

ENVIRONMENTAL INITIAL STUDY

INITIAL STUDY CHECKLIST References and Documentation

Henderson and Parkview Open Space Restoration Trail & Kayak
Access Project
Use Permit UP-2016-00392

Prepared by:
CITY OF REDDING
Development Services Department
Planning Division
777 Cypress Avenue
Redding, California 96001

March 31, 2017

CITY OF REDDING

ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Henderson and Parkview Open Space Restoration Trail & Kayak Access Project
2. **Lead agency name and address:**

CITY OF REDDING
Development Services Department
Planning Division
777 Cypress Avenue
Redding, CA 96001
3. **Contact Person and Phone Number:** Lily Toy, Senior Planner (530) 225-4020
4. **Project Location:** Parkview Road and Henderson Road
5. **Applicant's Name and Address:** Kim Niemer, City of Redding Community Services Director, 777 Cypress Avenue, Redding, CA 96001
6. **General Plan Designation:** "Greenway" and "Open Space"
7. **Zoning:** "OS" Open Space and "GO" General Office
8. **Description of Project:** Request to allow environmental restoration and public-access improvements. The restoration component consists of removal of approximately 20 acres of invasive plant species, the planting of 4 acres of California native plants, including a one-acre pollinator garden at the Parkview Open Space, planting of shaded aquatic along the edge of the river, where feasible. The public-access improvement component consists of a driveway access from Henderson Road, construction of 12 trailhead parking spaces and 17 kayak access parking spaces, 13 of which are car and trailer spaces, a vehicle drop-off zone near a calm water lagoon natural access to the river, 1,109 feet of 7-foot-wide trail, utilizing an existing historic riverside road, and 600 feet of 5-foot-wide trail connecting the kayak access area to the Cypress Bridge. The use permit is to allow the public-access improvements to encroach into the regulatory 100-year floodplain of the Sacramento River.
9. **Surrounding Land Uses and Setting:** The site is bounded by Cypress Avenue to the north, the Cobblestone shopping center to the west, riparian woodland and open space to the south, and the Sacramento River to the east. The project site is located on the east bank of the Sacramento River just south of the Cypress Avenue Bridge. The Federal Emergency Management Agency 100-year floodplain of the Sacramento River inundates approximately 7.53 acres of the site. The Henderson Open Space area is considered by the City to be a natural park area. The Henderson Open Space and Parkview Open Space (located directly across the river on the west bank) total approximately 40 acres of resource lands owned by the City just south of the Cypress Avenue Bridge. These lands include a total of 1 mile of river frontage and riparian dominated vegetation communities that include mature stands of Fremont cottonwood, valley oak, and willows. Historical land uses of the Henderson Open Space area and vicinity include use by Native Americans, ranching, and a bridge crossing location in the 1800s. Other historic land uses include a diversion of river flow into a horizontal paddlewheel facility in the early 1900s; a forest products, cement plant, and gravel operation in the 1940s through the 1960s; and a gravel operation used in the construction of Interstate 5 during the 1960s and 1970s. The remnants of some of these land uses are visible today.

Its proximity within the floodplain of the Sacramento River and gentle topography makes it suitable for recreational river access. This area is used by fisherman, kayakers, and others to access the river, while other recreationalists use the primitive trails that meander through the site for activities such as wildlife viewing. The area is largely unimproved, but does contain old road cuts, primitive trails, arbitrary parking areas, and river access.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**
11. **Tribal Consultation:** A letter requesting consultation was sent to the Redding Rancheria on December 2, 2016, to invite their participation in the Section 106 process and request their assistance in the identification of sites of religious and cultural significance or identification of historic properties that may be affected by the proposed undertaking. Letters were also sent to

the Shasta Nation, the Wintu Tribe of Northern California, and the Winnemem Wintu Tribe, which are identified as Native American organizations likely to have knowledge or concerns with historic properties in the area, requesting their assistance in identifying historic properties which may be affected by the proposed undertaking.

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.

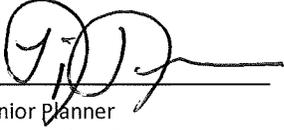
| | | | | | |
|--|------------------------------------|---|-------------------------------|---|-----------------------------|
| | Aesthetics | | Agricultural Resources | | Air Quality |
| | Biological Resources | X | Cultural Resources | | Geology / Soils |
| | Greenhouse Gas Emissions | | Hazards & Hazardous Materials | X | Hydrology / Water Quality |
| | Land Use / Planning | | Mineral Resources | | Noise |
| | Population / Housing | | Public Services | | Recreation |
| | Transportation / Traffic | X | Tribal Cultural Resources | | Utilities / Service Systems |
| | 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 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) 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 or 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 Lily Toy at (530) 225-4020.



Lily Toy, Senior Planner
Development Services Department

4/6/2017

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:

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

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 this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts 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:

- *City of Redding General Plan, 2000*
- *City of Redding General Plan Final Environmental Impact Report, 2000, SCH #1998072103*

List of attachments/references:

Attachment A – Location map

Attachment B – Site plan

Attachment C – URBEMIS air quality computer model, dated February 27, 2017

Attachment D – Technical Memorandum, dated June 21, 2016 by North State Resources, Incorporated. (on file with the Planning Division)

Attachment E – Archaeological Inventory Survey, by U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region dated December 2016. (on file with the Planning Division)

Attachment F – Biological Resources Assessment for Henderson Open space Recreational Trail Project, dated August 2016 (on file in the Planning Division)

Attachment G – Flood Risk Assessments by Pacific Hydrologic Incorporated, dated April 5, 2016 and March 27, 2017 (on file in the Planning Division)

SUMMARY OF MITIGATION MEASURES:

| I. <u>AESTHETICS</u> : <i>Would the project:</i> | 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) Substantially degrade the existing visual character or quality of the site and its surroundings? | | | | 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) The project will not involve construction of any tall structures. The project consists of public access trails, including parking spaces and a kayak access trail to the Sacramento River. The proposed project would not represent a significant change to the overall scenic quality of the area.
- b) The project site is not located adjacent to a state-designated scenic highway.
- c) The project will be compatible with the existing visual character of the property and its surroundings.
- d) The project is proposing solar lighting. Shielding of lighting as required by City Ordinance will minimize any impact to a level of less than significant.

Documentation:

City of Redding General Plan, Natural Resources Element, 2000
City of Redding Zoning Ordinance, Chapter 18.40.090

Mitigation:

None necessary.

| II. AGRICULTURE RESOURCES: <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural, Land Evaluation and Site Assessment Mode (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Convert Prime Farmland, Unique Farmland, or 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) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? | | | | X |

Discussion:

a-c) The project site has not been historically used for agricultural purposes, nor does it possess soils that are prime for agricultural production.

Documentation:

City of Redding General Plan, Natural Resources Element, 2000
 City of Redding General Plan Background Report, Chapter 9.4: Agricultural Lands
 California Department of Conservation’s Farmland Mapping and Monitoring Program
 United States Department of Agriculture, Soil Conservation Service and Forest Service, Soil Survey of Shasta County Area.

Mitigation:

None necessary.

| III. AIR QUALITY: <i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i> | 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) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | X | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | | X |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | | X |
| e) Create objectionable odors affecting a substantial number of people? | | | | X |

Discussion:

a-c) Shasta County, including the far northern Sacramento Valley, currently exceeds the state's ambient standards for ozone (smog) and particulates (fine, airborne particles). Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative

impacts are unavoidable when ozone and/or particulate emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential of contributing incrementally to the problem. The Environmental Impact Report for the *General Plan* acknowledged this dilemma; and as a result, Findings and a Statement of Overriding Considerations were adopted by the City Council for impacts to air quality resulting from growth supported under the *General Plan*.

The City Air Quality Element of the *General Plan* establishes emission-reduction goals of 20 to 25 percent, depending on the projected level of unmitigated emissions for a project. Mitigation thresholds are established for the important regional/local pollutants, including: Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx), which are ozone precursors, and Inhalable Particulate Matter, 10 Micron (PM₁₀). The mitigation thresholds for these pollutants are tiered at two levels as follows:

| Level "A" | Level "B" |
|---------------------------------------|--|
| 25 pounds per day of NOx | 137 pounds per day of NOx |
| 25 pounds per day of ROG | 137 pounds per day of ROG |
| 80 pounds per day of PM ₁₀ | 137 pounds per day of PM ₁₀ |

If a project has unmitigated emissions less than the Level "A" threshold, then it is viewed as a minor project (from an air quality perspective) and only application of Standard Mitigation Measures (SMMs) is required to try to achieve at least a 20 percent reduction in emissions, or the best reduction feasible otherwise. Land uses that generate unmitigated emissions above Level "A" require application of appropriate Best Available Mitigation Measures (BAMMs), in addition to the SMMs, in order to achieve a net emission reduction of 20 percent or more. If, after applying SMMs and BAMMs, a use still exceeds the Level "B" threshold, then a minimum of 25 percent of the unmitigated emissions exceeding 137 pounds per day must be offset by reducing emissions from existing sources of pollution; otherwise, an Environmental Impact Report is required.

Under policy of the Air Quality Element, a project has the potential to impact air quality primarily in two ways: (1) the project would generate vehicle trip emissions (with NOx, ROG, and PM₁₀) that contribute cumulatively to local and regional air quality conditions; and (2) fugitive dust (particulate/PM₁₀) emissions are possible during construction activities. As a residential development, a project does not have the potential to generate significant emission concentrations of other pollutants subject to state and federal ambient air quality standards.

