CITY OF REDDING
777 Cypress Avenue, Redding, CA 96001
PO BOX 496071, Redding, CA 96049-6071
cityofredding.org

Public Works
Engineering Division
530.225.4170
530.245.7024

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

The City of Redding (City) is proposing the Sacramento River Trail Repairs Project in the City of Redding, Shasta County, California. In January 2017, heavy rains and severe flooding caused water to overtop embankments along the Sacramento River, damaging various parks and trails. The purpose of the project is to repair flood-damaged areas so that pre-flood design, function, and capacity (in-kind) is achieved within the existing footprint. The project is needed so that pedestrians and bicyclists can continue to use the park and trail areas for recreation purposes. The project is led by the City of Redding and has received funding assistance from the Federal Emergency Management Agency (FEMA No. PA-09-CA-4301-PW-00935; PA-09-CA-4301-PW-00990; PA-09-CA-4301-PW-00991).

The project features a total of twenty six work sites, located along the Sacramento River Trail. The project will repair seating and viewing areas; as well as trail surfaces, trail embankments, and trail shoulders. Work will include vegetation removal, demolition, excavation, grading, sediment removal, culvert cleaning, paving, concrete repair, bench replacement, placement of rock slope protection, vegetation planting, and hydro-seed application. Work will occur on City property or within easements. Construction is anticipated to take one season and will be completed in the fall of 2023. The project sites are located on the north and south side of the River Trail between the Stress Ribbon Bridge and the Market Street Bridge. Additional project sites are located east of Turtle Bay Exploration Park. The project sites are located in the Redding Quadrangle at Township 32 north, Range 4 west, Section 31; Township 32 north, Range 5 west, Sections 25, 26, 27, 28, 33, 34, and 35 (latitude 40.59333, longitude -122.42701 at the approximate center point of the project sites).

The City of Redding Public Works Department has reviewed the project and, based on the whole record before the City (including the Initial Study and any supporting documentation), is recommending that a Mitigated Negative Declaration be adopted pursuant to the California Environmental Quality Act.

All interested persons are invited to comment in writing on the draft Mitigated Negative Declaration to the Public Works Department prior to the end of the public review period. **The comment period begins June 30, 2022 and ends July 29, 2022.** The City Council will consider adopting the Mitigated Negative Declaration at 6 p.m., Tuesday, August 16, 2022, in the City Council Chambers located at 777 Cypress Avenue, Redding, California. Subsequent notification will be made for all public hearings scheduled for consideration of the environmental document and project approval. Adoption of the Mitigated Negative Declaration will conclude the environmental review of the project.

The Initial Study, associated documents, and the draft Mitigated Negative Declaration are available for public review from 8 a.m. to 5 p.m. weekdays at the Public Works Department, 777 Cypress Avenue, Redding, CA 96001 (telephone 530-225-4170). The documents can also be viewed online at http://www.cityofredding.org/departments/public-works/environmental-management. For more information, please contact Amber Kelley, Environmental Compliance Manager, at the above address.

Amber Kelley

Dated: June 29, 2022
Attachments: Project Location Map

Amber Kelley
Environmental Compliance Manager

MITIGATED NEGATIVE DECLARATION

SACRAMENTO RIVER TRAIL REPAIRS PROJECT
(STATE CLEARINGHOUSE NO. 2022XXXXXX)

SUBJECT

Sacramento River Trail Repairs Project

PROJECT DESCRIPTION

The City of Redding (City) is proposing the Sacramento River Trail Repairs Project in the City of Redding, Shasta County, California. In January 2017, heavy rains and severe flooding caused water to overtop embankments along the Sacramento River, damaging various parks and trails. The purpose of the project is to repair flood-damaged areas so that pre-flood design, function, and capacity (in-kind) is achieved within the existing footprint. The project is needed so that pedestrians and bicyclists can continue to use the park and trail areas for recreation purposes. The project is led by the City of Redding and has received funding assistance from the Federal Emergency Management Agency (FEMA No. PA-09-CA-4301-PW-00935; PA-09-CA-4301-PW-00990; PA-09-CA-4301-PW-00991) to complete the project.

The project features a total of twenty six work sites, located along the Sacramento River Trail. The project will repair seating and viewing areas; as well as trail surfaces, trail embankments, and trail shoulders. Work will include vegetation removal, demolition, excavation, grading, sediment removal, culvert cleaning, paving, concrete repair, bench replacement, placement of rock slope protection, vegetation planting, and hydro-seed application. Work will occur on City property or within easements. Construction is anticipated to take one season and will be completed in the fall of 2023.

ENVIRONMENTAL SETTING

The project is located along the Sacramento River Trail, in central Redding (Figure 1a). The Sacramento River Trail traverses undeveloped areas, as well as park and recreation areas including Lake Redding Park, Caldwell Park, and Turtle Bay. Habitat within the area includes urban, barren, oak woodland, riparian habitats, and annual grassland. Land use in the project vicinity includes recreation, residential development, and transportation corridors.

FINDINGS AND DETERMINATION

The City of Redding conducted an Initial Study (attached) that determined that the proposed project could have significant environmental effects on biological resources. Implementation of specific mitigation measures identified below will avoid or mitigate the potentially significant environmental effects identified, and the preparation of an environmental impact report will not be required. If there are substantial changes that alter the character or impacts of the proposed project, another environmental impact determination will be necessary.

Prior to approval of the project, the lead agency may conclude, at a public hearing, that certain mitigation measures identified in the Mitigated Negative Declaration are infeasible or undesirable. In accordance with California Environmental Quality Act (CEQA) Section 15074.1, the lead agency may delete those mitigation measures and substitute other measures that it determines are equivalent or more effective. The lead agency would adopt written findings that the new measure(s) is(are) equivalent or more effective in mitigating or avoiding potential significant effects and that it would not cause any potentially significant effect on the environment.

1) Based on the whole record (including the Initial Study and any supporting documentation) and the mitigation measures incorporated into the project, the City of Redding has determined that there is no substantial evidence that the project will have a significant effect on the environment.

2) The Mitigated Negative Declaration, with its supporting documentation, reflects the independent judgment and analysis of the lead agency, which is the City of Redding.

DOCUMENTATION

The attached Initial Study documents the reasons to support the above determination.

MITIGATION MEASURES

The following mitigation measures will be incorporated into the project to minimize potential effects on biological resources:

MM-1. Before working within 150 feet of a water body, all heavy equipment, vehicles, and power tools must be power washed, allowed to fully dry, and inspected for fluid leaks. Cleaning will be repeated as often as necessary to keep the equipment free of external fluids and to prevent a leak or spill from entering the water. The equipment must also be inspected to make sure that no plants, soil, or other organic material is adhering to the surface. The equipment must be clean of material that may harbor invasive plant seeds or invasive pests before entering the work area. This material includes dirt or plant seeds on construction equipment, tools, boots, and clothing.

MM-2. Machinery and equipment used during work must be serviced, fueled, and maintained in upland areas. Equipment fueling areas shall be located at least 200 feet away from all aquatic resources.

MM-3. Staging of equipment, construction materials, tools, buildings, restrooms, and trailers must occur outside of the floodplain during flood season. Riparian trees and shrubs shall not be removed for staging areas.

MM-4. When working on stream banks or floodplains, disturbance to existing grades and vegetation must be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities must avoid and limit disturbance to stream banks or stream channel habitat as much as possible. After construction is complete, all staging, storage, or stockpile areas will be obliterated, the soil stabilized, and revegetated (as appropriate).

MM-5. All construction personnel will be required to attend an environmental awareness training prior to the start of construction. The training will be conducted by a qualified biologist and will familiarize construction personnel with the special status species that may occur onsite, their habitats, provisions and protections, measures to be implemented, and the project boundaries. The training must be provided within 3 days of the arrival of any new worker.

MM-6. A biological monitor must be present for activities within 100 feet of the Sacramento River that have potential to result in adverse effects on the four listed fish species or their habitat.

MM-7. The project shall be constructed between August 1 and October 15th. In-channel construction activities that could affect suitable habitat for listed fish species or EFH would be limited to daylight hours during weekdays, leaving a nighttime and weekend period of passage for the species.

MM-8. Riprap or rock slope protection (RSP) must be clean and durable, free from dirt, sand, clay and rock fines and must be installed to withstand the 100-year flood event.

MM-9. To prevent entrapment of special status species, all vertically sided holes or trenches will be covered at the end of the workday, or have escape ramps built into the walls of the excavation. If pipes are stored onsite or in associated staging areas, they will be capped when not in use or checked prior to installation. Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials.

MM-10. If a special status species is identified onsite, crews will immediately stop work within 50 feet of the individual, and inform the construction supervisor, the City, and the appropriate regulatory agency (USFWS, NMFS, CDFW). Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition, or an appropriate course of action has been agreed upon by the City and the regulatory agency.

MM-11. When restoring upland areas to pre-project conditions, native seed mix will be used for hydroseeding.

MM-12. Prior to the onset of construction activities, a qualified biologist will conduct preconstruction surveys for western pond turtle, turtle nests, and foothill yellow-legged frog. If these species or turtle nests are observed during the preconstruction survey or during construction, CDFW will be contacted, and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or foothill yellow-legged frog are not observed during the preconstruction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another preconstruction survey will be conducted.

MM-13. If it is determined that tree removal is required, the removal of trees 10 inches DBH or greater with cavities, crevices, or snags shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31), to the extent practical. If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified biologist shall conduct a pre-construction survey of the study area to locate maternity colonies. The preconstruction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified biologist, in consultation with CDFW, to ensure the colony is protected from project activities. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

MM-14. If vegetation removal or construction activities will occur during the nesting season for birds or raptors (February 1 through August 31 for birds and November 1 through July 1 for raptors), a qualified biologist will conduct a preconstruction survey seven (7) days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have

fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

MM-15. If an active raptor nest is found, no construction activities will occur within 300-feet of the nest for raptors and 450-feet of the nest for special-status raptors unless a smaller buffer zone is approved by the CDFW. Construction may resume once the young have left the nest or as approved by a qualified biologist.

PUBLIC REVIEW DISTRIBUTION

Draft copies or notice of this Mitigated Negative Declaration were distributed to:

- State Clearinghouse
- Shasta County Clerk
- California Department of Transportation District 2
- California Department of Fish and Wildlife District 1
- Central Valley Regional Water Quality Control Board
- California Native Plant Society
- California Highway Patrol
- Native American Heritage Commission
- State Office of Historic Preservation
- All property owners within 300 feet of the property boundary

PUBLIC REVIEW

(X) Draft document referred for comments June 30, 2022 – July 29, 2022
Date

( ) No comments were received during the public review period.

( ) Comments were received but did not address the draft Mitigated Negative Declaration findings or the accuracy/completeness of the Initial Study. No response is necessary. The letters are attached.

( ) Comments addressing the findings of the draft Mitigated Negative Declaration and/or accuracy or completeness of the Initial Study were received during the public review period. The letters and responses follow (see Attachment D, Response to Comments).

Copies of the Mitigated Negative Declaration, the Initial Study, documentation materials, and the Mitigation Monitoring Program may be obtained at the Public Works Department, Engineering Division, City of Redding, 777 Cypress Avenue, Redding, CA 96001. Contact: Amber Kelley, Environmental Compliance Manager, (530) 225-4046 or akelley@cityofredding.org.

Date of Draft Report: June 29, 2022

By: Amber Kelley

Name/ Title: Amber Kelley
Environmental Compliance Manager

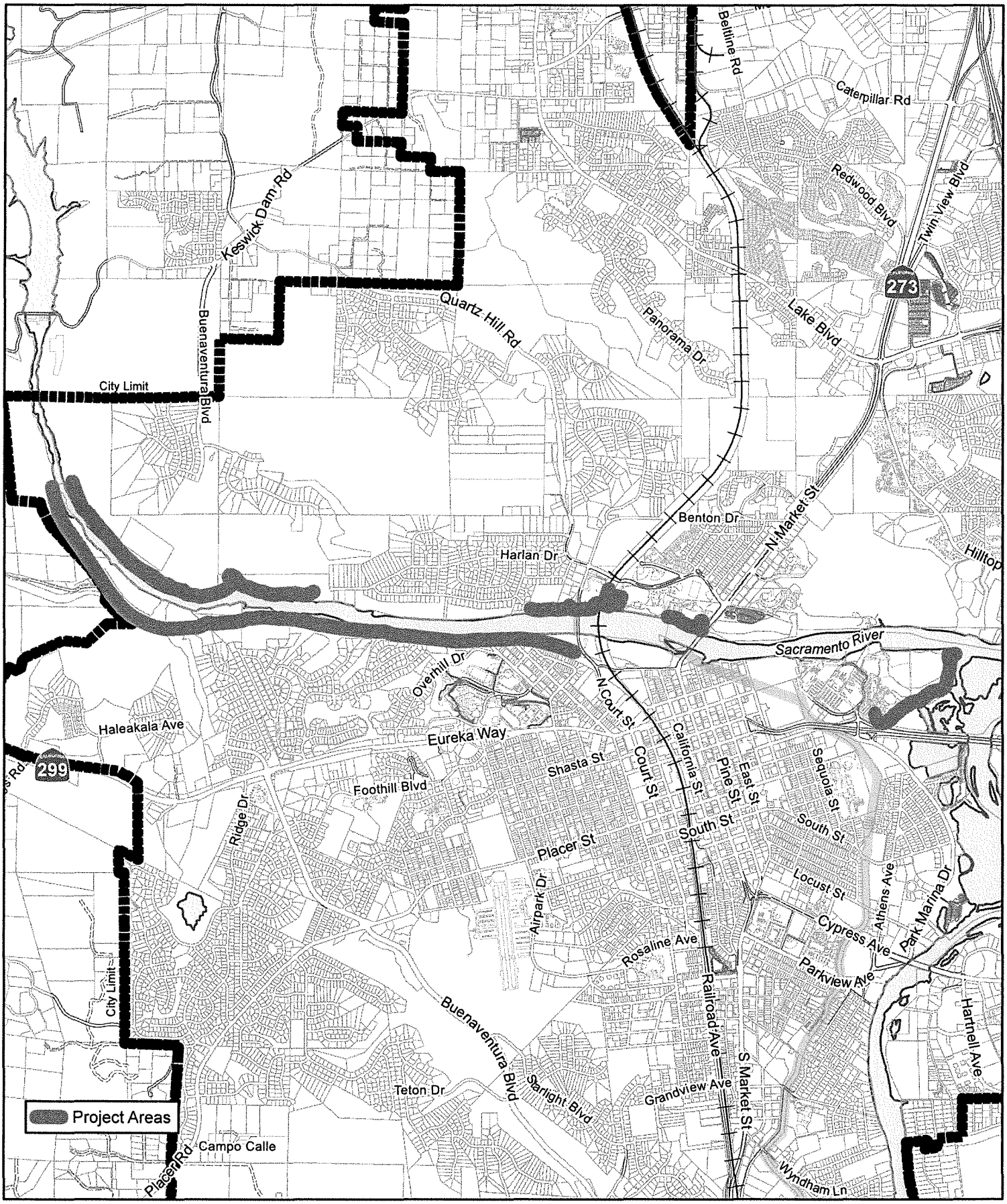
Date of
Final Report: _____

Attachments:

A. Project Location Map
B. Initial Study
C. Mitigation Monitoring and Environmental Commitment Program
D. Comments and Response to Comments (if any)

ATTACHMENT A

Project Location Map



N W E S	**GIS DIVISION** INFORMATION TECHNOLOGY DEPARTMENT	**LOCATION MAP**	MTG. DATE:
	DATE PRODUCED: JUNE 29, 2022	SACRAMENTO RIVER TRAIL REPAIRS PROJECT FEMA NO. PA-09-CA-4301-PW-00935; PA-09-CA-4301-PW-00990; PA-09-CA-4301-PW-00991	ITEM: ATTACHMENT:
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ATTACHMENT B

Initial Study

CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY

Sacramento River Trail Repairs Project

TO 3: PA-09-CA-4301-PW-00935
TO 5: PA-09-CA-4301-PW-00990
TO 6: PA-09-CA-4301-PW-00991

Prepared by:
CITY OF REDDING
Public Works Department
Engineering Division
777 Cypress Avenue
Redding, California 96001

June 2022

CITY OF REDDING
ENVIRONMENTAL CHECKLIST FORM

1) Project Title:

Sacramento River Trail Repairs Project (project)

2) Lead agency name and address:

City of Redding (City)
Public Works Department
777 Cypress Avenue
Redding, CA 96001

3) Contact Person and Phone Number:

Amber Kelley
Environmental Compliance Manager
Phone: (530) 225-4046
Email: akelley@cityofredding.org

4) Project Location:

The proposed project includes work to be completed under three separate Task Orders (TOs): TO 3, which features 8 work sites; TO 5, which features 17 work sites; and TO 6, which features 1 work site. All work sites are located along the Sacramento River Trail in Redding, Shasta County, California (Figures 1a, 1b, and 1c).

- Work sites associated with TO 3 are located along the Sacramento River, to the north of State Highway 44, just west of the Interstate 5 freeway (Figure 1a). The project sites are located in the Redding Quadrangle at Township 32 north, Range 4 west, Sections 25, 26, 27, 28, 33, 34, and 35 (latitude 40.592, longitude −122.4113 at the approximate center point of the project).
- Work sites associated with TO 5 are located along the Sacramento River, to the north and south of State Highway 44, just west of the Interstate 5 freeway (Figure 1b). The project sites are located in the Redding Quadrangle at Township 32 north, Range 4 west, Section 31; Township 32 north, Range 5 west, Sections 25, 26, 27, 28, 33, 34, and 35 (latitude 40.59333, longitude −122.42701 at the approximate center point of the project sites).
- The work site associated with TO 6 is located along the Sacramento River, to the north of State Highway 44, just west of the Interstate 5 freeway (Figure 1c). The project site is located in the Redding Quadrangle at Township 32 north, Range 5 west, Section 26 (latitude 40.5938, longitude −122.4048).

5) Applicant's Name and Address:

City of Redding
Public Works Department
777 Cypress Avenue
Redding, CA 96001

Representative's Name and Address:

Amber Kelley, City of Redding
Public Works Department
777 Cypress Avenue
Redding, CA 96001

6) General Plan Designation:

City of Redding: TO 3, Greenway (GWY), Park (PK), and Public Facilities (PF-I); TO 5, GWY, PK, and PF-1; TO 6, TO 5, GWY, PK, and PF-1.

7) Zoning:

City of Redding: City of Redding: TO 3, Open Space (OS) and Public Facilities (PF); TO 5, OS and PF; TO 6, OS.

8) Description of Project:

In January 2017, heavy rains and severe flooding caused water to overtop embankments along the Sacramento River, damaging various parks and trails. The project will repair flood-damaged areas so that pre-flood design, function, and capacity (in-kind) is achieved within the existing footprint. The project is needed so that pedestrians and bicyclists can continue to use the park and trail areas for recreation purposes. The project is led by the City of Redding and has received funding assistance from the Federal Emergency Management Agency (FEMA No. PA-09-CA-4301-PW-00935; PA-09-CA-4301-PW-00990; PA-09-CA-4301-PW-00991) to complete the project.

The following work would occur at the **TO 3** project sites:

- Site A – Trail seating area repairs; temporarily remove and reinstall one concrete bench; excavate and restore aggregate base; reconstruct triangle base for concrete bench; install concrete curb and gutter
- Site B – Trail embankment repairs; demolish and remove undermined areas of existing embankment slope armoring; excavate and place vegetative riprap to restore lost embankment
- Site C – Trail embankment repairs; remove and replace one concrete bench; excavate and place fill to restore lost embankment; place 4 cubic yards (CY) of concrete surface paving
- Site D – Trail seating area repairs; remove and replace one concrete bench; restore aggregate base; install concrete curb and gutter; remove and reinstall boulders/rocks; place 2 CY of concrete surface paving
- Site E – Trail embankment repairs; demolish and remove undermined areas of existing embankment slope armoring; excavate and place vegetative riprap and geotextile fabrics to restore lost embankment
- Site Y – Trail surface and embankment repairs; excavate and place vegetative riprap and geotextile fabric to restore lost embankment; restore aggregate base; place 6.5 CY of concrete surface paving
- Site CC – Trail seating area repairs; temporarily remove and reinstall two garbage bins and seven picnic tables; restore aggregate base; regrade the site around existing features
- Site DD – Trail surface and shoulder repairs; clear and grub 52 square yards (SY) for site preparation; excavate 20 CY along shoulder for bedding placement; restore aggregate base for trail shoulder, import 18 CY aggregate base for shoulder; place 14 CY of concrete surface paving

The following work would occur at the **TO 5** project sites:

- Site 3H– Replace shoulder backing; clear and grub 180 SY for site preparation; excavate 12 CY along shoulder for bedding placement; place, grade and compact 17.5 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3I– Replace shoulder backing; clear and grub 153 SY for site preparation; excavate 34 CY along shoulder for bedding placement; place, grade and compact 89 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3J – Replace shoulder backing; clear and grub 210 SY for site preparation; excavate 45 CY along shoulder for bedding placement; place, grade and compact 117.5 CY aggregate base for shoulder and reconstruct 2:1 slope

- Site 3L – Replace aggregate shoulder backing; repave asphalt surface; excavate and place vegetative riprap and geotextile fabric to restore lost embankment; clear and grub 100 CY for site preparation; excavate 3 CY along shoulder for bedding placement; place, grade, and compact 2.5 CY aggregate base for shoulder and reconstruct 2:1 slope; excavate 26 CY for riprap placement; place 70 CY vegetative riprap; replace 1 CY of asphalt pavement
- Site 3M – Clean jet culvert and place shoulder backing (HMP includes articulated blocks); clear and grub 19 CY for site preparation; excavate 19 CY on both sides of existing culvert; place, grade, and compact 13 CY aggregate base for shoulder; place 16 square feet (SF) of articulated blocks
- Site 3M East - Replace shoulder backing, repave and slope stabilization; clear and grub 112 CY for site preparation; excavate 3 CY for bedding and riprap replacement; place, grade, and compact 3 CY aggregate base material for shoulder; excavate 3 CY for riprap placement; place 90 CY vegetative riprap; replace 2 CY of asphalt pavement
- Site 3N– Replace shoulder backing; clear and grub 14 CY for site preparation; excavate 2.5 CY along shoulder for bedding placement; place, grade, and compact 5 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3P– Replace shoulder backing; clear and grub 27 CY for site preparation; excavate 6 CY along shoulder for bedding placement; place, grade, and compact 15 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3R - Clean jet culvert, shoulder backing, slope stabilization; clear and grub 379 CY for site preparation; clean and jet 24 linear feet (LF) existing culvert; excavate 5 CY along shoulder for bedding placement; excavate 24 CY sediment; place 96 CY vegetative riprap; place 16 SF of articulated blocks
- Site 3T – Replace shoulder backing; clear and grub 18 CY for site preparation; excavate 3.5 CY along shoulder for backing placement; place, grade, and compact 6.5 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3U - Replace shoulder backing, repave and slope stabilization; clear and grub 70 SY for site preparation; place, grade, and compact 822 CY aggregate base for shoulder and reconstruct 2:1 slope; excavate 50 CY for shoulder backing and riprap placement; place 100 CY vegetative riprap
- Site 3X - Replace shoulder backing and riprap backing; clear and grub 70 CY for site preparation; excavate 39 CY along shoulder for bedding placement; place, grade, and compact 6.5 CY aggregate base for shoulder and reconstruct 2:1 slope; place 34 CY riprap
- Site 3BB – Replace shoulder backing; clear and grub 10 CY for site preparation; excavate 2.5 CY along shoulder for bedding placement; place, grade, and compact 5 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3EE - Replace shoulder backing and slope stabilization; place, grade, and compact 70 CY aggregate base for shoulder and reconstruct 2:1 slope; excavate 25 CY for shoulder backing and riprap placement; place 44 CY vegetative riprap
- Site 3FF – Replace shoulder backing; clear and grub 34 CY for site preparation; excavate 7.5 CY along shoulder for bedding placement; place, grade, and compact 19 CY aggregate base for shoulder and reconstruct 2:1 slope
- Site 3GG – Replace shoulder backing; clear and grub 178 CY for site preparation; excavate 30 CY along shoulder for bedding placement; place, grade, and compact 57.5 CY aggregate base for shoulder and reconstruct 2:1 slope

- Site 3HH – Replace shoulder backing; clear and grub 33 CY for site preparation; excavate 8 CY along shoulder for bedding placement; place, grade, and compact 2 CY aggregate base for shoulder and reconstruct 2:1 slope

The following work would occur at the **TO 6** project site:

- Site W - Trail seating area repairs; remove custom concrete bench and dispose of offsite; demolish 5 CY of existing stamped concrete, remove and dispose of offsite; backfill and buildup top of bank with 15 CY import materials to replace lost materials in-kind; place 180 CY of 0.25-ton vegetated riprap; place geotextile fabric beneath riprap above ordinary high-water mark (OHWM), 30 SY; construct new custom bench to replace existing in-kind; install 45 LF concrete curb; install 5 CY of new stamped concrete

9) Surrounding Land Uses and Setting:

The project is located along the Sacramento River Trail, in central Redding (Figure 1a). The Sacramento River Trail traverses undeveloped areas, as well as park and recreation areas including Lake Redding Park, Caldwell Park, and Turtle Bay. Habitat within the area includes urban, barren, oak woodland, riparian habitats, and annual grassland. Land use in the project vicinity includes recreation, residential development, and transportation corridors.

10) Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- FEMA and California Office of Emergency Services – Funding approval
- FEMA, Office of Environmental and Historic Preservation – National Environmental Policy Act
- U.S. Fish and Wildlife Service (USFWS) – Programmatic Biological Opinion
- National Marine Fisheries Service (NMFS) – Programmatic Biological Opinion
- U.S. Army Corps of Engineers – Federal Clean Water Act (CWA) Section 404 permit
- California Department of Fish and Wildlife (CDFW) – Lake or Streambed Alteration Agreement
- Central Valley Flood Protection Board - Encroachment Permit
- Regional Water Quality Control Board – CWA Section 401 Water Quality Certification

11) Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Consultation letters were sent to the Redding Rancheria and the Wintu Tribe of Northern California on November 30, 2021, to invite their participation in the project development process and to request their assistance in the identification of sites of religious and cultural significance or the identification of historic properties that may be affected by the proposed project. No responses were received.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact or Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

	Aesthetics		Agricultural and Forestry Resources		Air Quality
X	Biological Resources		Cultural Resources		Energy
	Geology / Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Hydrology / Water Quality		Land Use / Planning		Mineral Resources
	Noise		Population / Housing		Public Services
	Recreation		Transportation		Tribal Cultural Resources
	Utilities / Service Systems		Wildfire	X	Mandatory Findings of Significance

DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of the initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR of NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Copies of the Initial Study and related materials and documentation may be obtained at the Planning Division of the Development Services Department, 777 Cypress Avenue, Redding, CA 96001. Contact Amber Kelley at (530) 225-4046.

