The City of Sacramento's historic preservation program began in 1975 with the enactment of the City's first Historic Preservation Ordinance. The current Historic Preservation Ordinance (No. 2006-063) was enacted in October 2006. The purpose of the Historic Preservation Ordinance is to do the following: identify, protect, and encourage the preservation of significant resources; maintain an inventory and ensure the preservation of these resources; encourage maintenance and rehabilitation of the resources; encourage retention, preservation, and re-use of the resources; safeguard city resources; provide consistency with state and federal regulations; protect and enhance the city's attraction to tourists; foster civic pride in the city's resources; and encourage new development to be aesthetically compatible.

3.3.4 Environmental Impacts and Mitigation Measures

Methods

The studies for this proposed project were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act* (Section 106 PA), as well as under Public Resources Code 5024 and pursuant to the January 2015 *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92* (5024 MOU) as applicable.

Records Search

GEI Consultants, Inc. (GEI) conducted a records search on July 27, 2017, at the North Central Information Center in Sacramento, California. The records search area included the proposed project area and a 1-mile buffer zone. The records search revealed five previously identified cultural resources within the project area. These include four railway crossings and Levee Unit 118, Part 1 (also known as the American River South Levee). No archaeological sites were identified in the APE as a result of the records search.

Referenced documents for the records search included base maps, reports from previous projects, Department of Parks and Recreation (DPR) site records, and California Historic Landmarks documentation. The records searched included the following sources:

- NRHP-listed properties (National Park Service [NPS] 1996) and updates;
- California Inventory of Historic Resources (California Department of Parks and Recreation 1976 and updates);

- California Points of Historical Interest (California Department of Parks and Recreation 1992 and updates);
- Caltrans Bridge Inventory (Caltrans 1989, 2000, and 2004);
- Historic Maps;
- California Historical Landmarks (Office of Historic Preservation 1996 and updates);
- Directory of Properties in the Historic Resources Inventory (Office of Historic Preservation 2006);

GEI conducted additional archival research at the California Railroad Museum's Library and Archives located at the California Statewide Museum Collection Center, California History Room of the California State Library, California Digital Newspaper Collection, the online Current and Historical Collection of *The Sacramento Bee* available at the Sacramento Public Library's website and GEI's cultural resources library.

Field Survey

An intensive archaeological pedestrian survey of the APE was conducted on December 7 and 14, 2017, and January 19, 2018, by two GEI archaeologists, led in the field by an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards in Archaeology. The survey was conducted to intensive standards (pedestrian transects spaced no more than 15 meters apart). A Trimble 7 Series GPS unit capable of sub-meter accuracy was carried to record the location of any identified resources. Aerial maps were used in the field to ensure adequate inspection of all portions of the proposed project area.

Two areas within the APE were not surveyed. When surveying the southwest corner of the preferred route in Segment 2 on December 07, 2017, a solid fence was encountered at the southwest corner. When approached from the north on December 14, 2017, a locked gate was encountered. Also, on December 14, 2017, the gate for the staging area in Segment 1 was locked, and the area was inaccessible. As the surface soil in both areas is capped fill, it was determined in consultation with Caltrans that survey would not be necessary.

Testing

A Limited Subsurface Testing Plan was implemented to test for buried resources in areas of significant ground disturbance. Because ground-disturbing activities in project segments 2, 5, and 6 will involve only a ~12-inch degrade of the existing bench, and in segment 4, only a ~12-inch degrade of the levee crown, no subsurface testing was recommended. Trail construction in segments 1 and 3, will also only require a ~12 inch degrade; however, a protective structure will be constructed in each of these segments, adjacent to the Union Pacific Railroad Bridges. The protective structures will be stabilized with posts set in footings up to 8 feet deep. Construction of segment 1 will be in a later phase of the project. Limited subsurface testing was recommended and completed in segment 3. Subsurface testing in segment 3 was completed on August 31, 2018 and included digging six 4-inch diameter hand-augered holes, ranging between 73 and 190 cm deep. Depth was limited by the presence of river rocks. Results for all augers were negative for buried archaeological resources.

Native American Consultation

Data Sources/Methodology

Under PRC section 21080.3.1 and 21082.3, the City must consult with tribes traditionally and culturally affiliated with the project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

On January 23, 2018, a search of the Sacred Lands Database was requested from the Native American Heritage Commission (NAHC). A response was received on January 31, 2018, indicating that Sacred Sites have been identified in the general vicinity (within the USGS quad, township, ranges, and sections of the project) but specific locations were not provided. Two tribes were listed as points of contact regarding these sites: the Ione Band of Miwok Indians (Ione), and United Auburn Indian Community (UAIC). Three additional federally listed tribes were indicated for consultation: Buena Vista Rancheria of Me-Wuk Indians (Buena Vista), Shingle Springs Band of Miwok Indians (Shingle Springs), and Wilton Rancheria (Wilton).

Native American Consultation Under CEQA

Two tribes have previously requested to be notified regarding projects within their traditional geographic area of cultural affiliation, in accordance with Public Resources Code Section 21080.3.1: UAIC and Wilton Rancheria. Consultation under Public Resources Code Section 21080.3.1 with UAIC is on-going. **Table 3.3-1**, below, provides a description of Native American consultation activities completed to date.

Date(s) Contacted	Method of Contact	Response
February 2, 2018	Letter	The City sent letters to UAIC and Wilton Rancheria notifying these Tribes about the proposed project and requesting a response within 30 days if consultation concerning the proposed project is requested. No response was received by the City from Wilton Rancheria.
February 15, 2018	Letter/Email	UAIC sent a letter to the City responding to the City's February 2, 2018 letter, indicating that UAIC would like to consult with the City under Assembly Bill 52. On the same date UAIC sent an email to the City requesting consultation, requesting a meeting and information about the proposed project, and providing recommended mitigation measures for potential impacts to tribal cultural resources.
March 22, 2018	In Person Meeting	The City and its cultural resources consultant, GEI met with a UAIC representative to discuss the proposed project. UAIC requested archaeological testing between site CA-Sac-40 and the proposed project area (the previously recorded site is outside the project area but in the vicinity); requested a copy of the cultural resource records search; and requested to have paid Native American monitors during any archaeological testing.
March 26, 2018	Email	UAIC sent an email to the City saying that upon review of their files, that 60% of the project area is what UAIC considers to be significantly sensitive.

Table 3.3-1. Native American Contact Efforts

Date(s) Contacted	Method of Contact	Response	
March 30, 2018 Letter/Mailing GEI sent UA requested by		GEI sent UAIC a copy of the cultural resource records search, as requested by UAIC on March 22, 2018.	
April through August 2018	Telephone/Email	GEI had intermittent contact with UAIC to coordinate UAIC monitoring of future archaeological augering near site CA-Sac-40	
August 31, 2018	Field Visit	UAIC conducted Native American monitoring of archaeological augering between site CA-Sac-40 and the proposed project. Resu for all augers were negative for buried archaeological resources.	

Table 3.3-1. Native American Contact Efforts

Native American Consultation Under the NHPA, Section 106

Using the list of Native American contacts provided by the NAHC On January 31, 2018, GEI, on behalf of Caltrans, sent letters to the following Native American Tribes, groups and individuals on February 8, 2018.

- Crystal Martinez-Alire, Chairperson, Ione Band of Miwok Indians
- Randy Yonemura, Cultural Committee Chair, Ione Band of Miwok Indians
- Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria (UAIC)
- Rhonda Morningstar Pope, Chairperson, Buena Vista Rancheria of Me-Wuk Indians
- Nicholas Fonseca, Chairperson, Shingle Springs Band of Miwok Indians
- Raymond Hitchcock, Chairperson, Wilton Rancheria

On February 14, 2014, Antonio Ruiz, Cultural Resources Officer for the Department of Environmental Resources of the Wilton Rancheria, responded via email to GEI's letter. Ruiz determined that the project is within the Wilton Rancheria Tribe's ancestral territory. They requested copies of any cultural resources assessments or other assessments that have been completed on all or part of the project's APE. This includes the records search results, archaeological inventory survey, results of the Sacred Lands File search, ethnographic studies, and geotechnical reports. The response also included the Tribe's fees for reviewing these materials and comparing it with their own information and databases. Cherilyn Neider, Administrative Assistant for the Department of Tribal Historic Preservation of UAIC, responded on March 13, 2018, also by email. She requested copies of any existing cultural resource assessments and records search results, GIS SHP files for the project APE, and a meeting to be set up between the City of Sacramento, GEI, and Caltrans.

My Randy Yonemura of Ione Band of Miwok Indians responded to the GEI letter by telephone and requested a meeting. A Section 106 consultation meeting was conducted with Mr. Yonemura on May 18, 2018 and Mr. Yonemura also participated in a field review of the project area with GEI archaeologists. In late July 2018 GEI was informed that there was a new chairwoman of the Ione Band of Miwok Indians, who should be contacted for consultation. A letter was sent to Sara Dutschke Setshwaelo on August 3, 2018, with follow-up by email on August 15, 2018. She responded on August 15, 2018 and requested a phone meeting. This phone meeting occurred on August 17, 2018, between Sara, and Karen and Barry from GEI. During the call, Sara Dutschke Setshwaelo explained that Randy Yonemura no longer represented Ione and did not pass along any information about this project to the Tribe. She requested information about the project and notes from previous meetings and surveys; these were sent to her on August 17 and 20, 2018, along with the subsurface testing plan. No additional meeting with the City was requested, nor were there any comments about the meeting minutes or survey notes, or any request for additional site visits or surveys.

Section 106 consultation meetings were also held with UAIC representatives on March 22, 2018 and on May 21, 2018. UAIC identified areas considered to be sensitive by UAIC and requested archaeological testing in the APE near site CA-Sac-40 and Native American monitoring during that testing. UAIC conducted Native American monitoring of the archaeological monitoring on August 31, 2018.

On July 1, 2019 GEI, on behalf of Caltrans, sent letters to the following Native American Tribes, groups and individuals, providing updated project design information including a change in the APE and requesting information on cultural resources important to Native Americans.

- Ione Band of Miwok Indians
- United Auburn Indian Community of the Auburn Rancheria (UAIC)
- Buena Vista Rancheria of Me-Wuk Indians
- Shingle Springs Band of Miwok Indians
- Wilton Rancheria
- Colfax-Todds Valley Consolidated Tribe
- Nashville-Eldorado Miwok
- Tsi Akim Maidu

To date, no responses to the July 1, 2019 letter have been received.

Historical Society Consultation

On January 16, 2018, GEI sent letters to Preservation Sacramento and Sacramento County Historical Society asking for information on known cultural resources in the project area. GEI sent follow-up emails to each organization on May 31, 2018. As of the date of this document, GEI has not received a response from either organization.

Archaeological Results

As a result of background investigations, including a records search, pedestrian survey, and limited subsurface testing, no archaeological resources were found within the proposed project APE.

Built Environment Results

One historic-era (more than 45 years old) resource, Levee Unit 118 Part 1, is in the project area. The levee unit is assumed eligible for listing in the National Register of Historic Places for the purposes of this project and is therefore also considered a historical resource for the purposes of CEQA.

Levee Unit 118 Part 1 (American River South Levee) is considered significant under National Register of Historic Places Criterion A within the context of flood management and for its association with the SRFCP. The period of significance begins in 1917, when U.S. Congress approved the Flood Control Act, marking the first comprehensive plan for flood management in California, and ends in 1968.

Tribal Cultural Resources Results

Based on consultation with the Native American Heritage Commission, consultation with Native American Tribes in accordance with Public Resources Code Section 21080.3.1, consultation with Native American Tribes in accordance with Section 106 of the NHPA, and archaeological testing conducted; portions of the proposed project area may be sensitive for the presence of tribal cultural resources, but no tribal cultural resources as defined in Public Resources Code 21074 have been identified in or adjacent to the proposed project area.

Thresholds of Significance

The significance criteria used to evaluate the project impacts are based on Appendix G of the State CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgement. A significant impact related to cultural resources would occur if the proposed project would:

- cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- disturb any human remains, including those interred outside of formal cemeteries; or
- result in a substantially adverse change in the significance of a TCR (as defined in California PRC Section 21074 and above) when compared against existing conditions.

Impact Analysis

Impact CTR-1: Damage to or Destruction of Built Environment Historic Properties

The proposed project would be constructed to ensure the levee retains its important aspects of integrity (location, materials, design, setting, feeling and association) that allow it to convey its historical significance as an important component of the SRFCP and flood management efforts in Sacramento. [Less than Significant]

Levee Unit 118 Part 1 (American River South Levee) is considered significant under National Register of Historic Places Criterion A within the context of flood management and for its association with the SRFCP. Levee Unit 118 Part 1 is also considered to be a historical resource for the purposes of CEQA.

As designed, the proposed project would be located primarily along the toe of the levee, with Segment 4 and portions of Segments 1 and 2 along the levee crown. The proposed trail design does not include any visual features or uses that would alter the character-defining features of the levee (i.e. its compacted earth, slope, crown). The levee would retain its important aspects of integrity (location, materials, design, setting, feeling and association) that allow it to convey its historical significance as an important component of the SRFCP and flood management efforts in Sacramento. Therefore, the impacts to Levee Unit 118 Part 1 (American River South Levee) are considered **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Impact CTR-2: Potential Damage to or Destruction of Previously Undiscovered Archaeological Sites or Tribal Cultural Resources

Construction-related activities resulting from the proposed project may affect previously unknown buried cultural resources or Tribal Cultural Resources. Implementation of avoidance and preservation measures included in Mitigation *Measures CTR-1 and CTR-2 would reduce this impact to less than significant.* [Less than Significant With Mitigation]

Efforts to identify archaeological resources and Tribal Cultural Resources included a records search and research, extensive Native American consultation, a pedestrian field survey with Native American participation, and archaeological testing. Based on these investigations, no archaeological resources or Tribal Cultural Resources have been identified within the project area. However, both ethnohistoric accounts and previously recorded sites nearby suggest that the project area is potentially sensitive for buried archaeological resources and Tribal Cultural Resources and there remains the possibility that previously unknown archaeological resources or Tribal Cultural Resources could be discovered during project construction and inadvertently damaged, resulting in a **potentially significant** impact. Implementation of **Mitigation Measures CTR-1** and **CTR-2** (described below) would reduce the potentially significant impact on any previously undiscovered archaeological resources and Tribal Cultural Resources would be avoided and preserved in place or assessed and treated in accordance with appropriate professional standards. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures CTR-1** and **CTR-2**.

Mitigation Measures

Mitigation Measure CTR-1: Conduct Cultural Resources and Tribal Cultural Resources Sensitivity and Awareness Training Program Prior to Ground-Disturbing Activities

The City shall require the contractor to provide a cultural resources and tribal cultural resources sensitivity and awareness training program (WEAP) for all personnel involved in project construction, including field consultants and construction workers. The WEAP will be developed in coordination with an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology, as well as culturally affiliated Native American tribes. The City may invite Native American representatives from interested culturally affiliated Native American tribes to participate. The WEAP shall be conducted before any project-related construction activities begin at the project site. The WEAP will include relevant information regarding sensitive cultural resources and tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations.

The WEAP will also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that could be located at the project site and will outline what to do and who to contact if any potential cultural resources or tribal cultural resources are encountered. The WEAP will emphasize the requirement for confidentiality and culturally appropriate treatment of any discovery of significance to Native Americans and will discuss appropriate behaviors and responsive actions, consistent with Native American tribal values.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	Before and During Construction Activities

Mitigation Measure CTR-2: Implement Avoidance, Minimization, and Preservation Measures Should Cultural or Tribal Cultural Resources Be Discovered During Construction

If cultural resources or tribal cultural resources (such as Native American archaeological materials, sacred objects, unusual amounts of bone or shell, artifacts, or human remains and associated objects and materials) are encountered at the project site during construction, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural materials), and the construction contractor shall immediately notify the project's City representative. Avoidance and preservation in place is the preferred manner of mitigating impacts to cultural resources or tribal cultural resources. This will be accomplished, if feasible, by several alternative means, including:

- Planning construction to avoid cultural resources or tribal cultural resources, archaeological sites and/or other cultural resources; incorporating cultural resources within parks, greenspace or other open space; covering archaeological resources; deeding a cultural resource to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity.
- Recommendations for avoidance of cultural resources or tribal cultural resources will be reviewed by the City representative, interested culturally affiliated Native American tribes and other appropriate agencies, considering factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project site to avoid cultural resources or tribal cultural resources, modification of the design to eliminate or reduce impacts to tribal cultural resources or tribal cultural resources or tribal cultural resources.
- Native American representatives from interested culturally affiliated Native American tribes will be invited to review and comment on these analyses and shall have the opportunity to meet with the City representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.
- If the discovered cultural resource or tribal cultural resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. The boundary of a tribal cultural resource will be determined in consultation with interested culturally affiliated Native American tribes and tribes will be invited to monitor the installation of fencing. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American representatives from interested culturally affiliated Native American tribes.
- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an "Environmentally Sensitive Area".

If a cultural resource or tribal cultural resource cannot be avoided, the following performance standard shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of tribal cultural resources:

 Each resource will be evaluated for California Register of Historical Resources- (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes, as applicable.

If a cultural resource or tribal cultural resource is determined to be eligible for listing in the CRHR, the City will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. The City shall coordinate the investigation of the find with a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) approved by the City and with interested culturally affiliated Native American tribes that respond to the City's invitation. As part of the site investigation and resource assessment, the City and the archaeologist shall consult with interested culturally affiliated Native American tribes to assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the City to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the City representative by the qualified archaeologist. These recommendations will be documented in the project record. For any recommendations made by interested culturally affiliated Native American tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

Native American representatives from interested culturally affiliated Native American Tribes and the City representative will also consult to develop measures for long-term management of any discovered Native American cultural resources or tribal cultural resources. Consultation will be limited to actions consistent with the jurisdiction of the City and considering ownership of the subject property. To the extent that the City has jurisdiction, routine operation and maintenance within tribal cultural resources retaining tribal cultural integrity shall be consistent with the avoidance and minimization standards identified in this mitigation measure.

If the City determines that the project may cause a significant impact to a cultural resource or tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:

Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

- Treat the resource with culturally appropriate dignity considering Tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protect the cultural character and integrity of the resource.
 - Protect the traditional use of the resource.
 - Protect the confidentiality of the resource.
 - Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.
 - Protect the resource.

Responsibility:	City of Sacramento / Construction Contractor	
Timing:	During Construction Activities	

Impact CTR-3: Potential Damage to or Destruction of Human Remains During Construction

While not anticipated, human remains may be inadvertently discovered during construction-related activities. Implementation of performance standards in accordance with the California Health and Safety Code included in Mitigation Measure 3.3-3 would reduce this impact to less than significant. [Less than Significant With Mitigation]

No human remains have been discovered in the project area and it is not anticipated that human remains, including those interred outside of dedicated cemeteries, would be discovered during ground disturbance activities with the proposed project. However, should human remains, including those interred outside of formal cemeteries, be discovered during construction activities, the human remains could be inadvertently damaged. Therefore, this impact would be potentially significant. Implementation of **Mitigation Measure CTR-3** would reduce the potentially significant impact on any previously undiscovered human remains to a **less than significant** level because the California Health and Safety Code (HSC) would be adhered to in the event human remains are discovered; non-Native American human remains would be treated in accordance with HSC Section 7000 (et seq.); and Native American human remains would be avoided and preserved in place or assessed and treated in accordance with appropriate professional standards in consultation with the Most Likely Descendant (MLD). Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measure CTR-3**.

Mitigation Measures

Mitigation Measure CTR-3: Implement Post Discovery Procedures in the Event of the Inadvertent Discovery of Human Remains

If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the following performance standards shall be met prior to implementing or continuing actions such as construction, which may result in damage to or destruction of human remains. In accordance with the California Health and Safety Code

(HSC), if human remains are encountered during ground-disturbing activities, the City shall immediately halt potentially damaging excavation in the area of the remains and notify the Sacramento County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (HSC Section 7050.5[b]).

If the human remains are of historic age and are determined to be not of Native American origin, the City will follow the provisions of the HSC Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.

If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (HSC Section 7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the City for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq.

Responsibility:	City of Sacramento / Construction Contractor
Timing:	During Construction Activities

Residual Significant Impacts

Mitigation measures that would reduce potential impacts to cultural resources and Tribal Cultural Resources to a less-than-significant level have been identified and therefore there would be no residual significant impacts to cultural resources or Tribal Cultural Resources.

3.4 Geology and Soils

3.4.1 Introduction

This section provides an overview of the existing geologic and soils conditions within the project study area, identifies the regulatory framework, and provides analysis of the potential geology and soils impacts that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comments were received regarding:

- geotechnical issues identified during construction of Phase I of the Two River Trail, specifically
 regarding the suitability of material used during historic levee construction,
- the deferral of preparation of a final geotechnical investigation until after Project approval,
- potential erosion at the project site.

Geotechnical impacts are described below in **Impact GEO-1** "Cause Adverse Effects Related to Earthquake Fault Rupture, Seismic Ground Shaking, Seismic-Related Ground Failure (including landslide, subsidence, or liquefaction, or Be Located On Expansive Soils". The effects of project construction and operation on surface erosion and siltation potential to affect water quality is addressed in **Section 3.6**, "**Hydrology, Water Quality, and Drainage**".

3.4.2 Environmental Setting

Regional Geologic Context

The project area lies within the Sacramento Valley, which is part of the Great Valley Geomorphic Province. In the project area, Holocene (i.e., 11,700 years B.P. [Present Day]) stream channel deposits lie atop the thick sequence of sedimentary rock units that form the deeply buried bedrock units in the mid-basin areas of the valley (CGS 1965). The youngest geomorphic features in the project area are low floodplains along the American River. These major drainage ways were originally confined within broad natural levees sloping away from the rivers or streams. The natural levees formed through the deposition of coarser materials that settled out of suspension nearest the rivers and streams, forming the natural levees and sand bars in the vicinity of the river channel. The finer material was carried in suspension farther from the rivers or streams have meandered and reworked the previously deposited sediments, extreme variations in material types may be found over a limited distance or depth. Additionally, portions of the project area have been substantially altered due to levee construction (Segments 3 and 4) while other portions of the project area are subject to some natural geomorphic processes (portions of Segment 5 and 6).

The area is characterized by Holocene-age stream channel deposits and is thus not considered to be paleontologically sensitive (Ayres 1997).

Seismicity and Other Hazards

Within the City of Sacramento and the Sacramento region, there are no known active faults. The Sacramento Valley has historically experienced low levels of seismic activity and does not contain any Alquist-Priolo Earthquake Fault Zones (CGS 2018). Numerous earthquakes of magnitude (M) 5.0 or

greater have occurred on regional faults in the Coast Ranges, approximately 38–55 miles west of downtown Sacramento. The nearest known active (Holocene or Historic) fault trace to the project study area is the Dunnigan Hills fault, approximately 25 miles northwest of downtown Sacramento (Jennings and Bryant 2010).

According to the California Geological Survey, the project area is not mapped in an area where strong seismic ground shaking, liquefaction, landslides, or seiche are likely to occur (CGS 2019).

Soils

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey five soil map units are present within the project area (**Table 3.4-1**) (NRCS 1993, 2018). These soils exhibit a low shrink-swell potential, except for the deepest layers of the Columbia-Urban land complex, which occurs along a small portion of the westernmost end of Segment 4.

Table 3.4-1. Soils within the Project Area

Soil Series Name and ID	Parent Material	Shrink-Swell Potential
117, Columbia sandy loam, drained, 0 to 2 percent slopes	Alluvium	Low
124, Columbia-Urban land complex, drained, 0 to 2 percent slopes	Alluvium	Low-High, depending on depth.
136, Dumps	N/A	N/A
203, Riverwash	Gravelly alluvium	N/A
205, Rossmoor-Urban land complex, 0 to 2 percent slopes	Alluvium	Low

Source: NRCS 1993, 2018

3.4.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

Uniform Building Code Chapter 18, Division 1 Section 1803.2 and 1804.5

Uniform Building Code Chapter 18, Division 1 Section 1803.2 and 1804.5 The Uniform Building Code (UBC) 1994, Chapter 18. Division 1 Section 1803.2 mandates that special foundation design consideration be employed if the soil Expansion Index is 20, or greater in accordance with information shown in **Figure3.4-1** below. The methodology and scope for a geotechnical investigation are described in UBC Section 1803, and requires an assessment of a variety of factors, such as slope stability, soil strength, adequacy of load-bearing soils, the presence of compressible or expansive soils, and the potential for liquefaction. The required content of the geotechnical report includes recommendations for foundation type and design criteria. These recommendations can include foundation design provisions that are intended to mitigate the effects of expansive soils, liquefaction, and differential settlement. In general, mitigation can be accomplished through a combination of ground modification techniques (i.e., stone columns, reinforcing nail and anchors, deep soil mixing, etc.), selection of an appropriate foundation type and configuration, and use of appropriate building/foundation structural systems. Section 1804.5 Excavation, Grading, and Fill require the preparation of a geotechnical report where a building will be constructed on compacted fill.

EXPANSION INDEX	POTENTIAL EXPANSION	
0-20	Very low	
21-50	Low	
51-90	Medium	
91-130	High	
Above 130	Very high	

Figure 3.4-1. Uniform Building Code Expansive Soils Classification

The International Building Code (IBC) replaced earlier regional building codes (including the Uniform Building Code) in 2000 and established consistent construction guidelines for the nation. In 2006, the IBC was incorporated into the 2007 California Building Code (CBC) (see State regulations below in Section 3.5.1.2), and currently applies to all structures being constructed in California. The national model codes are therefore incorporated by reference into the building codes of local municipalities. The CBC includes building design and construction criteria that take into consideration the State's seismic conditions.

Clean Water Act

The Clean Water Act (CWA, 33 USC 1344) focuses primarily on waters of the United States and is more thoroughly described in Section 3.3 (Biological Resources). However, the CWA focuses on sediment control in two aspects. First, the United States Army Corp of Engineers (USACE) administers Section 404, which regulates the discharge of fill into waters of the United States. Secondly, the State Water Resources Control Board (SWRCB) administers Section 401 which applies to stormwater discharges, where erosion control is an integral part of achieving permit compliance.

Earthquake Hazards Reduction Act of 1977

The Earthquake Hazards Reduction Act of 1977 established the National Earthquake Hazards Reduction Program (NEHRP) "to reduce the risks of life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program." The four principal goals of the NEHRP are:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation;
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems;
- Improve earthquake hazards identification and risk assessment methods, and their use; and
- Improve the understanding of earthquakes and their effects.

Many of the tools used to assess, as well as mitigate, earthquake hazards and impacts were developed under the NEHRP.

State Plans, Policies, Regulations, and Laws

Alquist-Priolo Fault Zoning Act

The Alquist-Priolo Fault Zoning Act (AP Act), administered by the California Geological Survey (CGS), provides a mechanism for reducing losses from surface fault ruptures on a statewide basis. The

AP Act requires the mapping of zones around active faults in California, in an effort to prohibit the construction of structures for human occupancy on active faults and minimize damage due to rupture of a fault. Active faults are those that have ruptured within the past 11,000 years. Where the AP Act identifies an Earthquake Fault Zone, a geologic investigation and report is necessary to prevent siting of buildings on active fault traces.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act governs the responsibilities of city, county, and state agencies in identifying and mapping seismic hazard zones and mitigation seismic hazards to protect public health and safety in accordance with the provision of the California Public Resources Code, Division 2. Geology, Mines and Mining, Seismic Hazards Mapping – Chapter 7.8. The publication delineates zones where earthquakes could cause hazardous ground shaking and ground failure, including liquefaction and landslides. Currently, zones near the San Andreas Fault in the urban centers of the Greater San Francisco Bay Area and Los Angeles have been delineated. Local cities and counties within these zones regulate construction in order to minimize loss associated with these seismic hazards.