In order to calculate the unmitigated emissions for the key pollutants noted above, the current URBEMIS air quality computer model was used as prescribed in the Air Quality Element. The results were as follows:

| | ROG | NOx | PM₁₀ |
|----------------------------|------------|------------|------------------------|
| Total Emissions (lbs./day) | 0.63 | 0.33 | 0.83 |

These results indicate that the project would result in ROG, NOx, and PM₁₀ emissions well below the Level "A" threshold. Furthermore, the project is for environmental restoration and public-access improvements and would have no permanent effect on existing air quality. However, some fugitive dust (particulate/PM₁₀) emissions are possible with the restoration work (excavation and grading). Standard Mitigation Measures (SMMs) as identified in the Air Quality Element of the *General Plan* are incorporated into the project as standard construction requirements to minimize potential effects to air quality. Thus, special construction-related mitigation is not required in this case.

Hence, application of SMMs are required in order to strive toward the *General Plan* policy of a net-reduction objective of 20 percent to address small-scale cumulative effects. SMMs applicable to this project address primarily short-term impacts related to construction. For the most part, these requirements are standard development regulations in the City promulgated in the City Grading Ordinance and Uniform Building Code. Application of special mitigation to achieve a level of less than significant is not necessary since actions for compliance are already included in existing uniformly applied regulations and construction standards. The following City standard regulations applied during grading and construction activities to control dust and PM₁₀ emissions apply to the project.

1. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more).
2. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.

3. Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow (e.g., flag person).
 4. Construction activities that could affect traffic flow shall be scheduled in off-peak hours.
 5. Active construction areas, haul roads, etc., shall be watered at least twice daily or more as needed to limit dust.
 6. Exposed stockpiles of soil and other backfill material shall either be covered, watered, or have soil binders added to inhibit dust and wind erosion.
 7. All trucks hauling solid and other loose material shall be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.
 8. All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip.
 9. Alternatives to open burning of cleared vegetative material on the project site shall be used unless otherwise deemed infeasible by the City Planning Division. Suitable alternatives include, but are not limited to, on-site chipping and mulching and/or hauling to a biomass fuel site.
- d) Potential impacts to neighboring homes (sensitive receptors) from fugitive dust caused during construction are mitigated by application of the SMMs discussed above.
- e) The project does not involve land use that could generate objectionable odors affecting substantial number of people.

Documentation:

Shasta County APCD Air Quality Maintenance Plan and Implementing Measures
 City of Redding General Plan, Air Quality Element
 City of Redding General Plan Final Environmental Impact Report, 2000, SCH #1998072103, Chapter 8.6, Air Quality,
 CEQA Findings of Fact and Statement of Overriding Considerations for the City of Redding General Plan Final Environmental Impact Report, as adopted by the Redding City Council on October 3, 2000, by Resolution 2000-166
 City of Redding General Plan Background Report, Chapter 9.7, Natural Resources and Air Quality
 URBEMIS (2007, v 9.2.4) Air Quality Computer Model Results for dated March 2, 2016

Mitigation:

None necessary.

| IV. <u>BIOLOGICAL RESOURCES</u> : <i>Would the project:</i> | 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 Wildlife 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 Wildlife or U.S. Fish and Wildlife Service? | | | X | |
| c) Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | X | |
| d) Interfere substantially with the movement of any native resident or | | X | | |

| IV. <u>BIOLOGICAL RESOURCES</u> : <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | 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-b) The General Plan identifies four habitat types as potentially sensitive and requiring special consideration or protection. These include: riparian, vernal pools, aquatic, and wetlands. Most special status species common to the region are associated with these habitat types. The proposed restoration and public access improvements has the potential to impact riparian, aquatic (pond), and other types of jurisdictional wetlands, although for the purpose of ultimately improving the native habitats. Thus, the main focus in this case is to minimize disturbance of sensitive habitat and any related special-status species, while at the same time achieving environmental restoration goals.

A Biological Resources Assessment was prepared for the project by North State Resources. Main species of concern that could be directly affected are the 15 special-status wildlife species that was determined to potentially occur in the project area and general vicinity including six federal and/or state listed species; green sturgeon southern DPS, Ventral Valley steelhead DPS, Central Valley spring-run chinook salmon ESU, Sacramento River winter-run chinook salmon ESU, California red-legged frog, and bald eagle. The other nine potentially occurring special-status wildlife species are either California fully protected species or species of special concern and include Central Valley fall/late fall-run chinook salmon ESU, western pond turtle, white-tailed kite, yellow-breasted chat, yellow warbler, pallid bat, Townsend’s big-eared bat, western red bat, and ringtail cat.

The proposed project may result in direct permanent impacts on riparian woodland habitat as a result of construction of the driveway, parking spaces, and trail system. However, environmental restoration activities are proposed and shall be designed to offset any potential impacts on riparian habitat that may occur from project activities. Project restoration activities include the removal of invasive plant species from the project area and the planting of California native riparian species. Additionally, shaded aquatic will be planted along the edge of the Sacramento River, above the ordinary high water mark, and where feasible.

Considering the presence of sensitive habitats and related special status species discussed here, mitigation is necessary as described below to minimize impacts.

- c) Approximately 1.35 Waters of the United States exist within the project area, including riparian wetland (0.80 ac), fresh emergent wetland (0.26 ac), and other waters (0.29 ac). The design of the project avoids all discharge of fill material into potential waters of the United States. No permanent or temporary discharges to waters of the United States are anticipated based on the proposed project design. However, if the project design changes prior to construction such that it would result in temporary or permanent impacts on waters of the United States, including wetlands, regulatory authorizations – a Section 404 permit from the Corps and Section 401 Water Quality Certification from the Central Valley RWQCB – will be required. Issuance of these permits, should they be necessary, may also trigger needs to consult with the USFWS and/or NMFS pursuant to the federal ESA.
- d) In the project area, valley foothill riparian habitat provides a movement corridor for wildlife. Additionally, the Sacramento River, which is located adjacent to the project area, provides a movement corridor for wildlife and fish. The proposed project may result in direct permanent impacts on riparian woodland habitat as a result of construction of the driveway, parking spaces, and trail system. However, environmental restoration activities are proposed and shall be designed to offset any potential impacts on riparian habitat that may occur from project activities. Proposed restoration activities include the removal of invasive plant species from the project area and the planting of California native riparian species. Additionally, shaded aquatic will be planted along the edge of the

Sacramento River, above the ordinary high water mark, and where feasible. Mitigation measures are proposed to avoid or reduce impacts on riparian habitat in the project that could result from project implementation.

- e) Valley foothill riparian occurs throughout most of the project area and is characterized by moderate to dense stands of riparian trees and shrubs with a sparse to moderate herbaceous understory. Dominant tree species include valley oak, white alder, Fremont cottonwood, black locust, black willow, and red willow, with occasional interior live oak. The understory consists of willow shrubs, Himalayan blackberry brambles, California grape, horsetail, and various grasses and forbs. While most of the trees located within the project area will remain untouched, adverse impacts on migratory birds could occur if they are actively nesting in the project area during project implementation. Potential nesting habitat occurs throughout the entire study area and includes areas of open ground, grassy areas, and areas dominated by trees and shrubs. To minimize impacts from construction, mitigation is provided below to encourage tree removal and other land-clearing work to be conducted outside the main nesting period of February 15 through September 30, and requiring a nest survey and appropriate nest-avoidance measures, if any work must occur during the nesting season.
- f) No habitat conservation plans or other similar plans have been adopted for the project site or project area. No impact would occur in this regard.

Documentation:

California Department of Fish and Wildlife: Natural Diversity Data Base
City of Redding General Plan, Natural Resources Element, 2000
City of Redding Municipal Code, Chapter 18.45, Tree Management Ordinance
City of Redding General Plan Environmental Impact Report, 2000, SCH #1998072103

Mitigation:

Mitigation Measure 1 – Riparian Habitat

- a. The width of the construction disturbance with riparian habitat shall be minimized through careful pre-construction planning.
- b. Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure impacts on riparian vegetation outside of the construction area are minimized. All construction-related pedestrian and vehicle/equipment travel shall be prohibited from these fenced off areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction and removed upon project completion.
- c. Riparian habitat areas temporarily disturbed shall be replanted with native riparian species known to occur in the project area and general vicinity.
- d. Areas planted with native riparian species shall be maintained and monitored to ensure the plantings are surviving and healthy.

Mitigation Measure 2 – Non-Native and Invasive Plant Species

- a. All equipment used for off-road construction activities will be weed-free prior to entering the project area.
- b. If project implementation calls for mulches or fill, they will be weed free.
- c. Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials to the extent practicable.
- d. Non-native and invasive species removed during project construction will be properly removed and disposed of to prevent the spread of non-native and invasive species in the project area and vicinity.

Mitigation Measure 3 – Waters of the United States

- a. If any stockpiled materials are to remain on site through the wet season, they should be covered and/or protected (e.g., silt fence, straw wattles) to prevent erosion.

Mitigation Measure 4 – Critical Fish Habitat

- a. The project shall at all times provide adequate erosion and sediment control devices to prevent potential degradation of water quality.
- b. The contractor shall prevent the discharge of sediment, and/or muddy, turbid, or silt laden waters, resulting from project activities, into the river. Where necessary, sediment barriers (e.g., filter fabric fencing, fiber mats, straw or wattles/rolls) capable of preventing sedimentation/turbidity shall be installed and maintained.
- c. Minimization of the width of the construction disturbance zone within the riparian habitat through careful pre-construction planning.

