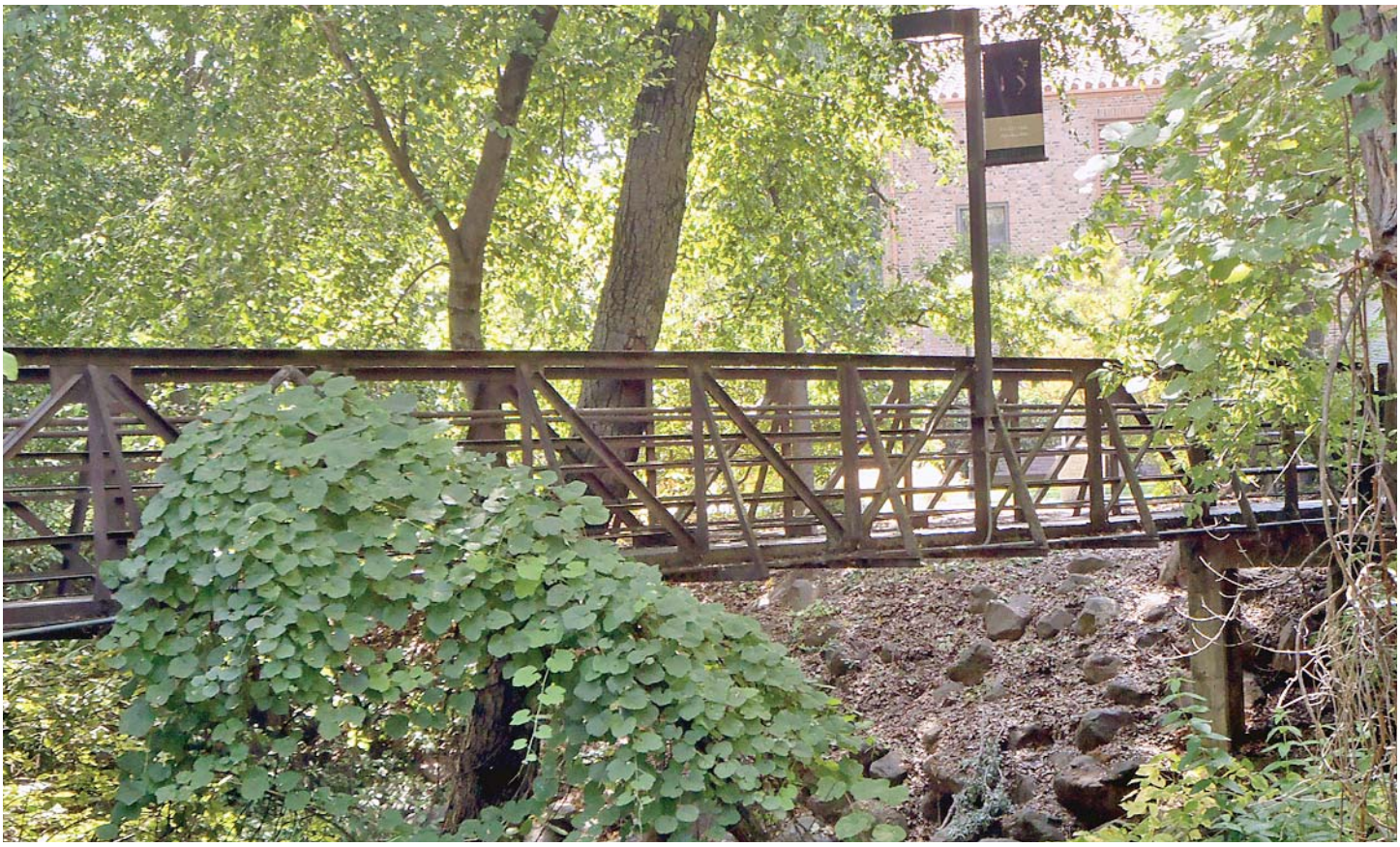
BRIDGE REPLACEMENT/RESTORATION PROJECT

Final Initial Study/Mitigated Negative Declaration

Prepared for
California State University, Chico

June 2014

ESA



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ENVIRONMENTAL CHECKLIST
Initial Study

1. **Project Title:** California State University, Chico: Physical Science Bridge Replacement Project and the Selvester's Café Bridge Restoration Project

2. **Lead Agency Name and Address:** California State University, Chico
400 West First Street
Chico, CA 95929

3. **Contact Person and Phone Number:** Jenna Wright
Campus Planner & Financial Analyst
(530) 898-6235

4. **Project Location:** CSU Chico Campus at Arcadian Avenue
Chico, CA

5. **Project Sponsor's Name and Address:** (see Lead Agency)

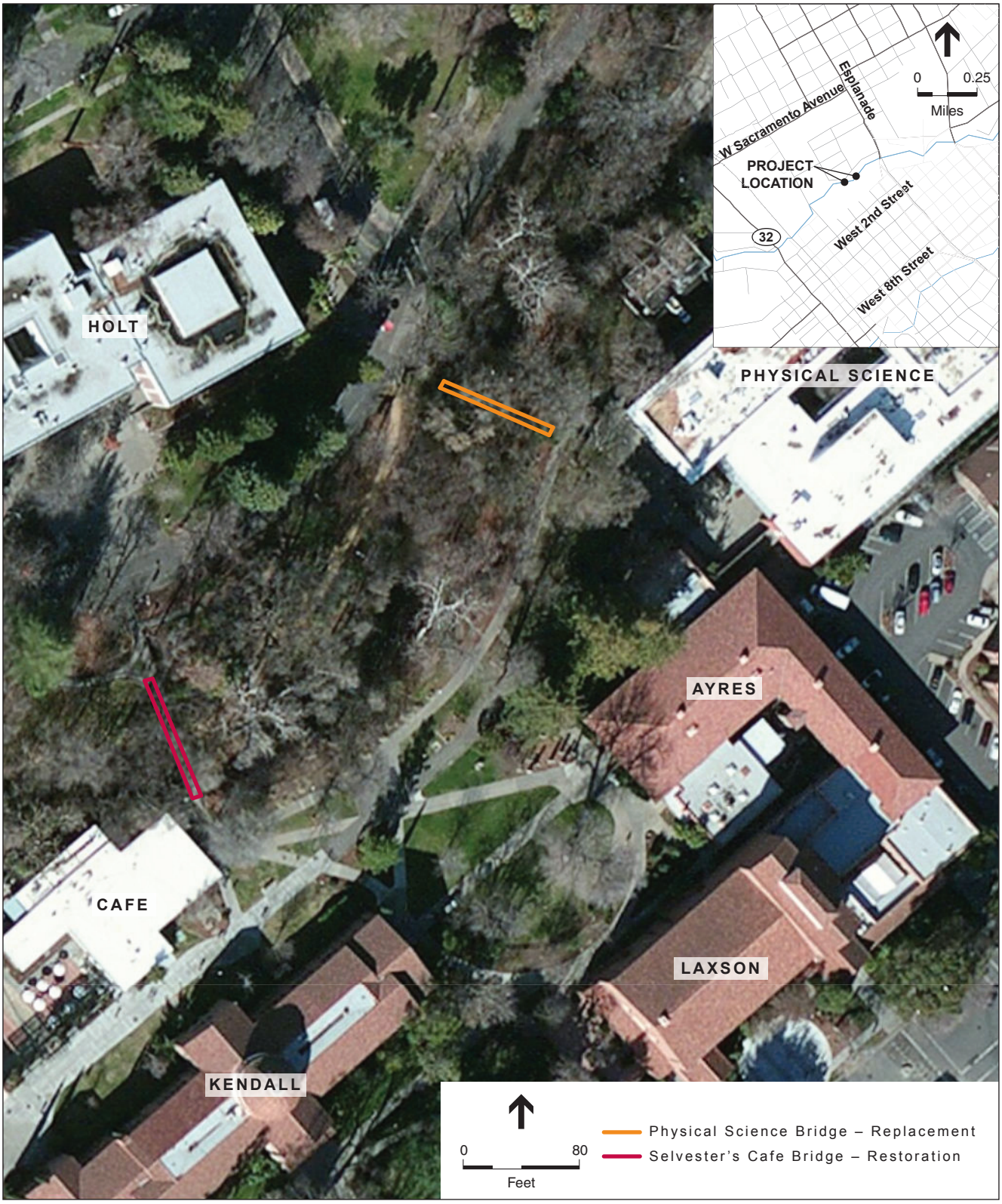
6. **General Plan Designation(s):** Public Facilities & Services (PFS)