California Standard Building Code

Title 24, Part 2 of the California Building Standards Code of the California Code of Regulations contains specific requirements for construction with respect to earthquakes and seismic hazards intended to be protective of public health. Chapter 16 Section 1613 Earthquake Loads of the 2016 California Building Code (effective January 1, 2017) deals with Structural Design and requires that every structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, shall be designed and constructed to resist the effects of earthquake motions.

Regional and Local Plans, Policies, Regulations, and Ordinances

The following goal and policies from the Environmental Constraints (EC) Element and the Environmental Resources (ER) Element related to geologic safety and soils are relevant to the proposed project (City of Sacramento 2015).

City of Sacramento 2035 General Plan

GOAL EC 1.1: Hazards Risk Reduction. Protect lives and property from seismic and geologic hazards and adverse soil conditions.

- **Policy EC 1.1.1 Review Standards.** The City shall regularly review and enforce all seismic and geologic safety standards and require the use of best Management Practices (BMPs) in site design and building construction methods.
- **Policy EC 1.1.2 Geotechnical Investigations.** The City shall require geotechnical investigations to determine the potential for ground rupture, earth shaking, and liquefaction due to seismic events, as well as expansive soils and subsidence problems on sites where these hazards are potentially present.
- Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinances.

City of Sacramento Emergency Operations Plan

The purpose of the City of Sacramento Emergency Operations Plan (EOP) is to provide safeguards to minimize loss of life and property damage during natural disasters and emergencies of national defense. The City of Sacramento EOP establishes an Emergency Management Organization and assigns functions and tasks in accordance with California's Standardized Emergency Management System (SEMS). The EOP provides guidance as to disaster response from the initial onset through the cost recovery process. It includes policies, responsibilities, and procedures necessary to protect human health and safety, public and private property, and the environment from the effects of natural and anthropogenic disasters and emergencies. The EOP outlines the specific emergency-related responsibilities of City agencies. For example, the City of Sacramento Police Department is responsible for implementing emergency evacuations, including traffic control plans, while the City of Sacramento Fire Department is the first responder for hazardous materials incidents (City of Sacramento 2018).

2016 Sacramento Countywide Local Hazard Mitigation Plan Update

The 2016 Sacramento Countywide Local Hazard Mitigation Plan Update (2016) is designed to guide hazard mitigation planning to better protect the people and property of the County and participating jurisdictions from the effects of natural disasters and hazard events. The plan identifies goals, objectives, and measures for hazard mitigation and risk reduction for disasters such as earthquakes, flooding, dam or levee failure, hazardous material spills, epidemics, fires, extreme weather, major transportation accidents, and terrorism.

Sacramento City Code

Applicable city codes pertaining to Geology, Soils, and Seismicity are presented below.

Chapter 15.88 Grading and Erosion and Sediment Control

The City's grading ordinance is enacted for the purpose of regulating grading on property within the City to safeguard life, limb, health, property and the public welfare; to avoid pollution of watercourses with nutrients, sediments, or other materials generated or caused by surface water runoff from construction sites; to comply with the City's National Pollutant Discharge Elimination System (NPDES) Permit issued by the Regional Water Quality Control Board (RWQCB); and to ensure that the graded site within the City limits complies with all applicable City ordinances and regulations. The grading ordinance is intended to control all aspects of grading operations within the City.

Chapter 17.720 Surface Mining and Reclamation

This chapter provides effective and comprehensive surface mining and reclamation policies and regulations to properly carry out the requirements of Surface Mining and Reclamation Act (SMARA), and other applicable regulations to ensure that: adverse environmental and other effects of surface mining operations will be prevented or minimized and that the reclamation of mined lands will provide for the beneficial, sustainable, long-term productive use of the mined and reclaimed lands; and the production and conservation of minerals will be encouraged, while eliminating hazards to public health and safety and avoiding or minimizing adverse effects on the environment.

Building Permit - Site-Specific Geotechnical Investigation

A site-specific geotechnical investigation is required by the City prior to construction. The geotechnical evaluation must provide grading and design recommendations to address slope, channel-wall, and foundation instability; groundwater level and need for dewatering; erosion control; expansive soils; and

differential settlement. The investigation must evaluate the soil types, test for shrink-swell potential, and determine preliminary load-bearing and strength characteristics. The geotechnical evaluation must be provided to the City as part of the City's building permit process. The City must review the geotechnical report along with Project design to confirm that the recommendations in the geotechnical report are reflected in Project design.

3.4.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to geology and soils are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. An impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards. Consequently, a significant impact related to geology and soils would occur if the project would:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)
 - ii) Strong seismic ground shaking?
 - iii) Seismic-related ground failure, including liquefaction?
 - iv) Landslides?
- b) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- c) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Or would the project:

- d) Result in substantial soil erosion or the loss of topsoil?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Issues Not Discussed Further in this EIR

Suitability of Soils for Septic or Alternative Wastewater Disposal Systems

The proposed project is a multi-use trail and would not involve the use of wastewater disposal systems of any kind, thus the ability of project area soils to support the use of septic or alternative wastewater disposal systems is not discussed further in this EIR.

Impacts to Paleontological or Unique Geologic Features

The area is characterized by Holocene-age stream channel deposits and is thus not considered to be paleontologically sensitive. Additionally, since the project involves minor earthmoving and paving activities, there is no potential to encounter paleontological resources. This issue is not discussed further in the EIR.

Impact Analysis

Impact GEO-1: Cause Adverse Effects Related to Earthquake Fault Rupture, Seismic Ground Shaking, Seismic-Related Ground Failure (including landslide, subsidence, or liquefaction, or Be Located On Expansive Soils

Construction-and operation related activity from the proposed project may be affected by unknown geotechnical site conditions (Less than Significant With Mitigation)

Seismicity

The project area is not located within an Alquist-Priolo Earthquake Fault Zone or in the immediate vicinity of an active fault. Surface fault rupture is most likely to occur on active faults (i.e., faults showing evidence of displacement within the last 11,700 years). Damage from surface fault rupture is generally limited to a linear zone a few yards wide. **Table 3.4-2** describes the proximity of the project site to local active and potentially active faults. The intensity of ground shaking caused by an earthquake at the Dunnigan Hills Fault is not expected to cause substantial damage to the project site, according to the *Probabilistic Seismic Hazard Assessment for the State of California*. However, the 2035 General Plan indicates that groundshaking would occur periodically in Sacramento due to distant earthquakes on any of the major regional faults.

Activity	Fault Name	Distance and Direction in Relation to Project Site
Historic	Green Valley Fault	45 mi W-SW
Historic	Rodgers Creek Fault	61 mi W-SW
Active	Dunnigan Hills	30 mi W-NW
Active	West Napa Fault	51 mi W-SW
Active	Concord Fault	55 mi SW
Potentially Active	Midland Fault	24 mi SW
Potentially Active	Bear Mountains Fault Zone – West	23 mi E
Potentially Active	Bear Mountains Fault Zone – East	28 mi E
Potentially Active	Maidu Fault	26 mi E
Potentially Active	Melones – West	33 mi E
Potentially Active	Melones – East	36 mi E

Table 3.4-2. Regional Active and Potentially Active Faults

Source: CGS 2018

Earthquake Induced Liquefaction, Surface Rupture Potential, and Settlement

Portions of Sacramento, especially along streams and floodplains, are underlain by historic alluvial deposits that, in their present states, could become unstable during seismic ground motion. To reduce the primary and secondary risks associated with seismically induced groundshaking, it is necessary to take the location and type of subsurface materials into consideration when designing foundations and structures, including recreational and flood management facilities.

Preliminary geotechnical investigations for the project alignment were completed by GEI Consultants (GEI 2017). Sampling of subsurface conditions focused on Segments 4 and 6, where the proposed waterside bike trail could potentially impact levee performance under the alternative previously analyzed in the October 2018 IS/MND (which included a "benched" levee trail in Segment 4). However, in order to address concerns from ARCFD, the trail alignment in the proposed project now avoids any construction that would require "benching" of the levee, and trail construction is confined to the levee toe along Segment 3, 5 and 6, and a portion of Segment 4, and is confined to the levee crown for the western portion of Segment 4.

Although the proposed project only involves paving the existing gravel trail and a portion of the existing gravel levee crown road (in Segment 4) and will not require penetration of the levee or remediation of levee material to facilitate trail construction or maintenance, subsurface conditions in Segments 4 and 6 were previously evaluated using draft subsurface profiles developed as part of the Department of Water Resources (DWR) Urban Levee Evaluation (ULE) for the American River study area. The subsurface data on the profiles consisted of geotechnical borings performed predominantly by USACE. Explorations were typically performed through the levee crown; however, several explorations were also performed at the landside levee toe or on waterside benches. The explorations range in depth, with the deepest explorations throughout Segments 4 and 6. The subsurface was generally composed of a sandy levee overlying a medium to stiff fine-grained blanket, an upper silty sand aquifer, a lower gravelly/cobbley aquifer, and a deep, very stiff to hard fine-grained layer.

Past performance issues documented in the DWR ULE Supplemental Geotechnical Data Report (SGDR) for the American River study area were reviewed to evaluate past performance of Segments 4 and 6 and to determine whether any prior levee instabilities had occurred within Segments 4 and 6. Available past performance records indicated a single past performance issue consisting of waterside erosion of the riverbank below the levee toe in Segment 4 (approximately Sta. 114+80 to Sta. 130+80 of the present project or DWR Sta. 1206+30 to Sta. 1222+30). No waterside slope instabilities or sloughs were documented. Existing improvements to the levees include a 75-foot-deep cutoff wall for the entire lengths of Segments 4 and 6 and placement of revetment in several locations (GEI 2017). The previously documented waterside erosion along Segment 4 was taken into account during design of the proposed project, and a portion of the trail was moved to the levee crown to avoid exacerbating erosion in this area where there is little to no levee toe available for siting of the trail.

All trail improvements, including the grade changes where the trail will transition from levee toe to top (near the BUS-80 bridge, along Segment 4, and near the H Street Bridge) would be designed based on the results of ongoing, detailed geotechnical engineering studies (GEI 2017) and would be required to comply with standard engineering practices for trail and levee design. Preliminary geotechnical design criteria for the project were based on DWR Urban Levee Design Criteria (ULDC) (DWR 2012). The Central Valley Flood Protection Board's (CVFPB's) standards are the primary state standards applicable to levees in the project area; these are stated in Title 23, Division 1, Article 8, Sections 111–137 of the

California Code of Regulations. The Board's standards direct that any modifications to existing levees (made to accommodate trail placement) be in accordance with EM 1110-2-1913 *Engineering Design and Construction of Levees* (USACE 2000), the primary Federal standards applicable to levee improvements. Because the design, construction, and maintenance of levee improvements must comply with the regulatory standards of USACE and CVFPB, it is assumed that the design and construction of all levee modifications to accommodate placement of the trail would meet or exceed applicable design standards for static and dynamic stability, seismic ground shaking, liquefaction, subsidence, and seepage.

Additionally, final designs would comply with California Uniform Building Code (UBC), which is based on the federal UBC but is more detailed and stringent. Chapter 18 of the California UBC, which regulates the excavation and construction of embedded posts and poles, and also with UBC Appendix Chapter A33 which regulates grading activities, including drainage and erosion control, and construction on unstable soils, such as expansive soils (BSC 2016).

Based on an existing regulatory framework that addresses earthquake safety issues and requires adherence to requirements of the CBC and various design standards, seismically induced groundshaking and secondary effects would not be a substantial hazard in the project area. Additionally, this area is not mapped by CGS as lying within a known liquefaction or landslide hazard area (CGS 2019).

Because the proposed project would be required to comply with federal, state, and local construction standards, it would not expose people or structures to the risk of loss, injury, or death. However, per City requirements (2035 General Plan - Policy EC 1.1.2), a geotechnical investigation of the site is required. Since the geotechnical investigation for the project area is still under development to verify onsite geologic conditions, the impact is **potentially significant**. Implementation of **Mitigation Measure GEO-1** described below would reduce the impacts to **less than significant** by identifying site-specific soil conditions and limitations and implementing recommendations to meet engineering requirements. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measure GEO-1**.

Mitigation Measures

Mitigation Measure GEO-1: Perform Final Geotechnical Investigation and Implement Report Recommendations

Prior to issuance of a construction contract, in accordance with City requirements (2035 General Plan - Policy EC 1.1.2), the project applicant shall prepare a final geotechnical investigation of the project alignment to determine the potential for ground rupture, earth shaking, and liquefaction due to seismic events, as well as expansive soils problems. As required by the City, recommendations identified in the geotechnical report for the proposed project shall be implemented to ensure that the project's design meets Caltrans Class 1 bikeway design criteria and State Water Code Title 23 standards for recreation trails on levees.

Responsibility:	City of Sacramento
Timing:	Before and During Construction Activities

Residual Significant Impacts

Mitigation that would reduce potential geotechnical impacts to a less-than-significant level have been identified and therefore there would be no residual significant impacts to Geology, Soils, or Seismicity conditions.

3.5 Hazards and Hazardous Materials

3.5.1 Introduction

This section provides an overview of the existing hazards and hazardous materials conditions within the proposed project study area, identifies the regulatory framework, and provides analysis of the potential hazards and hazardous materials impacts that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comment was received regarding:

• The presence of past landfill disposal sites along Segments 1 and 2 and the need for all project construction to comply with 27 CCR, Section 21190 post-closure, security, and public safety protection requirements for these sites.

Impacts related to the past landfill uses and potential hazardous conditions are described below in **Impact HAZ-2** "Potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment".

3.5.2 Environmental Setting

Segments 1 and 2 of the proposed project traverse parcels that were historically used for waste disposal and dumping, and there are regulatory listings which indicate that contaminated materials are still present. Please refer to the Phase I Environmental Site Assessment (GEI Consultants, Inc., 2018, included as Appendix D) for additional details. Groundwater monitoring wells associated with historic landfill uses are present near Segment 2, although sample results from these wells have not indicated the presence of contaminants above regulatory standards. No evidence of soil or groundwater contamination has been identified in Segments 3 through 6 (GEI Consultants, Inc., 2018). The project does not include demolition of any structures, and there are no known asbestos-containing materials that would be affected by construction of the project.

Schools

There is one school within 0.25 mile of the trail alignment; Courtyard Private School is located 0.1 mile from Segment 2 and one of the potential construction staging areas.

Known Hazardous Materials Sites

Table 3.5-1 presents database search results for the project vicinity. The database search included all of the data sources included in the Cortese List (enumerated in PRC Section 65962.5). These sources include the GeoTracker database, a groundwater information management system that is maintained by the State Water Resources Control Board (SWRCB); the Hazardous Waste and Substances Site List (i.e., the EnviroStor database), maintained by the California Department of Toxic Substances Control (DTSC); and EPA's Superfund Site database. Three sites with active SWRCB cases were identified within 0.25 mile of the project alignment:

Site Name, Address, Description, Number	Potential Contaminants	Media Affected	Status/Cleanup Actions
SMUD Station E Substation	Benzo(a)pyrene, metals,	Soil	Parts if site used as a landfill to dump burn waste in the past. Site currently managed under voluntary cleanup program with Sacramento County Environmental Management Department providing oversight.
Northern End of 20th Street	binbenyls		
Sacramento, CA 95816 SWRCB: 60002499	bipnenyis		
Dellar Landfill	n/s	n/a	Past municipal solid waste
2401 A Street			landfill. Site assessment ongoing.
Sacramento, CA 95816			
SWRCB: T10000007791			
Cannon/Scollan Landfills	n/s	n/a	Past municipal solid waste
2401 A Street			landfill. No longer accepting
Sacramento, CA 95816			waste.
SWRCB: T10000011373			

Table 3.5-1. Cortese-listed Sites

Notes:

SWRCB = State Water Resources Control Board ¹ Includes listings within 0.25 mile of project activity areas. Sources: DTSC 2019 and SWRCB 2019

3.5.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

Resources Conservation and Recovery Act

The Resources Conservation and Recovery Act (RCRA) set up the federal regulatory program for hazardous substances and gives the United States Environmental Protection Agency (USEPA) the authority to regulate the generation, transport, treatment, and disposal of hazardous substances in a "cradle to grave" system. Under the RCRA, USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. This regulatory system includes tracking all generators of hazardous waste.

1984 Hazardous and Solid Waste Amendment Act

RCRA was amended by the 1984 Hazardous and Solid Waste Amendment Act, which prohibited the use of certain techniques for the disposal of certain hazardous wastes (USEPA 2016a). The Emergency Planning and Community Right-to-Know Act of 1986 imposes safety requirements to protect local communities in the event of accidental release of hazardous substances. The requirements provide measures so that the risks from interaction with hazardous materials, such as handling, storage, and disposal, are mitigated or prevented. This law protects human health and the environment if the unintended release of hazardous materials was to occur (USEPA 2016b). USEPA has delegated fulfillment of many of the RCRA's requirements to the California Department of Toxic Substances Control (DTSC).

Clean Air Act

Regulations under the Clean Air Act (CAA) (42 USC 7401 et seq. as amended) are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store a threshold
quantity or greater of listed regulated substances to develop a risk management plan, including hazard assessments and response programs to prevent accidental releases of listed chemicals.

Hazardous Materials Transportation Act

The transport of hazardous materials is regulated by the United States Department of Transportation (Caltrans) under Hazardous Materials Transportation Act (HMTA). To accomplish this, the Federal Aviation Administration, Federal Motor Carrier Safety Administration, Federal Railway Administration, Pipeline and Hazardous Materials Safety Administration, and the U.S. Coast Guard have been given authority to enforce hazardous material transport regulations.

Occupational Safety and Health Administration

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA), which is responsible for protecting the health of workers, such as during the handling of hazardous materials. OSHA has created regulation to set federal standards of workplace safety including exposure limits, mandatory workplace training, accident and injury reporting, and safety procedures. These regulations are recorded in the CFR Title 29 (GPO 2016).

State Plans, Policies, Regulations and Laws

Hazards Waste Control Act

The Hazardous Waste Control Act created the State hazardous waste management program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling treatment, storage and disposal facilities; operation of facilities and staff training; and closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

California Environmental Protection Agency

The California EPA (CAL EPA) is responsible for creating and enforcing environmental regulations within California. Within CAL EPA is the DTSC, which was formed under the Hazardous Waste Control Act. The DTSC is responsible for regulating hazardous waste, remediating existing contamination, and identifying ways to reduce production of hazardous wastes. DTSC can delegate enforcement responsibilities to local jurisdictions.

Unified Program

The unified hazardous waste and hazardous materials management regulatory program (Unified Program) is a unified hazardous materials management program that was established by California's Secretary for Environmental Protection following Senate Bill 1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following programs:

- Hazardous Materials Release Response Plans and Inventories
- California Accidental Release Prevention Program
- Underground Storage Tank Program
- Above Ground Petroleum Storage Act Program
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements

These six environmental programs are implemented at the local government level by Certified Unified Program Agencies (CUPAs). CUPAs provide a central permitting and regulatory agency for permits, reporting, and compliance enforcement. California Public Resources Code Section 21151.4 sets special requirements for environmental impact reports and negative declarations for Projects that involve the construction or alteration of a facility within one-fourth of a mile of school that creates the following conditions:

- Might reasonably be anticipated to emit hazardous air emissions;
- Would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified in Section 25532(j) of the Health and Safety Code; or
- May pose a health or safety hazard to persons who would attend or would be employed at the school.

As part of the CEQA process, the lead agency preparing the EIR must consult with the appropriate school district regarding the potential impact of the project on the school and the school district must be notified about the project in writing at least 30 days before the proposed certification of the EIR or adoption of the mitigated negative declaration (Public Resources Code section 21151.4; 14 California Code of Regulations Section 15186(b)).

Cortese List Government Code Section 65962

Government Code Section 65962 was enacted in 1985 and was amended in 1992. It is used as a planning document to comply with the CEQA and requires information about locations of hazardous

materials release sites. It states that the through the combined efforts of the DTSC, the Department of Health Service, the State Water Resources Control Board (SWRCB) and local enforcement agencies a list of potential hazardous areas and sites will be compiled and remain up to date (at a minimum annually updated). The list is consolidated by the Secretary for Environmental Protection and is distributed to each city and county which sites on the list are located. The list can be found on the DTSC's data management system known as EnviroStor, which includes information from the SWRCB GeoTracker database.

Division of Occupational Safety and Health

The Division of Occupational Safety and Health (DOSH), also known as CalOSHA, is responsible for enforcing workplace safety regulations and requirements in California, including hazardous materials requirements recorded under CCR Title 8 (DIR 2016). These regulations include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about hazardous substance exposure (such as asbestos), and preparation of emergency action and fire prevention plans.

The DOSH also enforces hazard-communication program regulations that contain training and information requirements. Such requirements include procedures for identifying and labeling hazardous substances, communicating information about hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous waste sites. Under the hazard-communication program, employers must make Material Safety Data Sheets available to employees and document employee information and training programs.

California Emergency Services Act

The California Emergency Services Act provides the basic authority for conducting emergency operations following a proclamation of emergency by the governor and/or appropriate local authorities. Local government and district emergency plans are considered to be extensions of the California Emergency Plan, established in accordance with the Emergency Services Act.

The California Emergency Management Agency (CAL EMA) is the state agency responsible for establishing emergency response and spill notification plans related to hazardous materials accidents. CAL EMA regulates businesses by requiring specific businesses to prepare an inventory of hazardous materials (CCR Title 19). CAL EMA is also the lead state agency for emergency management and is responsible for coordinating the state-level response to emergencies and disasters.

Fire Protection

California state fire safety regulations apply to State Responsibility Areas (SRAs) during the time of year designated as having hazardous fire conditions. California Department of Forestry and Fire Protection (CALFIRE) has developed a fire hazard severity scale that considers vegetation, climate, and slope to evaluate the level of wildfire hazard in all SRAs. A SRA is defined as the part of the state where CALFIRE is primarily responsible for providing basic wildland fire protection assistance. Areas under the jurisdiction of other fire protection services are considered to be Local Responsibility Areas or on Federal lands are considered Federal Responsibility Areas.

During the fire hazard season, these regulations include: (a) restrict the use of equipment that may produce a spark, flame, or fire; (b) require the use of spark arrestors on any equipment that has an internal combustion engine; (c) specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and (d) specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. CAL FIRE has primary responsibility for fire protection within SRAs.

Regional and Local Plans, Policies, Regulations, and Ordinances

Sacramento County Environmental Management Department

The Sacramento County Environmental Management Department (SCEMD) is the CUPA for local implementation of the California Accidental Release Prevention (CAL ARP) and several other hazardous materials and hazardous waste programs. SCEMD is responsible for regulating hazardous materials business plans and chemical inventory, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Sacramento County to prepare business emergency response plans if hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of SCEMD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

The SCEMD distributes the information in the hazardous materials business plans and business emergency response plans to emergency response agencies, such as the Fire Department/Hazardous Materials Response Teams. In accordance with Health and Safety Code Chapter 6.95, Section 25500, the SCEMD prepared the Area Plan for Emergency Response to Hazardous Materials Incidents in Sacramento County (2012). The plan describes the responsibilities of local, state, and federal agencies during hazardous materials incidents.

The SCEMD is certified by California's Department of Resource Recycling and Recovery (CalRecycle) for Sacramento County. SCEMD permits and inspects solid waste facilities and enforces state laws pertaining to the storage, processing, and disposal of solid waste. The SCEMD also issues permits for the development and abandonment of groundwater wells, and with respect to the former 28th Street Landfill, the removal and relocation of the soil gas probes and groundwater monitoring wells.

2016 Sacramento Countywide Local Hazard Mitigation Plan Update

The 2016 Sacramento Countywide Local Hazard Mitigation Plan Update (2016) is designed to guide hazard mitigation planning to better protect the people and property of the County and participating jurisdictions from the effects of natural disasters and hazard events. The plan identifies goals, objectives, and measures for hazard mitigation and risk reduction for disasters such as earthquakes, flooding, dam or levee failure, hazardous material spills, epidemics, fires, extreme weather, major transportation accidents, and terrorism.

City of Sacramento 2035 General Plan

The following goals and policies from the Public Health and Safety (PHS) Element related to Hazards, Public Health and Safety are relevant to the proposed project (City of Sacramento 2015).

- **GOAL PHS 2.1:** Fire Protection and Emergency Medical Services. Provide coordinated fire protection and emergency medical services that support the needs of Sacramento residents and businesses and maintains a safe and healthy community.
- **GOAL PHS 2.2:** Fire Prevention Programs and Suppression. The City shall deliver fire prevention programs that protect the public through education, adequate inspection of existing development, and incorporation of fire safety features in new development.
- **GOAL PHS 3.1: Reduce Exposure to Hazardous Materials and Waste.** Protect and maintain the safety of residents, businesses, and visitors by reducing, and where possible, eliminating exposure to hazardous materials and waste.
- **Policy PHS 3.1.1 Investigate Sites for Contamination.** The City shall ensure buildings and sites are investigated for the presence of hazardous materials and/or waste contamination before development for which City discretionary approval is required. The City shall ensure appropriate measures are taken to protect the health and safety of all possible users and adjacent properties.
- Policy PHS 3.1.2 Hazardous Material Contamination Management Plan. The City shall require
 that property owners of known contaminated sites work with Sacramento County, the State, and/or
 Federal agencies to develop and implement a plan to investigate and manage sites that contain or
 have the potential to contain hazardous materials contamination that may present an adverse human
 health or environmental risk.

- **Policy PHS 3.1.4 Transportation Routes.** The City shall restrict transportation of hazardous materials within Sacramento to designated routes.
- Policy PHS 3.1.6 Compatibility with Hazardous Materials Facilities. The City shall ensure that future development of treatment, storage, or disposal facilities is consistent with the County's Hazardous Waste Management Plan, and that land users near these facilities, or proposed sites for the storage or use of hazardous materials, are compatible with their operation.

GOAL PHS 4.1: Natural and Human-made Disasters. Promote public safety through planning, preparedness, and emergency response to natural and human-made disasters.

City of Sacramento Emergency Operations Plan

The purpose of the City of Sacramento Emergency Operations Plan (EOP) is to provide safeguards to minimize loss of life and property damage during natural disasters and emergencies of national defense. The City of Sacramento EOP establishes an Emergency Management Organization and assigns functions and tasks in accordance with California's Standardized Emergency Management System (SEMS). The EOP provides guidance as to disaster response from the initial onset through the cost recovery process. It includes policies, responsibilities, and procedures necessary to protect human health and safety, public and private property, and the environment from the effects of natural and anthropogenic disasters and emergencies. The EOP outlines the specific emergency-related responsibilities of City agencies. For example, the City of Sacramento Police Department is responsible for implementing emergency evacuations, including traffic control plans, while the City of Sacramento Fire Department is the first responder for hazardous materials incidents (City of Sacramento 2018).