- d. Erecting construction fencing along the outer edges of the construction zone where needed to prevent accidental entry into riparian habitat.
- e. Mature cottonwoods, alders, and valley oaks located near construction areas shall be flagged and avoided during construction. No native vegetation shall be completely removed: only those branches in the lower 10 feet of any woody plant may be trimmed to accommodate vehicular access. Understory vegetation may be trimmed only as needed.
- f. In the event that a mature woody riparian plant contributing to shaded riverine aquatic (SRA) habitat is disturbed during project construction, it shall be replaced. The amount of habitat created/restored shall be at least three times greater than the amount lost due to project implementation (3:1 ratio, new plantings per woody riparian plant destroyed). These replanting ratios will help ensure successful establishment of at least one vigorous plant for each established plant removed to accommodate the project.
- g. Stockpiling equipment and materials outside of riparian habitat.
- h. Impacts on herbaceous cover will be offset by reseeding and/or mulching any un-vegetated and impacted areas with a suitable seed mixture post construction.
- i. Lighting along trails and parking spaces will be directed towards the ground and away from the Sacramento River.

Mitigation Measure 5 – California Red-legged Frog

- a. Environmental awareness training for construction personnel will be conducted by a qualified biologist prior to the on-set of work to brief them on how to recognize CRLF and other potentially occurring special-status species, and what measures to take if a special-status species is encountered during project activities.
- b. A qualified biologist should conduct pre-construction surveys shall be conducted within two weeks prior to commencement of construction for CRLF for work activities occurring near aquatic habitats and dense riparian vegetation. If California Red-legged Frog (CRLF) is encountered during surveys, the appropriate agencies (USFWS and CDFW) shall be notified.
- c. Construction activities should occur during the dry season when CRLF are more closely tied to aquatic habitats.
- d. To avoid potential injury or mortality, vegetation clearing will be done manually using hand tools (e.g., chainsaw, loppers, weed trimmer). The cut vegetation will be removed from the work area by hand.
- e. If a CRLF is encountered during project activities the project activities will stop and the appropriate agencies (USFWS and CDFW) shall be notified.
- f. The project shall at all times provide adequate erosion and sediment control devices to prevent potential degradation of water quality.

Mitigation Measure 6 – Bald Eagle and Special-Status Bird Species

- a. If construction activities are planned during the nesting season (February 15 through September 30), then pre-construction surveys for nesting raptors including the bald eagle, shall be conducted within two weeks prior to commencement of construction, by a qualified biologist within the project area and a 250-foot buffer around the project area to ensure that no nests will be disturbed during project implementation. At least one survey should be conducted no more than 14 days prior to the initiation of construction activities. If an active raptor nest is found within 250 feet of the project area, the biologist (in consultation with the CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest. A biological monitor will be present during construction activities in the area to ensure that the nesting special-status birds are not disturbed by these activities.
- b. If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season, if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

Mitigation Measure 7 – Western Pond Turtle

- a. Because turtles may move into and out of the project area, a pre-construction survey shall be conducted prior to commencement of construction for the species to confirm its status (presence/absence) on the site. The survey will be conducted by a qualified biologist and shall consist of a least one survey of the project site for western pond turtle and their nests. The survey shall be conducted a maximum of one week prior to construction activities. If a western pond turtle is found, the biologist shall move it to a safe location within similar habitat. If a western pond turtle nest is found, the biologist shall flag the site and determine if project activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the construction impact zone by a qualified biologist.
- b. If a western pond turtle is encountered during construction activities, the activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the turtle will not be harmed. Any turtles encountered during work shall be allowed to move away on their own. Any trapped, injured, or killed turtles shall be reported

immediately to CDFW.

- c. Standard Best Management Practices (BMP's) shall be implemented to ensure no potentially hazardous materials reach surface water features. Recommended BMP's include the following:
 - i. If necessary, a site specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. Containment berms shall be constructed to prevent sill materials from reaching surface water features.
 - ii. Equipment and hazardous materials shall be stored at least 50 feet away from surface water features.
 - iii. Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdown leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 50 feet away from water features.

Mitigation Measure 8 – Ringtail Cat

- a. If vegetation removal or construction activities occur outside of the breeding season for ringtail cat (February 1 through May 1), no further mitigation is necessary. If the breeding season cannot be completely avoided, the following measures will be implemented.
- b. If proposed tree and snag removal are to occur in suitable habitat for ringtail cat during the breeding season, a qualified biologist shall conduct a pre-construction survey within two weeks prior to commencement of construction for potential natal or maternity den trees. If an active den is found, a qualified biologist, in consultation with CDFW, will determine a construction-free buffer zone to be established around the den until the mother and young have dispersed.

Mitigation Measure 9 – Migratory Birds

- a. Project activities should be scheduled to avoid the nesting season to the extent feasible. The typical nesting season in northern California extends from February 15 through September 30. Thus, if project activities can be scheduled to occur outside of the nesting season, no impacts would be expected. If the nesting season cannot be completely avoided, Mitigation Measure 6 shall be implemented.

Mitigation Measure 10 – Pallid Bat, Townsend's Big-eared Bat, and Western Red Bat

- a. To the extent practicable, the removal of any large trees, if necessary, shall occur outside of the breeding season for bats. For purposes of implementation of this measure, the breeding season is considered to be April 1 through August 15.

| V. CULTURAL RESOURCES: <i>Would the project:</i> | 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) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | | X |
| d) Disturb any human remains, including those interred outside of dedicated cemeteries? | | | | X |

Discussion

- a, b, d) A technical memo date June 21, 2016, was submitted by North State Resources (NSR), Incorporated, who conducted a cultural resources survey on May 14, 2016. Their conclusion recommends that a complete archaeological inventory of the project be conducted to fully evaluate the prehistoric and historic archaeological constituents of the project.

The project site was considered to have a potential for the presence of historic or prehistoric cultural resources due to the project site's location being adjacent to the Sacramento River and known sites nearby. An archaeological study was prepared by U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region, dated December 2016, concluding that although the project site has a moderate to high sensitivity for buried archaeological sites; the extensive mining in the area and urban development in the City has negated that predictive model to a significant degree. A pedestrian cultural resource survey was used to identify the extent of the active riverine environment, built environment, and to identify any other cultural resources which might be present within the study area and determined that there are no features of cultural significance that meet CEQA and/or National Historic Preservation Act (NHPA); therefore special mitigation is not required. The City's standard development conditions include a requirement that if any cultural materials are discovered by chance during construction, all work must stop in the area of the find, and the City must be notified. A qualified archaeological professional must then be retained by the City to review the discovered item(s) and to determine its significance and any appropriate measures. The condition includes a note to be placed on all construction plans informing the construction contractor of this requirement.

c) No unique geologic features, fossil-bearing strata, or paleontological sites are known to exist on the project site.

Documentation:

City of Redding General Plan Background Report, 1998

City of Redding General Plan Final Environmental Impact Report, 2000, SCH #1998072103

Technical Memorandum, dated June 21, 2016 by North State Resources, Incorporated.

Archaeological Inventory Survey, by U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region dated December 2016.

Mitigation:

None necessary.

| VI. GEOLOGY AND SOILS: <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|---------------------------------------|---|-------------------------------------|------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> 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 become unstable 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 Uniform Building 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 |

Discussion:

- a, c, d) There are no Alquist-Priolo earthquake faults designated in the Redding area of Shasta County. There are no other documented earthquake faults in the immediate vicinity that pose a significant risk, and the site is located in an area designated in the Health and Safety Element of the *General Plan* as having a low ground-shaking potential. The project is not located on or near any documented landslide hazard areas, and there is no evidence of ground slippage or subsidence occurring naturally on the site. The type of soils and underlying geology is identified as having no potential for liquefaction. No portion of the site falls within the 100-year floodplain of the Sacramento River or any creek.
- b) The project site contains two primary soil classifications: Riverwash and Cobbly alluvial land. Riverwash is nearly level or gently sloping and is in stream channels and adjacent areas. Cobbly alluvial land consists of very gravelly, very cobbly, or very stony, coarse-textured alluvium. It is on flood plains of the Sacramento River and in some places it is along smaller streams. These land types are excessively drained and has rapid permeability. Runoff is very slow. The hazard of erosion is very high with the Riverwash land type and moderate with the Cobbly alluvial land type. Riverwash land type is subject to continuous or frequent flooding, so plants do not become established. With the Cobbly alluvial land type, it is subject to frequent flooding, except that it is not subject to annual flooding. Shasta Dam protects much of this land type from flooding. Proposed grading consists of a pad to accommodate a restroom at the proposed kayak launch facility. Most of the proposed access road and parking spaces will be at grade with some minor cut and fill to meet road grade requirements. The surface of the proposed trail, driveway, and parking areas will consist of crushed rock and crushed granite material. Some surfaces will be treated with a permeable polymer hardener. This will not result in substantial soil erosion or the loss of topsoil

The project is subject to certain erosion-control requirements mandated by existing City and State regulations. These requirements include:

- ◆ *City of Redding Grading Ordinance.* This ordinance requires the application of “Best Management Practices” (BMPs) in accordance with the City Erosion and Sediment Control Standards Design Manual (Redding Municipal Code Section 16.12.060, Subsections C, D, E). In practice, specific erosion-control measures are determined upon review of the final project improvement plans and are tailored to project-specific grading impacts.
- ◆ *California Regional Water Quality Board “Construction Activity Storm Water Permit.”* This permit somewhat overlaps the City’s Grading Ordinance provision by applying state standards for erosion-control measures during construction of the project.
- ◆ *California Regional Water Quality Control Board “Project Storm Water Pollution Prevention Plan (SWPPP).”* This plan emphasizes stormwater best management practices and is required as part of the Construction Activity Storm Water Permit. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of stormwater discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in stormwater discharges.
- ◆ *California Department of Fish and Wildlife “1600 Agreement.”* This notification is required for any work within a defined streambed and will be applicable to impacts to Sacramento River.
- ◆ *U.S. Army Corps of Engineers Nationwide Permit.* A new Nationwide 29 Permit (residential developments) will be required from the U.S. Army Corps of Engineers to address impacts to jurisdictional waters.