7. **Zoning Designation(s):** Public/Quasi Public Facilities (PQ)

8. **Description of Project:**

Introduction and Location

The California State University, Chico (CSU Chico) proposes to replace the existing Physical Science Bridge (proposed project) that spans Big Chico Creek with two new bridges that will facilitate emergency vehicle and pedestrian access between the CSU Chico campus and Arcadian Avenue. The existing Physical Science Bridge is a narrow steel truss bridge that currently provides an important connection point over Big Chico Creek to both sides of the CSU Chico campus. The existing bridge is a 5 ½ -foot wide by 81-foot long, 2 span, reinforced concrete slab between steel girders. The existing structure was constructed during the 1940s and was only meant as a pedestrian foot bridge; therefore, it is incapable of emergency vehicle access across campus. The bridge is also not considered ADA compliant based on a number of conditions. **Figure 1** shows the project site and surrounding vicinity.



SOURCE: Microsoft, 2011; ESA, 2014

California State University, Chico Bridge Replacement/Restoration Project . 130142

Figure 1
Project Site

As a smaller and separate project, CSU Chico proposes to restore (i.e., clean, paint, and service) the Selvester's Café Bridge (also known as the Gus Manolis Bridge). This bridge, constructed in 1961, also spans Big Chico Creek and is located downstream approximately 350 feet. It is very similar in construction to the Physical Science Bridge and is 5 ½ foot wide, 55 ft. long. This bridge serves pedestrians only, and is incapable of vehicular access. The project site for this bridge restoration project is also shown in **Figure 1**.

This document will largely focus on the replacement of the Physical Science Bridge. Areas that apply to the work on the Selvester's Café Bridge will be noted accordingly.

Project Background

Pedestrian, bicycle, and vehicular access is provided through a mixture of pedestrian pathways, sidewalks, open space, and service roads throughout the CSU Chico campus. Regular vehicle access to the campus core is very restricted with the use of bollards and access gates. One of these methods will also be used for the new bridge, as the vehicle portion of it is intended to be for emergency vehicles. While the west side of the campus has important emergency vehicle access across Big Chico Creek via the Mall Bridge, emergency vehicle access for the east side of campus is very limited due to the lack of a bridge that will accommodate emergency vehicles. This project proposes to correct the problem.

Project Purpose and Objectives

The purpose of the proposed project is to:

- Remove the existing structure, which has been determined to be deficient for accessible path of travel and incapable of vehicular access;
- Replace with two new separate structures: one that will meet design standards for vehicles, specifically emergency vehicles, utilizing this bridge, and the other that will provide adequate, accessible, and safe travel for campus users. This will minimize public safety conflicts by separating emergency response vehicles from non-motorized users of the bridge;
- Given the bridge's location within the environmentally sensitive Big Chico Creek, CSU Chico proposes to complete bridge replacement and restoration activities in a manner that minimizes environmental impacts to the creek corridor;
- Implement construction and restoration activities in a manner that maintains access, circulation, and connectivity to the surrounding CSU Chico campus as much as possible; and
- Incorporate restoration activities (i.e., paint coatings, materials, etc.) that maintain the aesthetic and design features of the existing bridge.

Project Description

Bridge Design

CSU Chico is proposing to replace the Physical Science Bridge at Arcadian Avenue with two new bridge structures; one to serve pedestrians and one for emergency vehicles when

necessary. As previously described, the existing bridge is a narrow pedestrian bridge that does not adequately serve the east side of campus in terms of emergency vehicle access. The Physical Science Bridge, constructed in approximately the 1940s, has been identified as the best bridge on campus to replace for a second emergency vehicle access point. In coordination with the bridge replacement, the fire lane from the Physical Science Bridge to Kendall Hall will be improved, allowing emergency vehicles to enter the campus from Arcadian Avenue, cross the bridge, and exit via the campus fire lane to Warner Street.

The proposed project will consist of two separate bridges; one 20 foot wide bridge solely for emergency response vehicles and a 10 foot wide bridge for pedestrian use (see **Figure 2**). CSU Chico originally considered a single 30 foot wide by100 feet long single span replacement structure. However, by designing individual bridges for their respective functions (emergency vehicle access versus pedestrian connectivity), several pedestrian safety, accessibility, right of way and environmental concerns associated with a single bridge structure were addressed by incorporating a reduced roadway/bridge approach that minimized the amount of additional fill material necessary for the proposed project.

The proposed bridges will be designed to free-span the waterway, creating no additional obstruction to water flow at the design flood elevation. Supporting bridge abutments and piles will be located outside the existing channel as shown in **Figure 2**. Preliminary design shows the bridge piles will likely be 24 inch cast-in-drilled-hole (CIDH) concrete piles at a depth of 35 feet below top of abutment. Preliminary design also shows the pedestrian bridge thickness at 14 inches (with a maximum approach slope of 4.5%) and the emergency vehicle access bridge thickness at 38 inches (with a maximum approach slope of 15%).