City of Sacramento Evacuation Plan

The purpose of the City of Sacramento Evacuation Plan (2008) is to provide evacuation-specific strategy and information to support and guide the City's Emergency Managers, Emergency Operations Center staff, and other governmental and non-governmental agencies that would be involved with an evacuation event in the City of Sacramento. Therefore, the Evacuation Plan serves as an amendment to the EOP. Flooding is considered the primary threat that would invoke an evacuation in Sacramento. Therefore, much of the Evacuation Plan is dedicated to procedures to be followed in event of a flood emergency. However, the associated strategy and plan details apply to other hazards as well. The City of Sacramento Police Department has divided the City into six districts with each district further divided into three or four police patrol beat areas. The Evacuation Plan provides evacuation routes and locations of sirens and shelters within each police patrol beat area. The City of Sacramento Fire Department maintains updated records of the emergency response and evacuation routes for the City.

Hazardous Materials Response

The City's Hazardous Materials Program (HazMat) provides capability for response to hazardous material emergencies. HazMat contains firefighters trained to the Hazardous Materials Response level and includes three Hazardous Materials Response Teams (HMRTs) and one Decontamination Team. Under contractual agreement, HazMat provides 24-hour first response to hazardous materials incidents within the City of Sacramento.

Sacramento Area Council of Governments

In December of 2013, Sacramento Area Council of Governments (SACOG) adopted the Airport Land Use Compatibility Plan (ALUCP) for the Sacramento International Airport. This plan ensures that land

uses in and around the Sacramento International Airport are compatible with airport use. The boundaries for this plan, or the Airport Influence Area (AIA), range from the cities of Woodland and Davies to the west, West Sacramento to the south, the Sutter-Placer County line in the east, and the town of Nicolaus to the north (SACOG 2013). Central and Eastern Sacramento is not included in the AIA.

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for the management and enforcement of a variety of air quality rules including asbestos within the City of Sacramento. Rule 902 of the SMAQMD outlines specific procedures to follow if asbestos is likely to occur within a Project area. These procedures include, but are not limited to, requirements for surveys to be conducted prior to construction, proper worker safety when handling asbestos containing materials, and proper disposal of any of these materials (SMAQMD 2015).

3.5.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to hazards are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to hazards or hazardous materials would occur if the project would:

For the purposes of this EIR, an impact is considered significant if the proposed project would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, including hazards associated with existing contaminated soils, asbestos, or existing contaminated groundwater during dewatering activities?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Issues Not Discussed Further in this EIR

Accidental release of Hazardous Materials Associated with Asbestos or Contaminated Groundwater Encountered During Dewatering

No structures would be demolished as a part of the project and the project alignment is not located in an area of known naturally-occurring asbestos (USGS 2011), thus there would be no potential for exposure to asbestos-containing materials as a result of project construction. Additionally, construction of the proposed trail would include only minor excavation and fill and excavation depths are unlikely to encounter the water table. No dewatering would be required during construction of the project. Thus, these issues are not discussed further in this EIR.

Conflict With An Airport Land Use Plan or Location Within Two miles of An Airport Resulting In Excessive Noise

The project alignment is not located within an airport land use plan area and is not located within wo miles of an airport (SACOG 2013). Thus, hazards associated with these issues are not discussed further in this EIR.

Interfere With An Emergency Response Or Evacuation Plan

Construction of the proposed project would result in short-term construction activities and will not require closure or reduced access on any adjacent roads that would interfere with an adopted emergency response plan or evacuation plan. Construction would occur in segments, thus only one portion of the trail will be inaccessible at any time, and construction will occur outside of the flood season. Additionally, the closest roads to the project alignment that are designated as evacuation routes are H Street, SR 160, and the Business I-80 Freeway by the Sacramento County Office of Emergency Services and access to these routes will not be affected by project construction or operation (Sacramento County 2015). Thus, hazards associated with emergency egress are not discussed further in this EIR.

Impact Analysis

Impact HAZ-1:

Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction activity from the proposed project may involve the accidental spill of common materials used in the operation and maintenance of construction vehicles and equipment. (Less than Significant With Mitigation)

Project construction would involve the incidental transport and use of common materials used for the operation and maintenance of construction vehicles and equipment such as oils, lubricants, and fuel. However, operation (use of the multi-use recreation trail) of the project would not involve routine or long-term transport or disposal of such materials. None of the proposed project activities would involve the use of acutely hazardous materials. Regulations governing hazardous materials transport are included in CCR Title 22, the California Vehicle Code (CCR Title 13), and the State Fire Marshal Regulations (CCR Title 19). Transport of hazardous materials can only be conducted under a registration issued by the California Department of Toxic Substances Control. Construction contractors would be required to use, store, and transport hazardous materials in compliance with Federal, State, and local regulations during project construction. However, accidental spills could still occur and therefore the project would have a **potentially significant** impact. Implementation of **Mitigation Measure BIO-3** (more fully described in **Section 3.2 "Biological Resources**") would reduce the impacts to **less than**

significant by requiring preparation of a hazardous materials business plan that identifies project specific measures to prevent and clean up hazardous material and waste spills (if necessary). Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measure BIO-3**.

Mitigation Measures

Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices. See Section 3.2 "Biological Resources" for a complete description of the mitigation measure.

Impact HAZ-2: Potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

Construction activity from the proposed project may expose construction workers to contaminated soil during cut and fill activities associated with the proposed project. (Less than Significant With Mitigation)

Portions of the project site (Segments 1 and 2) include lands that were historically used for waste disposal, and the Phase I Environmental Site Assessment prepared for the project indicated the potential presence of contaminated soil. During cut and fill activities associated with constructing the proposed project, construction workers could encounter contaminated soil. This impact would be **potentially significant**. Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** described below would reduce the impacts to **less than significant** by ensuring appropriate closure of potentially contaminated sites prior to construction and implementing safety measures for workers that may encounter onsite hazardous materials during construction-related activities. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measures HAZ-1** and **HAZ-2**.

Mitigation Measures

Mitigation Measure HAZ-1: Prepare a Worker Health and Safety Plan and Implement Appropriate Measures to Minimize Potential Exposure of the Public to Hazardous Materials

The City of Sacramento shall ensure the construction contractor implement the following measures before and during construction to reduce potentially significant impacts associated with exposure to hazardous materials.

- Prepare and implement a worker health and safety plan before the start of construction activities that identifies, at a minimum, the potential types of contaminants that could be encountered during construction activity; all appropriate worker, public health, and environmental protection equipment and procedures to be used during project activities; emergency response procedures; the most direct route to the nearest hospitals; and a Site Safety Officer. The plan shall describe actions to be taken should hazardous materials be encountered on-site, including the telephone numbers of local and state emergency hazmat response agencies.
- If, during site preparation and construction activities, evidence of hazardous materials contamination is observed or suspected (e.g., stained or odorous soil or groundwater) cease

immediately construction activities in the areas of the find. If contamination is observed or suspected, the City shall retain a qualified hazardous materials specialist to assess the site and collect and analyze soil and/or water samples, as necessary. If contaminants are identified in the samples, the City shall notify and consult with the appropriate Federal, State, and/or local agencies. Measures to remediate contamination and protect worker health and the environment shall be implemented in accordance with Federal, State, and local regulations before construction activities may resume at the site where contamination is encountered. Such measures could include, but are not limited to, preparation of a Phase I and/or Phase II Environmental Site Assessment, removal of contaminated soil, and pumping of groundwater into containment tanks.

Responsibility:	City of Sacramento / Construction Contractor
Responsibility:	City of Sacramento / Construction Contractor

Timing: Before and During Construction

Mitigation Measure HAZ-2: Obtain Site Closure and Follow Post-Closure Requirements for Past Disposal Sites

The City shall implement the following measures for all Segment 2 construction:

- Construction of the trail segment should not commence until this area is properly closed as per the requirements of the City of Sacramento.
- Segment 2 construction should be completed under the requirements described in Title 27 of the California Code of Regulations (CCR), Division 2, Subdivision 1, Chapter 3, Subchapter 5, Section 21190 titled "CIWMB-Post-Closure Land Use."
- Where cut and fill activities occur in Segment 2, proper measures should be taken to mitigate any landfill material or other hazardous material that is encountered.
- If fill material/soils will be brought in, these soils must be certified as clean fill.
- The trail will be designed to conform with drainage patterns in the project area and to prevent water collection that could cause seepage of the buried landfill material.

Responsibility:	City of Sacramento
Timing:	Before and During Construction

Residual Significant Impacts

Mitigation that would reduce potential hazardous materials impacts to a less-than-significant level have been identified and therefore there would be no residual significant impacts to Hazards and Hazardous Materials conditions.

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3.6 Hydrology, Water Quality, and Drainage

3.6.1 Introduction

This section provides an overview of the existing hydrology and water quality conditions within the project study area, identifies the regulatory framework for these resource areas, and provides analysis of the potential hydrologic and water quality impacts that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comments were received regarding:

- Maintenance costs to the City due to flooding of unpaved portions of the trail and deposition of mud and debris during high flow events.
- Location of trail segments along the levee toe in areas where high flows may submerge sections for extended periods of time.
- Flood threat to adjacent residences due to placement of the trail along a mid-levee bench.
- Location of trail segments in areas identified as having existing or potential erosion by the Lower American River Task Force, Bank Protection Working Group.
- Potential for water quality impacts (particularly increases in fecal coliform bacteria) due to assumed increase in dog-owning visitors and a lack of an accompanying increase in restroom facilities and trash receptacles.
- Potential for impacts if project construction and maintenance are not coordinated with other upstream flood management agencies and operations.

Impacts associated with potential threats to nearby residences or levee integrity due to trail placement along a "mid-levee" bench are not addressed further in this EIR since the benched segment has been removed from the proposed project.

Setting and methodology information regarding the potential for cumulative impacts from other projects affecting the proposed project study area are described in **Chapter 5.0** "**Cumulative and Growth Inducing**".

3.6.2 Environmental Setting

Surface Water

The project site is immediately adjacent to the American River along most of the project alignment, except for a small portion of Segment 2. Within Sacramento County, the American River is impounded at Folsom Dam and Nimbus Dam. The dams regulate the water level of the American River throughout the project site (excepting stormwater flows from the adjacent levee slopes and floodplain) and downstream to its confluence with the Sacramento River.

Water Quality

The project site is in the Sacramento Hydrologic Basin Planning Area and the Lower American Hydrologic Subarea, as designated by the Central Valley Regional Water Quality Control Board (CVRWQCB). In accordance with Section 303 of the federal CWA, water quality standards for this basin are contained in the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin (Basin Plan). Stormwater runoff from the project site is received by the American River which is listed on the 303(d) list as an impaired water for several constituents of concern, including fecal indicator bacteria, bifenthrin, pyrethroids, toxicity, mercury, and polychlorinated biphenyls (PCBs) (CVRWQCB 2016).

Groundwater

The project site is in the Sacramento Valley Groundwater Basin, within the larger South American Subbasin (5-021.65), as designated in the California Department of Water Resources' (DWR's) Bulletin 118 (DWR 2016). This basin is designated as a "High Priority" Basin under the Sustainable Groundwater Management Act (DWR 2018). According to the Groundwater Information Center Interactive Map Application, groundwater levels in the project area are approximately 25-40 feet from ground surface (DWR 2017).

Flood Management

The proposed project is mapped as Zone X (Segments 1 and 2) and Zone AE (Segment 3-6) on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (map panels 06067C0180J and 06067C0183H) (FEMA 2018). Zone X areas are designated as having a reduced flood risk due to the presence of levees and are considered by FEMA to be areas of minimal hazard (500-year flood zone) which are outside the 0.2% chance floodplain. The project areas mapped as Zone AE are designated as a Regulatory Floodway and are within the 100-year floodplain for the American River.

Stormwater/Drainage

The lands around Segments 1 and 2 are served by the City's Combined Sewer System (since they are located on the landside of the existing levee) and local runoff along Segments 3-6 flows by gravity overland during storm events, and also through culverts and vegetated or lined intermittent drainages, ultimately to the American River (since they are on the crest or waterside of the existing levee).

3.6.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

Federal Clean Water Act

The Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Section 401 of the CWA regulates surface water quality and a Water Quality Certification is required for federal actions (including construction activities) that may entail impacts to surface water. In California, NPDES permitting authority is delegated to, and administered by, the nine Regional Water Quality Control Boards (RWQCB).

NPDES Construction Permit

The federal CWA prohibits certain discharges of stormwater containing pollutants except in compliance with a NPDES permit. The federal statutes and regulations require discharges to surface waters comprised of storm water associated with construction activity, including demolition, clearing, grading, and excavation, and other land disturbance activities (except operations that result in disturbance of less than one acre of total land area and/or discharges to municipalities with combined stormwater and sewer systems) to obtain coverage under an NPDES permit. The NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff.

National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is responsible for managing the National Flood Insurance Program (NFIP), which makes federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. The NFIP, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level known as base flood elevation. To facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps (FIRMs) that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements.

U.S. Army Corps of Engineers – Section 408 Permission

The American River is a designated navigable waterway. As such, the U.S. Army Corps of Engineers has jurisdiction and is a permitting authority for any development or activity which may affect the river's floodway capacity. The Corps sets operation and maintenance standards and performs levee inspections within the floodway. The Corps frequently implements flood damage reduction construction projects in the floodway and thus has a need to implement environmental mitigation for these projects in the Parkway.

Section 14 of the Rivers and Harbors Appropriation Act of 1899, as amended, and codified in 33 USC 408 (Section 408) provides that the Secretary of the Army may, upon the recommendation of the Chief of Engineers, grant permission to other entities for the permanent or temporary alteration or use of any U.S. Army Corps of Engineers (USACE) Civil Works project. An alteration refers to any action by any entity other than the Corp that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity of a USACE project. Section 408 permission requires a determination that the requested alteration is not injurious to the public interest and will not impair the usefulness of the project. This means USACE has the authority to review, evaluate, and approve all alterations to federally authorized civil works projects to make sure they are not harmful to the public and still meet the project's intended purposes mandated by congressional authorization. Routine operations and maintenance does not require 408 permissions.

State Plans, Policies, Regulations and Laws

Porter Cologne Water Quality Control Act

The State of California established the State Water Resources Control Board (SWRCB), which oversees the nine RWQCBs, through the Porter-Cologne Water Quality Control Act (Porter-Cologne). Through the enforcement of the Porter Cologne Act, the SWRCB determines the beneficial uses of the waters (surface and groundwater) of the State, establishes narrative and/or numerical water quality standards, and initiates policies relating to water quality. The SWRCB and, more specifically, the RWQCB, is authorized to prescribe Waste Discharge Requirements (WDRs) for the discharge of waste, which may impact the waters of the State. Furthermore, the development of water quality control plans, or Basin Plans, are required by Porter-Cologne to protect water quality. The SWRCB issues both General Construction Permits and individual permits under the auspices of the federal NPDES program. Per the SWRCB General Construction Permit, construction activity that discharges to Combined Sewer Systems is an activity not covered under the general permit and therefore the permit does not apply.

Sustainable Groundwater Management Act

SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline.

Regional and Local Plans, Policies, Regulations and Ordinances

Sacramento Area Flood Control Agency

The Sacramento Area Flood Control Agency (SAFCA) was formed in 1989 by local agencies to address the deficiencies in Sacramento's flood control system identified by the United States Army Corp of Engineers (USACE) following the flood of 1986. Through a joint exercise of powers agreement, the City of Sacramento, County of Sacramento, the Sacramento County Water Agency, Sutter County, the Sutter County Water Agency, the American River Flood Control District, and Reclamation District 1000 (RD 1000) pooled their common flood-control authorities, established a management structure, and identified a program for improving Sacramento's flood control system. This program has three elements:

- 1. Ensure the structural integrity of the existing levee system;
- 2. Provide at least a 100-year level of flood protection as quickly as possible to the areas within the FEMA 100-year floodplain by, among other actions, increasing the space available for flood control at Folsom Dam and Reservoir (Folsom); and
- 3. Work toward achieving at least a 200-year level of flood protection for the Sacramento area.

SAFCA finances the local share of the cost to improve Sacramento's flood control system by creating assessment districts and levying annual assessments on properties which benefit from the improvements. These assessments are billed on Sacramento County's and Sutter County's annual real property tax bill.

SAFCA has carried out its flood risk management program on a step-by-step basis. It has succeeded in moving flood zone properties in Natomas and North Sacramento from a high- risk status (less than 100-year protection) to a moderate-risk status (greater than 100-year but less than 200-year protection) by

raising and strengthening levees around the Natomas basin and along lower Dry and Arcade creeks. When this work is completed, these properties will have greater than a 200-year level of protection and a relatively low risk of flooding. Outside the North Area, steps have been taken to ensure the integrity of the levee system along the Sacramento and American rivers and to secure additional flood storage space at Folsom Reservoir on an interim basis.

American River Flood Control District

The American River Flood Control District (ARFCD) is the part of SAFCA that provides flood protection for the Project site and surrounding neighborhoods. Formed by an act of the State Legislature in 1927, its mission is to protect the citizenry by maintaining the 40 miles of levees along the American River and portions of Steelhead, Arcade, Dry, and Magpie creeks. The ARFCD's year-round maintenance activities are designed to prevent degradation of the levees' structural stability and to keep the surface of the levees accessible and clearly visible so problems can be detected, and flood emergency equipment can be moved in when needed. In addition to routine operation and maintenance activities, the ARFCD implements Projects along the levee to improve accessibility. For example, in 2008, the ARFCD began working with numerous landowners to remove abandoned encroachments in River Park (such as deteriorating retaining walls, debris, and mounds of dirt), which resulted in a clean levee slope free of obstructions that will no longer compromise levee safety.

City of Sacramento 2035 General Plan

The following goals and policies from the Environmental Constraints (EC) Element and Environmental Resources (ER) Element related to Flooding Hazards and Water Resources are relevant to the proposed project (City of Sacramento 2015).

GOAL EC 2.1: Flood Protection. Protect life and property from flooding.

- Policy EC 2.1.2 Regional Flood Management Planning Efforts. The City shall participate in the California Department of Water Resources (DWR) Regional Flood Management Planning effort for the Lower Sacramento/Delta North region.
- **Policy EC 2.1.4 200-year Flood Protection.** The City shall work with local, regional, State, and Federal agencies to achieve by 2025 at least 200-year flood protection for all areas of the City.
- **Policy EC 2.1.12 New Development Design.** The City shall require new development located within a special (100-year) flood hazard area to be designed to minimize the risk of damage in the event of a flood.
- **GOAL ER 1.1:** Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American rivers, and their shorelines.
- Policy ER 1.1.3 Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the City's NPDES Permit.
- **Policy ER 1.1.4 New Development.** The City shall require new development to protect the quality of water bodies and natural drainage systems through site design, source controls, stormwater

treatment, runoff reduction measures, BMPs and Low Impact Development (LID), and hydromodification strategies consistent with the City's NPDES Permit.

- **Policy ER 1.1.5 Limit Stormwater Peak Flows.** The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.
- Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.

City of Sacramento Stormwater Management and Control Code

The City Stormwater Management and Control Code (Chapter 13.16 of the City Code) is intended to control non-stormwater discharges to the stormwater conveyance system; eliminate discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater; and reduce pollutants in urban stormwater discharges to the maximum extent practicable. Non-stormwater discharges are prohibited except where the discharge is regulated under a NPDES permit (see the descriptions of the NPDES in the discussions of federal and state water quality regulations above). Discharges to the stormwater conveyance system of pumped groundwater not subject to a NPDES permit may be permitted upon written approval from the City and in compliance with the City's conditions of approval.

City of Sacramento Grading. Erosion, and Sediment Control Ordinance

The City Grading, Erosion, and Sediment Control Ordinance (Title 15, Chapter 15.88 of the City Code) sets forth rules and regulations to control land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities. With limited exceptions, grading approval must be received from the City's Department of Utilities (DOU) before construction. All Project applicants, regardless of Project location, are required to prepare and submit separate erosion and sediment control plans applicable to the construction and post-construction periods. The ordinance also specifies other requirements, such as written approval from the City for grading work within the right of way (ROW) of a public road or street, or within a public easement.

City of Sacramento SQIP

The City of Sacramento Stormwater Quality Improvement Program (SQIP) provides a comprehensive plan to direct the Sacramento City Stormwater Management Program and its priorities and activities. Included in the City of Sacramento SQIP is information on the Sacramento City Stormwater Management Program's history and accomplishments as well as a description of specific activities. The City of Sacramento Stormwater Management Program is designed to reduce stormwater pollution to the maximum extent practicable and eliminate prohibited non-stormwater discharges in accordance with federal and state laws and regulations.

The Construction Element in the SQIP was designed to reduce the discharge of stormwater pollutants to the maximum extent practicable by requiring construction sites to reduce sediment in site runoff and reduce other pollutants such as litter and concrete wastes through good housekeeping procedures and proper waste management. The New Development Element in the SQIP was designed to protect local

creeks and rivers by reducing the discharge of stormwater pollutants that could result from new developments to the maximum extent practicable and by mitigating increased flows that could cause erosion and degrade habitat.

City of Sacramento Floodplain Management Ordinance

This Floodplain Management Ordinance is designed to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The Ordinance regulates development which is or might be dangerous to health, safety, and property by requiring at the time of initial development, or substantial improvement, methods of protection against flood damage in areas vulnerable to flooding in order to minimize flood damage. The Ordinance regulates the following developmental impacts: filling, grading, or erosion, alteration of natural flood plains, stream channels or water courses, the imposition of barriers which increase flood hazards, or any other impacts that aggravate or cause flood hazards.

Resolution 93-164

Resolution 93-164, with regard to storm drainage, is intended to prevent street flooding during 10-year return storms and to prevent flooding of structures during 100-year return storms at complete buildout in each drainage basin.

City of Sacramento NPDES Permit

The City of Sacramento NPDES permit (Order No. R5-2016-0040, NPDES No. CAS0085324) requires implementation of programs that establish priorities based on addressing urban pollutants of concern, to reduce the level of pollutants in stormwater discharges from municipal separate storm sewer systems and requires that any change in water quality will not unreasonably affect the present and anticipated beneficial use of receiving waters and will not result in water quality less than that prescribed in SWRCB policies. The SQIP, described earlier, provides a comprehensive plan to direct the City's Stormwater Management Program priorities and activities, including program management, target pollutant reduction strategy, monitoring program, program element implementation (i.e., industrial, municipal, construction, and public education and outreach elements), and program evaluation.

Central Valley Regional Water Quality Control Board Order No. R5-2015-0045

On April 17, 2015, the Central Valley Regional Water Quality Control Board (CVRWQCB) adopted the Waste Discharge Requirements for the City of Sacramento Combined Wastewater Collection and Treatment System (Order No. R5-2015-0045, NPDES No. CA0079111) which describe discharge prohibitions to the Sacramento River unless certain specified conditions have been met or authorizations granted; effluent limitations and discharge specifications for total suspended solids, settleable solids, and chlorine; receiving water limitations to the Sacramento River, monitoring and reporting requirements; and other standard and special provisions.

General Order for Dewatering and Other Low-Threat Discharges to Surface Waters

The CVRWQCB has adopted a general NPDES permit for short-term discharges of small volumes of clean or relatively pollutant- free wastewater from certain construction-related activities that pose little or no threat to water quality. Permit conditions for the discharge of these types of wastewaters to surface water are specified in "General Order for Dewatering and Other Low-Threat Discharges to Surface Waters" (Order No. R5-2013- 0074, NPDES Permit No. CAG995001). Discharges may be covered by

the permit provided they are either (1) four months or less in duration or (2) the average dry weather discharge does not exceed 0.25 mgd. Construction dewatering, well development water, pump/well testing, and miscellaneous dewatering/low-threat discharges are among the types of discharges that may be covered by the permit. The general permit also specifies standards for testing, monitoring, and reporting, receiving water limitations, and discharge prohibitions.

3.6.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to hydrology and water quality are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to hydrology and water quality issues would occur if the project would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i) result in substantial erosion or siltation on- or off-site;
 - ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv) impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Issues Not Discussed Further in this EIR

Affect Groundwater Supplies, Quality, Sustainable Management or Recharge

The project would not involve the use of groundwater during project construction or operation and would not affect any adjacent groundwater users or the recharge of groundwater in the project vicinity. Given that the maximum depth of excavation expected is 5 feet, this excavation would occur just below the levee crown, and the depth to groundwater in the project area is 25-40 feet, the need to dewater any trail segments during construction is not expected. No dewatering would be required during construction of the project. Therefore, this issue is not discussed further in the EIR.

Alteration of Existing Drainage Patterns and Stormwater Runoff

The footprint of the proposed project is not considered large enough to create a substantial increase in runoff from impervious surfaces and overall stormwater runoff patterns would not change along the

project alignment. In Segments 1 and 2, stormwater is expected to infiltrate into the ground before entering the City's stormwater conveyance system. In Segments 3-6, all stormwater would continue to flow to the American River. The trail would be slightly sloped away from the levee crown (toward the river) to encourage sheet flow of stormwater over the ground surface. In areas where trail design may cause minor ponding of water, small drain inlets would be installed to carry water under the bike trail to outlets on the river side of the trail. Outlets would discharge out of a flared end section and onto a small area of rock which would reduce stormwater velocity and disperse the water in a way that reduces the possibility of erosion around the outlet. Therefore, as also presented in **Table 1-5** of **Chapter 1.0** "**Introduction**", these issues are not discussed further in the EIR.

Hazards Associated with Tsunami or Seiche

According to the California Geological Survey, the project area is not mapped in an area where a tsunami or seiche are likely to occur (CGS 2019). Therefore, this issue is not discussed further in the EIR.

Impact Analysis

Impact HWQ-1:

Violate Water Quality Standards or Waste Discharge Standards, Degrade Surface Water Quality, Conflict With Implementation of a Water Quality Control Plan, or Release Pollutants During Flooding

Trail uses following project implementation would be similar to existing uses in the proposed project area (hiking, dog walking, bicycling). Although the number of users along the trail alignment, particularly bicycle commuters, may at times be greater relative to existing conditions, the exact mix of new users who may use the trail, and the assumption that certain types of trail users will degrade water quality conditions in the adjacent American River (particularly regarding the presence of fecal coliform [e.coli]) is speculative. (Less than Significant With Mitigation)

Since the SWRCB uses a "segmented" approach for assigning water bodies to the 303(d) list, any listing of the lower American River automatically includes the entire reach from Nimbus Dam to the Sacramento River confluence. The segment of the American River adjacent to the trail alignment is 303(d) listed as impaired for fecal coliform bacteria. However, the Water Board has recently begun working with Sacramento County and the Sacramento Area Sewer District to conduct weekly e. coli sampling to ascertain primary source areas for e.coli and disseminates this information on the County's website (the most recent samples were collected July 2, 2019). Two of the sampling locations are adjacent to the project trail alignment (Sutter's Landing Park and Paradise Beach) and show only a handful of exceedances of the Bacterial Objective Statistical Threshold Value (320 MPN/100mL) and very few exceedances of Bacterial Objective Geometric Mean Criteria (100 MPN/100mL) over the last several years, as compared to area with numerous exceedances (Steelhead Creek, Discovery Park, Tiscornia Beach) (Sacramento County 2018). Additionally, most E. coli strains are harmless and do not cause human illness (they are the necessary bacteria found in the intestines of mammals). Increased levels of E. coli do not necessarily equate to an increased exposure risk or possibility of illness for swimmers or other users coming into contact with these waters. E. coli are generally found in all recreational waters at various concentrations. Since documented e. coli levels adjacent to the project alignment are generally below acceptable levels and are much lower than other portions of the American River with heavy recreational usage, this impact would be less than significant.