Amber Kelley

Amber Kelley, Environmental Compliance Manager
Public Works - Engineering

June 29, 2022
Date

EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include the following:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Circulation
- Tribal Cultural Resources
- Utilities and Service System
- Wildfire

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the State CEQA Guidelines and used by the City of Redding in its environmental review process. For the preliminary environmental assessment undertaken as part of the preparation of this Initial Study, a determination that there is a potential for significant effects indicates the need to more fully analyze the impact of the development and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated, and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.
- **Less than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Potentially Significant Impact Unless Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

Prior environmental evaluations applicable to all or part of the project site follow:

- City of Redding General Plan
- Shasta County General Plan

LIST OF APPENDICES/REFERENCES

Appendix A: Figure 1a – TO 3 Project Location Map
Figure 1b – TO 5 Project Location Map
Figure 1c – TO 6 Project Location Map
Appendix B: TO 3 Biological Resources and Habitat Assessment*

TO 5 Biological Resources and Habitat Assessment*
TO 6 Biological Resources and Habitat Assessment*
Appendix C: TO 3 Cultural Resources Assessment*
TO 5 Cultural Resources Assessment*
TO 6 Cultural Resources Assessment*
Appendix D: TO 3 Aquatic Resources Delineation Report*
TO 5 Aquatic Resources Delineation Report*
TO 6 Aquatic Resources Delineation Report*
Appendix E: TO 3 & 5 FEMA ESA Review Form for USFWS Programmatic Biological Opinion*
TO 6 FEMA ESA Review Form for USFWS Programmatic Biological Opinion*
Appendix F: TO 3 & 5 FEMA ESA Review Form for NMFS Programmatic Biological Opinion*
TO 6 FEMA ESA Review Form for NMFS Programmatic Biological Opinion*

*Appendices are on file in the Public Works – Engineering Division.

AESTHETICS

I. AESTHETICS: *Except as provided in Public Resources Code Section 21099, would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				**X**
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				**X**
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that area experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				**X**
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

Discussion:

a) No Impact. No features within the project sites are designated as a scenic vista, and nothing within the project sites could be characterized as a scenic vista (Caltrans 2021). Therefore, there would be no impact.

b) No Impact. No designated state scenic vistas or highways are within or near the project sites (Caltrans 2021). Projected project construction activities would not damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway. Therefore, there would be no impact.

c) No Impact. The project sites are located along the Sacramento River Trail. The project would not conflict with applicable zoning or other regulations governing scenic quality (Caltrans 2021). Therefore, there would be no impact.

d) Less than Significant Impact. All work would occur during daytime unless operational, safety, or emergency conditions warrant night work. Work hours would typically be from 6:30 a.m. to 5:30 p.m., Monday through Friday. Occasionally, work may extend beyond these hours and on Saturday or Sunday to complete a necessary task for safety reasons or other urgent requirements. Active construction would not take place every day at every location during this time. Therefore, the impact would be less than significant.

Documentation:

- California Department of Transportation (Caltrans). 2021. California Scenic Highway Mapping System. Accessed March 2021. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.
- City of Redding Zoning Ordinance, Chapter 18.40.090.

Mitigation:

None necessary.

AGRICULTURAL RESOURCES

II. AGRICULTURE RESOURCES: *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:*	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

Discussion:

a) No Impact. There is no Prime Farmland, Unique Farmland, or Statewide Importance (Farmland), in the project areas (CDC 2022a). Therefore, there would be no impact.

b) No Impact. There is no existing zoning for agricultural use or a Williamson Act Contract in the project areas (CDC 2022b). Therefore, there would be no impact.

c) No Impact. The project would not conflict with existing zoning, and would not cause the rezoning of forest land or timberland. Therefore, there would be no impact.

d) No Impact. There is no forest land in the project areas. Therefore, there would be no impact.

e) No Impact. There is no farmland or forest land in the project areas. Therefore, there would be no impact.

Documentation:

- California Department of Conservation (CDC). 2022a. California Important Farmland Finder. Accessed April 2022. https://maps.conservation.ca.gov/dlrp/ciff/.

- California Department of Conservation (CDC). 2022b. Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency. Accessed April 2022. https://www.conservation.ca.gov/dlrp/fmmp/Pages/Shasta.aspx.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.
- City of Redding. 2022. City of Redding GIS Parcel and Zoning Map Viewer. Accessed April 2022. https://gispub.cityofredding.org/reddingmap/.
- Shasta County. 2018. Shasta County General Plan, Chapter 6, Section 6.1 "Agricultural Lands." Shasta County Department of Resource Management.

Mitigation:

None necessary.

AIR QUALITY

III. AIR QUALITY: *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:*	**Potentially Significant Impact**	**Less than-Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant forwhich the project region is non-attainment under an applicable Federal or State ambient air quality standard?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				**X**

Discussion:

a) **Less than Significant Impact.** Project-related construction activities would last several months and construction emissions impacts would be temporary in nature. Emissions from project construction are anticipated to be minimal due to the limited amount of construction equipment and number of vehicles to be used. Operation of the project would not cause emission increases compared to the existing conditions. The project would be constructed in compliance with State and local air district regulations, and best management practices (BMPs) would be implemented to reduce criteria pollutant emissions. Compliance with applicable regulations and implementation of BMPs during project construction would result in less than significant impacts related to air quality.

b, c) **Less than Significant Impact.** The proposed project is within the city of Redding in Shasta County, which is at the northern end of the Northern Sacramento Valley Air Basin (NSVAB). The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada range. These mountain ranges form a substantial physical barrier to locally created pollution as well as pollution transported northward on prevailing winds from the Sacramento metropolitan area.

In 1994, the air districts in the Northern Sacramento Valley Planning Area (NSVPA), which includes the Shasta County Air Quality Management District (SCAQMD) jurisdiction, prepared an Air Quality Attainment Plan for ozone. This plan was updated in 1997, 2000, 2003, 2006, 2009, 2012, and again in 2015. Like the preceding plans, the 2015 plan focuses on the adoption and implementation of control measures for stationary sources, area-wide sources, indirect sources, and

public information and education programs. The 2015 plan also addresses the effect that pollutant transport has on NSVPA's ability to meet and attain the State standards. The Air Quality Attainment Plan provides local guidance for air basins to achieve attainment of ambient air quality standards. Areas that meet ambient air quality standards are classified as attainment areas and areas that do not meet these standards are classified as nonattainment areas. Areas for which there is insufficient data available are designated unclassified. The attainment status for the Shasta County portion of the NSVAB is included in the following table. The region is nonattainment for State ozone and particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) standards.

NAAQS and CAAQS Attainment Status for Shasta County

Criteria Pollutants	State Designation	Federal Designation
Ozone	Nonattainment	Unclassified/Attainment
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Attainment	Unclassified/Attainment
CO	Unclassified	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified

Source: CARB, 2018, http://www.arb.ca.gov/desig/adm/adm.htm

The proposed project has the potential to release air pollutants into the ambient air; therefore, construction activities under the proposed project fall under the ambient air quality standards promulgated at the State and federal levels. The federal Clean Air Act of 1971 and the Clean Air Act Amendments (1977) established the NAAQS, which are promulgated by the U.S. Environmental Protection Agency for criteria pollutants including ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The State of California has also adopted its own CAAQS, which are promulgated by the California Air Resource Board (CARB). CAAQS include standards for criteria pollutants as well as sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Implementation of the project would occur in the Shasta County portion of the NSVAB, which is under the air quality regulatory jurisdiction of SCAQMD and is subject to the rules and regulations adopted by the air district to achieve the NAAQS and CAAQS.

The project would result in temporary construction emissions of nonattainment pollutants, which include ozone precursors of reactive organic gases (ROG) and oxides of nitrogen (NOx), and PM_{10}.

Emission thresholds within the City's General Plan Air Quality Element are based on the SCAQMD thresholds as listed in the following table.

City of Redding and SCAQMD Thresholds of Significance

Threshold	Emissions (pounds per day)		
	NO_x	ROG	PM_{10}
Level A Thresholds	25	25	80
Level B Thresholds	137	137	137

Source: City of Redding General Plan, SCAQMD

Construction of the project would only last approximately 3 months and requires a limited amount of construction equipment and number of vehicles, which would include an excavator, a small crane,

and work trucks. Construction emissions of ROG, NO_x, and PM_{10} are anticipated to be minimal and would not exceed the SCAQMD's Level A thresholds. There would not be operational emission increases once the project construction is completed. Therefore, the project would not have cumulatively considerable emissions increases; thus, it would have less than significant impacts.

Nevertheless, City standards (implemented through the Grading Ordinance and Uniform Building Code) require implementation of the following conservation measures and best management practices (BMPs) that contribute to achieving the City's goal of at least a 20 percent reduction in emissions or the best reduction otherwise feasible. The following standard conservation measures and BMPs will be used during construction to limit dust and PM_{10} emissions:

- **AQ-1.** Nontoxic soil stabilizers will be applied according to manufacturer's specification to all inactive construction areas.
- **AQ-2.** All grading operations will be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.
- **AQ-3.** Stockpiles, access roads, and disturbed or exposed areas will be watered, as necessary, to prevent airborne dust.
- **AQ-4.** Pursuant to the California Vehicle Code (Section 23114€4) (California Legislative Information 2016), all trucks hauling soils and other loose material to and from the construction site will be covered or will maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).
- **AQ-5.** All public roadways used by the project contractor will be maintained free from dust, dirt, and debris caused by construction activities. Streets will be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads.

Potential impacts on neighboring homes (sensitive receptors) due to construction-related fugitive dust would be temporary, localized, and minor. Project operation would have no impact on air quality experienced by sensitive receptors. There are no other sensitive receptors (e.g., hospitals, schools) in the immediate project vicinity, and any impact would be less than significant.

d) No Impact: The project would not create emissions that could generate objectionable odors affecting a substantial number of people. Therefore, the project would result in no impact with regard to odor.

Documentation:

- California Air Resources Board (CARB). 2017. Area Designations Maps/State and National. Accessed April 2022. http://www.arb.ca.gov/desig/adm/adm.htm.
- City of Redding. 2000. City of Redding General Plan, Air Quality Element.
- City of Redding. 2000. City of Redding General Plan Final Environmental Impact Report. Chapter 8.6, Air Quality. SCH #1998072103.
- Shasta County. 2004. Shasta County General Plan. Chapter 6, Section 6.5 "Air Quality." Shasta County Department of Resource Management.

Mitigation:

None necessary.

BIOLOGICAL RESOURCES

IV. BIOLOGICAL RESOURCES: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?		**X**		
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 U.S. Fish and Wildlife Service?			**X**	
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			**X**	
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?			**X**	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				**X**
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?				**X**

Discussion:

A Biological Resources and Habitat Assessment (Jacobs 2022) was prepared to assess the impacts of the proposed project on biological resources in the project area and vicinity. Studies included research, database review, species list review, a habitat assessment survey, a biological reconnaissance survey, and a delineation of jurisdictional waters. In addition, the project was reviewed by the FEMA Environmental and Historic Preservation Office (EHP) for compliance with the National Environmental Policy Act (NEPA). EHP conducted an Endangered Species Act review and appended the project under FEMA's Programmatic Biological Opinions with the Sacramento USFWS and West Coast Region of NMFS.

a) Less than Significant with Mitigation Incorporated. The project area supports habitat for several special-status wildlife species, but does not support habitat for any special status plant species.

Special Status Fish Species

The following federal and state listed fish species have the potential to occur in or adjacent to the project area:

- Central Valley steelhead distinct population segment (DPS) (*Oncorhynchus mykiss irideus*)
- Chinook salmon, Sacramento winter-run ESU (*Oncorhynchus tshawytscha*)
- Chinook Salmon, Central Valley spring-run ESU (*Oncorhynchus tshawytscha*)
- Green Sturgeon, Southern DPS (Acipenser medirostris)

The proposed project would have the potential to cause take of special-status anadromous salmonids if it resulted in any one of the following: direct mortality; temporary impacts on habitats such that special-status species suffer from injury, lowered reproductive success, increased stress, lessened fitness, or mortality; permanent loss of habitat critical to a special-status fish species; or a substantial reduction in the quantity or value of fish habitat in which a special-status population occurs. Indirect impacts on fish and their habitat could occur due to erosion and sediment transport, accidental fuel leaks, or spills of pollutants.

Installation of rock slope protection would require work to occur below the OHWM at five locations along the river; however, adverse effects, including the potential for take to the four anadromous species are not anticipated because there is a low potential to encounter the species within the action area. Some of the rock slope protection would be placed within the open water of the Sacramento River. Materials placed in the open water would only occur to water depths of less than 1-foot. In addition, the material would be carefully placed in open water by hand with the assistance of heavy equipment. No construction or heavy equipment would occur or be operated within the open water areas. The limited footprint associated with the activities, and hand placement of rock slope protection would not require diversion or dewatering because the effects would be insignificant and discountable. If required, dewatering and diversion would result in greater effects on the water quality and habitat conditions in the action area.

Work at four locations would require clearing and grubbing of opportunistic undergrowth vegetation, but no mature woody riparian vegetation would be removed. Work at three additional locations above the OHWM would require minor trimming of woody riparian vegetation, but no mature woody riparian vegetation would be removed and the shaded riverine aquatic habitat would not be impacted. Locations in which rock slope protection is placed (bank stabilization) will be revegetated by placing willow stakes and applying hydroseed. Hydroseed will also be placed on the trail shoulders where vegetation will be cleared.

There is potential for the four listed species to be present within the action areas during the construction period with no direct effects anticipated as a result of project activities; fish present in the action areas would be able to move away from disturbance as the river corridor provides extensive rearing and holding habitat. In addition, fish passage barriers such as the Keswick Dam and the ACID Diversion Dam are along the upper reach of the Sacramento River within the vicinity of the action areas. These fish passage barriers have limited the migration of the listed species into their historical spawning range and has resulted in decreased populations within the action areas. Activities occurring below the OHWM would be limited to the placement of Rock Slope Protection at the Sacramento River shoreline (at or under 1 foot depth). Given the small area, and implementation of the conservation measures, these activities are not expected to result in take of the anadromous species.

FEMA has determined that the proposed project:

- May affect, but is not likely to adversely affect the four listed anadromous fish species
- May affect and is likely to adversely affect critical habitat
- May adversely affect essential fish habitat (EFH)

With implementation of Mitigation Measures (MM) 1 through 8, the project will have a less than significant impact.

In addition, standard conservation measures and BMPs AQ-1 through AQ-5 (included in Section III.), HAZ-1 through HAZ-5 (included in Section IX.), and BIO-1 through BIO-3 are incorporated into all projects that require earthwork, equipment use, and work near streams.

- **BIO-1.** As required by the City of Redding Stormwater Quality Management and Discharge Control Ordinance, an erosion and sediment control plan (ESCP) or will be prepared to address

BMPs that will be used to prevent erosion and sediment loss. The ESCP must also address dust control, spill control, pollution control, waste management, equipment maintenance and fueling, and materials storage within the project site.