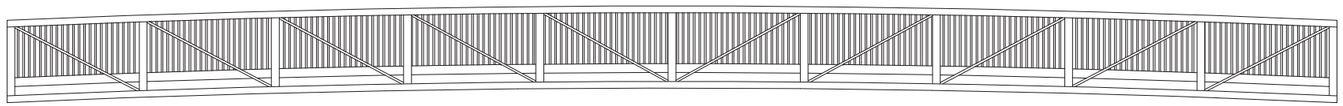
The bridge will provide lighting for safety and for path of travel code compliance. Lighting will match campus standard for site lighting, including compliance with ‘dark sky’ ordinances. Consistent with the CSU, Chico campus public art project, the proposed project will incorporate a decorative treatment consistent with the surrounding area and campus aesthetics.

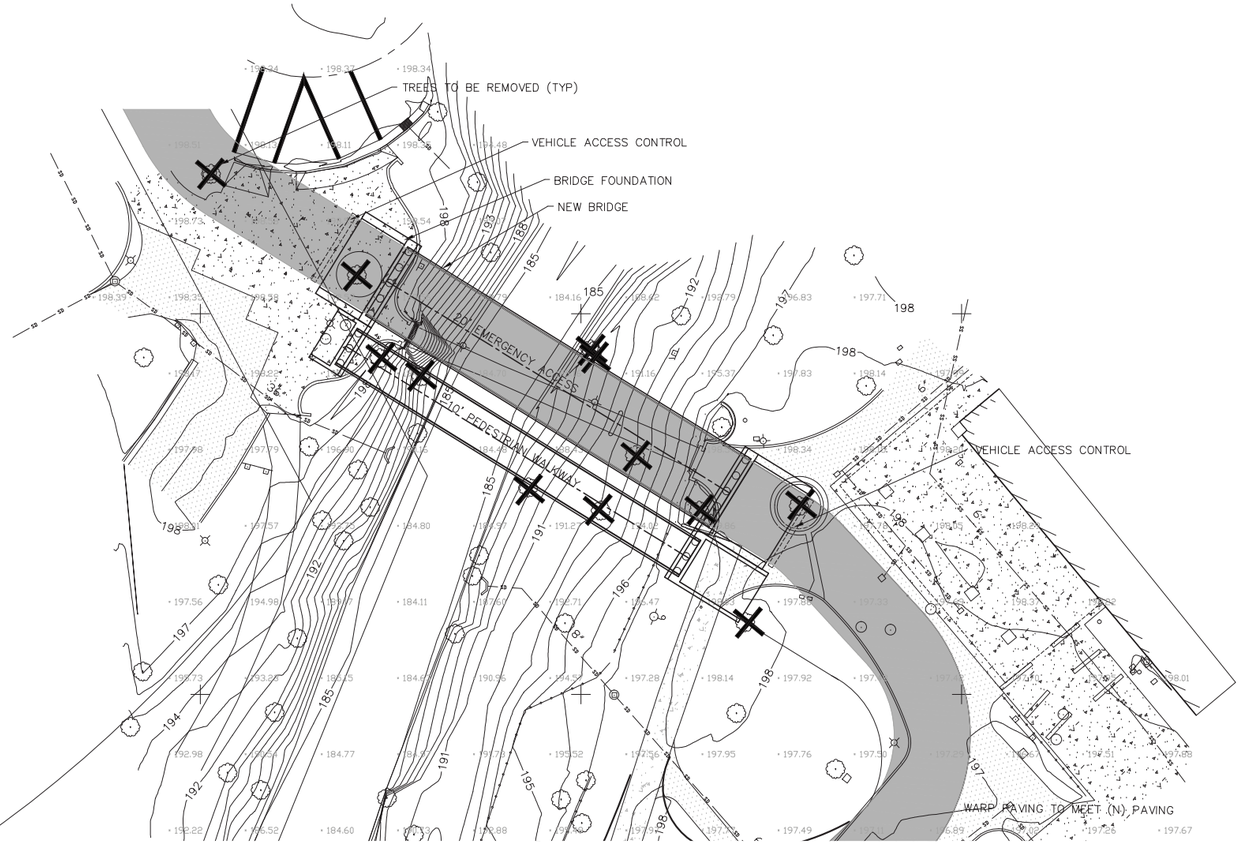
Utilities

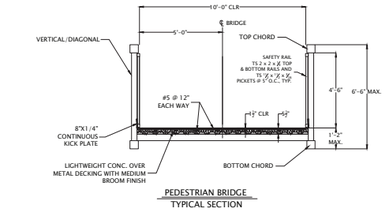
Campus infrastructure, such as steam, gas, electrical and data services will continue to be extended from the south side of campus, attached to the sides of the bridges, to the North side of Campus. All utility infrastructure connected to the bridge will comply with the applicable codes and for clearance above the flood plain.

Right-of-Way

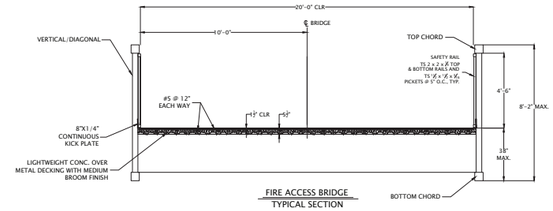
No right-of-way issues are anticipated with the proposed project. A temporary construction easement by the City of Chico will be required.







PEDESTRIAN BRIDGE
TYPICAL SECTION



FIRE ACCESS BRIDGE
TYPICAL SECTION

N

NOT TO SCALE

SOURCE: CSU Chico/DLR Group, 2013

Figure 2
Preliminary Physical Sciences Bridge Design

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Demolition and Construction – Equipment and Workers

The existing bridge will be removed as the first item of work. Removal of the existing bridge will include the removal of utilities, bridge superstructure, and the abutments/supports at each side of the creek. Demolition will also include existing site facilities, vegetation, and tree removal as required for the new construction. Stabilization/replacement of soil where vegetation is removed will be a critical path activity. Erosion control and Best Management Practice (BMP) measures will be implemented to prevent erosion and protect water quality.

Typical construction equipment that may be used during bridge construction activities is identified below in **Table 1**.