Actions for compliance with these regulations are addressed under standard conditions of approval, which are uniformly applied to all land development projects. Since the project is subject to uniformly applied ordinances and policies and the overall risk of erosion is low, potential impacts related to soil erosion and sedimentation are less than significant.

- e) The proposed project does not involve the use of septic tanks or alternative wastewater disposal. The proposed restroom is a self-contained system and a pumping service will be contracted to service the restroom. No impact has been identified.

Documentation:

City of Redding Health and Safety Element, figures 4-1 (Ground Shaking Potential) and 4.2 (Liquefaction Potential)
City of Redding General Plan Final Environmental Impact Report
City of Redding General Plan Background Report, 1998
City of Redding Grading Ordinance, RMC Chapter 16.12
City of Redding Standard Specifications, Grading Practices

City of Redding Standard Development Conditions for Discretionary Approvals (subdivisions, use permits, site development permits, etc.)
 Soil Survey of Shasta County Area, United States Department of Agriculture, Soil Conservation Service and Forest Service, August 1974
 Division of Mines and Geology Special Publication 42
 State Regional Water Quality Control Board, Central Valley Region, Regulations related to Construction Activity Storm Water Permits and Storm Water Pollution Prevention Plans

Mitigation:

None necessary.

| VII. GREENHOUSE GAS EMISSIONS: <i>Would the project:</i> | 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) In 2005, the Governor of California signed Executive Order S-3-05, establishing that it is the State of California’s goal to reduce statewide greenhouse gas (GHG) emission levels. Subsequently, in 2006, the California State Legislature adopted Assembly Bill AS 32, the California Global Warming Solutions Act. In part, AB 32 requires the California Air Resources Board to develop and adopt regulations to achieve a reduction in the State’s GHG emissions to year 1990 levels by year 2020.

California Senate Bill SB97 established that an individual project’s effect on GHG emission levels and global warming must be assessed under CEQA. SB97 further directed that the State Office of Planning and Research (OPR) develop guidelines for the assessment of a project’s GHG emissions. Those guidelines for GHG emissions were subsequently included as amendments to the CEQA Guidelines. The guidelines did not establish thresholds of significance and there are currently no state, regional, county, or city guidelines or thresholds with which to direct project-level CEQA review. As a result, the City of Redding has utilized the best available information to develop a threshold until a specific quantitative threshold is adopted by the state or regional air district.

As the Lead Agency, the City has opted to utilize a quantitative non-zero project-specific threshold using a methodology recommended by the California Air Pollution Officers (CAPCOA) and accepted by the California Air Resources Board. According to CAPCOA’s *Threshold 2.3, CARB Reporting Threshold*, 10,000 metric tons of carbon-dioxide equivalents per year (mtCO₂eq/yr) is recommended as a quantitative non-zero threshold. According to the CAPCOA, this threshold would be equivalent to 550 dwelling units, 400,000 square feet of office use, 120,000 square feet of retail, or 70,000 square feet of supermarket use. This approach is estimated to capture over half the future residential and commercial development projects and is designed to support the goals of AB 32 and not hinder it.

The United States Environmental Protection Agency (EPA) identifies four primary constituents that are most representative of the GHG emissions. They are:

- **Carbon Dioxide (CO₂):** Emitted primarily through the burning of fossil fuels. Other sources include the burning of solid waste and wood and/or wood products and cement manufacturing.
- **Methane (CH₄):** Emissions occur during the production and transport of fuels, such as coal and natural gas. Additional emissions are generated by livestock and agricultural land uses, as well as the decomposition of solid waste.
- **Nitrous Oxide (N₂O):** The principal emitters include agricultural and industrial land uses and fossil fuel and waste combustion.
- **Fluorinated Gases:** These can be emitted during some industrial activities. Also, many of these gases are substitutes for ozone-depleting substances, such as CFC’s, which have been used historically as refrigerants. Collectively, these gases are often referred to as “high global-warming potential” gases.

The primary generators of GHG emissions in the United States are electricity generation and transportation. The EPA estimates that nearly

85 percent of the nation’s GHG emissions are comprised of carbon dioxide (CO₂). The majority of CO₂ is generated by petroleum consumption associated with transportation and coal consumption associated with electricity generation. The remaining emissions are predominately the result of natural-gas consumption associated with a variety of uses.

With regard to the project, the predominant associated GHG is CO₂ generated by motor-vehicle travel to and from the site. To a substantially lesser degree, the project will result in CH₄ emissions associated with use of electric power generated by the Redding Electric Utility (REU), though it should be noted that REU distributes power from a variety of sources, including hydroelectric, wind, and natural gas.

According to the California Air Pollution Control Officers Association’s (CAPCOA) publication, *CEQA and Climate Change*, published in January 2008, there is currently not a single computer model that is capable of estimating all of a project’s direct and indirect GHG emissions. However, the Urban Emissions Model (URBEMIS) is likely the most consistently used model to estimate a project’s direct GHG emissions. URBEMIS is designed to model emissions associated with development of urban land uses. URBEMIS attempts to summarize criteria air pollutants and CO₂ emissions that would occur during operation of new development. URBEMIS was developed and is approved for statewide use by CARB. One of the shortfalls of URBEMIS is that the model does not contain emission factors for GHGs other than CO₂ except for methane (CH₄) from mobile sources, which is converted to CO₂. This may not be a major problem since CO₂ is the most important GHG from land development projects.

The emissions from the project as indicated by the URBEMIS model are significantly below the City of Redding’s air quality thresholds, as well as GHG emissions thresholds put forth by CARB. Therefore, the project will not contribute significantly to GHG emissions in the air basin. No mitigation measures are proposed. However, in an effort to reduce any potential contribution to negative effects from GHG emissions, the project incorporates elements that serve to reduce vehicle-miles traveled, the main project contributor of GHG emissions, and implements the State Attorney General’s recommended measures to reduce GHG emissions as follows:²

- Installation of solar powered lighting for the parking areas
- Restoration of the project area with native vegetation

On a larger scale, the City of Redding’s General Plan acknowledges that land use decisions have an impact on climate and air quality. Land use decisions that result in low or very low density on the periphery of the community increase the amount of vehicle-miles traveled (VMT), which increases vehicle emissions. In response to this impact, the City’s *General Plan* includes a number of goals and policies in the Community Development and Design Element, Transportation Element, and Housing Element that promote a compact urban form and encourage infill development, advocate higher housing density, and ensure connectivity to citywide bikeways and pedestrian plans. The goal of these policies is to reduce VMT, which also reduces emissions and reduces a wide variety of air quality impacts. Since automobiles are considered a major source of GHG emission, each vehicle trip reduced also reduces GHG emissions.

¹ CPCOA website, July 19, 2010

² California Office of the Attorney General, “The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level,” updated May 21, 2008.

Documentation:

City of Redding General Plan, 2000
 URBEMIS (2007, v 9.2.4) Air Quality Computer Model

Mitigation:

None necessary.

| VIII. HAZARDS AND HAZARDOUS MATERIALS: <i>Would the project:</i> | 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 |

| VIII. HAZARDS AND HAZARDOUS MATERIALS: <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| 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) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| h) 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, c, d) The nature of the project as a kayak launch and a recreation open space area does not present a significant risk related to hazardous materials or emissions. There is no documented hazardous material sites located on or near the project.
- e, f) The project is located outside the established approach/departure clear zones for Redding Municipal Airport. The project's land use of low-density residential would not conflict with operations of the Airport or present a safety hazard to people residing in the subdivision. There are no private airstrips in the project vicinity.
- g) The project does not involve a use or activity that could interfere with emergency-response or emergency-evacuation plans for the area.
- h) The project site does not have a wildland fire-hazard potential. The site has been disturbed in the past and is surrounded primarily by developed residential and commercial lots.

Documentation:

City of Redding General Plan, Health and Safety Element, 2000

Mitigation:

None necessary.

| IX. HYDROLOGY AND WATER QUALITY: <i>Would the project:</i> | 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? | | | | X |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a new deficit in | | | | X |

| IX. <u>HYDROLOGY AND WATER QUALITY</u> : <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | | | | X |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? | | | | X |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | | | | X |
| f) Otherwise substantially degrade water quality? | | | | X |
| g) Place housing within 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | X |
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | X |
| j) Inundation by seiche, tsunami, or mudflow? | | | | X |

Discussion:

- a) Since the project would be served by City sanitary sewer service, the project would not involve any permitted discharges of waste material into ground or surface waters.
- b) The project would utilize City water service for domestic uses and fire protection. The proposed project would not impact groundwater supplies.
- c, f) The project is subject to standard requirements defined under Section VI., *Geology and Soils*, and mitigation measures (if any) under Section IV., *Biological Resources*, above that minimize the potential for erosion or siltation on- or off-site. The final improvement plans for the project must also incorporate specific design measures intended to limit pollutant discharges in stormwater from urban improvements as established under the State’s National Pollutant Elimination System (NPDES) general permit, which the City is now obligated to follow in accordance with State Water Quality Control Order No. 2003-0005-DWQ. Feasible Best Management Practices (BMPs) would be incorporated in the final design of the project’s storm-drain system, as approved by the City Engineer, based on the BMPs listed in the latest edition of the California Storm Water Quality Association Storm Water Best Management Practices Handbook.
- d, e) City of Redding Policy 1806 requires that all subdivision development include stormwater detention facilities designed to maintain existing predevelopment rates of runoff during a 10-, 25-, and 100-year storm event with a 6-hour duration. The project does not propose any impervious material; therefore the existing predevelopment rates will not be increased.