As described in **Chapter 2.0 "Project Description**", the proposed project is limited to short-term construction activities that would cease upon project completion. During work on all trail segments and the cantilever railroad undercrossing, the proposed activities would disturb and expose soils to erosion from wind and stormwater, which could temporarily impair water quality should disturbed material, petroleum products from equipment, or construction-related wastes accidently be discharged into local drainage ditches or onto the ground where they could be carried into receiving waters. Accidental spills of construction-related substances such as oils and fuels could also contaminate both surface water and groundwater. The extent of potential impacts on water quality would depend on several factors: the tendency of erosion of soil types encountered, soil chemistry, types of construction practices, extent of the disturbed area, durations of construction-related contaminants. Construction of the multi-use trail would create a very small amount of new impervious surfaces along the trail alignment. This would result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff.

During project construction, clearing and grubbing of vegetation along the trail alignment, excavation, fill, grading, and compacting of soils may be needed to achieve a suitable trail base and ADA-compliant gradient which could result in short-term increased turbidity or sedimentation in the adjacent American River. Restoration of the site would involve grading and hydroseeding/revegetation after construction. These design features would protect surface water quality in the project vicinity after construction. The proposed project would not increase drainage flows along the alignment after construction. Additionally, the trail would be used by bicyclists and pedestrians, and motorized vehicles would be prohibited on the trail (except for maintenance vehicles). The prohibition on motorized vehicles, and their associated oil, grease and other fluids would also serve to protect water quality along the project alignment, after construction.

The City has adopted standard measures to control erosion and sediment during construction and all projects in the City are required to comply with the City's Standard Construction Specifications for Erosion and Sediment Control. The proposed project would comply with the City's standards set forth in the "Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control." The project would comply with the City's grading ordinance, which specifies construction standards to minimize erosion and runoff (City of Sacramento 2018).

Construction activities would take place primarily during the typical construction season, April 1 to November 15, which corresponds to the dry season during which rain, and resulting stormwater runoff and ponding are not expected in this region. However, during earthmoving activities close to a waterway, impacts to water quality could occur due to accidental release of sediment or other contaminants. Thus, this impact would be **potentially significant**. Implementation of **Mitigation Measure BIO-3** (more fully described in **Section 3.2** "**Biological Resources**") would reduce the impacts to **less than significant** by requiring the implementation of water quality and erosion control best management practices in accordance with the appropriate SWPPP that would ensure no water quality standards or waste discharge requirements would be violated. In addition, the proposed project is subject to the water quality and erosion prevention provisions outlined under the CDFW Streambed Alteration Agreement. Therefore, this impact would be **less than significant** with the incorporation of **Mitigation Measure BIO-3**.

Mitigation Measures

Mitigation Measure BIO-3: Prepare and Implement a Storm Water Pollution Prevention Plan, Spill Prevention and Control Plan, and Associated Best Management Practices. See Section 3.2 "Biological Resources" for a complete description of the mitigation measure.

Impact HWQ-2: Result in Erosion or Flood Impacts?

As discussed in the setting description, the project alignment (Segments 3-6) is located on the waterside of the levee, and therefore, is within a designated floodway and the 100-year floodplain. To understand the effect that the trail and railroad undercrossing structures may have on flood flows within the project area, a Hydraulic Assessment of Existing and Project Conditions has been prepared for the project alignment (cbec 2018). (Less than Significant With Mitigation)

Under the HEC-RAS two-dimensional hydraulic analysis, the cross-sectional area of the river was compared in the pre- and post-project conditions to determine if 1% or more of the river conveyance would be blocked by the proposed project during four different flow scenarios (ranging from 115,000 cfs to 192,000 cfs). The 1% threshold was established based on USACE guidance (Kukas 2014). Analysis determined that the trail footprint itself would not impact the modeled water surface elevation due to the limited topographic changes resulting from trail placement. In the model, railroad undercrossing structures were conservatively represented as complete obstructions across the width of the structural support columns to simplify calculations. Under this condition, the maximum reduction in conveyance for both undercrossings, was 0.28%, which is well below the 1% threshold. Thus, the project features are not expected to impede flood flows during or after construction and would not substantially increase exposure of people or property to injury or damage due to flooding. Therefore, this impact would be **less than significant**, with no mitigation required.

Flooding and periodic inundation are a concern along portions of the project alignment since the waterside of the levee is within the floodway and portions of the alignment may be subject to high flows and sedimentation. Although surrounded by levees, the American River Parkway is a dynamic riverine environment, and continual sediment transport and deposition, and recruitment and disposition of riparian and floodplain trees and other vegetation is a part of the natural cycle as the river meanders throughout the Parkway and experiences seasonal high flows. Inundation during high flows, and subsequent clean-up, repairs, and maintenance are common occurrences for recreational facilities along the Parkway, including trails. The majority of the trail will be paved, which will reduce maintenance costs. Additionally, maintenance of the trail will be the responsibility of the City Public Works Department, and will be coordinated with ARCFD, and County Parks. Therefore, this impact would be **less than significant**, with no mitigation required.

Operations and maintenance of the flood system adjacent to the proposed trail may be of concern to some trail users and nearby residents. Levee operation and maintenance activities along the south bank of the American River are conducted by ARFCD in accordance with the Supplement to Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project Unit No. 118- Part No. 1 (USACE 1955). Levees in this area are were constructed to pass 115,000 cfs with 5 feet of freeboard or 152,000 cfs with 3 feet of freeboard, whichever is higher. Subsequent levee improvements allow the levees to convey a peak release of 160,000 cfs (the Folsom Dam emergency objective release).

The inundation regime along the Segments 3-6 of the project alignment is dependent on releases from Folsom Dam. The effects of the 1986 and 1997 floods raised concerns over the adequacy of the existing flood management system, including areas along the American River. The results of these investigations led to authorization of several flood risk management projects, including the Folsom Dam Safety/Flood Damage Reduction Project, also known as the Joint Federal Project (JFP), the Folsom Dam Raise, the American River Common Features flood damage reduction project and general reevaluation (GRR).

Construction of the ongoing JFP was completed in 2017. Per Section 101(e) of the Water Resources Development Act (WRDA) of 1999, the Corps was directed by Congress to update the Water Control Manual (WCM) for Folsom Dam to fully realize the flood risk management and dam safety benefits of the completed Folsom Dam Modifications (now JFP). Sections 101(b) and 101(e) of the Act also directed the Corps to reduce variable space allocation to a range between 400,000 af and 600,000 af, and to evaluate the feasibility of incorporating improved weather forecasts into an updated WCM for Folsom Dam and Lake (Manual Update) (USACE 2017). The purpose of the Manual Update is to establish new operational changes to fully realize the flood risk management and dam safety benefits of the new auxiliary spillway in coordination with Reclamation, CVFPB, the California Department of Water Resources (DWR), and SAFCA. The crest of the auxiliary spillway is 50 feet lower than the main spillway. This improved the ability of Folsom Dam to manage large flood events by allowing more water to be safely released earlier in a storm event, resulting in more storage capacity remaining in the reservoir to hold back the peak inflow. The update of the water control manual is ongoing, with a draft Water Control Manual Update released in June 2017, along with a Draft Supplemental Environmental Assessment (EA)/Environmental Impact Report evaluating impacts of the manual update and any subsequent changes in operations on Folsom Dam, including hydraulic and flood impacts to the downstream lower American River.

Changes at Folsom Dam to allow additional releases necessitated improvements to downstream levees to ensure adequate channel capacity and levee stability, including in areas along the project alignment. Levee improvements along the American River have been ongoing for several years; some levees were raised and slurry walls were added to miles of levee along the north and south banks, in order to address seepage and stability concerns. These improvements (the American River Common Features Project) were funded by the 1996 and 1999 Federal WRDAs (USACE 2015, Figure 2-11). The American River Common Features Project was designed to operate in conjunction with Folsom Dam and provide the ability to convey emergency objective releases while providing flood protection along the lower American River.

Additionally, erosion protection projects identified in the American River GRR are ongoing and will further reduce the chance of levee erosion during flood releases. The only sites along the project alignment that have been identified as high-risk erosion sites by the Lower American River Task Force - Bank Protection Working Group, to be repaired with WRDA 2016 funding, are along a portion of Segment 5. As of March 2019, 10% designs for erosion repairs along this reach have been submitted to the Corps, and project construction is planned for 2020 (LARTF 2019). Completion of armoring and erosion repair projects is expected by 2025 (USACE 2017) and will enable optimal operation of the Folsom JFP.

A Final SEA/EIR for the Water Control Manual Update was released in January 2019 and concluded that downstream hydraulic impacts due to releases governed by the Manual Update, in concert with implementation of the erosion protection recommended by the American River Common Features GRR (USACE 2015) and implemented by Lower American River Task Force, Bank Protection Working

Group, would reduce the risk of potential bank and channel erosion impacts to **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Residual Significant Impacts

Mitigation that would reduce potential water quality impacts to a less-than-significant level have been identified and therefore there would be no residual significant impacts to hydrology or water quality conditions.

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3.7 Land Use and Planning

3.7.1 Introduction

This section provides an overview of the land use and planning framework within the project study area and provides analysis of the potential impacts related to land use and planning that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comment was received regarding:

• Consistency with the American River Parkway Plan (ARPP), including resource conservation policies, trail design policies, and policies related to the Discovery Park and Paradise Beach Area Plans within the ARPP.

Consistency with the ARPP policies is addressed in detail in Impact LUP-1, below.

3.7.2 Environmental Setting

The majority of the proposed trail alignment (from Sutter's Landing Regional Park to H Street) is designated as "Parks and Recreation" on the City's General Plan Land Use Diagram. The westernmost portion of the trail (between the Sacramento Northern Bikeway Trail and Sutter's Landing Regional Park) is designated "Employment Center Low Rise" and identified as a "Proposed Park/Parkway" in the 2035 General Plan. The project site is zoned A-OS (Agricultural–Open Space), M-2 (Heavy Industrial), and ARP-F (American River Parkway–Floodplain).

3.7.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

No Federal plans, policies, regulations, or laws related to land use and planning are relevant to the analysis of land use and planning impacts for the project.

State Plans, Policies, Regulations and Laws

No State plans, policies, regulations, or laws related to land use and planning are relevant to the analysis of land use and planning impacts for the project.

Regional and Local Plans, Policies, Regulations, and Ordinances

City of Sacramento 2035 General Plan

The following goals and policies from the Land Use and Urban Design Element (LU) Element are relevant to the proposed project (City of Sacramento 2015).

Policy LU 1.1.5 Infill Development. The City shall promote and provide incentives (e.g., focused infill planning, zoning/rezoning, revised regulations, provision of infrastructure) for infill development, redevelopment, mining reuse, and growth in existing urbanized areas to enhance community character, optimize City investments in infrastructure and community facilities, support increased transit use, promote pedestrian- and bicycle-friendly neighborhoods, increase housing diversity, ensure integrity of historic districts, and enhance retail viability.

- **GOAL LU 2.3:** City of Trees and Open Spaces. Maintain multi-functional "green infrastructure" consisting of natural areas, open space, urban forest, and parkland, which serves as a defining physical feature of Sacramento, provides visitors and residents with access to open space and recreation, and is designed for environmental sustainability.
- **Policy LU 2.6.1 Sustainable Development Patterns.** The City shall promote compact development patterns, mixed use, and higher-development intensities that use land efficiently; reduce pollution and automobile dependence and the expenditure of energy and other resources; and facilitate walking, bicycling, and transit use. (RDR)
- **GOAL LU 4.2:** Suburban Neighborhoods. Encourage the creation of more complete and welldesigned suburban neighborhoods that provide a variety of housing choices and mix of uses that encourage walking and biking.
- **Policy LU 4.2.1 Enhanced Walking and Biking.** The City shall pursue opportunities to promote walking and biking in existing suburban neighborhoods through improvements such as:
 - Introducing new pedestrian and bicycle connections.
 - Adding bike lanes and designating and signing bike routes.
 - Narrowing streets where they are overly wide.
 - Introducing planting strips and street trees between the curb and sidewalk.
 - Introducing traffic circles, speed humps, traffic tables, and other appropriate traffic-calming improvements.
- Policy LU 5.4.3 Connectivity to Regional Centers. The City shall require greater pedestrian and bicycle connections between mixed-use regional commercial centers and surrounding neighborhoods.
- **GOAL LU 9.1: Open Space, Parks, and Recreation.** Protect open space for its recreational, agricultural, safety, and environmental value and provide adequate parks and open space areas throughout the city.
- Policy LU 9.1.1 Open Space Preservation. The City shall place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, public safety, water and agricultural resources protection, and overall community benefit.

City of Sacramento Bicycle Master Plan

The purpose of the Sacramento City Bicycle Master Plan (City of Sacramento 2018) is to establish bicycle-related investments, policies, programs and strategies to establish a complete bicycle system. This will encourage more bicycling by the citizens of Sacramento for both transportation and recreation, thereby allowing the City of Sacramento to meet General Plan emission targets. The Bicycle Master Plan was updated in 2018 to further engage under-represented neighborhoods, evaluate the equity related to bicycle infrastructure, and identify best practice bikeway designs to better connect the City's Low-stress bikeway network. The proposed project is included within the 2018 Master Plan (see Figure 22).

American River Parkway Plan

The American River Parkway Plan (ARPP, Sacramento County 2008) is a policy and implementation guide developed to promote the preservation of the American River's natural environment while providing limited development for human enjoyment of the parkway. The American River Parkway (Parkway) is an open space greenbelt approximately 29 miles long extending west/southwest along the north and south sides of the Lower American River from Folsom Dam to its confluence with the Sacramento River. The ARPP divides the Parkway into smaller area plans that include specific guidelines and descriptions for individual segments of the Parkway. The proposed project is located within the Woodlake and Paradise Beach ARPP areas. These areas are predominately designated as Protected Areas under the ARPP, with habitat preservation and recreation-related activities being the primary uses. Trail recreation activities are permitted in the Protected Area land use category, and include walking, running, horseback riding, hiking, bicycling and in-line skating. These activities are permitted on designated trails only.

The following policies from the ARPP are relevant to analysis of land use impacts of the project:

- 3.1 Any development of facilities within the parkway, including but not limited to buildings, roads, turfed areas, trails, bridges, tunnels, pipelines, overhead electrical lines, levees and parking areas, shall be designed and located such that any impact upon native vegetation is minimized and appropriate mitigation measures are incorporated into the project.
- 3.2 Agencies managing the parkway shall protect, enhance and expand the parkway's native willow, cottonwood, and valley oak-dominated riparian and upland woodlands that provide important shaded riverine aquatic habitat (SRA), seasonal floodplain, and riparian habitats; and the native live oak and blue oak woodlands and grasslands that provide important terrestrial and upland habitats.
- 5.13 A separate designated pedestrian trail shall be provided along the entire length of the parkway. The pedestrian trail will be adjacent to the existing paved Jedediah Smith Memorial (bicycle) trail where practical given the width of the area and location of trees and other natural resources. New trail sections shall avoid heavily vegetated areas and low floodplain locations subject to frequent inundation. This trail shall not be paved; instead, it shall have a naturalistic design and surface that is stable, firm, and slip-resistant in order to support assistive devices for persons with disabilities.
- 7.9 Activities in the Protected Areas shall include all Nature Appreciation, all Trails Recreation and Aquatic Recreation. Recreational Enjoyment activities are restricted to limited family unit picnicking along trails.
- 7.18 Adverse impacts on adjacent land, such as dust, traffic congestion or noise, caused by parkway uses shall be eliminated or mitigated.
- 8.2 Access points and parking lots shall be located where there is the least potential environmental damage and adverse impact on the parkway's environment and surrounding neighborhoods.

- 8.3 It is the preference of this plan that jurisdictions adjacent to the parkway plan for safe and convenient routes on local streets for bicyclists and pedestrians traveling to designated parkway access points.
- 8.4 Parkway Managers shall encourage walking, bicycling, horseback riding, public transit and boating as forms of transportation to the parkway. This is particularly important during peak use holidays and weekends to reduce traffic congestion and air pollution. In addition to its importance for recreational activities, the Jedediah Smith Memorial Trail is recognized and shall be maintained as an important bicycle transportation route in the Sacramento region.
- 8.17 All new facilities and renovations or alterations of existing facilities, where applicable for the intended use and access of the facility, shall be accessible to persons with disabilities. designated entryways for accessible trails shall be installed at several locations throughout the parkway. All trails designated for persons with disabilities shall be appropriately signed to serve persons with disabilities.
- 10.4 Strengthen the Discovery Park Area's connections with the Sacramento Riverfront and with the surrounding urban neighborhoods in the Richards Boulevard and Natomas areas in ways that promote increased access and connectivity into the parkway.
- 10.4.2 Support construction of a Two Rivers Trail extension to H Street that will provide direct connectivity from California State University Sacramento to downtown Sacramento. The trail should be constructed on top of the levee where feasible.
- 10.18.3 Connect the north levee trail to the Two Rivers Trail on the south side of the American River through construction of a bike/pedestrian bridge attached to, or in the vicinity of, the Capital City Freeway crossing.
- 10.26 Permanent structures and any other physical changes that would attract groups of users should not be introduced to the [Paradise Beach] area.

American River Flood Control District Recreational Trails Policy

The ARFCD recreational trails policy (ARFCD, 2002) calls for ARFCD to support creation of recreational trails. The policy identifies the priority of ARFCD operations over recreational uses and requires trails to be located off the levee crown where feasible; the ARFCD board may permit a trail to be constructed on the levee crown on a case-by-case basis, with conditions.

3.7.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to land use are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to land use issues would occur if the project would:

- a) Physically divide an established community.
- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Issues Not Discussed Further in this EIR

Divide Established Community

The project site is located along City-owned lands and the Parkway, and generally follows the American River. The presence of the project would not divide any established community.

Impact Analysis

Impact LUP-1: Conflict with Land Use Plans: American River Parkway Plan

The proposed project is identified as a future project in the American River Parkway Plan, and construction and operation of the project would be consistent with the Plan (No Impact).

The proposed project would be constructed and operated within the Parkway. Segments 1 and 2 would provide a linkage between existing trail segments in the Woodlake Area, although most of the Segment 1 and 2 alignments would be located outside of the Parkway itself. Segments 3 through 6 would be located within the Paradise Beach Area. Most of the trail would be constructed in areas designated as "Protected Areas" by the ARPP. Trails recreation activities, including walking, running, horseback riding, hiking, bicycling, and in-line skating are permitted on designated trails only within Protected Areas.

The Resource chapter of the ARPP includes policies calling on agencies to protect and enhance riparian and upland woodlands, including minimizing impacts on native vegetation and incorporating mitigation measures into the project. The project has been designed to minimize impacts on native vegetation, including reducing the width of the trail, and further reducing the width of the shoulder where necessary to reduce impacts on trees and riparian vegetation. Please refer to **Section 3.2**, "**Biological Resources**", for a detailed description of the project's impacts on riparian vegetation, and associated mitigation measures.

Language in the Discovery Park Area Plan supports the construction of an extension of the Two Rivers Trail on the south bank of the American River to connect California State University-Sacramento and Downtown Sacramento. The policy language states that the trail should be constructed on the levee top where feasible. The American River Flood Control District has implemented a recreational trails policy prohibiting trails on the levee top in most instances, and the proposed project has been designed in compliance with this policy.

The Paradise Beach Area Plan includes only one policy, prohibiting structures or changes that would attract groups of users. This policy addresses historical concerns related to parties at the beach, and vehicular access limitations due to the small parking area at Glenn Hall Park.

The proposed project was identified as a future improvement in the ARPP, and the project has been designed in compliance with this plan, and with related requirements of the ARFCD. Consequently, **no impact** would occur and no mitigation is required.

Mitigation Measure: No mitigation is required.

Residual Significant Impacts

As more fully described above in **Impact LUP-1**, the proposed project would not conflict with applicable policies identified in the American River Parkway Plan and therefore there would be no residual significant impacts related to land use and planning.

3.8 Noise

3.8.1 Introduction

This section provides an overview of the existing noise conditions within the project study area, identifies the regulatory framework for this resource, and provides and analysis of the potential noise impacts that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comment was received regarding:

- Existing noise and potential for increased noise from trail users along the levee top.
- Potential new sources of noise from trial users, including: new trail users playing music with portable speakers; the potential for 24-hour use of the trail leading to unacceptable levels of nighttime noise; and that more pedestrians may use the top of the levee to avoid conflicts with bicyclists on the paved trail, creating new sources of noise closer to adjacent residents.

Noise impacts from all aspects of the proposed project (i.e., construction, maintenance, and trail use) is addressed in detail in **Impact NOS-1**, below.

3.8.2 Environmental Setting

Sound is the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium, such as air. Noise is defined as sound that is unwanted (loud, unexpected, or annoying). Excessive exposure to noise can result in adverse physical and psychological responses (e.g., hearing loss and other health effects, anger, and frustration); interfere with sleep, speech, and concentration; or diminish the quality of life.

The perceived loudness of sounds depends on many factors, including sound pressure level and frequency content. However, within the usual range of environmental sound levels, perception of loudness is relatively predictable, and can be approximated through frequency filtering using the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (decibels expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard descriptor for environmental noise assessment. All noise levels reported in this section are in terms of A-weighting.

Groundborne vibration is energy transmitted in waves through the ground. Vibration attenuates at a rate of approximately 50% for each doubling of distance from the source.

Noise-Sensitive Receptors

The project site is in central Sacramento. Construction access would be via local roadways, including 28th Street, Carlson Drive, Camellia Drive and H Street. Land uses defined by Federal, State, and local regulations as noise-sensitive vary slightly but typically include schools, hospitals, rest homes, places of worship, long-term care facilities, mental care facilities, residences, convalescent (nursing) homes, hotels, certain parks, and other similar land uses. The Technical Noise Supplement (Caltrans 2013) defines a noise receiver or receptor as "any natural or artificial sensor that can perceive, register or be affected by sound, such as a human ear, or a microphone." The closest noise-sensitive receptors are residences located within 85 feet of construction areas. Residences, and two schools and two churches

(Caleb Greenwood Elementary, Fremont Presbyterian Church and School, Sacramento Central Seventh-Day Adventist Church) along local haul routes are also noise-sensitive uses potentially affected by the project. The primary existing noise sources near the project site include vehicular traffic, the UPRR line, and low amounts of noise from adjacent residential and recreational activities.

Noise is defined as unwanted sound. Sound levels usually are measured and expressed in decibels (dB), with 0 dB being the lowest threshold of hearing. Decibel levels range from 0 to 140: 50 dB for light traffic is considered a low decibel level, whereas 120 dB for a jet takeoff at 200 feet is considered a high decibel level. The vicinity of the project area is most similar to that of "Normal suburban residential urban areas have a typical noise level of 50-55 dBA. **Table 3.8-1** summarizes typical ambient noise levels based on population density.

Population Density	dBA, Ldn
Rural Suburban	40–50
Quiet suburban residential or small town	45–50
Normal suburban residential urban	50–55
Normal urban residential	60
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75–80
Under flight path at major airport, 0.5 to 1 mile from runway	78–85
Adjoining freeway or near a major airport	80–90

Table 3.8-1. Population Density and Associated Ambient Noise Levels

Source: Hoover and Keith 1996

The majority of the proposed trail alignment (from Sutter's Landing Regional Park to H Street) is designated as "Parks and Recreation" on the City's General Plan Land Use Diagram. The westernmost portion of the trail (between the Sacramento Northern Bikeway Trail and Sutter's Landing Regional Park) is designated "Employment Center Low Rise" and identified as a "Proposed Park/Parkway" in the 2035 General Plan. The project site is zoned A-OS (Agricultural–Open Space), M-2 (Heavy Industrial), and ARP-F (American River Parkway–Floodplain).

3.8.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

No Federal plans, policies, regulations, or laws related to noise are relevant to the analysis of impacts for the project.

State Plans, Policies, Regulations and Laws

No State plans, policies, regulations, or laws related to noise are relevant to the analysis of impacts for the project.

Regional and Local Plans, Policies, Regulations and Ordinances

Sacramento County Parks Ordinances

6.68.150 General Noise Regulations: Notwithstanding any other provisions of this chapter and in addition thereto, it is unlawful for any person to willfully make or continue or cause to be made or continued any loud, unnecessary or unusual noise which disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. The standards which shall be considered in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:

- a. The sound level of the objectionable noise;
- b. The sound level of the ambient noise;
- c. The proximity of the noise to residential sleeping facilities;
- d. The nature and zoning of the area within which the noise emanates;
- e. The density of the inhabitation of the area within which the noise emanates;
- f. The time of day or night the noise occurs;
- g. The duration of the noise and its tonal informational or musical content;
- h. Whether the noise is continuous, recurrent or intermittent;
- i. Whether the noise is produced by a commercial or noncommercial activity. (SCC 254 § 1 (part), 1976.)

9.36.072 Sound Amplification Equipment: Within any park facility, no person shall use sound amplification equipment in excess of the noise levels provided by Chapter 6.68 of this code without a permit from the director. (SCC 0713 § 5, 1988; SCC 36 § 2 (part), 1971.)

6.68.145 Radios, Tape Players on Publicly Owned Property: Notwithstanding any other provision of this Code and in addition thereto, it is unlawful for any person to permit or cause any noise, sound, music or program to be emitted from any radio, tape player, tape recorder, record player or television outdoors on or in any publicly owned property, park or place when such noise, sound, music or program is audible to a person of normal hearing sensitivity one hundred feet from said radio, tape player, tape recorder, record player or television.

- a. As used herein, "a person or normal hearing sensitivity" means a person who has a hearing threshold level of between zero (0) decibels and twenty-five (25) decibels HL averaged over the frequencies 500, 1,000 and 2,000 Hertz.
- b. Notwithstanding any other provision of this Code, any person violating this section shall be guilty of an infraction and upon conviction thereof, is punishable by a fine not exceeding fifty dollars for a first violation; a fine not exceeding one hundred dollars for a second violation of this section within one year; a fine not exceeding two hundred fifty dollars for each additional violation of this section within one year. A person who violates the provisions of this section

shall be deemed to be guilty of a separate offense for each day, or portion thereof, during which the violation continues or is repeated.

- c. Notwithstanding Sections 6.60.010 and 6.68.230 or any other provision of this Code, no citation or notice to appear shall be issued or criminal complaint shall be filed for a violation of this section unless the offending party is first given a verbal or written notification of violation by any peace officer, public officer, park ranger or other person charged with enforcing this section and the offending party given an opportunity to correct said violation.
- d. This section shall not apply to broadcasting from any aircraft, vehicle or stationary sound amplifying equipment as defined and regulated in Chapter 5.56 or to the use of radios, tape players, tape recorders, record players or televisions in the course of an assembly or festival for which a license has been issued pursuant to Section 9.36.072 or a parade for which a permit has been issued pursuant to Section 10.32.020 or any other activity, assembly or function for which a permit or license has been duly issued pursuant to any provision of the Code. (SCC 490 § 1, 1981.)

City of Sacramento 2035 General Plan

The following goals and policies from the Environmental Constraints (EC) element are relevant to the proposed project (City of Sacramento 2015).

Construction noise is regulated by the City of Sacramento. Chapter 8.68 of the City of Sacramento Municipal Code contains application noise regulations within City limits:

Section 8.68.060 – Exterior Noise Standards

- a. The noise standards that apply to all agricultural and residential properties are:
 - 1. From seven a.m. to ten p.m. the exterior noise standard shall be fifty-five (55) dBA.
 - 2. From ten p.m. to seven a.m. the exterior noise standard shall be fifty (50) dBA.