TABLE 1
CONSTRUCTION EQUIPMENT

Equipment	Construction Purpose
Asphalt Concrete Paver	Paving roadways
Backhoe	Soil manipulation + drainage work
Bobcat	Fill distribution
Bulldozer / Loader	Earthwork construction + clearing and grubbing
Crane	Bridge construction
Excavator	Soil manipulation
Grader	Ground leveling
Truck with Seed Sprayer	Landscaping
Water Truck	Earthwork construction + dust control
Concrete Truck	Bridge construction
Concrete Pump Truck	Bridge construction
Equipment and Haul Truck	Bridge and fill material delivery + clearing and grubbing

The Selvester's Café Bridge Restoration Project will consist of preparation and painting of the steel support girders. No demolition or new construction is planned for this bridge. No in-channel work or ground disturbing activities will be required under this phase of the project. Specialized paint equipment will include a paint blaster/recycling machine, dust collector, and air compressors. The recycling machine stores, sorts and transports inbound and outbound blasting material streams. The dust collector filters and controls atmosphere within the paint containment tent. Air compressors provide air pressure to drive the recycling and collecting machines. A water containment system will be established to ensure that contaminated water used to wash and clean paint surfaces is fully captured without affecting the environment. All these machines come on wheeled trailers or carriages that spread out load below legal limits for operating on local streets, access ramps, and would be parked as close to the bridge as possible. Erosion control and BMPs will be implemented to prevent erosion and protect water quality.

An estimated 10 to 20 workers, which could vary based on construction/restoration activity, would be onsite each day. Construction activities would take place in compliance with the

City of Chico Noise Ordinance. The noise ordinance indicates that construction-related noise is exempt from the ordinance, provided that construction occurs between the hours of 7:00 a.m. and 9:00 p.m., Monday through Saturday, and between 10:00 a.m. and 6:00 p.m., Sundays and holidays, and does not exceed 83 dBA 7.6 meters (25 feet) from the source or 86 dBA at any point outside of the property plane of the project.

Bridge construction and restoration activities will occur during summer months when the water is lowest and storm flows do not occur down Big Chico Creek. For the bridge replacement project, minor dewatering activities may be required during the placement of the structural foundation. Should dewatering be required, a dewatering plan would be prepared and implemented that includes measures to ensure that potential effects to any sensitive species that may be present in the creek (within the work area) would be avoided and/or minimized. The dewatering plan would include requirements for a qualified biological monitor to be present and to work with the construction contractor to isolate the work area, survey for the potential presence of aquatic species, and, if present, to remove and relocate these species to suitable habitats up or downstream from the work area. After the site is cleared of all potentially present aquatic species, dewatering activities would be allowed to commence. The biological monitor would remain onsite during dewatering to ensure that all activities are conducted in a manner that is protective of the creek environment. No in-channel work or ground disturbing activities will be required under the Selvester's Café Bridge restoration project. All construction activities for the Physical Science Bridge replacement are expected to be completed over a single season and would occur in 2015. The schedule for restoration of the Selvester's Bridge is still to be determined.

Detour Route

Other existing bridge crossings will serve as pedestrian detour routes during the construction phase of the project. Student and staff population during the summer months is very low, which will reduce inconvenience to those who would normally use the bridge.

9. Surrounding Land Uses and Setting:

The proposed project is located in the southeastern portion of the CSU Chico campus. As previously described, the proposed replacement would span Big Chico Creek, which traverses the campus from east to west. Surrounding land uses are primarily associated with the CSU Chico, and include the Physical Science Building approximately twenty-six feet to the east, Ayres Hall 120 feet to the south, Holt Hall 73 feet to the west, and Modoc Hall 300 feet to the north of the project site. Other nearby land uses include residential uses approximately 311 feet to the north of the project site, Bidwell Mansion State Historic Park 450 feet to the northeast, the Bidwell Bowl Amphitheater 258 feet to the east, Children's Playground 456 feet to the east, and the Bidwell Presbyterian Church 330 feet to the southeast.

10. Other public agencies whose approval is required:

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

- U.S. Army Corps of Engineers (Corps) for work conducted above a Navigable Water as defined under section 10 of the federal Clean Water Act (CWA);
- U.S. Fish and Wildlife Service (USFWS) for impacts to federally threatened species per section 7 of the federal Endangered Species Act;
- California Department of Fish and Wildlife (CDFW) to address impacts within the banks of the river and associated riparian habitat per Section 1602 of State Fish and Game Code;
- Regional Water Quality Control Board (RWQCB) to address potential impacts to water quality that may result from discharges from the project site to the river or from diffused sources (e.g., erosion from soil disturbance or waste discharges to land) per Section 401 of the CWA;
- Central Valley Flood Protection Board (CVFPB) for work within a designated floodway; and
- City of Chico for approval of a temporary construction easement.

11. CEQA sections not requiring further review:

Due to the absence or nature of the resources identified below, the proposed project would have no impact in the following areas:

Agriculture and Forestry Resources

The project site is located entirely on the CSU Chico campus, which the City of Chico General Plan designates as "Public Services and Facilities". The "Public Services and Facilities" designation includes sites for schools, governmental offices, airports, and other facilities. The site is zoned as "Public/Quasi Public Facilities", which does not allow for agricultural uses, and there are no lands with Williamson Act contracts that would be affected by project activities. No existing agricultural or timber-harvest uses are located on or in the vicinity of the project site. Consequently, implementation of the proposed project would not result in impacts to agricultural resources and this issue is not discussed further in this initial study.

Land Use and Planning

The proposed project is located entirely within the CSU Chico campus, which is designated as "Public Services and Facilities" and zoned "Public/Quasi Public Facilities". As previously described above under Section 9 "Surrounding Land Uses and Setting", surrounding land uses include CSU Chico facilities, residential areas, park land, and a place of worship. As described above under Section #8 "Project Description", the project is a bridge replacement/restoration project that would not involve permanent land use changes within the CSU Chico Campus or City. Upon project completion, all project areas (staging/access areas) would be returned to pre-project conditions after construction activities are completed. Furthermore, though the footprint of the proposed bridge replacement would be larger than the existing one, implementation of the proposed project would not result in any land use changes and would not fundamentally change the function of the study area or its surroundings. Consequently the proposed project is consistent with planning designations in

the City of Chico General Plan and Zoning Code, and land use and planning issues are not further discussed in this initial study.

Mineral Resources

As identified in the Draft EIR for the CSU Chico Campus Master Plan 2005, no known mineral resources exist within the CSU Chico planning area, which includes the proposed project site (CSU Chico, 2005b). Implementation of the proposed project would not result in the loss of a known mineral resource of local, regional, or statewide importance. Furthermore, the proposed project would not interfere with an existing mining operation. Therefore, the proposed project would have no impact on mineral resources and this issue will not be further discussed in this initial study.