- g, h, i) A portion of the project site is located within the FEMA regulatory 100-year floodplain of the Sacramento River. As discussed in Section VI, Geology and Soils, the proposed grading consists of a pad to accommodate a restroom at the proposed kayak launch facility. Most of the proposed access road and parking spaces will be at grade with some minor cut and fill to meet road grade requirements. The surface of the proposed trail, driveway, and parking areas will consist of crushed rock and crushed granite material. Some surfaces will be treated with a permeable polymer hardener. A flood risk assessment of the grading has been performed by Pacific Hydrologic Incorporated in two separate reports. The first, dated April 5, 2016, is for the proposed road and parking spaces. The second, dated March 27, 2017 for the proposed restroom. The assessments conclude the proposed project is not expected to increase the water surface elevation during the most probable 100-year flood due to the location of proposed earthwork immediately upstream of higher ground, the flood neutral character of proposed earthwork, and the removal of vegetation resulting in more efficient conveyance of flood flow over the project footprint.
- j) The threat of a tsunami wave is not applicable to inland, central valley communities such as Redding. Seiches could potentially be generated in either Shasta or Whiskeytown Lakes during an earthquake. However, neither lake has been identified in the Health and Safety Element of the General Plan as having any risk to the City under such circumstances. There is no documented threat of mudflows affecting the project site.

Documentation:

City of Redding General Plan Background Report, Chapter 10, Health and Safety Element, 1998
 Federal Emergency Management Agency Floodplain regulations, FIRM maps 06089C1539G and 06089C1553G, dated March 17, 2011
 City of Redding Storm Drain Master Plan, Montgomery-Watson Engineers 1993
 Flood Risk Assessments by Pacific Hydrologic Incorporated, dated April 5, 2016 and March 27, 2017

Mitigation:

None necessary.

| X. LAND USE AND PLANNING: <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Physically divide an established community? | | | | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | X |

Discussion:

- a) The project does not have the potential to physically divide an established community.
- b) The project is compatible with the applicable policies and regulations of the City General Plan and Zoning Ordinance and is not in conflict with any other Plan adopted by a jurisdictional agency for the purpose of avoiding or mitigating an environmental effect.
- c) There is no habitat conservation or natural community conservation plans that are applicable to the site.

Documentation:

City of Redding General Plan, Community Development Element, 2000
City of Redding General Plan Environmental Impact Report, 2000, SCH #1998072103
City of Redding General Plan, Natural Resources Element, 2000

Mitigation:

None necessary.

| XI. MINERAL RESOURCES: <i>Would the project:</i> | 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, b) The project site is not identified in the General Plan as having any known mineral-resource value or as being located within any "Critical Mineral Resource Overlay" area.

Documentation:

City of Redding General Plan, Natural Resources Element, 2000

Mitigation:

None necessary.

| XII. NOISE: <i>Would the project result in:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | | X |
| b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels? | | | | X |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | | | | X |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | | 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 expose people residing or working in the project area to excessive noise levels? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

Discussion:

a, b, c) The project site is located on the east and west side of the Sacramento River on the south side of Cypress Bridge. The City of

Redding *General Plan* Noise Element establishes 60 dB Ldn as the standard acceptable exterior noise level for residential land use and 45dB Ldn for interior noise levels (40dB in sleeping areas). The project is not a residential project.

Table 5-2 of the Noise Element presents projected noise contours from the major road segments in the City. This table indicates that the projected 60 dB noise contour of Cypress Avenue extends 264 feet into the project site. However, recreational open space areas other than developed playgrounds and neighborhood parks is a land use not subject to noise levels from transportation sources.

- d) During the construction of the proposed project, there will be a temporary increase in noise in the project vicinity above existing ambient noise levels. The most noticeable construction noise will be related to grading, utility excavation, and land-clearing activity. The City's Grading Ordinance (RMC Chapter 16.12.120.H) limits grading-permit-authorized activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. No operations are allowed on Sunday. Since heavy construction work associated with the project is limited in scope and by existing regulation, the anticipated noise impact to neighboring residents is considered less than significant.
- e, f) The project site is located approximately 5 miles northwest from the Redding Municipal Airport and not within any of the noise contours of the airport. There are no private airstrips in the vicinity of the project site.

Documentation:

- City of Redding General Plan, Noise Element, 2000*
- City of Redding Grading Ordinance Redding Municipal Code, Section 16.12.120*
- City of Redding General Plan, Transportation Element, 2000*
- City of Redding Zoning Ordinance Redding Municipal Code, Section 18.40.100*
- City of Redding Municipal Airport Area Plan*

Mitigation:

None necessary.

| XIII. POPULATION AND HOUSING: <i>Would the project:</i> | 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 (for example, through extension of roads or other infrastructure)? | | | | X |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | X |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | | | | X |

Discussion:

- a, b, c) The project improves an open space area as planned and anticipated by the Redding *General Plan*. The project would not induce unplanned population growth and does not propose the extension of any new roads or utilities not anticipated by the *General Plan*. The project does not displace substantial numbers of people or substantial numbers of existing housing.

Documentation:

- City of Redding General Plan, Housing Element, 2014*

Mitigation:

None necessary.

| XIV. PUBLIC SERVICES: <i>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:</i> | 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:

Fire and Police Protection:

The project involves environmental restoration and public-access improvements that would not result in the need for any permanent additional police or fire protection services.

Schools:

The project would not generate a need for community or regional parks.

Parks:

The project is the improvement of an existing open space area to provide public-access; hence an enhancement to an open space area.

Other public facilities:

The project is not anticipated to adversely affect any other public facilities.

Documentation:

City of Redding General Plan, Public Facilities Element, 2000

Mitigation:

None necessary.

| 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, b) The project will enhance an existing open space area by providing public-access to an existing recreation facility.

Documentation:

- City of Redding General Plan, Natural Resources Element, 2000*
- City of Redding General Plan, Recreation Element, 2000*
- City of Redding General Plan, Public Facilities Element, 2000*

Mitigation:

None necessary.

| XVI. <u>TRANSPORTATION/TRAFFIC</u> : <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | | | | X |
| b) Exceed, either individually or cumulatively, a level of service standard established by the County congestion management agency for designated roads or highway? | | | | X |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | X |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| e) Result in inadequate emergency access? | | | | X |
| f) Result in inadequate parking capacity? | | | | X |
| g) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)? | | | | X |

Discussion:

- a, b, d) As an environmental restoration and public-access improvement project, there would be no significant traffic generation. The project would not adversely affect roadways under State jurisdiction. There are not significant impacts to circulation or street safety risks associated with the proposed project.
- c) The project site is located outside the Approach Zones for both the Redding Municipal Airport and Benton Airpark; therefore, there is no potential to interfere with airport operations. No impacts are anticipated in this regard.
- e) Access to the site is provided by way of Henderson Road. The completed project would ultimately help improve emergency access into this portion of the open space.
- f) The project involves the provision of parking spaces, however is not a need. The provision of parking spaces is to improve the access and utilization of this open space area.
- g) The project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Documentation:

- City of Redding General Plan, Transportation Element, 2000
- City of Redding General Plan Environmental Impact Report, 2000, SCH #1998072103
- City of Redding Parks, Trails, and Open Space Master Plan, 2002
- City of Redding Traffic Impact Fee Program
- City of Redding Bikeway Action Plan 2010–2015
- Redding Area Bus Authority System Map and Route Guide, October 2000

Mitigation:

None necessary.

| <u>XVII. TRIBAL CULTURAL RESOURCES:</u> <i>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:</i> | 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 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) A technical memo date June 21, 2016 was submitted by North State Resources (NSR), Incorporated, who conducted a cultural resources survey on May 14, 2016. Their conclusion recommends that a complete archaeological inventory of the project be conducted to fully evaluate the prehistoric and historic archaeological constituents of the project.

As discussed under Section V, Cultural Resources, the project site was considered to have a potential for the presence of historic or prehistoric cultural resources due to the project site’s location being adjacent to the Sacramento River and known sites nearby. An archaeological study was prepared by U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region, dated December 2016, concluding that although the project site has a moderate to high sensitivity for buried archaeological sites; the extensive mining in the area and urban development in the City has negated that predictive model to a significant degree. A pedestrian cultural resource survey was used to identify the extent of the active riverine environment, built environment, and to identify any other cultural resources which might be present within the study area and determined that there are no features of cultural significance that meet CEQA and/or National Historic Preservation Act (NHPA); therefore special mitigation is not required. The City’s standard development conditions include a requirement that if any cultural materials are discovered by chance during construction, all work must stop in the area of the find, and the City must be notified. A qualified archaeological professional must then be retained by the City to review the discovered item(s) and to determine its significance and any appropriate measures.

Regarding Native American Outreach, NSR did the following outreach:

1. On April 25, 2016, NSR sent a request to the Native American Heritage Commission (NAHC) to review its Sacred Lands File for historic properties that may be affected by the proposed undertaking, and provide a Native American Contacts

list for consultation. The NAHC responded on May 12, 2016, indicating that the NAHC Sacred Lands Inventory contained no records of Native American cultural resources in the immediate area. The NAHC also provided a list of Native American contacts.