- **BIO-2.** Appropriate erosion and sediment control measures (e.g., silt fences, straw wattles) shall be in place prior to the onset of construction activities near jurisdictional waters and in project areas where there is a potential for surface runoff to drain into jurisdictional waters. The measures shall be monitored and maintained until construction activities have ceased.

- **BIO-3.** High visibility fencing, flagging, or markers will be installed along the edges of the work zone near avoided waters and riparian areas. In addition, equipment entry and exit points; and staging, storage, and stockpile areas must be clearly marked prior to the entry of mechanized equipment or vehicles into the construction area.

Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)

AECOM biologists, working as FEMA's consultants, conducted a reconnaissance survey of the Action Areas on December 13, 2018. The survey included meeting with the City to gather additional information about the proposed project and included identification of the vegetation communities in the action areas and habitat assessment for federally listed species.

The Valley Elderberry Longhorn Beetle (VELB) is found exclusively on elderberry shrubs. Thus, protection of this beetle is based on protection of the elderberry shrub. Suitable habitat within the action area includes riparian woodland along the Sacramento River which may support the host plant. The host plant is known to occur in riparian woodland and in upland areas of oak woodland with the occupancy of elderberry by valley elderberry longhorn beetle highest in riparian communities (Barr 1991, Talley et al. 2007). While riparian habitat is present within the action area, no elderberry shrubs were observed in or adjacent to the action area at the time of the site visit. However, the site visit was conducted during a time of year when elderberry may have been difficult to identify. In addition, the Carr Fire created intense heat and much of the vegetation in the project vicinity was burned in 2018. The action areas provide suitable riparian woodland habitat for the host plant of valley elderberry longhorn beetle. Therefore, valley elderberry longhorn beetle may be present in the riparian understory of the action areas or the adjacent riparian and upland areas. Given the proximity of known occurrences and the presence of suitable habitat, the species, has a potential to occur at all site locations within the proposed project.

Implementation of the proposed project may result in adverse effects on the valley elderberry longhorn beetle that may result in incidental take, injury, or mortality. Construction activities would be conducted in riparian habitat where the host plant has potential to be present. These adverse effects may include encounters of construction equipment and personnel with valley elderberry longhorn beetles; temporary displacement of valley elderberry longhorn beetle from suitable habitat resulting in increased exposure; and/or habitat degradation from riparian understory vegetation removal. Indirect effects include potential for noise or visual disturbance due to equipment operation and presence of personnel.

The project is not located within designated critical habitat for the VELB and therefore no impacts to critical habitat would occur.

FEMA has determined that the proposed project:

- May affect, and is likely to adversely affect VELB
- Will have no effect on designated critical habitat for VELB

With implementation of MM-1 through MM-11 the project will have a less than significant impact. In addition, standard conservation measures and BMPs AQ-1 through AQ-5, HAZ-1 through HAZ-5, and BIO-1 through BIO-3 are incorporated into projects that require earthwork, equipment use, and work near streams.

Foothill Yellow-legged Frog (*Rana boylii*)

The project could adversely affect foothill yellow-legged frog if individuals were present in the project area during construction. Potential direct effects include harassment, injury, and mortality of individuals due to equipment and vehicle traffic. The species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, and accidental fuel leaks or spills.

An occurrence of foothill yellow-legged frog was reported within a 10-mile radius of the project area, and suitable habitat for foothill yellow-legged frog may exist along the banks of the Sacramento River. Construction along the bank of the River could result in direct and indirect impacts on foothill yellow-legged frog. Direct impacts on foothill yellow-legged frog could result from harm or harassment. Indirect impacts could occur if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills.

With incorporation of MM-5, MM-9, MM-10, and MM-12, impacts on foothill yellow-legged frogs would be less than significant. In addition, standard conservation measures and BMPs HAZ-1 through HAZ-5 and BIO-1 through BIO-3 are requirements of the project and will further reduce potential impacts.

Western Pond Turtle (*Actinemys marmorata*)

Suitable habitat for western pond turtle exists along the banks of the Sacramento River. The study area includes suitable basking sites (e.g., woody debris and rocks) and the adjacent upland habitats may be used for nesting.

Direct impacts to this species could include injury or mortality of individual turtles; temporary impediments to dispersal along the stream channel, or the removal of vegetation. Indirect impacts could include potential sedimentation of downstream habitats or the reduction of suitable upland habitat for basking and nesting. While no western pond turtles were found during the biological survey, pre-construction surveys and construction requirements will be used to reduce potentially significant impacts to this species.

With incorporation of MM-5, MM-9, MM-10, and MM-12, impacts on western pond turtle would be less than significant. In addition, standard conservation measures and BMPs HAZ-1 through HAZ-5 and BIO-1 through BIO-3 are requirements of the project and will further reduce potential impacts.

Tree-roosting Bats

Potentially suitable habitat is present for tree-roosting bats such as Western red bat. The cottonwood trees, and to a lesser extent willow trees, in and near the study area provide potential roosting habitat

for Western red bat (Lasiurus blossevillii). Vegetation in the area also provides potential foraging habitat. Western red bats may roost individually or in small groups in the riparian trees. If a tree is removed that contains a western red bat nursery colony, the removal could result in mortality or injury of individuals. Indirect impacts may occur from construction disturbance if a bat with pups is present in or adjacent to the study area. Significant noise disturbance could result in mothers temporarily or permanently leaving their pups.

The proposed project will not require tree removal and due to the ability of individual bats to move away from disturbance, direct impacts on bats are not expected. While no bat roosts were found during the biological surveys, pre-construction surveys and construction requirements will be used to reduce potentially significant impacts to bat species. With incorporation of MM-5, MM-10, and MM-13, impacts on bat species would be less than significant.

Migratory Birds and Raptors

Construction activities would occur during the avian breeding season (generally February through August for birds, and November through July for raptors) and could disturb nesting birds in or adjacent to the project area. Construction-related disturbance could result in the incidental loss of fertile eggs or nestlings, or nest abandonment. Impacts could result from tree removal, noise from construction activities, as well as ground disturbance such as grubbing and grading.

The trail and bank repair, and associated project features, does not require tree removal and large woody vegetation would be retained. The project area contains abundant avian nesting and foraging habitat and similarly suitable habitat occurs in the project vicinity. Foraging birds and birds present in, or adjacent to the project area would not be adversely impacted by construction activities due to their high mobility and available habitat outside of the project area. While tree removal is not proposed, construction activity could also disturb nesting raptors. Due to the proximity to potential nesting habitat, and potential for special-status migratory birds and raptors to occur in the project area, MM-14 and MM-15 will be used to ensure impacts are avoided or minimized by requiring pre-construction surveys and use of protection measures for any potential nests found to occur within the project area.

b) Less than Significant Impact. Valley foothill riparian is considered a sensitive natural community with the project area; however, construction would occur in previously disturbed areas, as the intended purpose is to restore trail areas damaged by flooding. The trail and bank repair, and associated project features, would result in a permanent loss of 0.172 acre and the temporary loss of 0.01 acre of riparian habitat. Impacts would occur during ground-disturbing activities such as grading, clearing, and grubbing of work areas. While the vegetation that would be impacted is within a riparian setting, it primarily consists of opportunistic species such as tree of heaven, poison oak, ruderal grasses. The project does not require tree removal and large woody vegetation would be retained.

The impacts would not be considered significant because the project was designed, and would be constructed, to restore trail areas to pre-flood function and condition. The project would have a less than significant impact on riparian habitat and sensitive natural communities. Although the project would have a less than significant impact, the project includes placement of willow stakes and hydro-seeding locations in which rock slope protection is placed along the river as bank stabilization.

c) Less than Significant Impact.

On August 18, 2021, Jacobs conducted an aquatic resource (i.e., wetlands and non-wetland waters) delineation for the project. Aquatic resources in the study area include the Sacramento River (riverine, perennial), culverted waters (ephemeral), and damaged trail shoulder areas that hold water and have developed into wetlands (paulustrine, emergent).

The OHWM of the Sacramento River intersects the study area at Sites A, B, D, and E under TO 3; Sites 3J, 3H, 3M, and 3R under TO 5; and Site W under TO 6. The aquatic resources delineated within the study area are potential waters of the U.S. and subject to regulation under Sections 401 and 404 of the CWA.

The trail and bank repair would result in permanent and temporary impacts to riverine and wetlands. Approximately 0.061 acre of aquatic resources would be permanently impacted (0.026 acre other waters, and 0.035 acre wetland). Approximately 0.009 acre of aquatic resources (other waters) would be temporarily impacted.

The project has been designed to avoid and minimize impacts to waters to the maximum extent practicable. The linear wetland features are located along the shoulder of the river trail and developed as a result of trail damage from flooding. The wetland features did not exist prior to the flood event, are not connected to any other wetland or water feature, and provide no aquatic resource value due to the location and linear nature. In-water construction activities will be conducted during the identified work window and regulatory permits will be obtained from CDFW, CVRWQCB, and the U.S. Army Corps.

The impact of the project on waters of the United States would be less than significant. Standard conservation measures and BMPs HAZ-1 through HAZ-5 and BIO-1 through BIO-3 are requirements of the project and will further reduce potential impacts.

d) Less than Significant Impact. The proposed trail repair project is not expected to disrupt the habitat connectivity in the project area. Although wildlife may avoid the active construction areas, which are small spot locations, the project would not permanently interfere with the movement of native wildlife. Construction will be short in duration and would occur during daylight hours when recreational user presence is high and wildlife use is low. The project does not require cofferdams or dewatering, and work will occur in less than 1-foot of water so migratory fish have a very wide corridor in which to move away from and pass the activity. Impacts on wildlife migratory and travel corridors would be less than significant.

e) No Impact. The City has adopted a Tree Management Ordinance (Chapter 18.45 of the Redding Municipal Code) that promotes the conservation of mature, healthy trees in the design of new development. The ordinance also recognizes that the preservation of trees sometimes conflicts with necessary land development requirements. There are no conflicts associated with the project that would prevent implementation of the Tree Preservation Ordinance or other resource protection ordinances.

f) No Impact. There are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan covering the proposed project area. Therefore, there would be no impact.

Documentation:

- California Department of Fish and Wildlife (CDFW). 2021. California Natural Diversity Database. Accessed March 2021. https://wildlife.ca.gov/Data/CNDDB.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.
- City of Redding Municipal Code, Chapter 18.45, Tree Management Ordinance.

- Graham Matthews & Associates (GMA). 2008. Churn Creek Fisheries Restoration Assessment: Constraints and Restoration Opportunities. Prepared for Western Shasta Resource Conservation District. March.
- Jacobs. 2021a. TO 3 Biological Resources and Habitat Assessment.
- Jacobs. 2021b. TO 5 Biological Resources and Habitat Assessment.
- Jacobs. 2021c. TO 6 Biological Resources and Habitat Assessment.
- Jacobs. 2021d. TO 3 Aquatic Resources Delineation Report.
- Jacobs. 2021e. TO 5 Aquatic Resources Delineation Report.
- Jacobs. 2021f. TO 6 Aquatic Resources Delineation Report.
- North State Resources. 2007. Stillwater–Churn Creek Watershed Assessment. Prepared for Western Shasta Resource Conservation District. February.
- U.S. Fish and Wildlife Service (USFWS). 2017. *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*.
- NMFS/FEMA Programmatic Biological Opinion (No. WCR-2017-8340)
- USFWS/FEMA Programmatic Biological Opinion (08ESMF00-2018-F-3331-1)
- FEMA ESA/MSA Review Form for NMFS BO
- FEMA ESA Review Form for USFWS BO

Mitigation:

MM-1. Before working within 150 feet of a water body, all heavy equipment, vehicles, and power tools must be power washed, allowed to fully dry, and inspected for fluid leaks. Cleaning will be repeated as often as necessary to keep the equipment free of external fluids and to prevent a leak or spill from entering the water. The equipment must also be inspected to make sure that no plants, soil, or other organic material is adhering to the surface. The equipment must be clean of material that may harbor invasive plant seeds or invasive pests before entering the work area. This material includes dirt or plant seeds on construction equipment, tools, boots, and clothing.

MM-2. Machinery and equipment used during work must be serviced, fueled, and maintained in upland areas. Equipment fueling areas shall be located at least 200 feet away from all aquatic resources.

MM-3. Staging of equipment, construction materials, tools, buildings, restrooms, and trailers must occur outside of the floodplain during flood season. Riparian trees and shrubs shall not be removed for staging areas.

MM-4. When working on stream banks or floodplains, disturbance to existing grades and vegetation must be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities must avoid and limit disturbance to stream banks or stream channel habitat as much as possible. After construction is complete, all staging, storage, or stockpile areas will be obliterated, the soil stabilized, and revegetated (as appropriate).

MM-5. All construction personnel will be required to attend an environmental awareness training prior to the start of construction. The training will be conducted by a qualified biologist and will familiarize construction personnel with the special status species that may occur onsite, their habitats, provisions and protections, measures to be implemented, and the project boundaries. The training must be provided within 3 days of the arrival of any new worker.

MM-6. A biological monitor must be present for activities within 100 feet of the Sacramento River that have potential to result in adverse effects on the four listed fish species or their habitat.

MM-7. The project shall be constructed between August 1 and October 15th. In-channel construction activities that could affect suitable habitat for listed fish species or EFH would be limited to daylight hours during weekdays, leaving a nighttime and weekend period of passage for the species.

MM-8. Riprap or rock slope protection (RSP) must be clean and durable, free from dirt, sand, clay and rock fines and must be installed to withstand the 100-year flood event.

MM-9. To prevent entrapment of special status species, all vertically sided holes or trenches will be covered at the end of the workday, or have escape ramps built into the walls of the excavation. If pipes are stored onsite or in associated staging areas, they will be capped when not in use or checked prior to installation. Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials.

MM-10. If a special status species is identified onsite, crews will immediately stop work within 50 feet of the individual, and inform the construction supervisor, the City, and the appropriate regulatory agency (USFWS, NMFS, CDFW). Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition, or an appropriate course of action has been agreed upon by the City and the regulatory agency.