Population and Housing

The proposed project does not involve construction of residential land uses that would generate new residents in the city or region. Temporary construction workers (estimated at 10 to 20 workers) serving the proposed project would reasonably be expected to come from the existing labor pool of residents in Chico and nearby communities. Additionally, the proposed bridge replacement/restoration project does not include the provision of additional infrastructure with the capacity to serve other un-served properties, or stimulate additional economic activity not currently planned for in the vicinity or region. Therefore, the project would not induce direct or indirect population growth. Consequently, the proposed project will not have an impact on population and housing and these issues are not described further in this initial study.

Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology, Soils and Seismicity
☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☒ Hydrology and Water Quality
☐ Land Use and Land Use Planning	☐ Mineral Resources	☒ Noise
☐ Population and Housing	☐ Public Services	☐ Recreation
☒ Transportation and Traffic	☐ Utilities and Service Systems	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

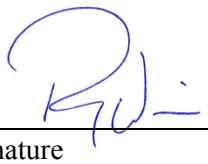
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ 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, no further environmental documentation is required.



Signature — March 14, 2014 (Date)

Jenna Wright, Campus Planner & Financial Analyst (Printed Name) — Ray Weiss for Jenna Wright (For)

Environmental Checklist

Aesthetics

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
1.	**AESTHETICS — Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Environmental Setting

The proposed project is located within a section of the Big Chico Creek corridor traversing through the CSU Chico campus. The City of Chico General Plan designates most of the CSU Chico main campus as "Public Services and Facilities" with a designation of "Creekside Greenways" for Big Chico Creek and its riparian corridor. While specific views in the immediate vicinity of the project site consist of a variety of open space features (i.e., trees, Big Chico Creek, etc.), the intactness of these views are reduced by the surrounding built environment associated with CSU Chico campus buildings and facilities. No officially designated scenic resources (i.e., vista points, viewsheds, historic buildings, or roadways) are located within the project site or would be affected by the proposed project.

Discussion

a) As described above, no officially designated scenic resources are located within the project site or immediate vicinity of the project site. Bridge replacement activities would occur within the same footprint as the existing Physical Science Bridge at a similar elevation. No in-channel work or ground disturbing activities will be required under the Selvester's Café Bridge restoration project. While some vegetation removal will be required, the proposed project includes a variety of revegetation and erosion control measures designed to minimize the loss of vegetation within the project sites (see **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** under the Biological Resources section, below). Consequently, implementation of the proposed project will result in ***no impact*** to a scenic vista. No additional mitigation is required.

b) The proposed project sites are not located on or within a reasonable distance of a state scenic highway or within an officially designated scenic roadway under a City/County

planning document. According to the Caltrans Map of Designated Scenic Routes, State Route 70 (Oroville to Quincy, CA) is considered eligible but not officially designated as a State Scenic Highway. Consequently, the proposed project would result in ***no impact*** on scenic resources associated with a scenic highway or roadway and no mitigation measures are required.

c) The visual context of the area surrounding the project site consists of limited open space uses (Big Chico Creek stream channel) surrounded by CSU Chico buildings and facilities. Predominate viewer groups include CSU Chico students, employees, and visitors. Construction of the proposed project would result in temporary changes in local visual conditions, such as clearing and grading at the project sites. However, the proposed project includes a variety of revegetation and erosion control measures designed to minimize the loss of vegetation (see **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** under the Biological Resources section, below) and restore the project site to pre-project conditions. Additionally, proposed bridge replacement and restoration activities would result in new or upgraded pedestrian bridge structures that would be developed within similar project footprints and profiles to minimize permanent changes to the visual landscape of the area. Consequently, visual impacts are considered ***less-than-significant*** and no additional mitigation measures are required.

d) The proposed project site is located within the CSU Chico campus, which includes a degree of existing nighttime lighting around existing buildings and campus pathways. While the proposed bridge replacement project will include a small amount of additional security nighttime lighting, the replacement bridge will not include significant new sources of light and glare (i.e., billboards, street lamps, vehicle lights, etc.) within the project site or surrounding area. Implementation of **Mitigation Measure AS-1 "Minimize Light and Glare Impacts"** will ensure light and glare impacts are ***less-than-significant.***

The proposed bridge restoration project would use similar materials and color schemes as those currently associated with the Selvester's Café Bridge. Consequently, implementation of the proposed bridge restoration project will be consistent with the existing lighting and surrounding development and would not adversely affect day or nighttime views. This impact is ***less-than-significant*** and no mitigation measures are required.

Under the proposed project, bridge replacement/restoration activities would be limited to daylight hours, resulting in no temporary light impacts associated with construction activities. This impact is ***less-than-significant*** and no mitigation measures are required.

Mitigation Measures

Mitigation Measure AS-1: Minimize Light and Glare Impacts. CSU Chico staff will ensure that the bridge lighting system shall include spill and glare shields and shall be of a cutoff style directed downward whenever feasible. Installation of the lighting system shall include a site visit

by the manufacturer's engineer, or qualified representative, to "fine tune" the spill and glare control for off-site spill light.

Air Quality

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
2.	**AIR QUALITY —** 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:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
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)?	☐	☒	☐	☐
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Environmental Setting

The proposed project is located in the Northern Sacramento Valley Air Basin (NSVAB), which is situated in the northern portion of the Central Valley and is bounded on the west by the Coastal Range, on the north and east by the Cascade-Sierra Nevada and Siskiyou foothills and mountains, and on the south by the Sacramento Air Basin. The NSVAB is a natural closed basin, often with poor air circulation and high atmospheric stability. Consequently, the project area is subject to frequent temperature inversions preventing dispersion of pollutants.

Several air quality monitoring stations are located in the City of Chico, which collect data on ozone, carbon monoxide (CO) and particulate matter (PM10 and PM2.5), nitrogen oxide (NOx), sulfur dioxide, and lead levels. Air quality standards are established by both the federal and State governments. State standards, set through the California Air Resources Board (CARB), are generally more stringent than federal standards. The attainment status of Butte County for criteria pollutants under State standards include nonattainment/transitional for ozone, attainment for CO, and non-attainment for PM10.

The Butte County Air Quality Management District (BCAQMD) regulates air quality through its permit authority and through its planning and review activities over most types of stationary emission sources. The BCAQMD is responsible for implementing emissions standards and other requirements of federal and State laws. The City's planning area (including the CSU Chico campus) is also subject to the Northern Sacramento Planning Area 2006 Air Quality Attainment

Plan, which provides an outline for legislative requirements, air monitoring, public education programs, transport of pollutants, and control measures on a regional basis.