2. In response to solicitation letters that were sent out to the list of Native American contacts provided by the NAHC, a letter was received from Greg Burgin Jr. of the Wintu Tribe of Northern California (WTNC). The response letter contained several comments that resulted in further attempts to communicate with Mr. Burgin Jr., which thus far have been unsuccessful. Most recently, in February, 2017, the City reached out to the Mr. Burgin Jr. and he requested a copy of the archaeological study prepared by U.S. Department of the Interior. On March 3, 2017, Mr. Burgin Jr. confirmed he would pick up the study from the City. As of the writing of this document, Mr. Burgin has not picked up the document; therefore, the study was mailed to him.

Documentation:

Technical Memorandum, dated June 21, 2016, by North State Resources, Incorporated. (on file with the Planning Division)

Archaeological Inventory Survey, by U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region dated December 2016. (on file with the Planning Division)

Mitigation:

None Necessary

| XVIII. UTILITIES AND SERVICE SYSTEMS: <i>Would the project:</i> | Potentially Significant Impact | Less-Than-Significant With Mitigation Incorporated | Less-Than-Significant Impact | No Impact |
|---|--------------------------------|--|------------------------------|-----------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | X |
| d) Have sufficient water supplies available to serve the project which serves or may serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | X |
| e) 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 |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | X |
| g) Comply with Federal, State, and local statutes and regulations related to solid waste? | | | | X |

Discussion:

a, b) The proposed environmental restoration and public-access improvements does not generate ongoing wastewater demands and does not generate the need for the construction of any new water- or wastewater-treatment facilities.

c) No need for additional storm-drainage facilities is anticipated by the implementation of this project.

d, e) The proposed project would be installing irrigation to some of the vegetation, however, there is ample water supplies available to serve the project. The project would not generate the need for sewer service. As discussed in Section VI, Geology and Soils, the proposed restroom is a self-contained system and a service to pump the unit will be provided.

Documentation:

City of Redding General Plan, Public Facilities Elements, 2000
City of Redding Water and Sewer Atlas

Mitigation:

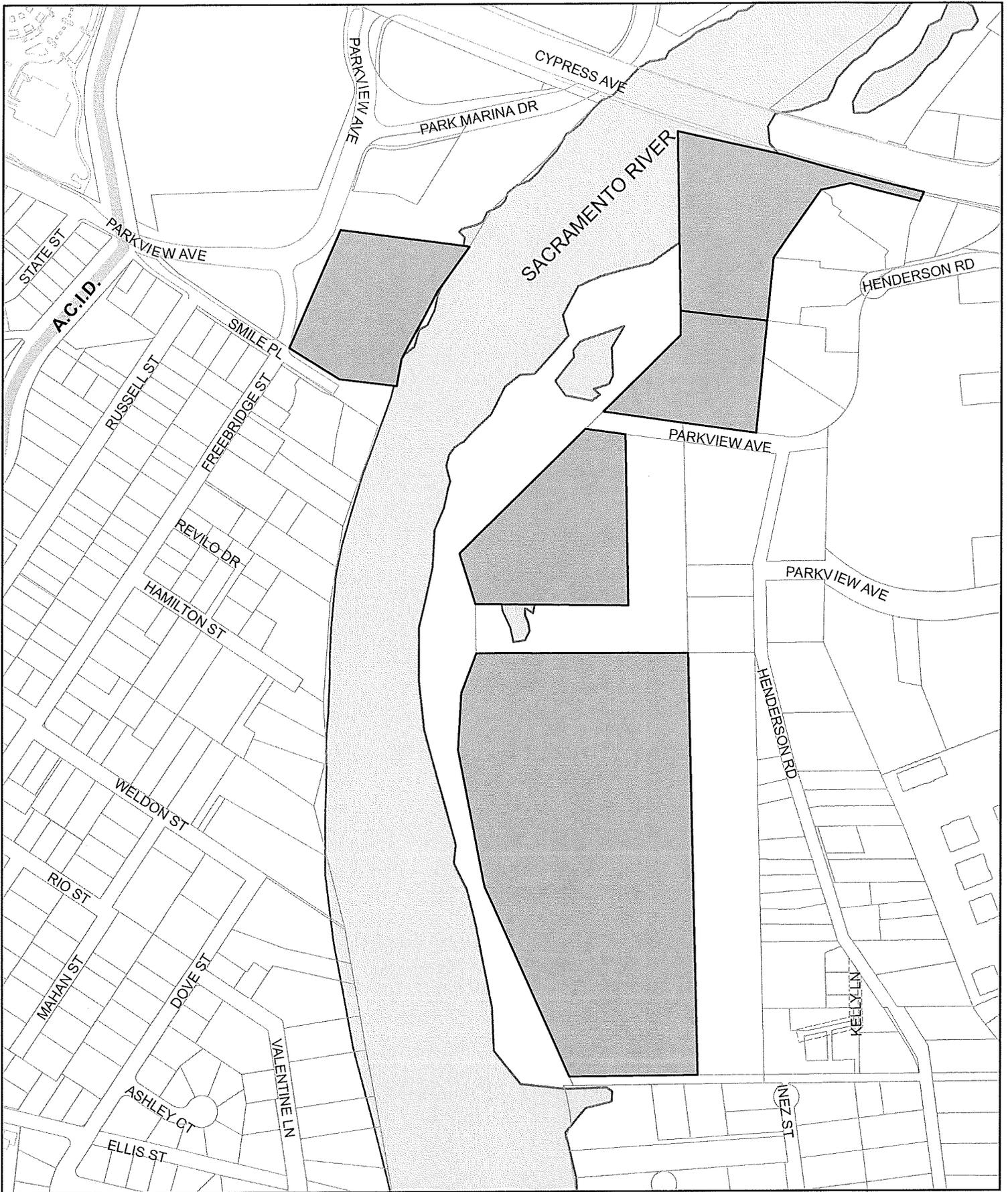
None necessary.

| XVIV. 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 cause substantial adverse effects on human beings, either directly or indirectly? | | | | X |

Discussion:

Based on the analysis undertaken as part of this Initial Study, the following findings can be made:

- a) The project has the potential to directly impact sensitive riparian and wetland habitat and related special status species. However, mitigation measures have been identified and will be followed by the project to minimize potential impacts to acceptable levels (discussion under Section IV, Biological Resources). No potential impacts to cultural or tribal resources have been identified.
- b) As discussed in Section III, the project will contribute to regionwide cumulative air quality impacts. However, under policy of the *General Plan*, application of Standard Mitigation Measures (SMMs) and Best Available Mitigation Measures (BAMMS) will reduce potential impacts from this project to a level less than significant.
- c) As discussed herein, the project does not have characteristics which could cause substantial adverse effects on human beings, either directly or indirectly.