Construction noise for the proposed project is exempt under City Code Section 8.68.080 as long as all work is compliant with noise code requirements that restrict construction activity to the following hours: 7am to 6pm, Monday through Saturday, and 9am to 6pm on Sundays. Work that occurs outside of these hours could result in noise that exceeds the 55-dBA daytime standard or 50-dBA nighttime standard. The contractor would be required to comply with the noise ordinance during construction activities. However, if construction activities generate noise in violation of the timeframes described above, the contractor will be required to obtain the proper variances as outlined in Sections 8.68.250 and 8.68.260.

GOAL EC 3.1: Noise Reduction. Minimize noise impacts on human activity to ensure the health and safety of the community.

• **Policy EC 3.1.1 Exterior Noise Standards.** The City shall require noise mitigation for all development where the Projected exterior noise levels exceed those shown in **Table 3.8-2** below, to the extent feasible.

Land Use Type	Highest Level of Noise Exposure That is Regarded as "Normally Acceptable"	
Residential- Low Density Single Family, Duplex, Mobile Homes	60 dBA	
Residential- Multi-family	65 dBA	
Transient Lodging- Motels, Hotels	65 dBA	
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA	
Auditoriums, Concert Halls, Amphitheaters	Mitigation Based on site-specific study	
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study	
Playgrounds, Neighborhood Parks	70 dBA	
Golf Courses, Riding stables, Water Recreation, Cemeteries	75 dBA	
Office Buildings- Businesses, Commercial and Professional	70 dBA	
Industrial, Manufacturing, Utilities, Agriculture	75 dBA	
Source: City of Sacramento 2009		

Table 3.8-2. Exterior Noise Compatibility Standards for Various Land Uses

 Policy EC 3.1.2 Exterior Incremental Noise Standards. The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in Table 3.8-3, to the extent feasible.

Table 3.8-3.Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses
(dBA)

Residences and Buildings where people normally sleep		Institutional land uses with primarily daytime and evening uses	
Existing (Ldn)	Allowable Noise Increment	Existing Peak hour (Leq)	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

Source: City of Sacramento 2009

 Policy EC 3.1.3 Interior Noise Standards. The City shall require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA Ldn (Ldn = Day/Night Average Sound Level) for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and 45 dBA Leq (peak hour) for office buildings and similar uses.

- Policy EC 3.1.4 Interior Noise Review for Multiple, Loud Short-Term Events. In cases where new development is proposed in areas subject to frequent, high-noise events, (such as aircraft overflights, or train and truck pass-bys), the City shall evaluate noise impacts on any sensitive receptors from such events when considering whether to approve the development proposal, taking into account potential for sleep disturbance, undue annoyance, and interruption in conversation, to ensure that the proposed development is compatible within the context of its surroundings.
- Policy EC 3.1.5 Interior Vibration Standards. The City shall require construction Projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.
- **Policy EC 3.1.7 Vibration.** The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.
- **Policy EC 3.1.9 Compatibility with Park and Recreation Uses.** The City shall limit the hours of operation of parks and active recreation areas in residential areas to minimize disturbance to residences.
- Policy EC 3.1.10 Construction Noise. The City shall require development Projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

3.8.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to noise and vibration are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to noise and vibration issues would occur if the project would:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable standards of other agencies, including:
 - i. result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
 - ii. result in residential interior noise levels of 45 dBA Ldn or greater caused by noise level increases due to the project?
- b) Generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
Issues Not Discussed Further in this EIR

Conflict With An Airport Land Use Plan or Location Within Two miles of An Airport Resulting In Excessive Noise

The project alignment is not located within an airport land use plan area and is not located within wo miles of an airport (SACOG 2013). Thus, noise associated with these issues are not discussed further in this EIR.

Impact Analysis

Impact NOS-1:Cause A Temporary or Permanent Increase in Ambient Noise Levels In Excess
Of Applicable Standards

The proposed project would not violate any of the City's construction noise standards or result in operational uses that would directly increase ambient noise levels in the vicinity of the project beyond existing conditions. (Less than Significant).

Implementation of the proposed project would generate construction noise from equipment operating at the project site, and from the transport of construction workers, construction materials, and equipment to and from each work location. The list of construction equipment that would be used for project construction activities is shown in **Table 3.8-4** with typical noise levels generated at 50 feet from the equipment (reference levels).

	Noise Levels (dBA)		
Type of Equipment	Lmax at 50 Feet	L _{eq} at 50 Feet	
Equipment/Supply Transport Trucks	84	80	
Front-end Loader	80	76	
Bulldozer	85	81	
Highway Dump Truck	84	80	
Grader	85	81	
Water Truck	84	80	
Self-propelled Sheepsfoot or Tamping Roller	85	78	
Vibratory Smooth-wheel Compactor	80	73	
Forklift	85	78	
Concrete Transit Truck	84	80	
Lubricating Truck	84	80	
Pick-up Truck	55	51	
Hydro-seed Truck	84	80	

Table 3.8-4. Construction Equipment and Typical Equipment Noise Levels

Notes:

L_{max} = maximum instantaneous sound level; L_{eq} = 1-hour equivalent sound level (the sound energy averaged over a continuous 1-hour period) Source: Construction equipment list based on Federal Highway Administration 2006, adapted by GEI Consultants, Inc. in 2016 and 2017

The 2035 General Plan establishes acceptable exterior noise levels in Policy EC 3.1.1. Acceptable exterior noise levels for land uses in the vicinity of the project site range from a weighted 24-hour

average of 60 dBA for low-density residential to 70 dBA for schools, parks, office buildings, and urban residential projects, to 75 dBA for industrial uses. Depending on the existing exterior noise environment, incremental noise increases can also be significant, even if the noise compatibility standards are not exceeded. Chapter 8.68.060 (Exterior Noise Standards) establishes acceptable noise levels of 55 dBA from 7 a.m. to 10 p.m. for residential properties.

Chapter 8.68.080 (Exemptions) of the Sacramento City Code exempts construction noise from its noise standards, provided that construction noise occurs between the hours of 7:00 am and 6:00 pm Monday through Saturday and between the hours of 9:00 am and 6:00 pm on Sunday. Since all project-related construction activities would only occur within the hours specified in the City's code, the proposed project would not result in a violation of the City's construction noise standards. Therefore, this impact would be **less than significant**, with no mitigation required.

Activities associated with trail maintenance would also be similar to existing levee maintenance activities. Typical maintenance activities during project operation would include routine inspections, debris removal, and repair of cracks and slope failures. Mowing would occur four times per year, and tree and vegetation trimming would occur on an annual basis. Because operation of the trail would not introduce significant new noise sources or expose new sensitive receptors to noise, this impact would be **less than significant**, with no mitigation required.

Trail uses following project implementation would be similar to existing uses in the proposed project area (hiking, dog walking, bicycling). Although the number of users along the trail alignment, particularly bicycle commuters, may at times be greater relative to existing conditions, there would be no change to current regulations prohibiting motorized vehicles on the trail. Additionally, in the absence of an established paved trail, existing trail users have been documented to use existing gravel paths along both the levee toe and levee crown. Establishment of a (majority) levee toe paved bike trail with adjacent areas designated for pedestrians will likely reduce the use of the exposed levee crown path by many users and reduce the effect of noise from trail users on nearby residences, except in the small portion of Segment 4 where flood management infrastructure integrity requires construction along the levee crown due to the absence of a toe wide enough for trail placement. Prohibition of access to any portion of the flood management system (i.e. the levee toe or crown) is under the jurisdiction of the applicable local maintaining agency (ARCFD) and the decision to restrict access to any portion of the American River Parkway is under the jurisdiction of County Parks. ARCFD and County Parks do not currently place any restrictions on access to public lands in the project vicinity, including any portion of the levee or Parkway, except for areas where locked gates or fencing may be present (i.e. pumping facilities); the areas are open to recreation and associated ambient noise levels associated with allowed recreational activities.

Additionally, compliance with all applicable noise ordinances and laws that govern City and County lands along the trail alignment is the personal responsibility of trail users. Any trail user in violation of noise standards as described in Sacramento County Park ordinances, City code, or the City General Plan is subject to citation and/or removal at the discretion of law enforcement agencies with jurisdiction along the trail alignment. Trail uses following project implementation would be similar to existing allowable uses and no other mobile sources of noise will be introduced. Thus, operation of the trail will not directly increase ambient noise levels in the vicinity of the project beyond existing conditions, and therefore this impact would be **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Impact NOS-2: Generate Excessive Groundborne Vibration or Groundborne Noise Levels

Construction equipment and traffic associated with the proposed project would not generate excessive groundborne vibration or groundborne noise levels. (Less than Significant).

Operation of some construction and maintenance equipment, and construction traffic would produce groundborne vibration. Project-related vibration levels were estimated using FTA's guidelines for environmental impact assessment to calculate a screening distance for vibration effects. The calculated screening distance is based on FTA's reference vibration levels for construction equipment (shown in **Table 3.8-5**). The highest reference vibration level for equipment used in constructing or maintaining the project is associated with use of a vibratory roller, approximately 94 VdB (0.210 inch per second PPV) at a distance of 25 feet (Caltrans 2013; FTA 2006). This vibration level at 25 feet is below the City of Sacramento's 0.5 inch per second PPV threshold. Although the use of a vibratory roller within 25 feet of the UPRR overcrossing (a historic structure) would exceed the City's 0.2 inch per second PPV standard, the UPRR overcrossing is built to withstand the vibration produced by freight and passenger rail traffic, well in excess of that produced by a vibratory roller. Therefore, impacts related to groundborne vibration from the operation of construction and maintenance equipment would be **less than significant**, with no mitigation required.

PPV at 25 feet (in/sec)	Approximate VdB at 25 feet
0.089	87
0.210	94
0.089	87
0.076	86
0.035	79
0.003	58
	PPV at 25 feet (in/sec) 0.089 0.210 0.089 0.076 0.035 0.003

 Table 3.8-5.
 Vibration Source Levels for Construction Equipment

Notes: PPV = peak particle velocity; in/sec = inches per second; VdB = vibration decibels Source: Federal Transit Administration 2006

Unless there are substantial discontinuities in local roads, groundborne vibration generated by traffic traveling on roadways does not exceed FTA standards (FTA 2006). The project-generated construction traffic would use established roadways and thus potential project impacts related to groundborne vibration from construction traffic would be **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Residual Significant Impacts

As more fully described above, construction, maintenance, and use of the recreation trail would not exceed local noise standards or result in groundborne vibration or noise levels. Therefore, there would be no residual significant impacts related to noise or vibration.

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3.9 Public Services, Recreation, and Utilities

3.9.1 Introduction

This section provides an overview of the existing public services, utilities, and recreation facilities within the project study area, identifies the regulatory framework, and provides and analysis of the potential impacts on public services, recreation, and utilities that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comments were received regarding:

- potential increased risk of fire and increased demand for police and emergency medical services with increased usage of trails;
- baseline existing recreational uses on the project site, and potential adverse effects on existing
 recreational use, including conflicts between bicycles and other trail users, and impacts on restrooms
 at Glenn Hall Park.

Increased demand for emergency medical services is addressed below in Impact **PSR-1** below, with demand for police services addressed in Impact **PSR-2**. Potential adverse effects on existing recreational use is addressed in Impact **PSR-3**. The related issue of increased wildfire risk is addressed in **Chapter 1.0** "Introduction" (see Table 1-5).

3.9.2 Environmental Setting

Public Services

Public Safety

The project site is located within the City of Sacramento and within the Woodlake and Paradise Beach areas of the American River Parkway (Parkway). The Sacramento County Park Ranger Unit is generally responsible for day-to-day patrol and law enforcement within the Parkway. The City of Sacramento Police (SPD) and Sacramento County Sheriff 's Department have concurrent law enforcement responsibilities within their respective jurisdictions where those jurisdictions overlap within the Parkway. Portions of the project alignment that are within Sutter's Landing Regional Park are also under the jurisdiction of City of Sacramento Park Rangers. The project lies within SPD Police District 3A, 3B, and 6E (SPD 2017). Other public safety agencies that provide law enforcement within the Parkway on a less frequent basis include CDFW, the California Highway Patrol, Cal Expo Police and the CSUS Police Department (Sacramento County 2008).

Police resources are allocated and assigned on an annual basis based upon several factors, including, but not limited to incidents of crime within a geographic area (police beat), population, and police staffing capabilities. Any significant expansion in terms of buildings, population, etc. would be factored into the annual patrol planning analysis when determining the amount of resources (patrol officers) to place in that particular geographic beat for the coming calendar year. (Young, Pers. Comm. 2018) The proposed trail project would not include the expansion of buildings or directly generate additional population growth in the surrounding area.

Fire and Emergency Medical Response

Emergency medical and fire protection is provided by the Sacramento City Fire Department. The project site is located within the Engine Company First-In District or Response Zone for Stations 2 and 4 (trail segments 1-3), and Station 6 (trail segments 4-6) (SFD 2012).

Schools

The City of Sacramento Unified School District provides school services to 42,000 students in the project vicinity.

Recreation

The project site extends from the Sacramento Northern Bikeway to Sutter's Landing Regional Park (Segments 1 and 2), and from Sutter's Landing Regional Park to H Street (Segments 3 through 6).

Segments 1 and 2 are not readily accessible or routinely used for recreation at the time of this Draft EIR's preparation. Segments 3 through 6 are on readily accessible public land and are routinely used for recreation. In Segments 3 through 6, the existing gravel road along the levee crown, the existing road along the levee toe (which includes both gravel and unpaved areas), and informal trails through wooded areas closer to the river are all used for recreation, including walking, jogging, biking, and dog walking.

The American River Parkway Plan (ARPP [Sacramento County 2008]) designates Segments 1 and 2, and Segments 3 through 6 as "Protected Area." Facilities permitted in this designation include surfaced and unsurfaced trails, water fountains, occasional family unit picnic tables, and restrooms located at trail rest stops. Trail recreational activities envisioned in Protected Areas include walking, hiking, running, horseback riding, and bicycling. The Two Rivers Trail is identified as a "proposed bike trail" in the ARPP. The ARPP also identifies activities and facilities for the Paradise Beach area. Due to the limited availability of parking at Glenn Hall Park, and the lack of legal on-street parking in the immediate vicinity of the park, the ARPP recommends that structures or physical changes that would attract groups of users to Paradise Beach should not be introduced.

During public outreach activities conducted by the City of Sacramento during the project planning and design, residents expressed satisfaction with the existing informal use of the levee crown, levee toe, and trails, and expressed concerns about compatibility of trails for bicycles, pedestrians, and dog walkers.

Existing park facilities in proximity to the proposed project include Sutter's Landing Regional Park and Glenn Hall Park. Sutter's Landing Regional Park offers a dog park, skate park, basketball and bocce courts, an existing portion of the Two Rivers Trail, and several parking lots. (City of Sacramento 2018a) Facilities at Glenn Hall Park include a public swimming pool, playground, picnic areas, tennis and volleyball courts, athletic fields, restrooms, and a parking lot. (City of Sacramento 2018b) Other nearby access points to the American River Trail's system of bicycle and pedestrian trails include Discovery Park, Ethan Way, Paradise Beach (at Glenn Hall Park), and Howe Avenue. (ARPF 2018)

The Lower American River has been designated a "Recreational River" under both the California Wild and Scenic Rivers Act and the National Wild and Scenic Rivers Act (NWSR 2018).

Utilities and Services

Water Supply

Water service to the project area is provided by the City of Sacramento. The City provides domestic water service from a combination of surface water and groundwater sources including the American River, Sacramento River, and groundwater wells. Water from the American River and Sacramento River is diverted by two water treatment plants (WTP): the Sacramento River WTP located south of Richards Boulevard between Bercut Drive and Sequoia Pacific Drive and the Fairbairn WTP located at the northeast corner of State University Drive South and College Town Drive. Water diverted from the Sacramento and American Rivers is treated, stored in storage reservoirs, and pumped to customers via an existing conveyance network.

The City of Sacramento complies with the California Water Code, which requires urban water suppliers to prepare and adopt an Urban Water Management Plan (UWMP) every five years. The most recent UWMP was adopted in 2016 (the 2015 UWMP) and includes an analysis of water demand sufficiency under normal, single dry year, and multiple dry year scenarios. Water supply and demand projections include future planned development until 2040.

Due to past severe drought conditions in California, the Governor has issued multiple Executive Orders mandating water use reductions and to support making water conservation a way of life in California. These include urban water use reporting requirements and prohibitions on wasteful practices such as watering during or after rainfall, hosing off sidewalks, and irrigating ornamental turf on public street medians.

Wastewater and Stormwater

The Sacramento Regional County Sanitation District (SRCSD) and the Sacramento Area Sewer District (SASD) and City of Sacramento provide both collection and treatment services within their service area. Wastewater generated in the service area is collected by trunk facilities in the Sacramento Area Sewer District and then conveyed via interceptors to the Sacramento Regional Wastewater Treatment Plant (SRWTP) (SRCSD 2018, SASD 2018). Wastewater within the vicinity of Segments 1 and 2 is collected by the City of Sacramento's Combined Sewer System and wastewater within the vicinity of Segment 3 through 6 is collected by SASD facilities. During non-storm conditions, all wastewater collected is conveyed to the SRCSD system, and ultimately treated at the SRWTP, which is located in Elk Grove.

There are no public restrooms or other wastewater-generating facilities along the project alignment. Local runoff along the project alignment flows by gravity overland during storm events, and also through culverts and vegetated or lined intermittent drainages, ultimately to the American River.

Solid Waste Disposal

Solid waste disposal services in the project area are provided by the Sacramento Regional Solid Waste Authority (SWA). The Sacramento County Kiefer Landfill in Sloughhouse, CA is the primary location for the disposal of waste from the City of Sacramento. The landfill accepts municipal waste and industrial waste and is permitted to accept up to 10,815 tons per day (CalRecycle 2018). It is the only landfill facility in Sacramento County permitted to accept household waste from the public. Current peak and average daily disposal is much lower than the current permitted amounts. As a result, the Kiefer Landfill is expected to be able to provide service to the City, without need for new expansion beyond that already planned, until the year 2065 (City of Sacramento 2014).

Electricity and Natural Gas

Sacramento Municipal Utility District (SMUD) is responsible for the generation, transmission, and distribution of electrical power to its 900 square mile service area, which includes most of Sacramento County and a small portion of Placer County. The Pacific Gas & Electric Company (PG&E) provides natural gas service to residents and businesses within the City of Sacramento.

Telecommunications

AT&T provides telecommunications service in the City of Sacramento and within the project area.

3.9.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

No Federal plans, policies, regulations, or laws related to land use and planning are relevant to the analysis of public services, recreation, or utilities impacts for the project.

State Plans, Policies, Regulations and Laws

No State plans, policies, regulations, or laws related to land use and planning are relevant to the analysis of public services, recreation, or utilities impacts for the project.

Regional and Local Plans, Policies, Regulations and Ordinances

City of Sacramento 2035 General Plan

The following goals and policies from the Public Health and Safety (PHS) and Education, Recreation, and Culture (ERC) Elements are relevant to the proposed project (City of Sacramento 2015).

- **GOAL PHS 1.1: Crime and Law Enforcement.** Work cooperatively with the community, regional law enforcement agencies, local government and other entities to provide quality police service that protects the long-term health, safety and well-being of our city, reduce current and future criminal activity, and incorporate design strategies into new development.
- **Policy PHS 1.1.2: Response Time Standards.** The City shall strive to achieve and maintain optimal response times for all call priority levels to provide adequate police services for the safety of all city residents and visitors.
- **Policy PHS 2.1.2 Response Time Standards.** The City shall strive to maintain appropriate emergency response times to provide optimum fire protection and emergency medical services to the community.
- **Policy PHS 2.2.4 Water Supplied for Fire Suppression.** The City shall ensure that adequate water supplies are available for fire suppression throughout the city and shall require development to construct all necessary fire suppression infrastructure and equipment.
- **GOAL ERC 2.1: Integrated Parks and Recreation System.** Provide an integrated system of parks, open space areas, and recreational facilities that are safe and connect the diverse communities of Sacramento.

- **Policy ERC 2.1.1 Complete System.** The City shall develop and maintain a complete system of parks and open space areas throughout Sacramento that provide opportunities for both passive and active recreation.
- **Policy ERC 2.1.2 Connected Network.** The City shall connect all parts of Sacramento through integration of recreation and community facilities with other public spaces and rights-of-way (e.g., buffers, medians, bikeways, sidewalks, trails, bridges, and transit routes) that are easily accessible by alternative modes of transportation.
- **GOAL ERC 2.2:** Parks, Community and Recreation Facilities and Services. Plan and develop parks, community and recreation facilities, and services that enhance community livability; improve public health and safety; are equitably distributed throughout the city; and are responsive to the needs and interests of residents, employees, and visitors.
- **Policy ERC 2.2.2 Timing of Services.** The City shall ensure that the development of parks and community and recreation facilities and services keeps pace with development and growth within the city.

3.9.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services, recreation, and utility use or infrastructure are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to public services, recreation, and utility issues would occur if the project would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection? Police protection? Schools? Parks? Other public facilities?

- b) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- c) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?
- d) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

- e) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- f) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- g) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- h) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?

Issues Not Discussed Further in this EIR

Schools, Parks, and Other Public Facilities or Utilities

The project site is located along City-owned lands and the Parkway. The proposed project would not require school, parks, library services, water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities because the project does not propose any residential or commercial uses that would generate demand for such services. In compliance with ARPP Policy 5.27 "Prohibited Activities and Facilities" which prohibits permanent lighting facilities in the Parkway, the proposed trail would not be constructed with electrical lighting along the alignment and no connections to the regional electricity grid would be required. The proposed project would also not require connection to the PG&E natural gas distribution system.

Sufficient Water, Wastewater, and Solid Waste Disposal Capacity

The proposed project would not include any residential or commercial uses that would require connection to existing water conveyance pipelines or require additional connections to the regional water supply system. The proposed project would not involve construction of any public restrooms or other wastewater-generating facilities along the project alignment. The project would not generate new demand for water, wastewater, or solid waste disposal capacity. Therefore, as also presented in **Table 1-5** of **Chapter 1.0 "Introduction**", these issues are not discussed further in the EIR.

Stormwater Runoff

The footprint of the proposed project is not considered large enough to create a substantial increase in runoff from impervious surfaces and overall stormwater runoff patterns would not change along the project alignment. In Segments 1 and 2, stormwater is expected to infiltrate into the ground before entering the City's stormwater conveyance system. In Segments 3-6, all stormwater would continue to flow to the American River. The trail would be slightly sloped away from the levee crown (toward the river) to encourage sheet flow of stormwater over the ground surface. In areas where trail design may cause minor ponding of water, small drain inlets would be installed to carry water under the bike trail to outlets on the river side of the trail. Outlets would discharge out of a flared end section and onto a small area of rock which would reduce stormwater velocity and disperse the water in a way that reduces the possibility of erosion around the outlet. Consequently, project construction and operation would not contribute to a need for additional stormwater facilities or additional connections to existing facilities. As also presented in **Table 1-5** of **Chapter 1.0 "Introduction**", these issues are not discussed further in the EIR.

Require New Recreational Facilities

The project would not introduce any new residents or commercial uses which would increase the demand for recreational facilities beyond what was envisioned in the 2035 General Plan, and the project would include construction of recreational facilities as envisioned in the General Plan.

Impact Analysis

Impact PSR-1: Public Services: Fire Protection and Emergency Medical Services

The project would not require new fire protection or emergency medical services facilities. [Less than Significant]

Segments 1 and 2 are not readily accessible to or routinely used by the public at the time of the preparation of the IS. Segments 3 through 6 are on public land and are routinely used for recreation. The existing gravel road along the levee crown, the existing road along the levee toe (which includes both gravel and unpaved areas) and informal trails through wooded areas closer to the river are all used for recreation, including walking, jogging, biking, and dog walking.

Segments 3 through 6 are readily accessible and routinely used by existing local and regional residents for recreation. The proposed project would not involve construction of residences or commercial buildings that would increase the population in the SFD service area. Construction workers, some likely from outside the immediate adjacent neighborhoods, would be in the area temporarily during construction, and following project completion, the developed access would likely result in increased bicycle and pedestrian use in the project area, potentially resulting in more service calls related to fire or emergency medical response. Nevertheless, several fire stations are in close proximity to the proposed project alignment and these areas already receive fire protection and emergency medical services from SFD, as discussed in Section 3.9.2, "Environmental Setting." Construction and operation of the project would not cause an increase in population such that additional fire stations would be needed under General Plan guidelines. The proposed project is consistent with the land use designation for these areas in the 2035 General Plan. Existing Sacramento County Parks Fire Fuel Reduction Action Plan activities along the Parkway would continue as would fuels and vegetation management in compliance with City Code (Sacramento County 2018). Therefore, impacts to fire service from the proposed project have already been accounted for, and the project would comply with the requirements of the City Code, County Parks, and General Plan policies regarding adequate fire protection services. As a result, the impact on fire and emergency medical response would be less than significant, with no mitigation required.

Mitigation Measure: No mitigation is required.

Impact PSR-2: Public Services: Police Protection

The project would not require new police facilities. [Less than Significant]

The majority of the project alignment is already used for undeveloped recreation and areas along the trail alignment are already under the jurisdiction of and served by SPD and City and County Park Rangers. The proposed project would not require construction of a new station or expansion of an existing facility in order to provide law enforcement services in the project area. Additionally, trail improvements associated with the proposed project were anticipated under the 2035 General Plan and would be consistent with General Plan policies.

Nearby residents have expressed concerns that the project would increase the number of unsheltered people along the Parkway in the project site, resulting in indirect impacts such as increased crime, fires, litter or noise. Although the project would introduce a paved path into areas currently characterized by informal recreation (Segments 3 through 6), this portion of the project site is currently accessible to the public and in widespread use for undeveloped recreation. There is no substantial evidence to indicate that a paved path would lead to increased crime, fires, or noise relative to the current condition. This impact would be **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Impact PSR-3: Recreation: Cause Deterioration of Existing Facilities

Implementing the project would not cause deterioration of existing parks or recreational facilities. Informal recreational use of the project site would be temporarily affected by construction of the project. [Less than Significant]

The project would expand recreational opportunities at the project site by offering a paved multi-use trail. The trail would generally consist of an 8-foot-wide paved path with a 2-foot-wide compacted aggregate base shoulder on the inner side and a similar 6-foot-wide shoulder on the waterside to provide space for walking and jogging adjacent to the paved portion of the trail, bringing the total trail cross section along most of its length to 16 feet wide. However, due to space limitations in some locations, the waterside shoulder of the trail would be narrowed to 4 feet wide.

There are no formal recreational facilities along most of the proposed trail alignment; the trail would connect several existing recreational facilities, including the Sacramento Northern Bikeway Trail, Sutter's Landing Regional Park, Glenn Hall Park, and an existing developed trail in the American River Parkway, extending eastward from H Street. Visitors seeking access to the proposed project might increase the use of Sutter's Landing Regional Park facilities, including use of parking and other facilities. However, as described in **Section 3.9.2**, "**Environmental Setting**," the limited parking available at Glenn Hall Park reduces the potential for an increase in visitors using Glenn Hall Park to access the proposed trail facilities. The project would likely result in increase the use of Glenn Hall Park to access the proposed trail facilities, the presence of the levee between the proposed trail location and the developed facilities at Glenn Hall Park is likely to reduce the use of park facilities by through-traveling users of the trail.

Existing informal recreational use along the proposed trail alignment would be temporarily disrupted during construction, but the disruption would be short-term and there are other trails and parks in the region. Following the completion of construction activities, the levee crown and existing informal foot trails between the levee and the American River would be unchanged from the existing condition.