The BCAQMD publishes the CEQA Air Quality Handbook (2008). According to the BCAQMD, throughout the NSVAB, the major contributor to air pollution is the motor vehicle. In recognition of this contribution, the State Legislature adopted the California Clean Air Act (CCAA). This legislation requires local air districts to develop measures to reduce emissions from mobile sources. The proposed bridge replacement and restoration projects would not result in new sources of vehicle traffic and continue to encourage the use of bicycles and pedestrian transportation within the CSU Campus and City of Chico. Therefore the proposed project is consistent with these regulations.

The BCAQMD's CEQA Air Quality Handbook discusses Action Level Thresholds "A," "B," and "C" to determine the extent of the indirect source impacts resulting from projects, and as a basis from which to apply mitigation measures. These Action Levels are consistent with the New Source Review Rule adopted by the NSVAB. The Level "A" thresholds (less than 25 pounds per day for ozone precursors or 80 pounds per day for PM10) requires only standard mitigation measures applicable to all projects. The Level "B" thresholds (greater than 25 pounds per day of ozone precursors or 80 pounds per day for PM10) require, in addition to standard mitigation measures, the selection of as many supplemental mitigation measures as feasible from a list of Best Available Mitigation Measures. The Level "C" threshold (137 pounds per day for ozone precursors or PM10) requires additional mitigation. Unmitigated emissions above 137 pounds per day are considered to represent a significant adverse impact.

Implementation of the proposed project would involve the use of heavy equipment and vehicles during construction activities for an area less than one acre of land. Construction activities would be short-term and would not involve any permanent stationary emissions of reactive organic gases (ROG), NOx, and PM10. Construction emissions would fall below the Level C Threshold and therefore do not represent a significant adverse effect under BCAQMD's criteria.

Discussion

a) The purpose of the proposed project is to replace/restore two CSU Chico bridges to add emergency vehicle access to the southeast portion of the campus and for continued safe access for bicycle and pedestrian use on campus. The proposed project would not increase bridge/roadway capacity or service capabilities that would induce unplanned growth or remove an existing obstacle to growth. The proposed project would not increase long-term traffic levels and there would be no operational impacts to air quality. Therefore, the proposed project would not conflict with the region's air quality management plans and would be considered a ***less-than-significant*** impact and no mitigation measures are required.

b) The proposed project would only generate short-term, temporary air quality emissions as a result of bridge replacement/restoration activities. Consequently, standard air quality emission modeling conducted for typical construction-related projects involving a variety

of earthmoving activities was not conducted for the proposed project, as ground disturbing activities are not proposed or considered very minor. Other activities resulting in some minor amounts of construction-related exhaust emissions would be generated by heavy-duty maintenance equipment, material delivery/haul trucks, and a small number of construction worker vehicles (between 10 to 20 average daily trips). Some site restoration/clean-up activities (i.e., repairing AC surfaces, restoring existing slopes and grades, and restoring vegetated surfaces/hydro-seeding, etc.) would also generate very small amounts of reactive organic gas (ROG) emissions. As these emissions would be temporary in nature, and would cease following the construction phase of the projects, air quality emissions do not represent a significant adverse effect under BCAQMD's criteria. However, the proposed project will include applicable BCAQMD Rule 205 Fugitive Dust Emission Measures (including low vehicle speeds, erosion control, etc.) to ensure that construction phase air quality emissions are low. Consequently, with implementation of **Mitigation Measure AQ-1 "Construction-Related Emission Control Practices"** the proposed project would fulfill all the BCAQMD-required construction control practices. Therefore, the impact would be ***less-than-significant*** with incorporation of mitigation.

c) Please see the response to Item "b" above.

d) Implementation of the proposed project would result in the short-term generation of diesel particulate matter (PM) emissions from the use of painting equipment and off-road diesel equipment required for moving materials and bridge construction. Diesel PM has been classified as a toxic air contaminant (TAC) by the CARB and therefore even acute exposure could have potential health impacts. Residences are located roughly 300 feet from the nearest edge of the staging area and are considered sensitive receptors. Diesel PM emissions would vary depending on the types of activities occurring each day.

The dose to which receptors are exposed is the primary factor used to determine health risk and is a function of both the concentration and duration of receptor exposure. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments that determine the health risks associated with exposure of residential receptors to TAC emissions should be based on a 70-year exposure period and health risk assessments that address the health risk associated with exposure of children to TAC emissions should be based on a 9-year exposure period (OEHHA 2003). TAC exposure to children is of special concern because children typically metabolize more air per unit of body weight in comparison to adults and can be more sensitive to toxics during development. As described above ("Project Description"), bridge replacement/restoration activities would occur over a short term period (single construction season – 3 to 4 months). Therefore, the total exposure time where some level of construction activities and subsequent diesel PM emissions are occurring would be less than the minimum number of years recommended for a health risk assessment and less than 1% of the total exposure time for a typical health risk assessment.

Consequently, because the potential generation of TACs would be temporary and intermittent in nature and the relatively low exposure period in combination with the dispersive properties of diesel PM (Zhu and Hinds 2002), short-term construction activities would not result in the exposure of sensitive receptors to TAC concentrations that would exceed 10 in a million cancer risks. However, the proposed project will include applicable construction-related emission control practices (including low vehicle speeds, limited equipment idling, etc.) to ensure that construction-related activity emissions are low. Implementation of **Mitigation Measure AQ-1** would reduce diesel PM emissions from heavy-duty construction equipment by limiting idling time, limiting construction vehicle speeds, and properly maintaining construction equipment. Therefore, the impact would be ***less-than-significant*** with incorporation of mitigation.

e) Generally, the types of projects or activities that pose potential odor problems include refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations. The proposed project is a short-term bridge replacement/restoration project that would not create long-term objectionable odors affecting a substantial number of people. While some short-term construction related odors would result within the immediate construction site, sensitive land uses (i.e., residential, etc.) with outdoor areas are located some distance (approximately 300 feet) from the project site and would not be affected. This impact would be ***less-than-significant*** and no mitigation measures are required.

Mitigation Measures

Mitigation Measure AQ-1: Implement Construction-Related Emission Control Practices. CSU Chico staff will ensure that the construction contractor implement the following applicable BCAQMD recommended fugitive dust emission measures (consistent with Rule 205, Fugitive Dust Emissions) and standard diesel PM emission control measures:

- Stabilizing of backfill material, wind erodible surfaces, demolition debris, staging areas, stockpiled, and disturbed materials at all phases of activity. Also stabilize traffic areas, and stabilize areas during trenching, loading of trucks, and turf overseeding activities.
- Maintain stability of soil through pre-watering, during, and immediately after clearing and grubbing activities and cut and fill activities.
- Use of water spray, sweeping and water spray, or vacuum system to clear forms.
- In unpaved areas limit vehicles to established unpaved roads and parking lots, and limit on-site vehicles to a speed of 15 mph on unpaved roads.
- Land clearing, grading, earth moving or excavation activities suspended when winds exceed 20 miles per hour.
- Install wheel washers or wash all trucks and equipment leaving the site.
- Non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operation and hydroseed area.
- Plant vegetative ground cover in disturbed areas as soon as possible.