MM-11. When restoring upland areas to pre-project conditions, native seed mix will be used for hydroseeding.

MM-12. Prior to the onset of construction activities, a qualified biologist will conduct preconstruction surveys for western pond turtle, turtle nests, and foothill yellow-legged frog. If these species or turtle nests are observed during the preconstruction survey or during construction, CDFW will be contacted, and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or foothill yellow-legged frog are not observed during the preconstruction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another preconstruction survey will be conducted.

MM-13. If it is determined that tree removal is required, the removal of trees 10 inches DBH or greater with cavities, crevices, or snags shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31), to the extent practical. If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified biologist shall conduct a pre-construction survey of the study area to locate maternity colonies. The preconstruction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified biologist, in consultation with CDFW, to ensure the colony is protected from project activities. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

MM-14. If vegetation removal or construction activities will occur during the nesting season for birds or raptors (February 1 through August 31 for birds and November 1 through July 1 for raptors), a qualified biologist will conduct a preconstruction survey seven (7) days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

MM-15. If an active raptor nest is found, no construction activities will occur within 300-feet of the nest for raptors and 450-feet of the nest for special-status raptors unless a smaller buffer zone is approved by

the CDFW. Construction may resume once the young have left the nest or as approved by a qualified biologist.

CULTURAL RESOURCES

V. CULTURAL RESOURCES: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?			**X**	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?			**X**	
c) Disturb any human remains, including those interred outside of formal cemeteries?			**X**	

Discussion

a) Less than Significant Impact. Background research completed as part of this project included a records search from the California Historical Resources Information System and a review of properties listed in/as the National Register of Historic Places and California Register of Historical Resources, California Historical Landmarks, and California Points of Historical Interest, or listed in a local register of significant resources. Additionally, the City reviewed records search information and past cultural resources survey and report data. As a result of this review, no previously recorded cultural resources are known to exist within the area of potential effects or within the boundaries of any project sites (Jacobs 2021g, 2021h, 2021i). The project would not cause an adverse change in a historical resource; therefore, the impact would be less than significant.

b, c) Less than Significant Impact. Although all project sites are located near the Sacramento River, which has a relatively high potential for cultural resources, no previously recorded archaeological or prehistoric resources have been identified in the project area. The project area has been subject to previous disturbances such as the creation of paved and unpaved trailways. Although these efforts did not identify historical or archaeological resources within the project area, unidentified resources could be present or encountered during ground-disturbing activities. While the project is not anticipated to affect cultural resources, the following standard practices are included on all projects that involve ground disturbance.

- **CR-1.** If previously unidentified cultural materials are unearthed during construction, it is the City's policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if the proposed project undertaking limits are extended beyond the present survey area of potential effect limits.
- **CR-2.** If human remains are discovered during project activities, all activities in the vicinity of the find will be stopped, and the Shasta County Sheriff-Coroner's Office will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains will be conducted in accordance with further direction of the County Coroner or NAHC, as appropriate.

Documentation:

- City of Redding. City of Redding General Plan, Natural Resources Element.
- Jacobs. 2021g. Cultural Resources Assessment.
- Jacobs. 2021h. Cultural Resources Assessment.
- Jacobs. 2021i. Cultural Resources Assessment.

Mitigation:

None necessary.

ENERGY

V. Energy: *Would the project:*	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?			**X**	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				**X**

Discussion:

a) Less than Significant Impact. The project would not permanently alter energy use because it would not result in an increase in vehicle travel or an increase in carbon emissions; therefore, direct energy use would involve the short-term use of energy for construction activities.Project construction would primarily consume diesel and gasoline through operation of construction equipment, material deliveries, and debris hauling. Construction is estimated to result in a short-term consumption of energy, representing a small demand on local and regional fuel supplies that would be easily accommodated and would be temporary. The project would not result in an inefficient, wasteful, and unnecessary consumption of energy; therefore, the impact on energy would be less than significant.

b) No Impact. The project would not conflict with or obstruct a State or local plan for renewable energy, and no impact would occur.

Documentation:

- California Public Utilities Commission. 2011. California Long-Term Energy Efficiency Strategic Plan.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.
- City of Redding. 2000. City of Redding General Plan, Public Facilities and Services Element.

Mitigation:

None necessary.

GEOLOGY AND SOILS

VI. GEOLOGY AND SOILS: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) 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 Division of Mines and Geology Special Publications 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would becomeunstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				**X**
d) Be located on expansive soil, as defined in Table 18-1-B of the UniformBuilding Code (1994), creating substantial risks to life or property?				**X**
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				**X**
f) Directly or indirectly destroy a unique paleontological resource or unique geological feature?				**X**

Discussion:

a, c, d) No Impact. The project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The project is not located within an Alquist-Priolo Earthquake Fault Zone.

Landslides usually occur in locations with steep slopes and unstable soils. According to the California Department of Conservation California Geological Survey Seismic Hazards Zonation Program (CDC 2020), the project area is not within a known area of landslide concern. All four project areas are situated on flat or very gently sloping topography where the potential for slope failure is low. The project would also have no impact related to seismic-related failure, including liquefaction, because the potential is low at these predominantly flat, low-seismicity sites. Design and construction in accordance with California Department of Transportation's seismic design criteria would ensure that substantial impacts due to seismic forces and displacements are avoided or minimized to the extent feasible. The project is not on an unstable geologic unit or soil and would not become unstable as a result of the project. On- or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse is not anticipated. Therefore, the project would result in no impact.

b) Less than Significant Impact. The purpose of the project is to regrade and restore trails previously damaged by storm events. Layers of topsoil may be removed during construction;

however, implementation of standard construction BMPs and an ESCP for sediment and erosion control would minimize the potential for erosion. Ground disturbance for construction access could result in a small amount of soil erosion or loss of topsoil; however, it would not result in substantial erosion or soil loss, and the impact would be less than significant. By following these erosion control plans and BMPs, the project would result in a less than significant impact.

e) **No Impact.** The project would not use septic tanks or an alternative wastewater disposal system on the site. Therefore, the project would have no impact caused by soils incapable of adequately supporting septic systems.

f) **No Impact.** No unique geologic features, fossil-bearing strata, or paleontological sites are known to exist on the project site. Therefore, there would be no impact.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Health and Safety Element Figures 4-1 (Ground Shaking Potential) and 4-2 (Liquefaction Potential).
- California Department of Conservation (CDC). 2020. California Geological Survey Seismic Hazards Zonation Program. Accessed November 2021. https://www.conservation.ca.gov/cgs/shp.
- Natural Resources Conservation Service. 2018. Web Soil Survey. Shasta County Area, California. Accessed March 30, 2021. http://websoilsurvey.nrcs.usda.gov/app/.

Mitigation:

None necessary.

GREENHOUSE GAS EMISSIONS

VII. GREENHOUSE GAS EMISSIONS: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			**X**	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				**X**

Discussion:

a) Less than Significant Impact. The primary generators of greenhouse gas (GHG) emissions in the United States are electricity generation and transportation. The U.S. Environmental Protection Agency estimates that nearly 85 percent of the nation's GHG emissions are composed of CO_2. Most CO_2 emissions are generated by petroleum consumption associated with transportation and coal consumption, which is in turn associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

For the proposed project, the predominant associated GHG is CO_2 temporarily generated by construction vehicle travel to and from the site. CARB has recommended the use of 10,000 metric tons of carbon dioxide equivalent per year ($mtCO_2$-e/yr) as the minimum gas emission threshold in its Climate Change Scoping Plan (approved January 9, 2009, updated May 22, 2014). According to the California Air Pollution Control Officer's Association, the 10,000 $mtCO_2$-e/yr is equivalent to 550 dwelling units, 400,000 SF of office use, 120,000 SF of retail, or 70,000 SF of supermarket use. Given the scope and nature of the proposed project compared to that of similar projects, emissions from the project would be significantly below the thresholds put forth by CARB, as well as the City's air quality thresholds. Therefore, the project would not contribute significantly to GHG emissions in the air basin. Additionally, the City and State's construction standards and BMPs, including AQ-1 through 5 (listed in Section III, Air Quality), would be used during construction to further limit any potential contribution to negative impacts from GHG emissions. The project would have no direct or indirect impact on measurable GHGs in the Redding area.

b) No Impact. The project would not conflict with any applicable plans, policies, or regulations adopted to reduce GHG emissions. As noted in "a" above, and in Section III, the project is in conformance with the City's air quality policies and thresholds, State guidelines and regulations, and mitigation measures and BMPs AQ-1 through AQ-5 listed in Section III, Air Quality. The proposed project would have no impact on any applicable plans, policies, or regulations related to GHG emissions.

Documentation:

- California Air Pollution Control Officer's Association. 2010. Website. Accessed November 2021.
- California Office of the Attorney General. 2010. The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level. Updated January 6, 2010.
- City of Redding. 2000. City of Redding General Plan, Air Quality Element.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.
- Shasta County. 2004. Shasta County General Plan. Chapter 6, Section 6.3 "Minerals." Shasta County Department of Resource Management.
- URBEMIS. 2007. Air Quality Computer Model. Version 9.2.4.

Mitigation:

None necessary.

HAZARDS AND HAZARDOUS MATERIALS

VIII. HAZARDS AND HAZARDOUS MATERIALS: *Would the project:*	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
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?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				**X**
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?			**X**	
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 for people residing or working in the project area?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				**X**
g) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas, or where residences are intermixed with wildlands?			**X**	

Discussion:

a, b, d) Less than Significant Impact. The project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (such as flammable fuels). As a part of CWA Section 402, National Pollutant Discharge Elimination System, an ESCP is required. Compliance under water quality regulations and the ESCP would require use of the following standard BMPs to avoid or minimize the potential for accidental release of hazardous materials from spills or fuel leaks during project construction:

- **HAZ-1.** Hazardous materials, including fuels, oils, cement, and solvents, will be stored and contained in an area protected from direct runoff and away from areas where they could enter WOTUS.
- **HAZ-2.** Construction equipment will be inspected daily for leaks. Leaking fluids will be contained upon detection, and equipment repairs will be made as soon as practicable, or the leaking equipment will be moved offsite.

- **HAZ-3.** Secondary containment such as drip pans or absorbent materials will be used to catch spills or leaks when removing or changing fluids. Secondary containment will be used for storage of all hazardous materials.
- **HAZ-4.** Spill containment and cleanup materials will be kept onsite at all times for use in the event of an accidental spill.
- **HAZ-5.** Absorbent materials will be used on small spills rather than hosing down or burying the spill. The absorbent material will be promptly removed and properly disposed of.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and the project would not be expected to create a significant hazard to the public or environment.

A search for hazardous wastes within 1 mile of the project areas was conducted using the California State Water Resource Control Board GeoTracker website and California Department of Toxic Substances Control EnviroStor website. Forty-nine known sites were identified within 1 mile of the project area. The following table provides a list of known hazardous waste sites with a status of "Open" within 1 mile of the project.

Site Name	Global ID	Site Type	Status
Market – Pine Street Alley	T10000016197	LUST Cleanup Site	Open – Site Assessment
Former Artistic Body and Paint	T10000017638	LUST Cleanup Site	Open – Site Assessment

Note:
LUST = leaking underground storage tank

c) **No Impact.** The project sites are approximately 0.25 mile north of Shasta High School. No hazardous waste emissions or handling of hazardous materials would occur within 0.25 mile of an existing or currently proposed school. Therefore, no impact would occur.

d) **No Impact.** The project sites are within approximately 1 mile of Benton Airpark. However, the project would not result in a safety hazard for people residing or working in the Project area because the project is not within the direct vicinity or flight path of Benton Airpark. Therefore, there would be no impact related to safety of the public in the project area.

e) **No Impact.** The project would not impair implementation of or interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, there would be no impact.

f) **Less than Significant Impact.** The use of construction equipment in and around vegetated areas increases the potential for wildfire ignition. Operation of the project would not increase the existing wildfire potential; however, the standard specifications require internal combustion engines to be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire. Therefore, the potential for wildfire ignition would be less than significant. While the potential for wildfire ignition is less than significant, the following conservation measures and BMPs have been incorporated into the project:

- **HAZ-6.** With the exception of vegetation clearing equipment, no vehicles or construction equipment may be operated in areas of tall, dry vegetation.
- **HAZ 7.** A Fire Prevention and Suppression Plan would be developed for any maintenance and repair activities that require welding or otherwise carry a higher risk of starting a wildfire.

Documentation:

- California Department of Toxic Substances Control. EnviroStor. Accessed April 2022. https://www.envirostor.dtsc.ca.gov/public/.
- City of Redding. 2000. City of Redding General Plan, Health and Safety Element.
- Shasta County Airport Land Use Commission. 1981. Comprehensive Land Use Plan Map.
- State Water Resources Control Board. GeoTracker. Accessed April 2022. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=redding.

Mitigation:

None necessary.

HYDROLOGY AND WATER QUALITY

IX. **HYDROLOGY AND WATER QUALITY:** *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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 offsite; 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?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management system?				X

Discussion:

a) Less than Significant Impact. Project construction may result in temporary impacts on surface water quality at project sites under all three TOs. When soils are disturbed, surface runoff that flows across the site may contain sediments that are conveyed into the river. A construction general or NPDES permit and an ESCP would be implemented during construction. Additionally, the City's construction standards require that all projects prepare an erosion and sediment control plan prior to construction to address water pollution control. The project would have a less than significant impact. In addition, BMPs HAZ-1 through HAZ-5, as well as the following BMPs have been incorporated into the project.