The proposed trail is a modification of the City's standard trail cross section; the paved width would be less than the standard trail section, and the project would include a wider gravel shoulder on the waterside of the trail. These modifications to the standard trail section are intended to better accommodate the existing pedestrian uses of the corridor, while providing an accessible facility for bicycles. Although some commenters on the IS/MND and NOP identified concerns for increased conflict between pedestrians and high-speed bicycle trail users, the presence of multiple options (paved trail, shoulders, levee crown, and informal foot trails) and the relatively narrow paved trail cross section

compared to other segments of the Parkway trail would reduce the potential for conflict among trail users. Consequently, this impact would be **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Residual Significant Impacts

As more fully described above in **Impacts PSR-1** through **PSR-3**, there would be no residual significant impacts related to public services, recreation, or utilities.

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3.10 Transportation and Circulation

3.10.1 Introduction

This section provides an overview of the existing transportation facilities and conditions within the proposed project study area, identifies the regulatory framework, and provides and analysis of the potential transportation impacts that would result from implementation of the proposed project.

As a result of circulation of the IS/MND and during the proposed project's NOP scoping period, the following comments were received regarding:

- the existing use of trails in the project area, and the need to address potential conflict between users of the new multiuse trail facility and the existing informal trail users, and
- the lack of a bike lane on Carlson Drive.

The effect of project construction and operation on existing informal trail use is addressed in **Impact PSR-2**, and in **Section 3.9**, "**Public Services, Recreation, and Utilities**."

Carlson Drive enters the River Park neighborhood approximately 1,000 feet from the access point to the proposed multiuse trail at the H Street Bridge. Users from outside the neighborhood are therefore unlikely to travel more than 1.5 miles along Carlson Drive to access the trail by bicycle. Within the River Park neighborhood, bicycle traffic approaching Glenn Hall Park would likely be collected from other streets onto Carlson Drive and Sandberg Drive. The potential for substantial new bicycle traffic within the River Park neighborhood leading to new conflicts is low, and this issue is not addressed further in the EIR.

3.10.2 Environmental Setting

The project site is in central Sacramento. Construction access would be via local roadways, including 28th Street (a local roadway), Carlson Drive (a minor collector), Camellia Drive (a local roadway) and H Street (an arterial east of Camellia Drive and major collector west of Camellia Drive) (City of Sacramento 2015).

Transit serving the project vicinity includes the Sacramento Regional Transit (SacRT) Bus #30, which travels on H Street between downtown Sacramento and Sacramento State University; Bus #34, which circulates through the River Park neighborhood on Carlson Drive, Moddison Avenue, Sandberg Drive, and Messina Drive and in the Midtown neighborhood on F Street; and Buses #82 and #87, which pass the project site on H Street/Fair Oaks Boulevard (SacRT 2018).

The Midtown and River Park neighborhoods are served by sidewalks on both sides of most roadways. The project would connect to existing portions of the Two Rivers Trail, the Sacramento Northern Bikeway Trail, and the existing developed trail that extends eastward from H Street in the American River Parkway.

3.10.3 Regulatory Setting

Federal Plans, Policies, Regulations and Laws

No federal plans, policies, regulations, or laws related to transportation/traffic apply to the project.

State Plans, Policies, Regulations and Laws

No state plans, policies, regulations, or laws related to transportation/traffic apply to the project.

Regional and Local Plans, Policies, Regulations and Ordinances

City of Sacramento General Plan 2035

The City of Sacramento strives to operate most roadways at a LOS D or better during typical weekday conditions. The City has identified several roadways as exceptions to this policy in the 2035 General Plan, including the Central City Community Plan Area (which includes 28th Street access to Sutter's Landing Park), Carlson Drive, and H Street west of Carlson Drive. On these roadways, LOS F is acceptable. (City of Sacramento 2015)

Sacramento City Code

Section 12.20.020 of the Sacramento City Code has the following provisions related to construction traffic within the City limits:

A. Except when performing emergency repairs, no person shall perform any work that will obstruct vehicular traffic on a city street unless a traffic control plan has been approved by the director.

B. All work requiring a traffic control plan shall conform to the conditions and requirements of the approved plan.

C. Where a traffic control plan is required, the approved plan must be available at the site for inspection by the director during all work.

D. If the director determines that actual traffic conditions under the approved plan are hazardous to public safety, the director may require the plan to be immediately modified. If the hazardous conditions cannot be eliminated by plan modification the director may require work under the plan to be stopped, and the plan suspended, until the safety hazard is remedied.

The specific requirements for a traffic control plan are described in Section 12.20.030 of the Sacramento City Code and should include the appropriate diagrams, proposed time periods that traffic control would be in effect, and any proposed phases of the project that would affect the traffic control plan.

City of Sacramento Bicycle Master Plan

The purpose of the Sacramento City Bicycle Master Plan is to establish bicycle-related investments, policies, programs and strategies to establish a complete bicycle system. This will encourage more bicycling by the citizens of Sacramento for both transportation and recreation, thereby allowing the City of Sacramento to meet General Plan emission targets. The Bicycle Master Plan was updated in 2015 to further engage under-represented neighborhoods, evaluate the equity related to bicycle infrastructure, and identify best practice bikeway designs to better connect the City's Low-stress bikeway network. The proposed project is included within the 2015 Master Plan (City of Sacramento, 2018).

City of Sacramento Pedestrian Master Plan

The purpose of the Pedestrian Master Plan is to make Sacramento a model pedestrian-friendly city, also known as the "Walking Capital" (Pedestrian Master Plan 2006). The current overarching objectives of the Plan are to institutionalize pedestrian considerations and to improve the current pedestrian

deficiencies. The goals of the Plan include improving awareness through education, creating a walkable pedestrian environment, and increasing pedestrian safety.

3.10.4 Environmental Impacts and Mitigation Measures

Thresholds of Significance

The significance criteria used to evaluate the project impacts to transportation and circulation are based on Appendix G of the CEQA Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to transportation and circulation issues would occur if the project would:

- a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Or
- d) Result in inadequate emergency access?

For item (a), impacts resulting from conflict with a program, plan, ordinance, or policy may be considered significant if construction and/or implementation of the proposed project would result in:

- level of service impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:
- adverse effects on public transit operations;
- failure to adequately provide for access to public transit;
- adverse effects on bicycle travel, bicycle paths;
- failure to adequately provide for access by bicycle;
- adverse effects on pedestrian travel, pedestrian paths; or
- failure to adequately provide for access by pedestrians.

Institute of Transportation Engineers – Screening Criteria for Construction Traffic

The Institute of Transportation Engineers (ITE) has recommended a screening criterion for assessing the effects of construction projects that create temporary traffic increases (ITE 1988). To account for the large percentage of heavy trucks associated with typical construction projects, ITE recommends a threshold level of 50 or more new peak-direction truck trips during the peak-hour. Therefore, a project would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system, and result in a significant effect related to traffic, if they would result in 50 or more new truck trips (100 passenger car equivalent [PCE] trips) during the a.m. or p.m. peak hours. This is considered an "industry standard" and is the most current guidance commonly used for impact analysis.

Issues Not Discussed Further in this EIR

Conflict with CEQA Guidelines Section 15064.3(b)

The project would include temporary vehicle travel and VMT associated with construction activities, including worker commutes and transport of materials used to construct the facility. After construction of the project has been completed, the project would provide a connection between existing trails that are part of the American River Parkway, and the use of the new trail segment is not likely to increase VMT; the most conveniently accessible access points to users from outside the River Park neighborhood will continue to be Sutter's Landing Regional Park and access points at Sacramento State University and Howe Avenue.

Substantially increase hazards due to a geometric design feature or incompatible uses.

The project does not include any modifications to roadways. There would be no increase in hazards due to design features or incompatible uses.

Inadequate emergency access.

The project does not include any modifications to roadways, and thus there would be no change to emergency access as a result of the project.

Impact Analysis

Impact TRC-1: Conflict with Plans or Standards: Congestion and Transit Operations

Construction-related activity from the proposed project may affect the existing transportation network. No lane, street, sidewalk, or bikeway closures are planned, and transit service would not be affected. (Less than Significant)

Construction-related activity from the proposed project may potentially disrupt the existing transportation network in the surrounding project area. No lane, street, sidewalk, or bikeway closures are planned, but heavy construction vehicles, materials, and workers would travel to and from the site and staging areas. As a result of these activities, existing roadway operation conditions may be degraded. Based on the construction details provided in the Project Description, up to 20,400 cubic yards (cy) of material would be transported as part of project construction. This includes excavation and transport offsite of 8,500 cy of material, and import of approximately 2,000 cy of fill material, approximately 7,900 cy of aggregate base, and 2,000 cy of pavement material. Based on a 5- to 6-month construction period, and assuming 10 cy per trip, this would generate approximately 21 heavy truck trips per day. Up to 20 construction workers would be present at any given time. Construction-related activity would therefore include less than 50 heavy truck trips (or 100 PCE trips) during the peak a.m. or p.m. hour and would not exceed the ITE screening criterion, described above. Implementation of the construction traffic control plan (consistent with City Code 12.20.030) as described in Chapter 2.0 "Project **Description**" (see "Access and Staging Areas") would involve measures that would further reduce the potential for impacts associated with construction traffic by designating circulation routes and waiting areas for trucks. Consequently, this impact would be less than significant, with no mitigation required.

The project would not adversely affect existing or planned transit operations. As previously discussed, SacRT routes 30, 34, 82, and 87 operate nearby and would be accessible to the project site. While the project would not be anticipated to add noticeable transit demand, any additional demand is anticipated

to be adequately accommodated by the existing/planned transit system. The impacts of the proposed project on transit therefore would be **less than significant**, with no mitigation required.

Mitigation Measure: No mitigation is required.

Impact TRC-2:Conflict with Plans or Standards: Pedestrian and Bicycle CirculationConstruction of the project could result in temporary closures of existing
unimproved trails and areas used for informal recreation. (Less than Significant)
Operation of the project would increase the range of pedestrian and bicycle
transportation choices in the project area (Beneficial).

Construction

Construction of the project could result in temporary closures to the public of portions of the existing levee crown road and unimproved trail along the toe of the levee for construction access. As described in the Project Description under "Access and Staging Areas," the construction traffic control plan would include identification and signage of detours for bicycles and pedestrian traffic. In Segments 1 and 2 currently, there is no public access to the proposed trail alignment. Therefore, closures during construction would not disrupt pedestrian or bicycle transportation in this area. At Sutter's Landing, closures also would not significantly disrupt pedestrian or bicycle transportation because the existing trail currently dead-ends in the park, limiting through pedestrian- and bicycle traffic. At H Street, the existing bike trail along the south side of J Street, and existing bike lanes and sidewalks along Carlson Drive between H and J Streets offer an alternative route for bicycles and pedestrians. However, while portions of the trail would remain open to the public during construction between Sutter's Landing Park and north of the H Street bridge, closures would be necessary and could disrupt existing informal recreational activities, including walking, bicycle riding, and dog walking. These disruptions would be temporary; alternative routes are available, and as described in the Project Description under "Access and Staging Areas," the construction traffic control plan would include identification and signage of detours for bicycles and pedestrian traffic; therefore, this impact would be less than significant, with no mitigation required.

Operations

The project would add bicycle traffic to the corridor between Sutter's Landing Regional Park and H Street (Segments 3 through 6) and eventually between Sutter's Landing Regional Park and the Sacramento Northern Bikeway (Segments 1 and 2). Although bicycle travel is currently prohibited on the levee maintenance roads, there is some bicycle travel along the existing paths primarily along Segments 3 through 6. The number of bicycles would be expected to increase on all trail segments as a result of the project. The design of the project (with wider shoulders for pedestrian access and a narrower paved surface to reduce bicycle speeds) is intended to minimize the conflict between bicycles and pedestrians. This impact would therefore be **less than significant**, with no mitigation required.

The project includes construction of a multiuse trail along a corridor that is currently used informally by pedestrians, joggers, and dog walkers. The project has been designed to accommodate these uses alongside bicycle users. Operational impacts related to bicycle facilities and pedestrian transportation would thus be **beneficial**.

Mitigation Measure: No mitigation is required.

Residual Significant Impacts

The project would have no residual significant transportation impacts.

4.1 Introduction

This chapter describes alternatives to the proposed project that were considered but rejected based on environmental impacts or inability to meet project objectives. During preparation of the IS/MND and as a result of the proposed project's NOP scoping period, the following comments related to alternatives were received and considered during preparation of the impact analysis:

- Preparation of an EIR that fully analyzes the alternatives and their impacts.
- Consideration of a levee top alternative for additional trail segments and alignment of a trail outside the American River Parkway.

Consideration of these alternatives is more fully described below in Section 4.4.

4.2 CEQA Requirements for Evaluation of Alternatives

The principles used to guide selection of the alternatives analyzed in this EIR are provided by section 15126.6 of the CEQA Guidelines, which specifies that an EIR must do all of the following:

- Describe a reasonable range of potentially feasible alternatives to the Project that could attain most of the basic objectives of the Project,
- Consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed Project, including alternatives that may be costlier or could otherwise impede the Project's objectives, and
- Evaluate the comparative merits of the alternatives.

The focus and definition of the alternatives are governed by the "rule of reason," in accordance with section 15126.6(f) of the CEQA Guidelines. That is, the range of alternatives presented in this Draft EIR must permit a reasoned choice by the City. CEQA Guidelines require that an EIR evaluate at least one "No-Project Alternative," evaluate a reasonable range of alternatives to the Project, identify alternatives that were considered during the scoping process but were eliminated from detailed consideration, and identify the "environmentally superior alternative." Consistent with section 15126.6(d) of the CEQA Guidelines, the information provided in this Draft EIR about each alternative is sufficient to allow for a meaningful evaluation, analysis, and comparison of the alternatives with the proposed Project.

4.3 Alternatives Considered and Screening Criteria

This section describes the development of a reasonable range of alternatives to the proposed project and the methods used to screen the alternatives.

4.3.1 Development of Reasonable Range of Alternatives

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to a project or to the location of a project that would feasibly attain most of the basic project objectives and avoid or substantially lessen significant project impacts (CEQA Guidelines section 15126.6). The alternatives to the proposed project considered in this Draft EIR were developed based on information gathered during the development of the proposed project and during the EIR scoping process.

In developing the proposed project, the City has considered a range of potential actions that could meet the Project objectives. Comments received during initial public outreach and scoping included the following:

- Preparation of an EIR that fully analyzes the alternatives and their impacts.
- Complete levee-top alternative (see Alternative 2, below).
- Extend levee-top segment to a point near River Mile #5 (near the intersection of Jerome Way and Sandburg Drive) (see Alternative 3, below).
- Align trail outside the American River Parkway on City streets (see Alternative 4, below).

4.3.2 Methods Used to Screen Alternatives

Potential alternatives were screened for their ability to attain most of the basic project objectives, their feasibility to be implemented, and reduce or eliminate any significant environmental impacts of the proposed project.

- Meeting Project Objectives The project objectives are listed in Chapter 2.0 "Project Description". The CEQA Guidelines state that alternatives must feasibly attain most of the basic objectives of the Project (CEQA Guidelines section 15126.6). Alternatives that did not meet the majority of the objectives were screened out and not carried forward for further evaluation in the EIR.
- Feasibility Alternatives that are not "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors," (per Public Resource Code Section 21061.1), were not carried forward for further evaluation in the EIR.
- Avoiding or lessening any potentially adverse environmental effect of the Proposed Project Consistent with the CEQA Guidelines (section 15126.6), alternatives should avoid or substantially lessen one or more of the significant environmental effects of the proposed project. Alternatives that would not lessen or avoid a potentially significant environmental impact, were not carried forward for detailed evaluation in the EIR.

4.4 Alternatives Considered but Not Carried Forward for Further Evaluation

The alternatives described below were rejected for further consideration and analysis because they failed to meet most of the basic project objectives or were determined to be infeasible, and/or would not avoid

or substantially lessen significant environmental impacts. While the No Project Alternative or a trail alignment outside of the American River Parkway (use of existing City streets) would avoid or substantially lessen the environmental impacts of the proposed project, these alternatives failed to meet most of the basic project objectives.

4.4.1 Alternative 1: October 2018 Initial Study Alternative

This alternative was analyzed in the October 2018 Initial Study and includes 3.4 miles of new Class 1 bicycle and pedestrian trail comprised of 6 segments. The trail would generally consist of an 8-foot-wide paved path with a 2-foot-wide compacted shoulder on the inner side and a similar 6-foot-wide shoulder on the waterside to provide space for walking and jogging adjacent to the paved portion of the trail, bringing the total trail cross section along most of its length to 16 feet wide. However, due to space limitations in some locations, the waterside shoulder of the trail would be narrowed to 4 feet wide. The trail would be paved and engineered to be load-bearing.

- Segment 1 begins at the existing Sacramento Northern Bikeway Trail at North 18th Street and ends 0.3 miles west of Sutter's Landing Park. At North 18th Street, the trail would run along the toe of the levee crossing under the Union Pacific Railroad (UPRR) and continue for another 0.3 miles.
- Segment 2 begins at the eastern terminus of Segment 1 and continues to Sutter's Landing Regional Park and would diverge from the levee immediately at the end of the first segment and extend south for approximately 0.3 mile and then turn southeast and extend another approximately 0.4 mile to 28th Street at the entrance to Sutter's Landing Regional Park across the street from McKinley Village Way.
- Segment 3 begins on the east side of Sutter's Landing Park at the end of the recently completed trail segment. The trail would run along an existing bench at the toe of the levee, first crossing under another portion of the UPRR and eventually under the Capital City Freeway (BUS 80) where Segment 4 begins.
- Segment 4 is also approximately 0.25 miles long. There is no defined bench on the water side of the levee in this segment. Consequently, to both avoid the potential for trail users to interfere with vehicles using the patrol road on the levee crown to perform levee maintenance and inspection activities, and limit the ability of trail users to see into the yards of residences located directly adjacent to the land side of the levee, this trail segment would be constructed on the water side slope on an artificial bench offset from the top of the levee with a reduced path width to limit impacts. The trail segment would also include a small retaining wall along the inner edge of the trail to maintain the width of the levee crown for levee maintenance and patrol vehicle use.
- Segment 5 is 1.4 miles long and passes Paradise Beach and Glenn Hall Park. This trail segment has a bench all along the waterside toe where the trail would be aligned, but bench width varies such that this segment has been subdivided into three subsegments (to accommodate topographic conditions). Subsegment 5A is approximately 2,900 feet in length, and the waterside bench, although well-defined, is narrower in this area than in Subsegment 5B. Subsegment 5B is approximately 4,300 feet in length and has a well-defined, much wider and flatter, bench to accommodate the trail. Subsegment 5C is approximately 500 feet in length and its waterside bench characteristics are similar to Subsegment 5A.

 Segment 6 begins at the east end of Subsegment 5C along the levee toe, is approximately 0.3 miles long, and includes a transition back to the levee crown where the trail would connect to the existing paved trail near the H Street Bridge. While there is a bench along the toe in this segment, the bench is much narrower than in other locations requiring a reduced path width to limit impacts.

Screening Evaluation – This alternative meets several project objectives and is considered feasible for implementation. However, this alternative was not carried forward for further analysis for the following reasons:

- Public concerns regarding impacts to biological resources, including the removal of trees on the levee toe along portions of Segment 4 during construction and impacts to VELB during construction and vegetation maintenance activities.
- ARFCD expressed concern regarding risk to levee integrity near River Mile 4, due to the presence of the trail on an artificial bench along portions of Segment 4, in an area that has experienced erosion during past high flows.

Impacts Identified as Being the Same or Similar to the Project

Under Alternative 1, aesthetics; air quality; cultural resources; tribal cultural resources; geology and soils; greenhouse gas; land use and planning; public services; recreation; hazards and hazardous materials; hydrology and water quality; noise; traffic; and utilities would result in similar impacts to the proposed project due to the scale (similar trail width and length) and location (toe of levee) of this alternative.

Impacts Identified as More Severe than the Project

Biological Resources. Alternative 1 would result in additional or greater special status species habitat (VELB) and tree loss impacts through development of the benched waterside trail section along Segment #4.

4.4.2 Alternative 2: Top of Levee Construction – Segments 4 through 6

This alternative includes 3.4 miles of new Class 1 bicycle and pedestrian trail comprised of 6 segments along the same alignment as described in Alternative 1, however, under this alternative, the entire length of Segments 4 - 6 would be constructed along the levee crown.

Screening Evaluation – This alternative meets several project objectives and is considered feasible for implementation. However, this alternative was not carried forward for further analysis for the following reasons:

- ARFCD expressed concerns regarding the ability to perform levee maintenance and inspection activities from the levee crown patrol road if the entire crown was occupied by the bike trail.
- Public comments received from River Park residents regarding a reduction in privacy and degradation of aesthetics for residences immediately adjacent to the landside of the levee due to increased recreational users along the levee top trail.

Impacts Identified as Being Similar or Less Severe than the Project

Under Alternative 2, air quality; biological resources, cultural resources; tribal cultural resources; geology and soils; greenhouse gas; land use and planning; public services; recreation; hazards and hazardous materials; hydrology and water quality; noise; traffic; and utilities would result in similar construction-related impacts (i.e., traffic, noise, land use, air quality, etc.) or less severe (less habitat/tree disturbance) impacts to the proposed project due to the location (disturbed/levee top) of this alternative.

Impacts Identified as More Severe than the Project

Aesthetics Resources. Alternative 2 would result in greater aesthetic impacts resulting from additional trail use along the top of the levee that may be visible to residents adjacent to the landside of the levee.

Alternative 3: Extended Top of Levee Segment Alternative

This alternative was suggested during the June 2019 EIR Public Scoping Meeting and is identical to the proposed project, except for a portion of Segment 4. Under this alternative, the trail would move from the levee toe to the top of levee near Jerome Way (approximately RM 5), rather than near Bevil Street, resulting in a top of levee segment approximately 3x longer than what is included in the proposed project.

Screening Evaluation – This alternative meets several project objectives and is considered feasible for implementation. However, this alternative was not carried forward for further analysis for the following reasons:

- This alternative is very similar to the proposed project due to the fact that both alternatives share a combination levee top and levee toe alignment, although the lengths of the top/toe segments vary.
- ARFCD expressed concerns regarding the ability to perform levee maintenance and inspection activities from the levee crown patrol road and has precluded construction along the levee crown unless absolutely necessary due to the complete absence of a toe bench.
- Public comments received from River Park residents regarding a reduction in privacy and degradation of aesthetics for residences immediately adjacent to the landside of the levee. This alternative would move even more of the alignment to the levee top than what is planned under the proposed project and would expose more homes directly adjacent to the landside of the levee to privacy and aesthetic concerns due to increased recreational users along the levee top trail.

Impacts Identified as Being Similar or Less Severe than the Project

Under Alternative 3, air quality; biological resources, cultural resources; tribal cultural resources; geology and soils; greenhouse gas; land use and planning; public services; recreation; hazards and hazardous materials; hydrology and water quality; noise; traffic; and utilities would result in similar construction-related impacts or less severe (less habitat/tree disturbance) impacts to the proposed project due to the location (disturbed/levee top) of this alternative. However, development of the trail segments along the waterside of the levee (past River Mile #5) would still result in similar types of habitat and tree loss impacts as the proposed project.

Impacts Identified as More Severe than the Project

Aesthetics Resources. Alternative 3 would result in greater aesthetic impacts resulting from additional trail use along the top of the levee that may be visible to residents adjacent to the landside of the levee.

Alternative 4: Align Trail Outside of the American River Parkway

This alternative was suggested during review of the IS/MND and during the June 2019 EIR Public Scoping Meeting. Under this alternative, no trail would be developed within the American River Parkway. Existing trail use along developed portions of the Two Rivers Trail (Phase I) would use existing City streets to travel between 16th Street or the current trail terminus at Sutter's Landing Park to reach the East Sacramento/River Park neighborhoods and CSUS. Public comments suggested using the Elvas Avenue Corridor and Carlson Driver as possible travel corridors for bicycles and pedestrians.

Screening Evaluation – Similar to the "No Project" alternative (described below), this alternative would not construct the remainder of Phase II of the Two Rivers Bike Trail to Class 1 bicycle and pedestrian standards. Implementation of this alternative would not meet any of the project objectives and was not carried forward for further analysis.

Impacts Identified as Being Similar or Less Severe than the Project

Implementation of Alternative 4 would not develop a trail within the American River Parkway and would result in no environmental impacts.

Impacts Identified as More Severe than the Project

Implementation of Alternative 4 would not develop a trail within the American River Parkway and would result in no environmental impacts.

No Project Alternative

Under the No Project Alternative, the City would not construct the remainder of Phase II of the Two Rivers Bike Trail to Class 1 bicycle and pedestrian standards. This alternative would leave the existing trail and access points unpaved and inaccessible to some users, which is currently not required to comply with the requirements of the Americans with Disabilities Act (ADA). Transportation access for commuters would not be improved in the eastern part of the City, CSUS, Central City, North Sacramento, East Sacramento, or Richards Boulevard areas. Educational opportunities fostering a connection to the Parkway and American River for trial users would not be provided. An important recreational link, identified as a subsequent project in the City of Sacramento 2035 General Plan, would remain unfinished. Construction would not result in the removal of any trees nor would the City be required to provide any additional maintenance activities along the trail alignment.

Implementation of the No Project Alternative would not develop a trail within the American River Parkway and would result in no environmental impacts.

4.5 Environmentally Superior Alternative

CEQA requires identification of the environmental superior alternative; that is, the alternative that has the least significant impacts on the environment. As presented in Chapter 3, implementation of the proposed project would result in less than significant environmental impacts with mitigation incorporated. As described above, Alternative 4 or the No Project Alternative would have the least significant impacts on the environment because nothing would be constructed; however, this alternative does not meet the project objectives. Of the build alternatives, Alternative 2 (Top of Levee Construction – Segments 4 through 6) would substantially reduce biological and water quality impacts along Segments 4 through 6. However, implementation of trail Segments 1 and 2 would still result in similar biological and water quality impacts. **Table 4-1** presents a comparison of all alternatives with respect to the impacts and the ability to meet project objectives.

Table 4-1.	Overview Comparison of Project Objective Attainment and Environmental
	Impacts of the Alternatives

	Alternative 1: October 2018 Initial Study Alternative	Alternative 2: Top of Levee Construction – Segments 4 through 6	Alternative 3: Extended Top of Levee Segment Alternative	Alternative 4: Align Trail Outside of the American River Parkway	Proposed Project	No Project Alternative
Environmental Impacts	Less Than With	Significant Mitigation	(LTS)	No Impact	LTS with Mitigation	No Impact
Meets Project Objective:						
Provide alternative transportation access for commuters and residents in the eastern part of the City, CSUS, Central City, North Sacramento, East Sacramento, and Richards Boulevard area;	Yes	Yes	Yes	No	Yes	No
Provide opportunities for educating trail users through interpretive signage, establishing a connection to the river, and the Parkway;	Yes	Yes	Yes	No	Yes	No
Provide an acceptable project to all authoritative agencies;	No	No	No	No	Yes	No
Complete the project in a manner that minimizes environmental impacts to the Parkway, given the proposed project's location within the environmentally sensitive Parkway	No	Yes	Yes	No	Yes	No
Where feasible, design trail access points to comply with the requirements of the Americans with Disabilities Act (ADA).	Yes	Yes	Yes	No	Yes	No

Notes:

* Detail regarding specific environmental impacts of each alternative is provided in the "Screening Evaluation" provided in the previous section.