- Cover inactive storage piles.
- Paved streets adjacent to the development site shall be swept or washed at the end of each day as necessary to remove excessive accumulations of silt and/or mud which may have accumulated as a result of activities on the development site.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Biological Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
3. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

The following section provides a summary of the complete environmental and regulatory setting provided in **Appendix A** of this report.

Data Sources/Methodology

Biological resources within the study area were identified through field reconnaissance by ESA biologists Lindsay Tisch on August 15, 2013 and LeChi Huynh on January 9, 2014. Prior to the reconnaissance surveys, a review of pertinent literature and database queries were conducted for the project sites and surrounding area. The reconnaissance surveys consisted of a pedestrian survey of the study area in its entirety. The primary sources of data referenced for this study include the following:

- "Federal Endangered and Threatened Species that may be Affected by Projects in the Chico, California 7.5-Minute Topographic Quadrangle" (United States Fish and Wildlife Service, 2013);

- California Natural Diversity Database (CNDDB), Rarefind computer program (v5)(California Department of Fish and Wildlife, 2013);
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (v8-02) (CNPS, 2013).

A list of special-status species with potential to occur on the study area was compiled from these sources and from information collected during the field reconnaissance. This appendix includes the special-status species lists for the region.

Regional and Study Area Ecology

Regionally, the study area is located in the northeastern portion of the Sacramento Valley. Historically, this region supported extensive marshes, riparian woodlands intermixed with oak woodland, vernal pools, and grasslands. Intensive agricultural and urban development has resulted in substantial changes and conversions of these habitats. Because most native habitats have been altered by changes in land use, native plant communities are typically limited to areas along water courses and drainages, within designated reserves, or on untilled pasture lands. Present terrestrial habitats are characterized by urban development and valley foothill riparian. Aquatic habitats present within the study area include a perennial drainage (Big Chico Creek).

Data from the Western Regional Climate Center for the Chico Experiment (041715) weather station indicates that average annual precipitation is 25.66 inches. The average maximum annual temperature is 75.2 degrees (F) and average minimum annual temperature is 46.8 degrees (F) (Western Regional Climate Center, 2013).

Elevation of the study area is approximately 204 to 274 feet above mean sea level (msl). The project sites are situated on nearly flat terrain along the north and south banks of Big Chico Creek. Surrounding vegetation communities consist of urban/developed and valley foothill riparian.

Site Descriptions

Project sites are located within the CSU Chico campus and include Big Chico Creek. Land uses surrounding the sites and study area include urban (residential) and open space (parkway along Big Chico Creek) uses. Urban habitat types include landscape or planted vegetation, as well as developed urban lands with little or no native vegetation types and urban lands where a portion of the area is barren. Within the urban residential zone, approximately 40 percent of the land's surface is covered by impervious material (parking areas, etc.). Species occurring within this habitat type are typically common and well-adapted to an urban environment. Open space areas include valley foothill riparian habitat and public parks along Big Chico Creek. Habitat types that occur within the study area are identified in **Figure 3**.

Vegetation Communities and Wildlife Habitats

Wildlife habitats were classified using the CDFWs *A Guide to Wildlife Habitats* (Mayer and Laudenslayer 1988), which is integrated with the California Wildlife Habitat Relationships (CWHR) System. Wildlife habitats generally correspond to plant communities. Habitats or vegetative communities are assemblages of plant species that occur together in the same area,

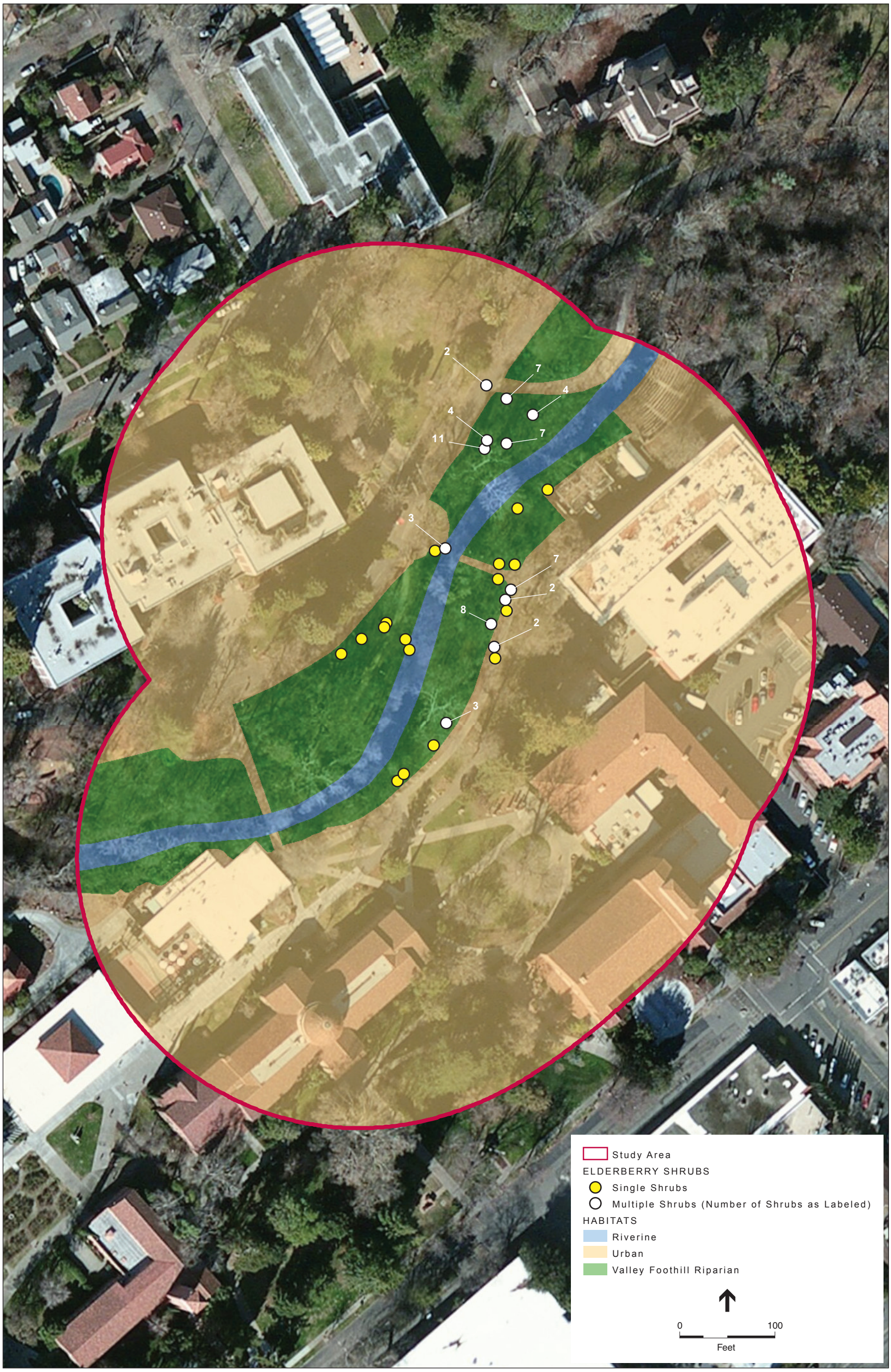
which are defined by species composition, relative abundance, and repetition across landscapes. Plant communities within the study area were identified using field reconnaissance and aerial photography. The CWHR habitat classification scheme supports the CWHR System, a wildlife information system and predictive model for California's regularly occurring birds, mammals, reptiles and amphibians. The plant communities described below generally correlate with wildlife habitat types found within the study area.