- **WQ-1**. All construction work and stockpiling of materials will be confined to the project disturbance area.
- **WQ-2.** Temporary stockpiling of excavated or imported material will be placed in upland areas.
- **WQ-3.** Excess soil will be used onsite or disposed of at a regional landfill or other appropriate facility.

b) Less than Significant Impact. Project construction would not substantially deplete groundwater supplies because no groundwater would be used, and no groundwater wells would be affected during construction. Implementation of the ESCP would avoid and minimize the potential for subsurface seepage of pollutants; and therefore, impacts to groundwater supplies would be less than significant.

c) Less than Significant Impact.

i) Less than Significant Impact. The project would implement an ESCP and comply with a construction general or NPDES permit that would result in minimal erosion or siltation from the construction of the project, resulting in a less than significant impact.

ii) No Impact. The project would not create any new substantial impervious surfaces and would not increase surface runoff with the restoration of trail areas. Construction laydown areas would be unpaved and permanently seeded after construction; therefore, there would be no impact. In addition, a Central Valley Flood Protection Board (CVFPB) Encroachment Permit is required for every proposal or plan of work, including the placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, or works of any kind; and including the planting, excavation, or removal of vegetation, and any repair or maintenance that involves cutting into the levee, wholly or in part, within any area for which there is an Adopted Plan of Flood Control, as defined by California Code of Regulations Title 23, Waters, Division 1 (Title 23). The Encroachment Permit must be approved by CVFPB prior to commencement of work. In general, if the proposed work is located within the State Plan of Flood Control, within 300 feet from a CVFPB Designated Floodway or within 30 feet from the bank of a CVFPB Regulated Stream, a permit will be required. All the aquatic resources delineated within or adjacent to the study area are potential CVFPB jurisdiction and will require a CVFPB permit.

iii) No Impact. The project would not affect capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; therefore, the project would have no impact.

iv) No Impact. Construction at the project sites listed previously would occur within the OHWM of the Sacramento River, but the project would not impede or redirect flood flows; therefore, there would be no impact.

d) Less than Significant Impact. The threat of a tsunami wave is not applicable to inland communities such as Redding. Seiches could potentially be generated in either Shasta or Whiskeytown Lakes during an earthquake; however, as identified in the Health and Safety Element of the General Plan, if a seiche over 65 feet in height were to overtop Shasta Dam, or in the event of dam failure, the proposed project area would be within the inundation zone.

e) No Impact. Construction and operation of the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Documentation:

- Central Valley Regional Water Quality Control Board. 2018. The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region. Fifth edition. Revised May.

- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.
- City of Redding. 2000. City of Redding General Plan, Health and Safety Element.
- Federal Emergency Management Agency (FEMA). 2021. National Flood Hazard Map. Accessed March 2021. https://msc.fema.gov/portal/home.
- Jacobs. 2021d. TO 3 Aquatic Resources Delineation Report.
- Jacobs. 2021e. TO 5 Aquatic Resources Delineation Report.
- Jacobs. 2021f. TO 6 Aquatic Resources Delineation Report.

Mitigation:

None necessary.

LAND USE AND PLANNING

X. **LAND USE AND PLANNING:** *Would the project:*	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Physically divide an established community?				**X**
b) Cause a significant environmental impact due to a conflict with land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect				**X**

Discussion:

a) No Impact. The project would have no potential to divide an established community. Therefore, there would be no impact.

b) No Impact. The project is consistent with the City's General Plan. The project would not cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environment effect. Therefore, there would be no impact.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Community Development Element.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.

Mitigation:

None necessary.

MINERAL RESOURCES

XI. MINERAL RESOURCES: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				**X**
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local General Plan, specific plan or other land use plan?				**X**

Discussion:

a) No Impact. The project is not within a known mineral resources area and would not result in the loss of mineral resource value to the region or to the residents of the state; therefore, there would be no impact.

b) No Impact. The project is not located within any "Critical Mineral Resource Overlay" area as identified in the General Plan; therefore, there would be no impact.

Documentation:

- California Department of Conservation (CDC) Division of Mines and Geology. 1997. Open File Report 97-03.
- City of Redding. 2000. City of Redding General Plan, Natural Resources Element.

Mitigation:

None necessary.

NOISE

XII. NOISE: Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive ground borne vibration or ground borne noise levels?			X	
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?				X

Discussion:

a) Less than Significant Impact. Noise generated during construction would vary depending on specific construction activities. During construction, the project would generate noise intermittently, and nearby sensitive receptors (residential areas and parks) may be temporarily affected. Construction would primarily occur during the hours of 7 a.m. to 7 p.m., Monday through Friday. To accommodate the construction schedule, construction may occur on some weekends during daytime hours. Construction will require dump trucks, cement trucks, an excavator, crane, roller (for compaction), water truck, and standard pickup trucks. The project does not require pile driving or vibratory hammers and work would not exceed noise standards. The project would result in a less than significant impact.

b) Less than Significant Impact. Potential sources of ground borne noise and vibration such as excavation would occur during construction; however, no work is proposed that would require pile driving or vibratory hammers. Any vibration would be minimal and intermittent and would result in less than significant impact.

c) No Impact. The project sites for TOs 3 and 5 are within approximately 1 mile of Benton Airpark; however, the project would not expose people residing or working in the project area to excessive noise levels; therefore, there would be no impact.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Noise Element.
- City of Redding. 2000. Noise Standards 18.40.100. https://library.municode.com/ca/redding/codes/code_of_ordinances?nodeId=TIT18ZO_DIVIVREAPALDI_CH18.40DESIRE_18.40.100NOST.

Mitigation:

None necessary.

POPULATION AND HOUSING

XIII. POPULATION AND HOUSING: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (forexample, through extension of roads or other infrastructure)?				**X**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

Discussion:

a, b) No Impact. The purpose of the project is to improve trail areas damaged by flood events. The project would not induce population growth; expand capacity of new homes, businesses, and infrastructure; or call for the displacement of any number of housing, therefore resulting in no impact.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Housing Element.

Mitigation:

None necessary.

PUBLIC SERVICES

XIV. PUBLIC SERVICES: a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Fire Protection?				**X**
Police Protection?				**X**
Schools?				**X**
Parks?				**X**
Other public facilities?				**X**

Discussion:

a) No Impact. The proposed project does not include new development or facilities and would not generate population growth that would result in an increased demand for public services such as fire protection, police protection, schools, parks, or other public services; therefore, there would be no impact.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Public Facilities.

Mitigation:

None necessary.

RECREATION

XV. RECREATION:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project 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?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion:

a) Less than Significant Impact. The proposed project is intended to restore damaged trail areas from previous storm flooding events. Trail restoration would occur under all three TOs and include trail stabilization and erosion control measures to prevent damage from future storm events. The project would enhance existing trail areas and may encourage increased use. However, the project would not result in substantial deterioration of existing facilities, and impacts would be less than significant.

b) No Impact. Although the project would provide restoration and preventive measures to the existing trails, no additional recreation facilities or expansion of recreational facilities are proposed; therefore, there would be no impact.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Recreation.

Mitigation:

None necessary.

TRANSPORTATION / TRAFFIC

XVI. TRANSPORTATION/TRAFFIC: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				**X**
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			**X**	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				**X**
d) Result in inadequate emergency access?				**X**

Discussion:

a) No Impact. The proposed project involves restoration of existing trail areas and would not conflict with an applicable program, plan, ordinance, or policy for the performance of a circulation system; therefore, no impact would occur.

b) Less than Significant Impact. The proposed project would not degrade the existing level of service on current roadways within the vicinity of the project. Construction activities would create a temporary negligible amount of traffic along roadways near the project sites caused by construction workers and delivery of materials and equipment. No road closures are expected, and construction would last approximately 90 days for TOs 3 and 5 and 30 days for TO 6; therefore, the impact would be less than significant.

c) No Impact. The project would not substantially increase hazards due to geometric design features or incompatible uses. Additionally, all potential traffic hazards would be addressed by a traffic control plan prior to construction; therefore, there would be no impact.

d) No Impact. The project would not conflict with emergency access routes because there are no planned road or lane closures to complete construction activities; therefore, no impact would occur.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Transportation.

Mitigation:

None necessary.

TRIBAL CULTURAL RESOURCES

XVII. TRIBAL CULTURAL RESOURCES: *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or				**X**
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				**X**

Discussion:

a, b) No Impact. As described in the Cultural Resources section and the Cultural Resources Assessment (Appendix C), no Tribal Cultural Resources listed historical or eligible for listing occur on the project site and the proposed project would therefore, not cause a substantial adverse change in the significance of any known tribal cultural resources.

Documentation:

- Jacobs. 2020. Cultural Resources Assessment.

Mitigation:

None necessary.

UTILITIES AND SERVICE SYSTEMS

XVIII. UTILITIES AND SERVICE SYSTEMS: *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?				**X**
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				**X**
c) Result in a determination by the wastewater treatment provider which 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?				**X**
d) 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?			**X**	
e) Comply with federal, state, and local management and reduction statues and regulations related to solid waste?			**X**	

Discussion:

a) No Impact. The project does not require relocation of existing utilities or the construction of new utilities; therefore, there would be no impact.

b) No Impact. During construction, water would be used for dust control, but use would be minimal, and no additional water supplies would be needed during construction or operation; therefore, no impact would occur.

c) No Impact. The project would not generate wastewater or increase capacity at a wastewater treatment facility; therefore, there would be no impact.

d) Less than Significant Impact. During construction, the project would generate a small amount of waste including concrete removal; however, the amount is not expected to exceed landfill capacities. Solid waste generated by the project would be transported to Anderson Landfill; therefore, impacts would be considered less than significant.

e) Less than Significant Impact. The project may require disposal of construction debris, but only in small amounts. Construction debris would be disposed of consistent with federal, State, and local regulations. Therefore, impacts would be less than significant.

Documentation:

- City of Redding. 2000. City of Redding General Plan, Public Facilities.

Mitigation:

None necessary.

WILDFIRE

XVIV. WILDFIRE: *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**
c) Require installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

Discussion:

a) No Impact. Implementation of the project would not impair or alter any existing emergency response plan or evacuation plan; therefore, there would be no impact.

b) No Impact. The project sites for TOs 3 and 5 are not located within a State responsibility area but are classified as a Very High Fire Hazard Severity Zone (VHFHSZ). Implementation of the project would not exacerbate wildfire risk; therefore, there would be no impact.

c) No Impact. Implementation of the project would not require installation or maintenance of infrastructure that may exacerbate fire risk; therefore, there would be no impact.

d) No Impact. The project sites for all three TOs have had significant risks such as flooding due to past storm events. The project is intended to prevent risk to people or structures from significant risks such as flooding; therefore, no impacts would occur.

Documentation:

- CalFire. 2020. Department of Forestry and Fire Protection Redding, Very High Fire Hazard Severity Zones. https://osfm.fire.ca.gov/media/5992/redding.pdf.

Mitigation:

None necessary.

MANDATORY FINDINGS OF SIGNIFICANCE

XX. MANDATORY FINDINGS OF SIGNIFICANCE:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below the self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	
c) Does the project have potential environmental effects which may causesubstantial adverse effects on human beings, either directly or indirectly?				**X**

Discussion:

a) Less than Significant With Mitigation Incorporated. The proposed project would have minimal potential to degrade the quality of the environment, affect wildlife populations or their habitats, or reduce the number or restrict the range of rare or endangered plant and animal species. Although special-status wildlife species, including anadromous fish, migratory birds, western pond turtle, foothill yellow-legged frog, and bats may be affected by implementation of the proposed project, standard conservation measures and BMPs, as well as mitigation measures, will be used to avoid adverse impacts on these species. Implementation of the proposed project would not eliminate examples of history or prehistory. The project's impacts would be less than significant with mitigation incorporated.

b) Less than Significant Impact. As described in Section III, the proposed project could temporarily contribute to regionwide cumulative air quality impacts. However, these impacts would be considered less than significant and, under policy of the City's General Plan and application of standard BMPs, would eliminate the potential for air quality impacts during project implementation. The project's potential cumulative impacts would be less than significant.

c) No Impact. As discussed in this document, the proposed project does not include any activities that cannot be mitigated to a less than significant level or that could otherwise cause substantial adverse impacts on human beings, either directly or indirectly.

Documentation:

- Refer to all previous sections.

Mitigation:

MM-1. Before working within 150 feet of a water body, all heavy equipment, vehicles, and power tools must be power washed, allowed to fully dry, and inspected for fluid leaks. Cleaning will be repeated as often as necessary to keep the equipment free of external fluids and to prevent a leak or spill from

entering the water. The equipment must also be inspected to make sure that no plants, soil, or other organic material is adhering to the surface. The equipment must be clean of material that may harbor invasive plant seeds or invasive pests before entering the work area. This material includes dirt or plant seeds on construction equipment, tools, boots, and clothing.

MM-2. Machinery and equipment used during work must be serviced, fueled, and maintained in upland areas. Equipment fueling areas shall be located at least 200 feet away from all aquatic resources.

MM-3. Staging of equipment, construction materials, tools, buildings, restrooms, and trailers must occur outside of the floodplain during flood season. Riparian trees and shrubs shall not be removed for staging areas.

MM-4. When working on stream banks or floodplains, disturbance to existing grades and vegetation must be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities must avoid and limit disturbance to stream banks or stream channel habitat as much as possible. After construction is complete, all staging, storage, or stockpile areas will be obliterated, the soil stabilized, and revegetated (as appropriate).

MM-5. All construction personnel will be required to attend an environmental awareness training prior to the start of construction. The training will be conducted by a qualified biologist and will familiarize construction personnel with the special status species that may occur onsite, their habitats, provisions and protections, measures to be implemented, and the project boundaries. The training must be provided within 3 days of the arrival of any new worker.

MM-6. A biological monitor must be present for activities within 100 feet of the Sacramento River that have potential to result in adverse effects on the four listed fish species or their habitat.

MM-7. The project shall be constructed between August 1 and October 15th. In-channel construction activities that could affect suitable habitat for listed fish species or EFH would be limited to daylight hours during weekdays, leaving a nighttime and weekend period of passage for the species.

MM-8. Riprap or rock slope protection (RSP) must be clean and durable, free from dirt, sand, clay and rock fines and must be installed to withstand the 100-year flood event.

MM-9. To prevent entrapment of special status species, all vertically sided holes or trenches will be covered at the end of the workday, or have escape ramps built into the walls of the excavation. If pipes are stored onsite or in associated staging areas, they will be capped when not in use or checked prior to installation. Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials.