GIS DIVISION
 INFORMATION TECHNOLOGY DEPARTMENT
 DATE PRODUCED:
 APRIL 12, 2016

0 200 400 Feet

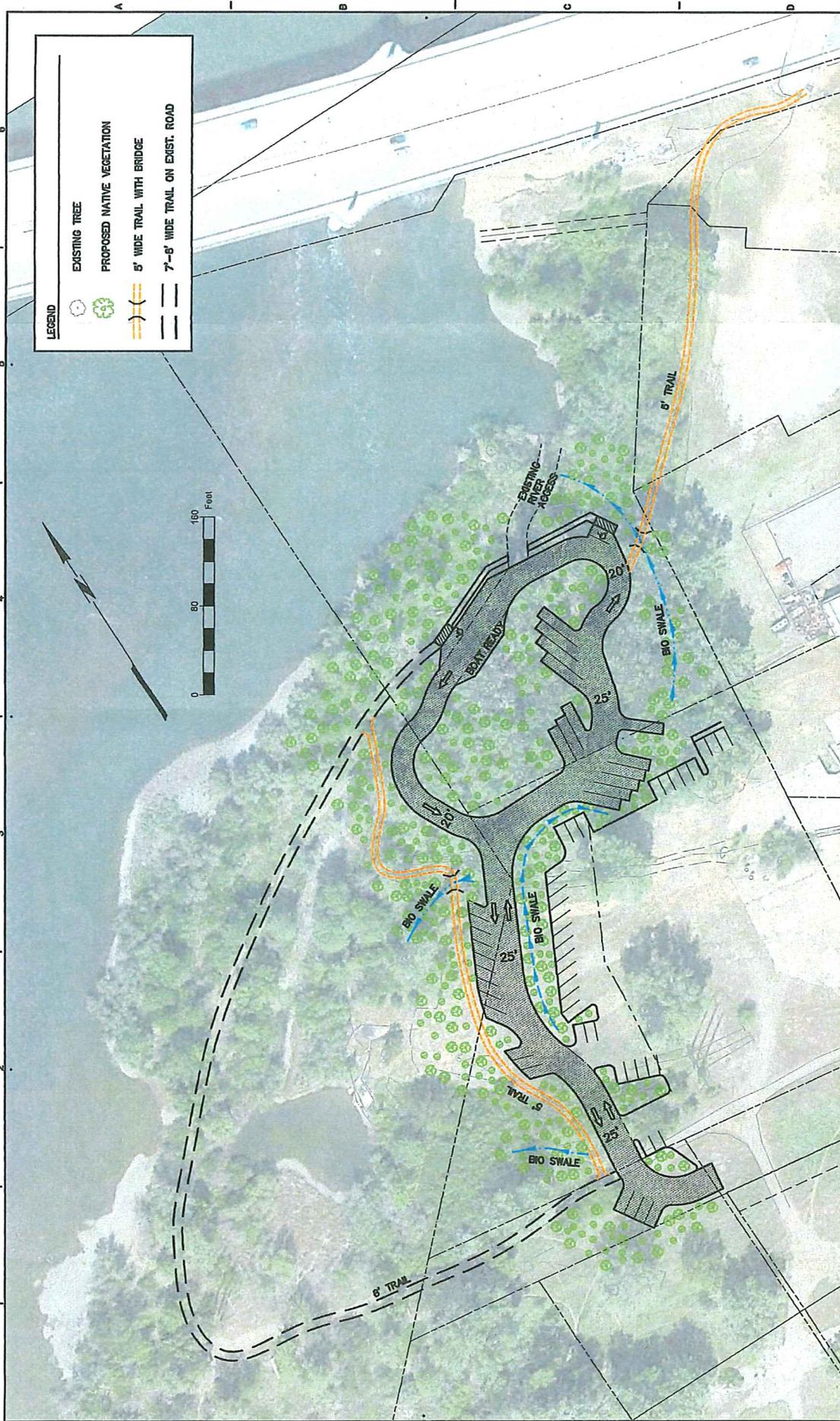
LOCATION MAP

UP-2016-00392 \ CITY OF REDDING
 2410/2560/2650 HENDERSON ROAD,
 40 PARKVIEW AVENUE & 380 SMILE PLACE
 AP# 107-500-010, 012, 016 & 023 & 102-470-002

MTG. DATE:

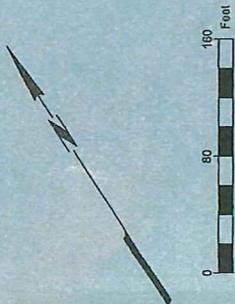
ITEM:

ATTACHMENT:
A



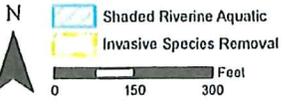
LEGEND

- EXISTING TREE
- PROPOSED NATIVE VEGETATION
- 8' WIDE TRAIL WITH BRIDGE
- 7'-8" WIDE TRAIL ON EXIST. ROAD



| | | | | | | | | | | |
|--|---------------------------|----------|-----|------|----|----------|--|-----------------------------------|--|---|
| Stoll Engineering 800 Leleha Lane Redding, California 96001 (530) 243-1760 FAX (530) 243-1503 | DESIGNER JOHN J. STOLL | REVISION | NO. | DATE | BY | APPROVED | VERIFY SCALE SHALL BE ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON SCALE, INDICATE SCALE ACCURATELY. | CLIENT: CITY OF REDDING | SITE PLAN HENDERSON & PARKVIEW OPEN SPACE MASTER PLAN | SHEET 1 of 1 C.D. NO. DATE 1/31/2016 PROJ. |
| | CHECKER D. ZANTZ | | | | | | | | | |

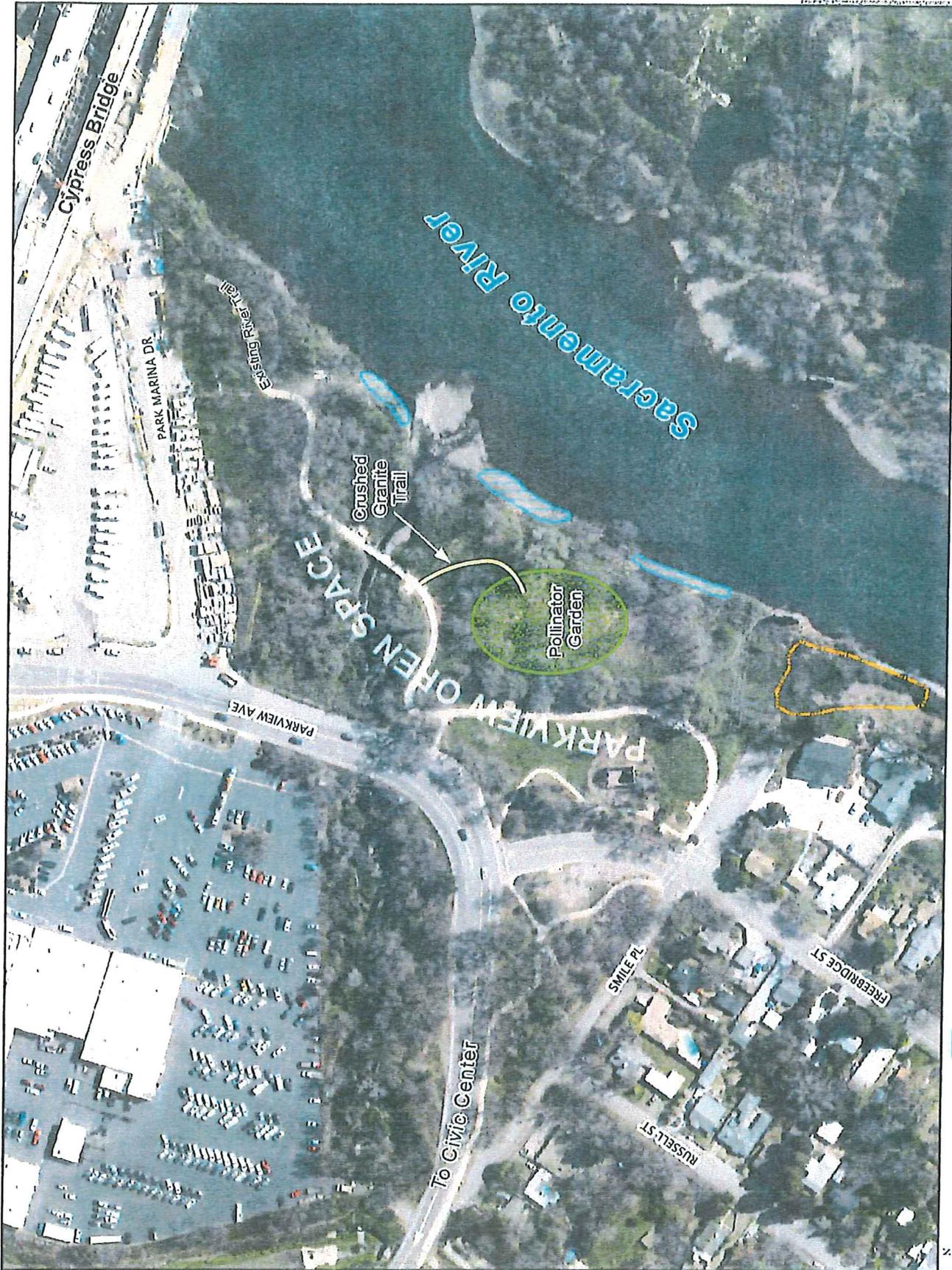
B.1



Henderson Open Space Restoration Improvements



Plot Date January 3, 2013



Parkview Open Space
Restoration Improvements

Shaded Riverline Aquatic
Restoration Area



B.3

Summary Report for Summer Emissions (Pounds/Day)

File Name:

Project Name: Henderson and Parkview Open Space Project

Project Location: California State-wide

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10 Dust</u> | <u>PM10 Exhaust</u> | <u>PM10</u> | <u>PM2.5 Dust</u> | <u>PM2.5 Exhaust</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|------------------|---------------------|-------------|-------------------|----------------------|--------------|------------|
| 2017 TOTALS (lbs/day unmitigated) | 4.35 | 19.99 | 56.10 | 0.07 | 200.01 | 0.96 | 200.96 | 41.77 | 0.88 | 42.65 | 9,111.33 |
| 2017 TOTALS (lbs/day mitigated) | 4.35 | 19.99 | 56.10 | 0.07 | 200.01 | 0.96 | 200.96 | 41.77 | 0.88 | 42.65 | 9,111.33 |

AREA SOURCE EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 0.12 | 0.02 | 1.55 | 0.00 | 0.01 | 0.01 | 2.81 |
| TOTALS (lbs/day, mitigated) | 0.12 | 0.02 | 1.55 | 0.00 | 0.01 | 0.01 | 2.81 |
| Percent Reduction | 0.00 | 0.00 | 0.00 | NaN | 0.00 | 0.00 | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 0.51 | 0.31 | 2.93 | 0.00 | 0.82 | 0.16 | 474.68 |

C

2/27/2017 1:25:02 PM

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

| | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 0.63 | 0.33 | 4.48 | 0.00 | 0.83 | 0.17 | 477.49 |

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

MITIGATION MONITORING PROGRAM

USE PERMIT APPLICATION UP-2016-00392 HENDERSON-PARKVIEW OPEN SPACE RESTORATION TRAIL & KAYAK ACCESS PROJECT

MITIGATION MONITORING PROGRAM CONTENTS

This document is the Mitigation Monitoring Program (MMP) for the Henderson-Parkview Open Space Restoration Trail & Kayak Access Project. The MMP 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 itself.

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. 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 Henderson-Parkview Open Space Restoration Trail & Kayak Access 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, on-site identification and resolution of environmental problems, and proper reporting to City staff.

MITIGATION MONITORING TABLE

The Mitigation Monitoring Table identifies the mitigation measures proposed for the Henderson-Parkview Open Space Restoration Trail & Kayak Access Project. These mitigation measures are reproduced from the Initial Study and conditions of approval for the project. The tables have the following columns:

Mitigation Measure: Lists the mitigation measures identified within the Initial Study for a specific impact, along with the number for each measure as enumerated in the Initial Study.