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5.1 Introduction

Chapter 5.0 of this EIR describes other required topics including growth inducing impacts, significant and unavoidable impacts, and significant irreversible environmental changes relative to the proposed project. Additionally, this section addresses and assesses the potential for cumulative impacts from the proposed project in conjunction with recent past, current and reasonably foreseeable future projects.

5.2 Growth Inducing Impacts

CEQA (Guidelines (section 15126.2(e)) requires that an EIR evaluate the growth inducing impact of a proposed project. The CEQA Guidelines describe the required growth inducement analysis as follows:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Included in this definition are public works projects, which would remove obstacles to population growth, would tax community service facilities, or encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have the potential for direct and/or indirect growth inducement. Direct growth inducement would result if a project involved construction of new housing which would facilitate new population in an area. Indirect growth inducement or secondary growth-inducement potential would be present if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises), or if it would involve a substantial construction effort with substantial long-term employment opportunities which could indirectly stimulate the need for additional housing and services to support the new employment demand.

Similarly, a project could indirectly induce growth if it would remove a physical obstacle to additional growth and development, such as removing a constraint or adding a required public service. Examples of removing a physical obstacle would include construction of a new roadway into an undeveloped area or construction of a wastewater treatment plant with sufficient capacity to serve additional new development. Construction of these types of infrastructure projects cannot be considered isolated from the immediate development that they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in the area. The growth inducing potential of a project could also be considered significant if it fosters growth in excess of what is assumed in the local master plans and land use plans, or in projections made by regional planning agencies.

5.2.1 Direct Growth Inducement

The proposed project does not include the construction of new housing, businesses, or roadways, require acquisition of private property, or create new connections to undeveloped land. The proposed project aims to improve pedestrian and bicycle access throughout East Sacramento and provide multi-modal

connectivity to CSUS and adjacent communities throughout the Sacramento area. No impacts would occur to the surrounding communities. However, the proposed project would result in improved accessibility for surrounding communities. The proposed project would also not create permanent employment. The proposed Project is consistent with the City of Sacramento General Plan as the proposed project will be zoned for Parks and Recreation and the Project would not change the zoning designation of adjacent areas. Development of the site as proposed would alter the existing landscape, but the project site has been designated for Recreation in the 2035 General Plan and the proposed development is consistent with these planning designations and those of the American River Parkway Plan (Sacramento County, 2008). The proposed project is included within the 2018 Master Plan (see Figure 22) (City of Sacramento 2018).

5.2.2 Indirect Growth Inducement

The proposed project would not establish new permanent employment opportunities or involve a substantial construction effort with substantial long-term employment opportunities that could indirectly stimulate the need for additional housing and services to support the new employment demand. Construction of the proposed project would last less than one year and would not require additional housing and/or services for workers. The proposed project would not directly or indirectly induce growth or remove an obstacle to growth, would not require or result in the need for new or expanded water or wastewater treatment facilities, and would not increase population. Consequently, no growth inducing effects would occur.

5.3 Significant and Unavoidable

CEQA Guidelines section 15126(b) requires an EIR to "describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the proposed project is being proposed, notwithstanding their effect, should be described."

Chapter 3.0 of this EIR provides a description of the potential environmental impacts of the proposed project and recommends mitigation measures to reduce impacts to a less than significant level, where possible. After implementation of the recommended mitigation measures, all of the potentially significant impacts associated with the proposed project would be reduced to a less than significant level. Therefore, the proposed project will not have significant and unavoidable impacts.

5.4 Significant Irreversible Environmental Changes

CEQA Guidelines section 15126.2(d) describes irreversible environmental changes as follows:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The CEQA Guidelines refer to the need to evaluate and justify the consumption of nonrenewable resources and the extent to which the proposed project commits future generations to similar uses of

nonrenewable resources. In addition, CEQA requires that irreversible damage that could result from an environmental accident associated with the project be evaluated.

Construction of the proposed project would result in the commitment of nonrenewable natural resources used in the construction process and during operation, including gravel, petroleum products, and other materials. As described in **Chapter 2.0** "**Project Description**", the proposed project would not require large areas to be excavated or include the demolition or removal of existing buildings or infrastructure that would generate large amounts of construction waste.

Construction and operation of the proposed project would also result in commitment of energy resources such as fossil fuels and electricity. Direct energy used during construction and operation would involve using petroleum products and electricity to operate equipment, and indirect energy use would involve consuming energy to extract raw materials, manufacture items, and transport the goods and people necessary for construction activities. Construction-related energy consumption would be temporary and would be confined to the construction period. Nevertheless, construction and operation activities would, as with any construction project, cause irreversible and irretrievable commitments of finite nonrenewable energy resources, such as gasoline and diesel fuel.

The proposed project would include all feasible control measures to improve equipment efficiency and reduce energy use as required by the Sacramento Metropolitan Air Quality Management District (SMAQMD). These measures include an Emission and Dust Control Plan that would reduce unnecessary equipment idling and other policies that would help reduce energy use and are consistent with state and local legislation and policies to conserve energy. In addition, the proposed project would comply with applicable Federal, State and local policies and regulations pertaining to energy standards and would ensure that natural resources are conserved to the maximum extent possible. Therefore, due to the rate and amount of energy consumed, the proposed project would not result in the unnecessary, inefficient, or wasteful use of resources and energy use would be accomplished in a manner consistent with applicable laws and regulations.

Finally, construction of the proposed project has the potential to result in accidental release of hazardous materials which may lead to irreversible damage. However, as stated in **Section 3.5**, "**Hazards and Hazardous Materials**" used during construction would be typical of common construction activities. They would be handled by the contractor in accordance with applicable federal, State, and local regulation for hazardous substances.

5.5 Cumulative Impacts

CEQA requires an environmental impact report to include a discussion of cumulative effects of a project when the project's incremental effect is "cumulatively considerable." An effect is cumulatively considerable when it is significant in connection with the effects of past projects, the effects of other current projects and the effects of future projects (CEQA Guidelines section 15065(a)(3)).

A "cumulative impact" is an impact that is created as a result of the combination of a project together with other projects causing related impacts. The first step in the cumulative analysis, therefore, is to identify each impact of the project and, in each case, consider whether there are other projects (past, current, future) that could have related impacts, and then to determine whether the project's contribution to the overall impact is "cumulatively considerable." For example, a project that constructs a new residential or commercial retail center would generate a substantial number of vehicle trips once the project is completed and opened for operation, which in turn would affect road operations and conditions in the vicinity of the project site. A lead agency would be required not only to consider the effects of trips generated by the project, but also those trips in combination with other projects that might contribute vehicle trips to the same roadway system. Thus, CEQA seeks to avoid situations in which a series of small projects with relatively minor effects eventually result in far larger effects as their effects are combined.

Although the proposed Two Rivers Trail is part of a larger planned connection between the existing Sacramento River Parkway and the larger Jedediah Smith Memorial Trail located along the northern bank of the American River, no cumulative effects are anticipated because environmental resources that are adversely affected by the proposed project would be localized and of limited extent. While the elimination of trees and vegetation adjacent to the existing non developed path would temporarily impact the existing visual quality of the corridor, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and not considered a cumulative effect.

Additionally, the proposed project was analyzed in terms of consistency with project's identified in the City of Sacramento Bicycle Master Plan, City of Sacramento General Plan, and the City of Sacramento General Plan Master Environmental Impact Report. The following sections include an overview of the relevant cumulative impacts and the proposed project's potential to contribute to the construction related cumulative impacts.

Geographic Scope

The geographic area that is analyzed for cumulative impacts depends on the resource being analyzed. The geographic area associated with a proposed project's different environmental impacts defines the boundaries of the area used for compiling the list of past, present, and probable future projects considered in the cumulative impact analysis. The geographic area varies depending on the type of environmental resource being considered (see **Table 5-1**, below). Also listed is the method of evaluation used to analyze cumulative impacts for each environmental resource.

For those environmental resources that were evaluated based on the projections approach, the projections take into consideration future projects that are not included in the below list of related plans and projects.

List of Related Plans and Projects

A list of past, current, and reasonably foreseeable future projects was compiled using information from the City. The past, present and reasonably foreseeable future projects proposed by the City within or directly adjacent to the proposed project area, the surrounding community, or the City as a whole were identified and categorized in **Table 5-2** below. For the purposes of this discussion, these projects that may have a cumulative effect on the resources of the Project area are often referred to as the "collective projects." These projects are described in **Table 5-2**.

Resource Topic	Geographic Area	Method of Evaluation (*)	
Aesthetics	Immediate Project Vicinity	Projects	
Air Quality, Greenhouse Gas Emissions	Local (Toxic Air Contaminants);	Projects and Projections	
(GHG), and Energy	Air Basin (Construction Related and Mobile Sources); GHG (Statewide).		
Biological Resources	Immediate Project Vicinity and Region	Projects	
Cultural and Tribal Resources	Immediate Project Vicinity	Projects	
Geology and Soils	Immediate Project Vicinity	Projects	
Hazards and Hazardous Materials	Immediate Project Vicinity	Projects	
Hydrology, Water Quality, and Drainage	Immediate Project Vicinity	Projects and Projections	
	Watershed/Basin		
Land Use and Planning	Immediate Project Vicinity	Projects and Projections	
Noise	Immediate Project Vicinity	Projects	
Public Services, Utilities, and Recreation	Immediate Project Vicinity	Projects and Projections	
Transportation and Circulation	Immediate Project Vicinity	Projects and Projections	
	Regional Circulation Network		

Table 5-1. Geographic Scope of Cumulative Impact and Method of Evaluation

Notes:

Projects: the use of a list of past, present, and reasonably foreseeable "Projects". Projections = the use of Projections contained in relevant planning documents.

Table 5-2.List of Collective Past, Present, and Reasonably Anticipated Future
Projects Within the City

Project	Status	Location	Description
American River Common Features In Progress Erosion Control Project (including Bank Protection Conceptual Design Process)		American River Levees	The Sacramento Area Flood Control Agency (SAFCA) is proposing to implement improvements to the flood management system protecting portions of the City and County of Sacramento along the Lower American. Projects would include the placement of rock erosion protection to over 6,000 feet of levee and bank within the project area. The design will also reduce erosion potential by removing susceptibility to geotechnical failure and increasing native riparian vegetation regeneration.
North Sacramento Streams, Sacramento River East Levee, Lower American River and Related Flood Improvements Project	In Progress	Sacramento River Levees	SAFCA is also proposing to implement improvements to the flood management system protecting portions of the City and County of Sacramento along the Lower American and Sacramento Rivers and their tributaries outside the Natomas Basin. The proposed improvements would reduce flood risk and bring the flood management system in the project area into compliance with applicable engineering

Project	Status	Location	Description
			standards established under the National Flood Insurance Program.
Sacramento to Roseville Third Main Track Project	Future Project	City of Sacramento	The Capitol Corridor Joint Powers Authority (CCJPA) is proposing to improve existing intercity passenger rail (IPR) service along the Capitol Corridor by increasing the frequency of service between the cities of Sacramento and Roseville and implementing infrastructure improvements to support the increased service. Potentially affects the UPRR structure located within the western portion of the proposed project. Final EIR completed in November 2015.
Cap City Corridor Project	Future Project	City of Sacramento	Caltrans (in cooperation with the City of Sacramento and the Sacramento Area Council of Governments) is proposing the Cap City Corridor Project that would widen the existing roadway, extend the existing bus/carpool lanes, construct auxiliary lanes, improve intelligent transportation system elements, construct a new Class I bike path on the American River Bridge, and widen or replace existing structures within the project limits.
Railyards Specific Plan	In Progress	City of Sacramento	Sacramento Railyards Specific Plan area is approximately 244-acres and includes the subject property, the City's Sacramento Valley Station, and the Union Pacific Railroad rail corridor. The Project proposes to subdivide lots for a variety of uses, including residential, retail, and office. The propjet also includes a medical center campus and a major sports complex.
McKinley Village Project	In Progress	City of Sacramento	The McKinley Village Project consists of the construction and operation of a residential development, a neighborhood recreation center, parks, and associated infrastructure on an approximately 48-acre site within the East Sacramento Community Plan Area. Revised CEQA completed in 2017.
Leisure Lane Storm Drain Improvements Project	In Progress	Royal Oaks Drive/ Hwy 160 and Leisure Lane/ Exposition Blvd/ Hwy 160	Project consists of constructing a new outlet weir box north of CA-Highway 160 between the existing sewer line. CEQA review completed in 2015.
Accelerated Water Meter Project	In Progress	City of Sacramento	The Accelerated Water Meter Project proposes to install approximately 25,700 water meters on existing residential and commercial water service connections. The proposed

Table 5-2.List of Collective Past, Present, and Reasonably Anticipated Future
Projects Within the City

Project	Status	Location	Description
			Project also involves replacement of approximately 62 miles of existing distribution and transmission mains primarily in existing City street rights-of- way. CEQA review was completed in 2017.
Sacramento Convention Center Renovation and Expansion and the 15th/K Street Hotel Projects	Future Project	13th Street W.,15th Street E., J Street N., K Street S.; Hotel: SW corner of K and 15th Streets	The proposed Sacramento Convention Center Renovation and Expansion Project will add exhibit space, meeting rooms, new lobbies, an outdoor amphitheater, and back-of-house uses to expand and renovate the existing Convention Center. The 15th/K Street Hotel Project will construct a hotel adjacent to the Convention Center. CEQA review was completed in 2018.
Twin Rivers Transit-oriented Development and Light Rail Station Project	Future Project	Richards Blvd./North 12th Street	The City, in partnership with the Sacramento Housing and Redevelopment Agency and the Sacramento Regional Transit District, proposes implementation of the Twin Rivers Transit-Oriented Development and Light Rail Station Project. The proposed Project would develop a mixed-income and mixed-use community comprising replacement public housing units, new market rare rental and low-income housing tax credit units, a realigned internal street network, green open space, and other community amenities on two noncontiguous but proximate properties that currently include public housing and undeveloped land. CEQA review was completed in 2017.

Table 5-2.List of Collective Past, Present, and Reasonably Anticipated Future
Projects Within the City

Notes:

* Detail regarding specific environmental impacts of each alternative is provided in the "Screening Evaluation" provided in the previous section.

Methods

The analysis below examines the cumulative impacts of the proposed project for each of the topics that are analyzed in **Chapter 3.0** of this EIR. The impacts are assessed by short term (construction) and long term (operational) impacts of the proposed project combined with the impacts of the past and planned projects listed in **Table 5-2** (referred to as the collective projects).

The following objectives were set forth to analyze the short-term construction and long-term operational cumulative impacts. First, there is an assessment of whether the baseline condition, when considered with the proposed project, entails a significant impact to any specific resource. Then, there is an assessment of whether the combined impacts of the proposed project and the projects in **Table 5-2** are cumulatively significant. Finally, there is a determination of whether the incremental effects of the proposed project would 'contribute considerably' and therefore cause a cumulatively considerable effect. If so, there is also a determination of whether mitigation is feasible.

Specifically, the following objectives were set forth to analyze the short-term construction and long-term operational cumulative impacts described below:

- Identify if the combined impacts of the proposed project and the projects described in Table 5-2 are significant. If so,
- Determine whether the proposed project's incremental contribution to that significant impact are cumulatively considerable. If so,
- Determine if mitigation is feasible.

Note: it is possible that even when the cumulative impact of multiple projects is significant, the incremental contribution of the impact for the proposed project may itself not be cumulatively considerable (California Code of Regulations [CCR] section 15064.H4, Communities for Better Environment Case Law). In this case, the project's impact would not be cumulatively considerable.

Furthermore, a project's contribution is less than cumulatively considerable if the project implements mitigation measures designed to alleviate the cumulative impact. (CEQA Guidelines section 15130 (a)(3)).

Resource-Specific Cumulative Analysis

Aesthetics

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to aesthetic and visual resources is limited to areas within the physical footprint of a project area and areas adjacent to the project with views that could be changed by the proposed project.

What is the level of significance of the Combined Impact of the Proposed Project with the projects listed in Table 5-2?

The area surrounding the proposed project site is within the American River Parkway and consists of the American River levee and open space uses (see Sections **3.1** "Aesthetics" and **3.7** "Land Use and **Planning**"). Development of past and current projects, as well as future proposed projects, continue to alter the visual environment in and around the City. In general, the visual resource impacts of the proposed project and the majority of projects listed in **Table 5-2** are site-specific and would not necessarily combine with other projects that are not in the same viewshed to create a cumulative impact. In addition, all proposed and reasonably foreseeable projects would be subject to City design and landscaping requirements to ensure that they do not degrade visual character. The appearance of the project vicinity would not substantially change, and construction of the proposed project would not create significant visual impacts that would contribute to visual resource degradation in the viewshed when assessed in conjunction with other local projects. Therefore, the proposed project, in conjunction with other planned projects, would have a **less than significant** cumulative impact on aesthetic resources.

Finding: Less than Cumulatively Significant
Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The multiple development, transportation and infrastructure projects in the region around the City would have a combined aesthetic impact; however, the proposed project would not cause a considerable increase to that impact, given the proposed project involves construction of a multi-use recreation trail and no structures or roadways would be constructed. While the removal of large existing trees and vegetation would temporarily impact the existing visual quality of the corridor, new trees and vegetation would be planted and allowed to grow (see **Mitigation Measures BIO-2**, **BIO-5** through **BIO-10**, **BIO-12**, and **BIO-13**, summarized below and more fully described in **Section 3.2 "Biological Resources**"); therefore, this impact would be temporary and ultimately result in a similar aesthetic or visual quality. The combined impacts of tree removal with other projects does not constitute a significant impact and the proposed project does not entail a considerable contribution to the existing baseline (**Table 5-2**); therefore, no additional mitigation is necessary.

- Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat
- Mitigation Measure BIO-5: Return Temporarily Disturbed Areas to Pre-Project Conditions
- Mitigation Measure BIO-6: Avoid the Spread of Invasive Plant Species
- Mitigation Measure BIO-7: Compensate for Permanent Impacts to Riparian Habitat and Protected Trees
- Mitigation Measure BIO-8: Monitor During Ground Disturbance and Vegetation Removal
- Mitigation Measure BIO-9: Avoid Construction Activities within 165 feet of Elderberry Shrubs During Valley Elderberry Longhorn Beetle Flight Season
- Mitigation Measure BIO-10: Implement Dust Control Measures
- Mitigation Measure BIO-12: Compensate for the Permanent Removal and Temporary Disturbance of Valley Elderberry Longhorn Beetle Habitat
- Mitigation Measure BIO-13: Transplant Elderberry Shrubs

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Air Quality and Greenhouse Gas Emissions

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to both air quality and greenhouse gas emissions is on a regional level because air quality impacts are regional in nature.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The City is at nonattainment for State and Federal Ozone, State PM10 and Federal PM2.5. The collective projects listed in **Table 5-2** would result in new air emissions and the combined project impacts relative to these constituents are considered **significant**.

Finding: Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The SMAQMD has established operational cumulative significance thresholds for ROG and NOx, which are ozone precursors, of 85 pounds per day. Any project emitting over 85 pounds per day of ROG or NOx would be considered a cumulatively significant impact and would require mitigation. Based on the results of the air quality modelling assessment, construction-related emissions from the proposed project would be below the SMAQMD significance thresholds for cumulative impacts. Furthermore, implementation of all basic construction emission control practices and requirements provided in SMAQMD Rule 403 (see **Mitigation Measure AIR-1**, summarized below and more fully described in "**Executive Summary**", **Table ES-1**). Consequently, the incremental addition to the problem from the proposed project is considered mitigated to minimal levels and thus does not contribute considerably to this existing impact; therefore, no further mitigation is required.

• Mitigation Measure AIR-1: Implement Construction-related Emission Control Practices:

Finding: Less than Cumulatively Considerable for both air quality and greenhouse gas emissions with no additional mitigation required.

Biological Resources

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative biological resources analysis is the project site and adjacent surrounding areas (including the BSA).

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

Simultaneous construction of other projects in the project area (see **Table 5-2**) could potentially result in significant impacts on biological resources, should they be present within the project site or the vicinity of the Project site. Implementation of the Sacramento to Roseville Third Main Track Project, the Cap City Corridor Project, and portions of the American River Common Features Project would have a direct physical overlap with the proposed project. The American River Common Features Project may require construction activities within the project study area in 2021 and will require coordination with the City and SAFCA and ensure biological resource impacts are minimized. The cumulative projects listed in **Table 5-2** were/are required to complete CEQA environmental assessments, by law, which include a biological resource study and compliance with the FESA/CESA (as appropriate). While the proposed project would affect the habitat of VELB, a special status species. However, implementing the VELB avoidance, restoration, maintenance, and compensation measures (see **Mitigation Measures**)

BIO-7 through **BIO-13**, summarized below and more fully described in Section 3.2 "Biological Resources") would reduce project impacts to a less than significant level. Therefore, in general, the proposed collective projects in Table 5-2 are not considered to have a cumulatively significant impact to biological resources.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

When the proposed project is analyzed in conjunction with other recent, current, and reasonably foreseeable projects, the potential contribution to the cumulative biological resource impact to special status species, wetlands, migratory corridors, and trees, is not considered cumulatively considerable, because the proposed project was designed and adjusted to avoid and minimize impacts to biological resources as much as feasible. While the elimination of riparian and existing trees would temporarily impact the project corridor, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and ultimately result in a similar visual quality.

The proposed Project would not have a cumulatively considerable impact to migratory wildlife corridors, specifically migratory nesting birds, when reviewed in conjunction with other local projects. While the elimination of large existing trees would impact nesting bird habitat, new trees and vegetation would be planted and allowed to grow (see **Mitigation Measures BIO-2**, **BIO-4** through **BIO-12**, summarized below and more fully described in **Section 3.2 "Biological Resources**"); therefore, this impact would be temporary. The proposed project is designed to protect wildlife species such as migratory birds through implementation of pre-construction biological surveys and monitoring, as needed, to protect and avoid these biological resources (see **Mitigation Measure BIO-14**, summarized below and more fully described in **Section 3.2 "Biological Resources**"). Therefore, it does not contribute to a cumulatively considerable impact to biological resources when analyzed in conjunction with other proposed projects in the region (**Table 5-2**).

- Mitigation Measure BIO-2: Install Temporary Fencing around Environmentally Sensitive Habitat
- Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions
- Mitigation Measure BIO-5: Avoid the Spread of Invasive Plant Species
- Mitigation Measure BIO-6: Compensate for Permanent Impacts to Riparian Habitat and Protected Trees
- Mitigation Measure BIO-7: Monitor During Ground Disturbance and Vegetation Removal
- Mitigation Measure BIO-8: Avoid Construction Activities within 165 feet of Elderberry Shrubs During Valley Elderberry Longhorn Beetle Flight Season
- Mitigation Measure BIO-9: Implement Dust Control Measures
- Mitigation Measure BIO-10: Prohibit Use of Herbicides and Mowing near Elderberry Shrubs
- Mitigation Measure BIO-11: Compensate for the Permanent Removal and Temporary Disturbance of Valley Elderberry Longhorn Beetle Habitat

- Mitigation Measure BIO-12: Transplant Elderberry Shrubs
- Mitigation Measure BIO-14: Conduct Preconstruction Surveys

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Cultural and Tribal Resources

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative cultural and tribal analysis is the project site and the adjacent surrounding areas.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The records search of the State and local registers of archaeological resources did not identify any archaeological resources (prehistoric or historic period) within the project area. In addition, based on consultation with tribal representatives summarized in **Section 3.3**, "**Cultural and Tribal Resources**", no tribal cultural resources were identified within the project area. The records search of the State and local registers of historic resources identified one resource, the American River South Levee (Levee Unit 118 Part 1) is considered significant under National Register of Historic Places Criterion A within the context of flood management and for its association with the SRFCP.

As designed, the proposed project would be located primarily along the toe of the levee, with Segment 4 and portions of Segments 1 and 2 along the levee crown. The proposed trail design does not include any visual features or uses that would alter the character-defining features of the levee (i.e. its compacted earth, slope, crown). The levee would retain its important aspects of integrity (location, materials, design, setting, feeling and association) that allow it to convey its historical significance as an important component of the SRFCP and flood management efforts in Sacramento. Therefore, the impacts to Levee Unit 118 Part 1 (American River South Levee) are considered less than significant, with no mitigation required.

There is a potential for the inadvertent discovery of buried tribal cultural resources, significant paleontological resources, or human remains during the construction of the proposed Project, but with implementation of resource avoidance measures (see **Mitigation Measures CTR-1** through **CTR-3**, summarized below and more fully described in **Section 3.3 "Cultural Resources**"), it would reduce the proposed Project's impacts to tribal cultural resources, significant paleontological resources, and human remains to **less than significant**.

Simultaneous construction of other projects in the project area could potentially result in significant impacts on historic resources, archaeological resources, human remains, or tribal resources, should they be present within the project site or the vicinity of the Project site. Implementation of the Sacramento to Roseville Third Main Track Project, the Cap City Corridor Project, and portions of the American River Common Features Project would have a direct physical overlap with the proposed project. However, all the projects listed in **Table 5-2** were/are required to complete CEQA environmental assessments, by law, which include a cultural resource study within the area including any areas overlapping the proposed project area as well as consultation with any tribes located in the area. These cultural resource studies and tribal consultations ensure proper documentation, protection, and/or mitigation of important cultural and tribal resources. Because of the CEQA requirements to assess impacts to cultural and tribal

resources, there is no combined significant impact to cultural or tribal resources from these projects, and the combined impacts to cultural and tribal resources are considered less than cumulatively significant.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

Since combined impacts of the projects do not constitute a significant impact and the proposed project does not entail a significant impact to cultural resources (as determined by CSO) or tribal cultural resources, there would not be a contribution to a cumulatively considerable impact.

- Mitigation Measure CTR-1: Conduct Cultural Resources and Tribal Cultural Resources Sensitivity and Awareness Training Program Prior to Ground-Disturbing Activities
- Mitigation Measure CTR-2: Implement Avoidance, Minimization, and Preservation Measures Should Cultural or Tribal Cultural Resources Be Discovered During Construction
- Mitigation Measure CTR-3: Implement Post Discovery Procedures in the Event of the Inadvertent Discovery of Human Remains.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Geology and Soils

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative geologic resources is the project site and adjacent surrounding areas.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The projects in **Table 5-2** must be constructed in compliance with seismic regulations and include soils and erosion control BMPs. Therefore, the potential impact to soil erosion is localized and mitigated, and not considered cumulatively significant.

Finding: Less than Cumulatively Considerable

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

Construction in a seismically-active region puts people and structures at risk from a range of earthquakerelated effects, such as surface fault rupture, strong ground shaking, and landsliding. However, as more fully described in **Section 3.4** "**Geology and Soils**", the proposed project is not located within an area that is seismically active. Furthermore, the proposed project would be built to applicable California State Building Codes to further reduce risks associated with seismic activity. The proposed project would also entail erosion control BMPs and site restoration. Therefore, the proposed project's contribution to seismic hazards, erosion, and sedimentation in the region is not considered cumulatively considerable. Finding: Less than Cumulatively Considerable with no additional mitigation required.