MM-10. If a special status species is identified onsite, crews will immediately stop work within 50 feet of the individual, and inform the construction supervisor, the City, and the appropriate regulatory agency (USFWS, NMFS, CDFW). Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition, or an appropriate course of action has been agreed upon by the City and the regulatory agency.

MM-11. When restoring upland areas to pre-project conditions, native seed mix will be used for hydroseeding.

MM-12. Prior to the onset of construction activities, a qualified biologist will conduct preconstruction surveys for western pond turtle, turtle nests, and foothill yellow-legged frog. If these species or turtle nests are observed during the preconstruction survey or during construction, CDFW will be contacted, and work within that area will be avoided until an appropriate course of action is established. If western

pond turtle, turtle nests, or foothill yellow-legged frog are not observed during the preconstruction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another preconstruction survey will be conducted.

MM-13. If it is determined that tree removal is required, the removal of trees 10 inches DBH or greater with cavities, crevices, or snags shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31), to the extent practical. If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified biologist shall conduct a pre-construction survey of the study area to locate maternity colonies. The preconstruction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified biologist, in consultation with CDFW, to ensure the colony is protected from project activities. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

MM-14. If vegetation removal or construction activities will occur during the nesting season for birds or raptors (February 1 through August 31 for birds and November 1 through July 1 for raptors), a qualified biologist will conduct a preconstruction survey seven (7) days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.

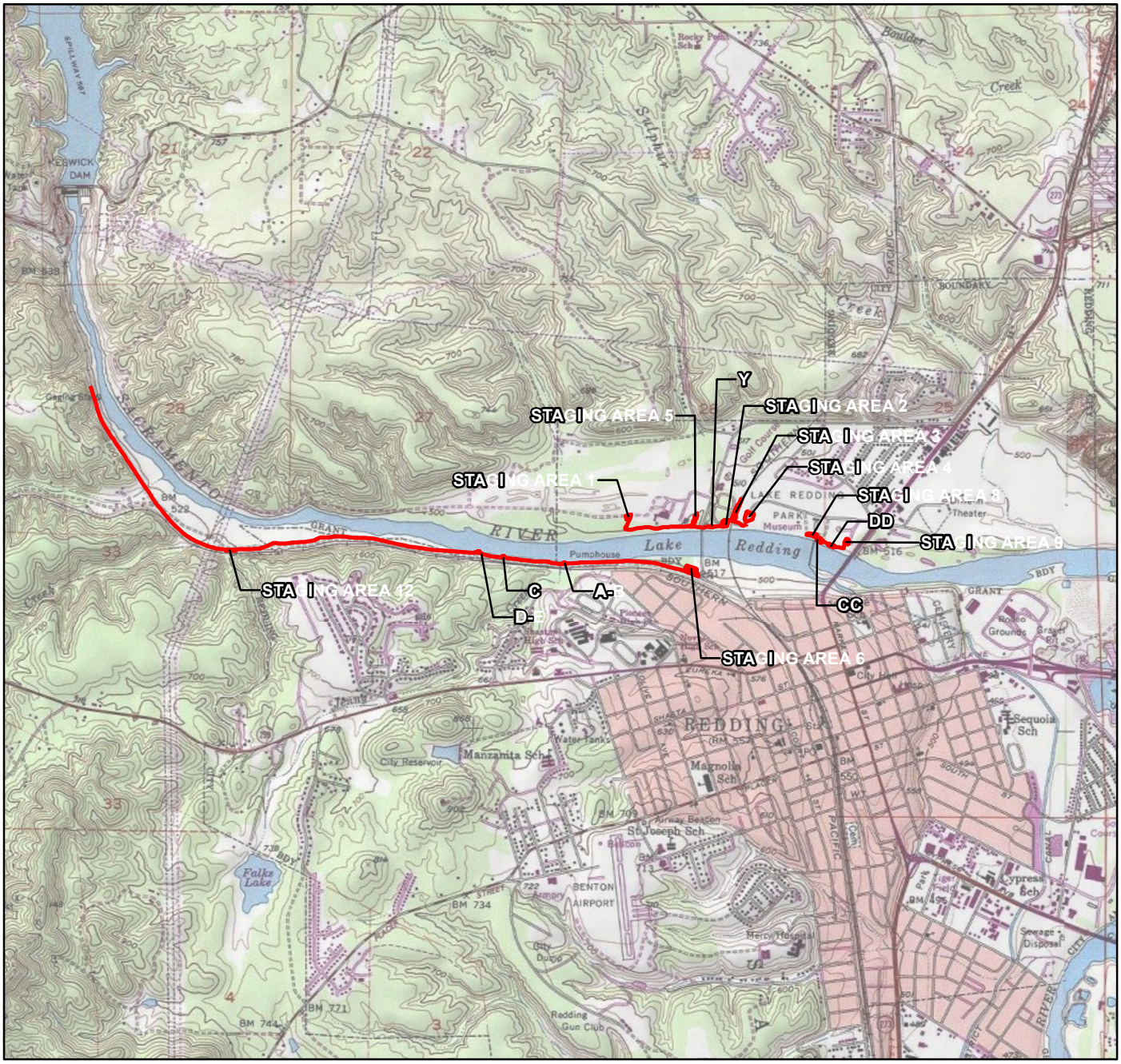
MM-15. If an active raptor nest is found, no construction activities will occur within 300-feet of the nest for raptors and 450-feet of the nest for special-status raptors unless a smaller buffer zone is approved by the CDFW. Construction may resume once the young have left the nest or as approved by a qualified biologist.

APPENDIX A

Figure 1a – TO 3 Project Location Map

Figure 1b – TO 5 Project Location Map

Figure 1c – TO 6 Project Location Map



VICINITY MAP

LEGEND

Project Location

Notes:
1. Projection - State Plane California Zone 1 Feet NAD 83
2. Project site within the following: T32N R5W Sections 25, 26, 27, 28, 33, 34, and 35
3. USGS Topographic Quad 1:24,000: Redding, CA

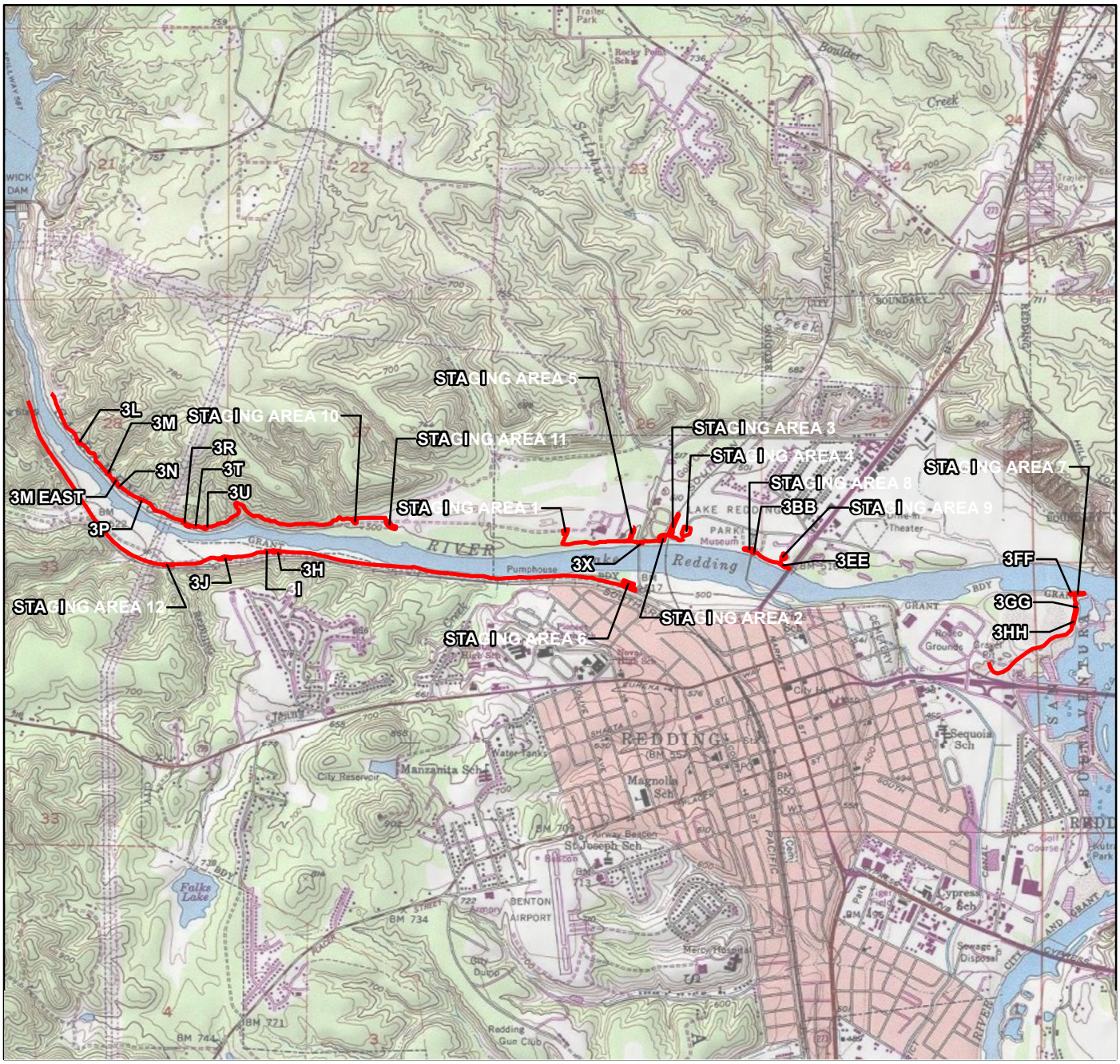
N

0 1,500 3,000
Feet

FIGURE 1
PW-00935 Project Location
FEMA No. PA-09-CA-4301-PW-00935
City of Redding Sacramento River Trail Repairs Project
Shasta County, California

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China

Jacobs



VICINITY MAP

LEGEND

Project Location

Notes:
1. Projection - State Plane California Zone 1 Feet NAD 83
2. Project site within the following: T32N R4W Section 31; T32N R5W Sections 25, 26, 27, 28, 33, 34, and 35
3. USGS Topographic Quad 1:24,000: Redding, CA and Enterprise, CA

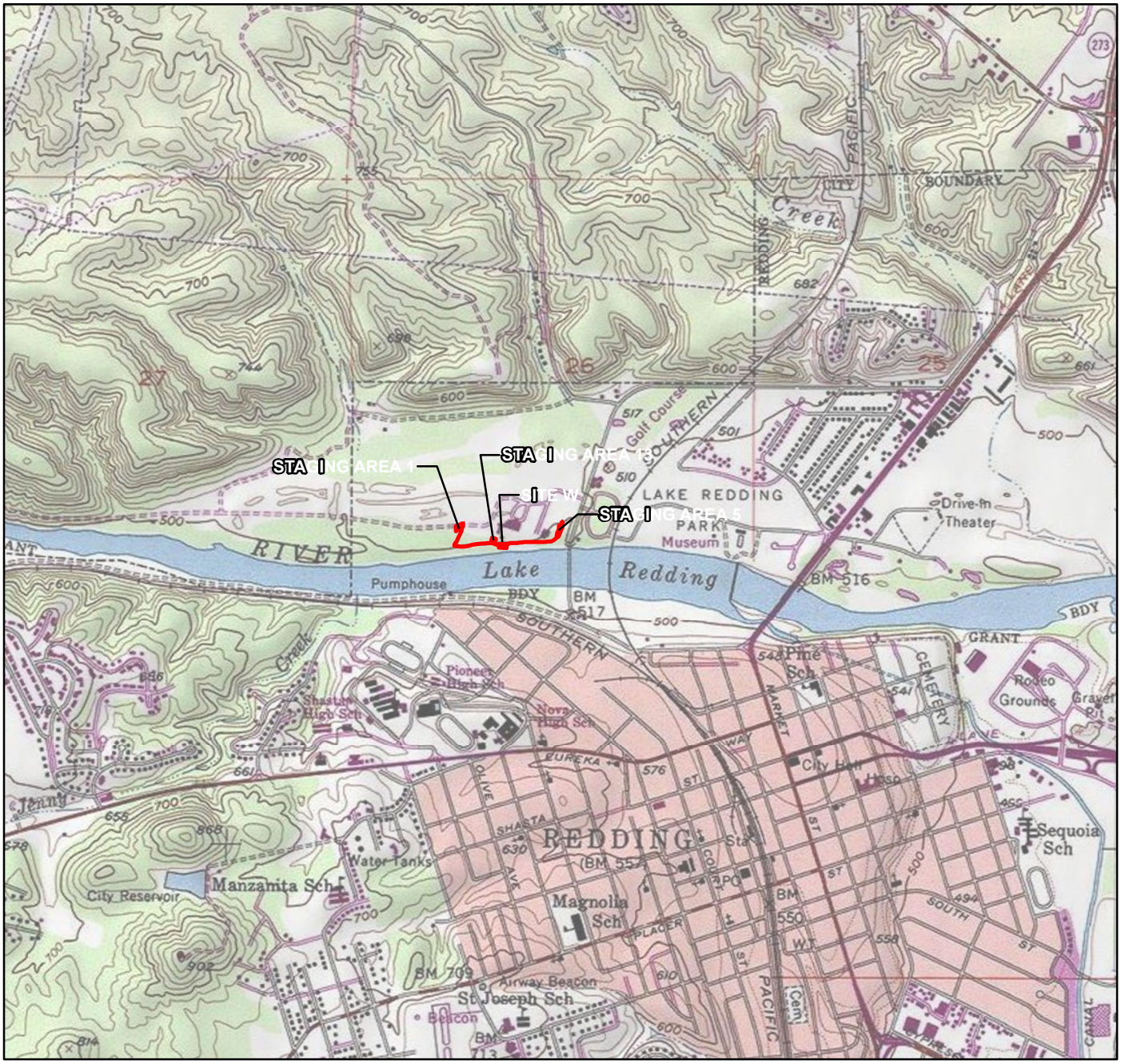
N

0 1,500 3,000
Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China

FIGURE 1
PW-00990 Project Location
FEMA No. PA-09-CA-4301-PW-00990
City of Redding Sacramento River Trail Repairs Project
Shasta County, California

Jacobs



VICINITY MAP

LEGEND

Project Location

Notes:
1. Projection - State Plane California Zone 1 Feet NAD 83
2. Project site within the following: T32N R5W Section 26
3. USGS Topographic Quad 1:24,000: Redding, CA

N

0 1,000 2,000
Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China

FIGURE 1
PW-00991 Project Location
FEMA No. PA-09-CA-4301-PW-00991
City of Redding Sacramento River Trail Repairs Project
Shasta County, California

Jacobs

ATTACHMENT C

Mitigation Monitoring and Environmental Commitment Program

MITIGATION MONITORING AND ENVIRONMENTAL COMMITMENT PROGRAM

SACRAMENTO RIVER TRAIL REPAIRS PROJECT
TO 3: PA-09-CA-4301-PW-00935
TO 5: PA-09-CA-4301-PW-00990
TO 6: PA-09-CA-4301-PW-00991

(STATE CLEARINGHOUSE NO. 2022XXXXXX)

MITIGATION MONITORING PROGRAM CONTENTS

This document is the Mitigation Monitoring and Environmental Commitment Program (MMP/ECP) for the Sacramento River Trail Repairs Project (project). The MMP/ECP includes a brief discussion of the legal basis for, and the purpose of, the program, discussion, and direction regarding complaints about noncompliance; a key to understanding the monitoring matrix; and the monitoring matrix.