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 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 conduct an investigation 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 complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue.

MITIGATION MONITORING TABLE
FOR HENDERSON-PARKVIEW RESTORATION TRAIL & ACCESS PROJECT (UP-2016-00392) MMP

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|--|---|-------------------------------------|
| <p>Biological Resources – Riparian Habitat</p> <p>Mitigation Measure 1</p> <p>a. The width of the construction disturbance with riparian habitat shall be minimized through careful pre-construction planning.</p> <p>b. Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure impacts on riparian vegetation outside of the construction area are minimized. All construction-related pedestrian and vehicle/equipment travel shall be prohibited from these fenced off areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction and removed upon project completion.</p> <p>c. Riparian habitat areas temporarily disturbed shall be replanted with native riparian species known to occur in the project area and general vicinity.</p> <p>d. Areas planted with native riparian species shall be maintained and monitored to ensure the plantings are surviving and healthy.</p> | <p>Prior to grading permit issuance and during all construction activity</p> | <p>Development Department</p> <p>Services</p> | |
| <p>Biological Resources – Non-Native and Invasive Plant Species</p> <p>Mitigation Measure 2</p> <p>a. All equipment used for off-road construction activities will be weed-free prior to entering the project area.</p> <p>b. If project implementation calls for mulches or fill, they will be weed free.</p> <p>c. Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will</p> | <p>During all construction activity</p> | <p>Development Department</p> <p>Services</p> | |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|--|------------------------|----------------------------------|
| <p>consist of locally adapted native plant materials to the extent practicable.</p> <p>d. Non-native and invasive species removed during project construction will be properly removed and disposed of to prevent the spread of non-native and invasive species in the project area and vicinity.</p> | | | |
| Biological Resources – Waters of the United States | | | |
| Mitigation Measure 3 | | | |
| <p>a. If any stockpiled materials are to remain on site through the wet season, they should be covered and/or protected (e.g., silt fence, straw wattles) to prevent erosion.</p> | During all construction activity | Development Department | Services |
| Biological Resources – Critical Fish Habitat | | | |
| Mitigation Measure 4 | | | |
| <p>a. The project shall at all times provide adequate erosion and sediment control devices to prevent potential degradation of water quality.</p> <p>b. The contractor shall prevent the discharge of sediment, and/or muddy, turbid, or silt laden waters, resulting from project activities, into the river. Where necessary, sediment barriers (e.g., filter fabric fencing, fiber mats, straw or waddles/rolls) capable of preventing sedimentation/turbidity shall be installed and maintained.</p> <p>c. Minimization of the width of the construction disturbance zone within the riparian habitat through careful pre-construction planning.</p> <p>d. Erecting construction fencing along the outer edges of the construction zone where needed to prevent accidental entry into riparian habitat.</p> <p>e. Mature cottonwoods, alders, and valley</p> | Prior to issuance of a grading permit and during all construction activity | Development Department | Services |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|---|------------------------|-------------------------------------|
| <p>oaks located near construction areas shall be flagged and avoided during construction. No native vegetation shall be completely removed; only those woody branches in the lower 10 feet of any woody plant may be trimmed to accommodate vehicular access. Understory vegetation may be trimmed only as needed.</p> <p>f. In the event that a mature woody riparian plant contributing to shaded riverine aquatic (SRA) habitat is disturbed during project construction, it shall be replaced. The amount of habitat created/restored shall be at least three times greater than the amount lost due to project implementation (3:1 ratio, new plantings per woody riparian plant destroyed). These replanting ratios will help ensure successful establishment of at least one vigorous plant for each established plant removed to accommodate the project.</p> <p>g. Stockpiling equipment and materials outside of riparian habitat.</p> <p>h. Impacts on herbaceous cover will be offset by reseeding and/or mulching any unvegetated and impacted areas with a suitable seed mixture post construction.</p> <p>i. Lighting along trails and parking spaces will be directed towards the ground and away from the Sacramento River.</p> | | | |
| <p>Biological Resources – California Red-legged Frog</p> <p>Mitigation Measure 5</p> <p>a. Environmental awareness training for construction personnel will be conducted by a qualified biologist prior to the on-set of work to brief them on how to recognize California Red-legged Frog (CRLF) and</p> | <p>Prior to issuance of a grading permit and during all construction activity</p> | | |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|--|------------------------|-------------------------------------|
| <p>other potentially occurring special-status species, and what measures to take if a special-status species is encountered during project activities.</p> <p>b. A qualified biologist should conduct pre-construction surveys shall be conducted within two weeks prior to commencement of construction for CRLF for work activities occurring near aquatic habitats and dense riparian vegetation. If CRLF is encountered during surveys, the appropriate agencies (USFWS and CDFW) shall be notified.</p> <p>c. Construction activities should occur during the dry season when CRLF are more closely tied to aquatic habitats.</p> <p>d. To avoid potential injury or mortality, vegetation clearing will be done manually using hand tools (e.g., chainsaw, loppers, weed trimmer). The cut vegetation will be removed from the work area by hand.</p> <p>e. If a CRLF is encountered during project activities the project activities will stop and the appropriate agencies (USFWS and CDFW) shall be notified.</p> <p>f. The project shall at all times provide adequate erosion and sediment control devices to prevent potential degradation of water quality.</p> | | | |
| <p>Biological Resources – Bald Eagle and Special-Status Bird Species</p> | | | |
| <p>Mitigation Measure 6</p> <p>a. If construction activities are planned during the nesting season (February 15 through September 30), then pre-construction surveys for nesting raptors including the bald eagles shall be conducted within two weeks prior to commencement of</p> | <p>Prior to issuance of a grading permit</p> | | |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|--|------------------------|-------------------------------------|
| <p>construction by a qualified biologist within the project area and a 250-foot buffer around the project area to ensure that no nests will be disturbed during project implementation. At least one survey should be conducted no more than 14 days prior to the initiation of construction activities. If an active raptor nest is found within 250 feet of the project area, the biologist (in consultation with the CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest. A biological monitor will be present during construction activities in the area to ensure that the nesting special-status birds are not disturbed by these activities.</p> <p>b. If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season, if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts.</p> | | | |
| Biological Resources – Western Pond Turtle | | | |
| Mitigation Measure 7 | Prior to issuance of a grading permit and during all construction activity | Development Department | Services |
| <p>a. Because turtles may move into and out of the project area, a pre-construction survey shall be conducted prior to commencement of construction for the species to confirm its status (presence/absence) on the site. The survey will be conducted by a qualified biologist and shall consist of a least one survey of the project site for western pond turtle and their nests. The survey shall be conducted a maximum of one week prior to construction activities. If a western pond</p> | | | |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|---|-----------------------|------------------------|-------------------------------------|
| <p>turtle is found, the biologist shall move it to a safe location within similar habitat. If a western pond turtle nest is found, the biologist shall flag the site and determine if project activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated and re-buried at a suitable location outside of the construction impact zone by a qualified biologist.</p> <p>b. If a western pond turtle is encountered during construction activities, the activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the turtle will not be harmed. Any turtles encountered during work shall be allowed to move away on their own. Any trapped, injured, or killed turtles shall be reported immediately to CDFW.</p> <p>c. Standard Best Management Practices (BMP's) shall be implemented to ensure no potentially hazardous materials reach surface water features. Recommended BMP's include the following:</p> <ul style="list-style-type: none"> i. If necessary, a site specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. Containment berms shall be constructed to prevent spill materials from reaching surface water features. ii. Equipment and hazardous materials | | | |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|--|--|-------------------------------------|
| <p>shall be stored at least 50 feet away from surface water features.</p> <p>iii. Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdown leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 50 feet away from water features.</p> | | | |
| Biological Resources – Ringtail Cat | | | |
| Mitigation Measure 8 | | | |
| <p>a. If vegetation removal or construction activities occur outside of the breeding season for ringtail cat (February 1 through May 1), no further mitigation is necessary. If the breeding season cannot be completely avoided, the following measures will be implemented.</p> <p>b. If proposed tree and snag removal are to occur in suitable habitat for ringtail cat during the breeding season, a qualified biologist shall conduct a pre-construction survey within two weeks prior to commencement of construction for potential natal or maternity den trees. If an active den is found, a qualified biologist, in consultation with CDFW, will determine a construction-free buffer zone to be established around the den until the mother and young have dispersed.</p> | During all construction activity | Development Department Services | |
| Biological Resources – Migratory Birds | | | |
| Mitigation Measure 9 | | | |
| <p>a. Project activities should be scheduled to avoid the nesting season to the extent feasible. The typical nesting season in</p> | Prior to issuance of a grading permit. | Development Department Services | |

| Mitigation Measure | Timing/Implementation | Enforcement/Monitoring | Verification (Date and Initials) |
|--|---|---|-------------------------------------|
| <p>northern California extends from February 15 through September 30. Thus, if project activities can be scheduled to occur outside of the nesting season, no impacts would be expected. If the nesting season cannot be completely avoided, Mitigation Measure 6 shall be implemented.</p> | | | |
| <p>Biological Resources – Pallid Bat, Townsend's Big-eared Bat, and Western Red Bat</p> <p>Mitigation Measure 10</p> <p>a. To the extent practicable, the removal of any large trees, if necessary, shall occur outside of the breeding season for bats. For purposes of implementation of this measure, the breeding season is considered to be April 1 through August 15.</p> | <p>Prior to issuance of a grading permit.</p> | <p>Development Department</p> <p>Services</p> | |