Hazards and Hazardous Materials

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to hazards and hazardous material is limited to the American Society for Testing and Materials (ASTM) standard of one-mile area surrounding the proposed project.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

Hazardous materials to be used during construction are of low toxicity and would consist of fuels, oils, paints, and lubricants. Because these materials are required for operation of construction vehicles and equipment, BMPs would be implemented to reduce the potential for or exposure to accidental spills or fires involving the use of hazardous materials. Impacts from minor spills or drips would be avoided by thoroughly cleaning up minor spills as soon as they occur. While foreseeable projects have the potential to cause similar impacts, is it assumed these projects would also implement BMPs. Therefore, there would not be a significant cumulative impact.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

Hazardous materials utilized during operation include fuels, oils, and lubricants. The materials would be stored in accordance with regulatory requirements as disclosed in Section 3.5 "Hazards and Hazardous Materials". Simultaneous construction of projects in Table 5-2 could also require the use of hazardous materials during construction. If these projects occurred in the immediate vicinity of the proposed Project, they could result in a cumulatively considerable potential risk of upset. However, the projects listed in Table 5-2 would not occur simultaneously as the proposed project. Additionally, the proposed project and the projects listed in Table 5-2 do not have high risk of wildfires due to the highly-urbanized nature of the City. Therefore, the proposed project would not result in a cumulatively considerable increase in hazards.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Hydrology and Water Quality

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to hydrology and water is on a regional level because hydrology and water quality impacts are regional in nature.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The cumulative projects listed in **Table 5-2** may result in a cumulatively significant impact to regional hydrologic resources if, for example, flow alterations combined to either significantly reduce or increase flows in the region's stream, rivers and canals. The proposed project does not entail significant proposed

flow decreases or increases and the proposed trail design would not affect local or regional drainage patterns within the study area. Furthermore, the proposed project and the projects listed in **Table 5-2** would be subject to Federal, State and local regulations designed to minimize cumulative impacts to water quality. Erosion and water quality BMPs (see **Mitigation Measure BIO-4**, summarized below and more fully described in **Section 3.2 "Biological Resources**"), implemented in the short-term (during construction of the proposed project), in combination with compliance with Federal, state and local regulations, are expected to reduce potential short-term combined impacts to hydrology and water quality to a less than significant level.

The American River Common Features Erosion Control Project (including Bank Protection Conceptual Design Process) currently planned along Segment 5 would be constructed in 2021, after analysis and design has concluded. Trail construction for the proposed project would take place before the erosion repair project is implemented. However, any construction along the levee or within the floodway would involve close coordination between the City, County, LARTF, Corps, ARFCD, SAFCA, and CVFPB to ensure the two project designs do not affect levee integrity or contribute to a cumulatively considerable risk of erosion, flooding, or degradation of water quality in the vicinity of the project site.

The short-term impacts of the projects listed in **Table 5-2** on hydrology and water quality are estimated to be less than significant or less than significant with mitigation incorporated. None of the construction projects are expected to occur simultaneously as the proposed project. Therefore, the proposed project would have a **less than significant** cumulative impact on hydrology and water quality.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The proposed project would mitigate impacts to a less than significant level by avoiding impacts to hydrology and water quality and would not be cumulatively considerable given the small and localized nature of the proposed project and the potential impacts. Therefore, the proposed project would not be cumulatively considerable and would not require additional mitigation.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Land Use and Planning

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative land use analysis is the region (City). Land use decisions are made at the City level for the project region; therefore, the City is an appropriate geographic scope.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The projects identified in **Table 5-2** could both create and alleviate growth-related impacts in the City. Residential and other development-related projects will impact regional infrastructure, including impacts to finite resources such as wastewater treatment capacity and water supply. Transportation-related projects such as the Twin Rivers Transit-oriented Development and Light Rail Station Project will alleviate impacts associated with cumulative development. Water and wastewater infrastructure construction projects such as the 3rd and 9th Street Sewer Relief Projects, and the Water Treatment Plants Rehabilitation Project serve to alleviate impacts to existing infrastructure associated with increased development. The proposed multi-use trail would not contribute to the combined impacts associated with the past, present, and future development projects listed in **Table 5-2**.

Short-term and long-term cumulative impacts to land use as a result of the projects listed in **Table 5-2** would be less than significant. The cumulative infrastructure development of the proposed project and the projects identified in **Table 5-2**, would not individually or cumulatively physically divide a community or communities. All projects must be developed in accordance with applicable land use plans and policies. Applicable zoning ordinances and land-use regulations would not be affected as a result of the projects listed in **Table 5-2**. As a result, the proposed project and the projects listed in **Table 5-2** would have a **less than significant** cumulative impact.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The combined impacts of the projects listed in **Table 5-2** do not constitute a significant land use impact. The proposed project area for the multi-use trail is classified as Parks and Recreation in the City of Sacramento 2035 General Plan and zoning code and would continue to be zoned as such. The trail project would not change the zoning designation of adjacent areas. Because the project does not create new connections to undeveloped land, no impacts to growth, economics, affordable housing, or crime would occur. Development of the site as proposed would alter the existing landscape, but the project site will continue to be consistent with these planning designations. The City Bikeway Master Plan also identifies the proposed trail project (Figure 22, City of Sacramento, 2018). Since the proposed project does not have the potential to conflict with land use plans as described above and would not incrementally contribute to the combined impact of the past, present, and future projects listed in **Table 5-2**, there would be no cumulative impact to land use.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Noise and Vibration

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to noise is limited to areas within the physical footprint of a project area.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

If the construction of projects identified in **Table 5-2** were to occur simultaneously when assessed in combination with the proposed project, they could have a cumulative impact to sensitive receptors adjacent to the project area. However, there are no overlapping construction schedules, thus their noise impacts would not compound to exceed a threshold, excessively vibrate the ground, or cause substantial permanent increase in ambient noise. Additionally, the timing of these projects located nearest to the proposed project are not anticipated to be constructed at the same time as the proposed project. Therefore, the potential cumulative impact from the projects in the region and the proposed project would be less than cumulatively significant.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

As discussed above, the baseline recent past, current, and reasonably foreseeable future cumulative conditions, with the addition of the proposed project, would not create a significant noise impact in the area, such as an increase in noise levels above local and regional thresholds. Therefore, the proposed project would not result in a cumulatively considerable impact.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Public Services, Recreation, and Utilities

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative public services, recreation, and utilities analysis is the service area of each of the providers serving the proposed project area. These are discussed under Section 3.9 "Public Services, Recreation, and Utilities" of this Draft EIR and include local fire districts, police departments, school districts, municipalities and utility service providers (both public and private),

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The potential for the projects in the region (**Table 5-2**) combined with the proposed project to cumulatively trigger new or larger demand on public services or utilities is considered less than cumulatively significant. This is because the proposed projects listed in **Table 5-2**, along with the proposed project, would not be constructed simultaneously and do not entail added demand for school or parks, or require the addition of large numbers of workers to move to the area. In addition, the potential heightened risk for fire (and demand on fire departments) during construction is temporary and significantly reduced through the application of standard fire prevention and control mitigation. As such, combined demand on local police, fire, schools, parks, and other public facilities or utilities is considered less than significant. In addition, the operation of the combined projects, most notably the housing development projects, could create additional demand on local facilities such as the police and fire department; however, such facility expansions (i.e. new parks, police, and fire stations) are typically part of the proposed development projects therefore would not trigger the need for new governmental facilities for which impacts have not been contemplated.

Finding: Less than Cumulatively Considerable

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

As discussed above, the past, current and reasonably foreseeable future cumulative conditions with the addition of the proposed project would not create a significant impact to public services or utilities. The proposed project's contribution to the cumulative less than significant impact to public services/utilities is also not cumulatively considerable, as it would not cause a significant incremental increase to the demand on these services or utility service providers.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Transportation and Circulation

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to transportation and traffic is limited to a quarter mile area surrounding the proposed project.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in Table 5-2?

The proposed project would not result in long-term effects on the existing transportation system. In addition, the projects in the region, given their locations, do not appear to have significant overlapping access footprints that would result in a cumulatively significant impact to key highways and roads. Therefore, the potential cumulative impact to transportation and circulation from past, current and reasonably foreseeable future projects is considered **less than significant**.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The proposed project consists of constructing a multi-use trail and would not include the construction of trip generating development roadways or other transportation infrastructure that would impact traffic. Based on the analysis in **Section 3.10** "**Transportation and Circulation**", the limited project footprint within existing roadways, and minimal amounts of long-term vehicle generation, the contribution of the proposed project to the cumulative impact to transportation and traffic resources would not cause a significant increase to the demand on these resources beyond the thresholds listed. Therefore, the impact of the proposed project would not be cumulatively considerable.

Finding: Less than Cumulatively Considerable with no additional mitigation required.

Chapter 6. References

Executive Summary

No references sited.

1.0 Introduction

- California Department of Forestry and Fire Protection (Calfire). 2007/2008. *Fire Hazard Severity Zones Mapping*. Available: <u>https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-</u> <u>engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/</u> Accessed June 27, 2019
- City of Sacramento. 2018. *Bicycle Master Plan*. Available: <u>https://www.cityofsacramento.org/-</u> /media/Corporate/Files/Public-Works/Transportation/Active-Transportation/Sacramento-BMP-<u>Amended-201808.pdf?la=en</u> Accessed July 1, 2019
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- County of Sacramento. 2008. American River Parkway Plan 2008. Municipal Service Agency, Planning and Community Development Department. Available at <u>http://www.regionalparks.saccounty.net/Parks/Documents/Parks/ARPP06-092617_sm.pdf</u> Accessed: July 1, 2019.
- James, E. 2018 (June 6). Email communication from Erik James, District Levee Safety Program Manager, USACE, to Andrea Shephard and Graham Bradner, GEI Consultants.

Jones & Stokes. 2001. Two Rivers Trail Concept Plan Report. Sacramento, CA.

0.0 Project Description

American River Flood Control District. 2002. Recreational Trails Policy. Sacramento, CA

ARFCD. See American River Flood Control District.

City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019

County of Sacramento. 2018. American River Parkway Trail & Parks Policy & Sign Manual

Quincy Engineering Inc. 2019. Glenn Hall Park Access Route Design Graphic. Rancho Cordova, CA.

3.0 Environmental Analysis

3.1 Aesthetics

City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019

County of Sacramento. 2008. *American River Parkway Plan 2008*. Municipal Service Agency, Planning and Community Development Department. Available at <u>http://www.regionalparks.saccounty.net/Parks/Documents/Parks/ARPP06-092617_sm.pdf</u> Accessed: July 1, 2019.

3.2 Biological Resources

- Area West Environmental, Inc. 2018 (September). *Two Rivers Trail Phase II Project Natural Environment Study*. Orangevale, CA. Prepared for: California Department of Transportation, District 3.
- California Department of Fish and Wildlife. 1994. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (buteo swainsoni) in the Central Valley of California*. Available: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991</u>. Accessed: October 17, 2018.
- California Native Plant Society, Rare Plant Program. 2018. *Inventory of Rare and Endangered Plants of California* (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 17 October 2018].
- CDFW. See California Department of Fish and Wildlife.
- CNPS. See California Native Plant Society, Rare Plant Program.
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>.
- U.S. Fish and Wildlife Service. 1999. Conservation Guidelines for the Valley Elderberry Longhorn Beetle, July 9, 1999. U.S. Fish and Wildlife Service. Sacramento Fish and Wildlife Office.

 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus). U.S. Fish and Wildlife Service, Sacramento, California.
28 pp. May 2017.

USFWS. See U.S. Fish and Wildlife Service

3.3 Cultural Resources

Beardsley, R. K. 1948. "Culture Sequences in Central California Archaeology." *American Antiquity*. 14(1):1–28.

- Bennyhoff, J.A., and D. A. Fredrickson. 1969. A Proposed Integrative Taxonomy for Central California. In *Toward a New Taxonomic Framework for Central California Archaeology*, 1974, edited by Richard E. Huges, 15-24. Contributions of the University of California Archaeological Research Facility, Berkeley, CA.
- California Geological Survey. *Geologic Map of the Sacramento Quadrangle, California, 1:250,000.* Available at <u>http://www.quake.ca.gov/gmaps/rgm/sacramento/sacramento.html.</u> Accessed July 2, 2019
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- Drinkwater, J. G. 1933. Memorandum to the Division Engineer, Pacific Division, San Francisco, California regarding construction of levee by hired labor and government plant. [RG 77 Records of the Office of the Chief of Engineers, California Debris Commission, General Administrative Files (Series SAC), 1906-1935, Box 77 File Code: Sac 1, HM FY08, Folder Sac 1/118]. On file with the National Archives San Francisco, San Bruno, CA.
- Johnson, Richard B. 2018. *History of Us: Nisenan Tribe of the Nevada City Rancheria*. Comstock Bonanza Press.
- Kelley, Robert Lloyd. 1989. Battling the Inland Sea: American Political Culture, Public Policy and the Sacramento Valley, 1850-1986. University of California Press, Berkeley, CA.
- Kroeber, A.L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78:391–421. Washington, D.C.
- Lillard, J.B., R. F. Heizer, and F. Fenenga. 1939. *An Introduction to the Archaeology of Central California*. Sacramento Junior College, Department of Anthropology Bulletin 2. Sacramento, CA.
- McClurg, John and Jim Haupt. 1991. Memorandum to Steve Yaeger regarding Lower American River review of objective release criteria.
- McGowan, Joseph A., and Terry R. Willis. 1983. *Sacramento: Heart of the Golden State*. Windsor Publications, Inc., Woodland Hills, CA.
- Madley, Benjamin. 2016. An American Genocide: The United States and the California Indian Catastrophe. Yale University Press, New Haven, CT.
- Moratto, M. J. 1984. California Archaeology. Academic Press, New York, NY.
- O'Neill, Karen. M. 2006. *Rivers by Design: State Powers and the Origins of U. S. Flood Control.* Duke University Press, Durham, NC.
- Page & Turnbull. 2013. General Plan Technical Background Report. June.

- Russo, Mitch, ed. 2010. Fact Sheet: Sacramento River Flood Control Project Weirs and Flood Relief Structures. Available at http://www.water.ca.gov/newsroom/docs/WeirsReliefStructures.pdf, accessed May 2016.
- Society of Vertebrate Paleontology. 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Impact Mitigation Guidelines Revision Committee. Available: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx>. Accessed: September 28, 2018.
- Wilson, N. L. and A. H. Towne. 1978. Nisenan. In *Handbook of North American Indians. Volume 8: California.* R. F. Heizer, editor, 387–397. Smithsonian Institute, Washington, D.C.

3.4 Geology and Soils

- Ayres Associates. 1997. Final Report: American and Sacramento River Project, Geomorphic, Sediment Engineering, and Channel Stability Analyses. Prepared for U.S. Army Corps of Engineers, Sacramento District. December 1997.
- BSC. See California Building Standards Commission.
- California Building Standards Commission. 2016. 2016 California Building Code, Part 2, Volume 2. Chapter 18 – Soils and Foundations. Available online: <u>https://codes.iccsafe.org/public/chapter/content/1836/</u>. Accessed September 6, 2018.
- California Department of Water Resources. 2012 (May). Urban Levee Design Criteria. Sacramento, CA.
- California Geological Survey. 1965. *Geologic Atlas of California-Sacramento Sheet*. Available: <u>ftp://ftp.consrv.ca.gov/pub/dmg/pubs/gam/GAM_012_Sacramento/</u>. Accessed: March 20, 2019.
 - ____. 2018. CGS Information Warehouse: Regulatory Maps. Available: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed September 4, 2018.
 - _____.2019. *Fault Activity Map of California (2010)*. Available at http://maps.conservation.ca.gov/cgs/fam/. Accessed September 5, 2018.
- CGS. See California Geological Survey.
- City of Sacramento. 2018. *City Code Chapter 15.88: Grading, Erosion, and Sediment Control.* Available at https://www.qcode.us/codes/sacramento/view.php?topic=15-15_88. Accessed July 2, 2019.
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- DWR. See California Department of Water Resources.

- GEI Consultants, Inc. 2017 (May). Memorandum Geotechnical Evaluation of Proposed Bike Trail Alternatives-Segments 4 and 6, Two Rivers Bike Trail Phase II Project. Sacramento, California.
- Jennings, C.W. and Bryant, W.A. 2010. 2010 Fault Activity Map of California. Available at http://maps.conservation.ca.gov/cgs/fam/. Accessed September 5, 2018.

Natural Resources Conservation Service. 1993 (April). Soil Survey of Sacramento County, California.

- . 2018. *Web Soil Survey*. Available at http://websoilsurvey.nrcs.usda.gov/app/. Accessed September 5, 2018.
- U.S. Army Corps of Engineers. 2000 (April). Design and Construction of Levees. EM 1110-2-1913.

3.5 Hazards and Hazardous Materials

- California Department of Toxic Substances Control. 2019. EnviroStor. Available: <u>https://www.envirostor.dtsc.ca.gov/public/</u>. Accessed: July 10, 2019.
- City of Sacramento. 2018. City of Sacramento Evacuation Plan: An Annex to the City of Sacramento's Emergency Operations Plan. Available: http://www.sacramentoready.org/Documents/sac_018943.pdf. Accessed: July 10, 2019.
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- County of Sacramento. 2015. American River South Evacuation Route 3 Map. Available: http://www.waterresources.saccounty.net/stormready/Pages/American-River-South-Evacuation-Route-3-Map.aspx. Accessed: July 10, 2019.
- . 2016. 2016 Sacramento Countywide Local Hazard Mitigation Plan Update. Available: http://www.waterresources.saccounty.net/Local%20Hazard%20Mitigation%20Plan%202017/Ex ecutive%20Summary.pdf. Accessed: July 10, 2019.
- GEI Consultants, Inc. 2018. Phase I Environmental Site Assessment, Two Rivers Trail Project Phase II. Rancho Cordova, CA.
- Sacramento Council of Governments (SACOG). 2013. Sacramento International Airport Land Use Compatibility Plan. December. Available: https://www.sacog.org/airport-planning. Accessed: July 10, 2019.
- Sacramento Metropolitan Air Quality Management District (SMAQMD). 2015. Rule 902 Asbestos. Available: <u>http://www.airquality.org/ProgramCoordination/Documents/rule902.pdf</u>. Accessed July 10, 2019.
- USGS. 2011. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and other Natural Occurrences of Asbestos in California, Map Sheet 59. Available: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ms/59/MS59_Plate.pdf. Accessed: July 10, 2019.

State Water Resources Control Board. 2019. GeoTracker. Available: <u>http://geotracker.waterboards.ca.gov/</u>. Accessed: July 10, 2019.

3.6 Hydrology, Water Quality, and Drainage

- California Department of Water Resources. 2003. *California's Groundwater Bulletin 118*. Available at https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/Statewide-Reports/Bulletin_118_Update_2003.pdf. Accessed September 7, 2018.
 - .2017. *Groundwater Information Center Interactive Map Application*. Updated June 2017. Available at https://gis.water.ca.gov/app/gicima/.https://gis.water.ca.gov/app/gicima/. Accessed September 7, 2018.
- cbec. 2018. Hydraulic Assessment of Existing and Project Conditions, City of Sacramento Two Rivers Trail Phase 2. June 6, 2018.
- City of Sacramento, 2018. Sacramento City Code, Chapter 15.88: Grading, Erosion, and Sediment Control. Available: <u>https://www.qcode.us/codes/sacramento/view.php?topic=15-15_88</u>. Accessed: July 10, 2019.
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- Central Valley Regional Water Quality Control Board. 2016. 2016 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report. Available at https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/#basinplaninfo. Accessed September 7, 2018.
- CVRWQCB See Central Valley Regional Water Quality Control Board.
- DWR. See California Department of Water Resources.
- Federal Emergency Management Agency. 2018. FEMA Flood Insurance Rate for Sacramento, CA. Available at https://msc.fema.gov/portal/search?AddressQuery=american%20river#searchresultsanchor. Accessed September 6, 2018.
- FEMA. See Federal Emergency Management Agency.
- Kukas, G. 2014. *Hydraulic Screening and Analysis Needed for USACE Review, July 25, 2014*. Available at http://slideplayer.com/slide/5296680/. Accessed September 7, 2018.
- Lower American Task Force (LARTF). 2019. Bank Protection Working Group/Technical Resource Advisory Committee Update Presentation. March 19, 2019. Available: <u>http://www.safca.org/protection/NR_Documents/LARTF_2019_03_19_BPWG.pdf</u>. Accessed: July 10, 2019.

Sacramento County Parks. 2019. E. Coli Monitoring in the Lower American River: Monitoring map and Test Results. Available: <u>http://waterboards.maps.arcgis.com/apps/webappviewer/index.html?id=1d02f001ac9143ca85612</u> <u>5b436bb5905&extent=-13549968.9671%2C4646804.2164%2C-</u> <u>13476589.42%2C4682500.3086%2C102100</u>. Accessed: July 10, 2019.

U.S. Army Corps of Engineers (USACE). 1955. Supplement to Standard Operation and Maintenance Manual for the Sacramento River Flood Control Project Unit No. 118- Part No. 1. August.

- 2015. American River Watershed Common Features General Reevaluation Report. March 2015. Available: <u>https://www.spk.usace.army.mil/Portals/12/documents/civil_works/CommonFeatures/Document</u> <u>s/GRR/ARCF_Draft_GRR_Mar2015.pdf</u>. Accessed: July 10, 2019.
- . 2017. Draft Folsom Dam and Lake, American River, California: Water Control Manual, Appendix VIII to master Water Control Manual for the Sacramento River Basin, California. Available: https://www.spk.usace.army.mil/Portals/12/documents/civil_works/JFP/Water%20Control%20M

https://www.spk.usace.army.mil/Portals/12/documents/civil_works/JFP/Water%20Control%20M anual%20Update/DSEAandAppendices2017/DraftWCMUpdate_06062017.pdf?ver=2017-06-06-170628-783. Accessed: July10, 2019.

3.7 Land Use and Planning

American River Flood Control District. 2002. Recreational Trails Policy. Sacramento, CA

City of Sacramento. 2018. *Bicycle Master Plan*. Available: <u>https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Transportation/Active-Transportation/Sacramento-BMP-Amended-201808.pdf?la=en</u> Accessed July 1, 2019

City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019

County of Sacramento. 2008. American River Parkway Plan 2008. Municipal Service Agency, Planning and Community Development Department. Available at <u>http://www.regionalparks.saccounty.net/Parks/Documents/Parks/ARPP06-092617_sm.pdf</u> Accessed: July 1, 2019.

3.8 Noise

- California Department of Transportation. 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September.
- 2013b. Transportation and Construction Vibration Guidance Manual.

Caltrans. See California Department of Transportation.

City of Sacramento. 2015. 2035 General Plan: Environmental Constraints (Noise). March.

- Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment*. Federal Transit Administration. U.S. Department of Transportation.
- FTA. See Federal Transit Administration.

Hoover, R.M., and R.H. Keith. 1996. Noise Control for Buildings, Manufacturing Plants, Equipment and Products.

Sacramento Council of Governments (SACOG). 2013. Sacramento International Airport Land Use Compatibility Plan. December. Available: https://www.sacog.org/airport-planning. Accessed: July 10, 2019.

3.9 Public Services, Recreation, and Utilities

- American River Parkway Foundation. 2018. *South Side of the River Access Points*. Available at <u>http://arpf.org/visit/. Accessed: August 31, 2018.</u>
- ARPF. See American River Parkway Foundation.
- California Department of Resources Recycling and Recovery. 2018. Solid Waste Facility Permit 34-AA-0001, updated November 2018. Available online: <u>https://www2.calrecycle.ca.gov/swfacilities/Directory/34-AA-0001/Document/193320</u>. Accessed September 5, 2018.
- CalRecycle. See California Department of Resources Recycling and Recovery.
- City of Sacramento 2018a. *Sutter's Landing Park*. Available at <u>https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory/Central-City/Sutters-Landing-Park</u>. Accessed: August 31, 2018.
- City of Sacramento 2018b. *Glenn Hall Park*. Available at <u>https://www.cityofsacramento.org/ParksandRec/Parks/Park-Directory/East-Sacramento/Glenn-Hall</u>. Accessed: August 31, 2018.
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- City of Sacramento. 2014 (August). *City of Sacramento 2035 General Plan Background Report: Utilities*. Available online: <u>http://www.cityofsacramento.org/-</u> <u>/media/Corporate/Files/CDD/Planning/General-Plan/2035-GP/Chapter-4---Utilities.pdf?la=en</u>. Accessed September 5, 2018.
- County of Sacramento. 2008. American River Parkway Plan 2008. Municipal Service Agency, Planning and Community Development Department. Available at <u>http://www.regionalparks.saccounty.net/Parks/Documents/Parks/ARPP06-092617_sm.pdf</u> Accessed: July 1, 2019.
- National Wild and Scenic Rivers System. 2018. *Map of Designated Rivers*. Available online: <u>https://www.rivers.gov/rivers/american-lower.php</u>. Accessed September 5, 2018.

NWSR. See National Wild and Scenic Rivers System.

- Sacramento Area Sewer District. 2018. *Service Area Map*. Available online: <u>https://www.sacsewer.com/sites/main/files/file-attachments/sasd_servicearea_20161005.pdf</u>. Accessed September 5, 2018.
- Sacramento Fire Department. 2012. Engine Company First-IN Districts and Response Zones BARB Configuration Map. Available at https://www.cityofsacramento.org/Fire/About/Station-Information. Accessed September 4, 2018.
- Sacramento Police Department. 2017. *Map of Police District 6*. Updated January 2017. Available at https://www.cityofsacramento.org/Police/Contact/Police-Facilities/Richards-Police-Facility. Accessed September 4, 2018.
- Sacramento Regional County Sanitation District. 2018. *Service Area Map*. Available online: <u>https://www.regionalsan.com/sites/main/files/file-</u> <u>attachments/regional_san_servicearea_dec2015_1.pdf</u>. Accessed September 5, 2018.
- SASD. See Sacramento Area Sewer District.
- SRCSD. See Sacramento Regional County Sanitation District.
- Young, M. 2018 (September 20). Email communication from Sgt. Matt Young, Sacramento Policy Department, CPTED Unit to Tom Buford, City of Sacramento, and Andrea Shephard, GEI Consultants.
- SFD. See Sacramento Fire Department.
- SPD. See Sacramento Police Department.

3.10 Transportation and Circulation

- City of Sacramento. 2018. *Bicycle Master Plan*. Available: <u>https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Transportation/Active-Transportation/Sacramento-BMP-Amended-201808.pdf?la=en</u> Accessed July 1, 2019
- City of Sacramento. 2015. 2035 General Plan. Available: <u>https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--</u> <u>General-Plan</u>. Accessed July 1, 2019
- City of Sacramento. 2006. *Pedestrian Master Plan*. Available: <u>https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Publications/Transportation/Bicycle-Pedestrian/Sac-Ped-Plan_9-06.pdf?la=en</u> Accessed July 1, 2019
- Institute of Transportation Engineers. 1988. *Traffic Access and Impact Studies for Site Development*. Transportation Planners Council. Washington, DC.

Sacramento Regional Transit District. 2018. Bus and Light Rail System Map. Available: http://www.sacrt.com/systemmap/RT_MainMap_2018.pdf. Accessed: October 17, 2018.

SacRT. See Sacramento Regional Transit District.

4.0 Project Alternatives

No references sited.

5.0 Other CEQA Considerations

- City of Sacramento. 2018. *Bicycle Master Plan*. Available: <u>https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Transportation/Active-Transportation/Sacramento-BMP-Amended-201808.pdf?la=en</u> Accessed July 1, 2019
- County of Sacramento. 2008. *American River Parkway Plan 2008*. Municipal Service Agency, Planning and Community Development Department. Available at http://www.regionalparks.saccounty.net/Parks/Documents/Parks/ARPP06-092617_sm.pdf Accessed: July 1, 2019.

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As required by the California Environmental Quality Act (CEQA), this chapter identifies the preparers of this Environmental Impact Report (EIR).

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