LEGAL BASIS OF AND PURPOSE FOR THE MITIGATION MONITORING PROGRAM

California Public Resources Code Section 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report (EIR) or a mitigated negative declaration (MND). This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The MMP contained herein is intended to satisfy the requirements of CEQA as they relate to the Initial Study/Mitigated Negative Declaration prepared for the project. It is intended to be used by City of Redding (City) staff, participating agencies, project contractors, and mitigation monitoring personnel during implementation of the project.

Mitigation is defined by CEQA Guidelines Section 15370 as a measure that does any of the following:

- Avoids impacts altogether by not taking a certain action or parts of an action.
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifies impacts by repairing, rehabilitating, or restoring the impacted environment.
- Reduces or eliminates impacts over time by preservation and maintenance operations during the life of the project.
- Compensates for impacts by replacing or providing substitute resources or environments.

The intent of the MMP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMP will provide for monitoring of construction activities as necessary, onsite identification and resolution of environmental problems, and proper reporting to City staff.

In addition to meeting the CEQA MMP requirements, this document incorporates environmental commitments, standard practices, conservation measures, and best management practices (BMPs). The environmental commitments may be part of the project design, standard contract specifications, City requirements, or conservation measures. These commitments are part of the project, but they do not

constitute mitigation under CEQA as they have not been incorporated to reduce a potentially significant impact.

MITIGATION MONITORING/ENVIRONMENTAL COMMITMENT PROGRAM TABLE

The MMP/ECP Table identifies the mitigation measures and commitments proposed for the project. The tables have the following columns:

- **Mitigation Measure:** Lists the mitigation measures identified within the Initial Study for a specific potentially significant impact, along with the number for each measure as enumerated in the Initial Study.
- **Environmental Commitment:** Lists the commitments identified within the project that are not related to a potentially significant CEQA impact, but further ensure environmental resource protection.
- **Timing:** Identifies at what point in time, review process, or phase the mitigation measure will be completed.
- **Agency/Department Consultation:** References the City department or any other public agency with which coordination is required to satisfy the identified mitigation measure.
- **Verification:** Spaces to be initialed and dated by the individual designated to verify adherence to a specific mitigation measure.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures and commitments associated with the project. The complaint shall be directed to the City in written form, providing specific information on the asserted violation. The City shall investigate and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the City shall take appropriate action to remedy any violation. The compliant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

MITIGATION MONITORING AND ENVIRONMENTAL COMMITMENT PROGRAM TABLE FOR THE SACRAMENTO RIVER TRAIL REPAIRS PROJECT MITIGATION MONITORING PROGRAM (STATE CLEARINGHOUSE NO. 2022XXXXXX)

ENVIRONMENTAL COMMITMENTS

The following environmental commitments will be incorporated into the project to further protect environmental and biological resources:

Best Management Practices	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials)
Air Quality (AQ)			
AQ-1. Nontoxic soil stabilizers will be applied according to manufacturer's specification to all inactive construction areas.	Construction	Construction Management	
AQ-2. All grading operations will be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.	Construction	Construction Management	
AQ-3. Water all stockpiles, access roads, and disturbed or exposed areas, as necessary, to prevent airborne dust.	Construction	Construction Management	
AQ-4. Pursuant to the California Vehicle Code (Section 23114(e)(4)) (California Legislative Information 2016), all trucks hauling soil and other loose material to and from the construction site will be covered or will maintain at least 6 inches of freeboard (i.e., minimum vertical distance between top of load and the trailer).	Construction	Construction Management	
AQ-5. All public roadways used by the project contractor will be maintained free from dust, dirt, and debris caused by construction activities. Streets will be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads.	Construction	Construction Management	
Biological Resources (BIO)			
BIO-1. A Stormwater Pollution Prevention Plan (SWPPP), as required by the City of Redding Stormwater Quality Management and Discharge Control Ordinance, will be prepared to address BMPs that will be used to prevent erosion and sediment loss within the project site. BMPs such as silt fence, mulching and seeding, and straw wattles will be placed where needed to prevent sediment from leaving the site during and after construction.	Preconstruction/ Construction	City/ Construction Management	

Best Management Practices	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials)
BIO-2. Appropriate sediment control measures (e.g., silt fences, straw wattles) will be in place prior to the onset of construction activities near waters of the United States and in project areas where there is a potential for surface runoff to drain into jurisdictional waters. Sediment control measures will be monitored and maintained until construction activities have ceased.	Preconstruction/ Construction	City/ Construction Management	
BIO-3. High visibility fencing, flagging, or markers will be installed along the edges of the work zone near avoided waters and riparian areas. In addition, equipment entry and exit points; and staging, storage, and stockpile areas must be clearly marked prior to the entry of mechanized equipment or vehicles into the construction area.	Preconstruction/ Construction	City/ Construction Management	
Cultural Resources (CR)			
CR-1. If previously unidentified cultural materials are unearthed during construction, it is the City's policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if the proposed project undertaking limits are extended beyond the present survey area of potential effect limits.	Construction	City/ Construction Management	
CR-2. If human remains are discovered during project activities, all activities near the find will be stopped, and the Shasta County Sheriff-Coroner's Office will be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the Native American Heritage Commission (NAHC). Treatment of the remains will be conducted in accordance with further direction of the County Coroner or NAHC, as appropriate.	Construction	City/NAHC/ County Coroner	
Hazards and Hazardous Materials (HAZ)			
HAZ-1. Hazardous materials, including fuels, oils, cement, and solvents will be stored and contained in an area protected from direct runoff and away from areas where they could enter waters of the United States.	Construction	City/ Construction Management	
HAZ-2. Construction equipment will be inspected daily for leaks. Leaking fluids will be contained upon detection, and equipment repairs will be made as soon as practicable, or the leaking equipment will be moved offsite.	Construction	City/ Construction Management	
HAZ-3. Secondary containment such as drip pans or absorbent materials will be used to catch spills or leaks when removing or changing fluids. Secondary containment will be used for storage of all hazardous materials.	Construction	City/ Construction Management	
HAZ-4. Spill containment and clean-up materials will be kept onsite at all times for use in the event of an accidental spill.	Construction	City/ Construction Management	

Best Management Practices	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials)
HAZ-5. Absorbent materials will be used on small spills rather than hosing down or burying the spill. The absorbent material will be promptly removed and disposed of properly.	Construction	City/ Construction Management	
HAZ-6. With the exception of vegetation clearing equipment, no vehicles or construction equipment may be operated in areas of tall, dry vegetation.	Construction	City/ Construction Management	
HAZ 7. A Fire Prevention and Suppression Plan would be developed for any maintenance and repair activities that require welding or otherwise carry a higher risk of starting a wildfire.	Preconstruction	City/ Construction Management	
Hydrology and Water Quality (WQ)			
WQ-1. All construction work and stockpiling of materials will be confined to the project disturbance area.	Construction	City/ Construction Management	
WQ-2. Temporary stockpiling of excavated or imported material will be placed in upland areas.	Construction	City/ Construction Management	
WQ-3. Excess soil will be used onsite or disposed of at a regional landfill or other appropriate facility.	Construction	City/ Construction Management	

CALIFORNIA ENVIRONMENTAL QUALITY ACT MITIGATION MEASURES

Resource-specific mitigation measures that will be used during project implementation include the following:

Mitigation Measure (MM)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials)
Biological Resources (BIO)			
MM-1. Before working within 150 feet of a water body, all heavy equipment, vehicles, and power tools must be power washed, allowed to fully dry, and inspected for fluid leaks. Cleaning will be repeated as often as necessary to keep the equipment free of external fluids and to prevent a leak or spill from entering the water. The equipment must also be inspected to make sure that no plants, soil, or other organic material is adhering to the surface. The equipment must be clean of material that may harbor invasive plant seeds or invasive pests before entering the work area. This material includes dirt or plant seeds on construction equipment, tools, boots, and clothing.	Preconstruction/ Construction	City/ Construction Management	
MM-2. Machinery and equipment used during work must be serviced, fueled, and maintained in upland areas. Equipment fueling areas shall be located at least 200 feet away from all aquatic resources.	Construction	City/ Construction Management	
MM-3. Staging of equipment, construction materials, tools, buildings, restrooms, and trailers must occur outside of the floodplain during flood season. Riparian trees and shrubs shall not be removed for staging areas.	Construction	City/ Construction Management	
MM-4. When working on stream banks or floodplains, disturbance to existing grades and vegetation must be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities must avoid and limit disturbance to stream banks or stream channel habitat as much as possible. After construction is complete, all staging, storage, or stockpile areas will be obliterated, the soil stabilized, and revegetated (as appropriate).	Construction	City/ Construction Management	
MM-5. All construction personnel will be required to attend an environmental awareness training prior to the start of construction. The training will be conducted by a qualified biologist and will familiarize construction personnel with the listed and special status species that may occur onsite, their habitats, provisions and protections, measures to be implemented, and the project boundaries. The training must be provided within 3 days of the arrival of any new worker.	Preconstruction/ Construction	City/ Construction Management	

Mitigation Measure (MM)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials)
MM-6. A biological monitor must be present for activities within 100 feet of the Sacramento River that have potential to result in adverse effects on the four listed fish species or their habitat.	Construction	City/ Construction Management	
MM-7. The project shall be constructed between August 1 and October 15th. In-channel construction activities that could affect suitable habitat for listed fish species or EFH would be limited to daylight hours during weekdays, leaving a nighttime and weekend period of passage for the species.	Construction	City/ Construction Management	
MM-8. Riprap or rock slope protection (RSP) must be clean and durable, free from dirt, sand, clay and rock fines and must be installed to withstand the 100-year flood event.	Construction	City/ Construction Management	
MM-9. To prevent entrapment of special status species, all vertically sided holes or trenches will be covered at the end of the workday, or have escape ramps built into the walls of the excavation. If pipes are stored onsite or in associated staging areas, they will be capped when not in use or checked prior to installation. Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials.	Construction	City/ Construction Management	
MM-10. If a special status species is identified onsite, crews will immediately stop work within 50 feet of the individual, and inform the construction supervisor, the City, and the appropriate regulatory agency (USFWS, NMFS, CDFW). Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition, or an appropriate course of action has been agreed upon by the City and the regulatory agency.	Construction	City/ Construction Management	
MM-11. When restoring upland areas to pre-project conditions, native seed mix will be used for hydroseeding.	Construction	City/ Construction Management	
MM-12. Prior to the onset of construction activities, a qualified biologist will conduct preconstruction surveys for western pond turtle, turtle nests, and foothill yellow-legged frog. If these species or turtle nests are observed during the preconstruction survey or during construction, CDFW will be contacted, and work within that area will be avoided until an appropriate course of action is established. If western pond turtle, turtle nests, or foothill yellow-legged frog are not observed during the preconstruction survey, then construction activities may begin. If construction is delayed or halted for more than 7 days, another preconstruction survey will be conducted.	Preconstruction/ Construction	City/ Construction Management	

Mitigation Measure (MM)	Timing/ Implementation	Enforcement/ Monitoring	Verification (Date and Initials)
MM-13. If it is determined that tree removal is required, the removal of trees greater than 10" DBH with cavities, crevices, or snags shall occur before bat maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 31), to the extent practical. If construction (including the removal of large trees) occurs during the bat non-volant season (March 1 through August 31), a qualified biologist shall conduct a pre-construction survey of the study area to locate maternity colonies. The preconstruction survey will be performed no more than 7 days prior to the implementation of construction activities. If a maternity colony is located within or adjacent to the study area, a disturbance free buffer shall be established by a qualified biologist, in consultation with CDFW, to ensure the colony is protected from project activities. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.	Construction	City/ Construction Management	
MM-14. If vegetation removal or construction activities will occur during the nesting season for birds (February 1 through August 31 for birds and November 1 through July 1 for raptors), a qualified biologist will conduct a preconstruction survey seven (7) days before construction activities begin. If nesting birds or raptors are found, CDFW will be notified and consulted. An appropriate buffer, as determined by CDFW and the qualified biologist, will be placed around the nest until the young have fledged. If construction activities cease for a period greater than 7 days, additional preconstruction surveys will be required.	Construction	City/ Construction Management	
MM-15. If an active raptor nest is found, no construction activities will occur within 300-feet of the nest for raptors and 450-feet of the nest for special-status raptors unless a smaller buffer zone is approved by the CDFW. Construction may resume once the young have left the nest or as approved by a qualified biologist.	Construction	City/ Construction Management	

ATTACHMENT D

Comments and Response to Comments (if any)