Urban/Developed. Urban areas are typically landscaped with ornamental plant species, paved, or otherwise developed and generally lack natural vegetation. Urban areas within the study area include paved and unpaved pathways and parking lots, university buildings, and public works infrastructure. Tree species observed within the project sites and within the nearby vicinity include American elm (*Ulnus americana*), dawn redwood (*Metasequoia glyptostroboides*), shiny xylosma (*Xylosma congestum*), and American chestnut (*Castanea dentata*), among others. Although these species are not native to California, they are mature trees that may contribute to the overall quality of habitat for wildlife when grown adjacent to valley foothill riparian habitat. Urban/developed environments generally provide limited habitat for common wildlife species such as rock pigeon (*Columba livia*), house sparrow (*Passer domesticus*), American crow (*Corvus brachyrhynchos*), house mouse (*Mus musculus*), and opossum (*Didelphis virginiana*).

Valley Foothill Riparian. Riparian habitats are vegetated corridors along stream and river banks. Valley foothill riparian habitat occurs within the study area and generally along the banks of Big Chico Creek. The riparian habitat is composed of a tree -dominated overstory with shrub and herbaceous understory. Dominant plant species observed in this community include valley oak (*Quercus lobata*), American elm, white alder (*Alnus rhombifolia*), silver maple (*Acer saccharinum*), sycamore (*Platanus occidentalis*), box elder (*Acer negundo*), and buckeye (*Aesculus californica*). The understory consists of yarrow (*Achillea millefolium*), creeping Oregon grape (*Mahonia repens*), mugwort (*Artemisia douglasiana*), California grape (*Vitis californica*), California blackberry (*Rubus ursinus*), Himalayan blackberry (*Rubus armeniacus*), and Santa Barbara sedge (*Carex barbarae*). Limited areas of the understory consist of common periwinkle (*Vinca minor*) and English ivy (*Hedera helix*). Blue elderberry shrubs (*Sambucus nigra* ssp. *caerulea*) occur in the vicinity of the Physical Science Bridge.

Riparian corridors, such as those found in the project sites and immediate surroundings, are important wildlife areas that provide nesting habitat for migratory songbirds such as warblers, vireos, grosbeaks, raptors, and flycatchers. Riparian areas also provide foraging habitat for many species of reptiles and amphibians and act as migration and movement corridors for many wildlife species. The canopy and sub-canopy layers provide shade and protection of the water features and their aquatic inhabitants. Many fish inhabiting the waterways of riparian habitats require the shade of streamside vegetation and undercut banks.

Riverine. Riverine habitat includes larger open water channels with water depths greater than two meters (approximately 6.5 feet) beyond the depth of rooted emergent vegetation. Big Chico Creek is classified as riverine habitat.



SOURCE: Microsoft, 2011; ESA, 2014

California State University, Chico Bridge Replacement/Restoration Project . 130142

Figure 3
Study Area Habitats

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Riverine aquatic habitats are distinguished by intermittent or continually flowing water, and often occur in association with a variety of terrestrial habitats such as riparian and freshwater wetlands. The open water portion of Big Chico Creek does not support emergent vegetation. The banks of Big Chico Creek typically support species common to the riparian areas as described above under valley foothill riparian.

The open water zones of large rivers or waterways provide resting and escape cover for many species of waterfowl. Mallard (*Anas platyrhynchos*), American coot (*Fulica americana*), common moorhen (*Gallinula chloropus*), and snowy egret (*Egretta thula*) are a few species common to this habitat. Some of the more common mammals found in riverine habitats include river otter (*Lontra canadensis*), mink (*Mustela vison*), muskrat (*Ondatra zibethicus*) and beaver (*Castor canadensis*). Riverine habitat provides habitat for aquatic species such as fish and invertebrates as well as waterfowl, amphibians, and some reptiles. During the reconnaissance survey, juvenile salmonids (species unidentified) were present within Big Chico Creek.

Wetland and Other Waters of the U.S.

The study area is situated on nearly flat terrain within the riparian corridor of Big Chico Creek. Big Chico Creek drains a watershed of approximately 72 square miles and begins within the boundaries of Lassen National Forest in the northern portion of Butte County. The creek is formed by the confluence of two small unnamed tributaries near the community of Butte Meadows at an elevation of approximately 4,400 feet. Big Chico Creek flows in a south-southwest direction for approximately 45 river miles where it empties into the Sacramento River. For the first 35 miles from its origin, Big Chico Creek flows through relatively steep terrain with rugged canyon walls. The remaining 10 miles of the creek flow through the Central Valley floor until it meets the Sacramento River. Big Chico Creek passes directly through the City of Chico, which is about 5.5 river miles west of the Sacramento River.

While a formal wetland delineation has not been conducted for the study area, reconnaissance surveys conducted on August 15, 2013 and January 9, 2014 indicate that wetlands and other waters of the U.S. are limited to Big Chico Creek.

Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as deserving special consideration. Some of these species receive specific legal protection pursuant to federal or state endangered species legislation. Others lack such legal protection, but have been characterized as "sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives.

Potentially Affected Listed and Proposed Species

A list of special-status plant and animal species that have the potential to occur within the vicinity of the study area was compiled based on data in the CNDDB (CDFW, 2013), CNPS Inventory of

Rare and Endangered Plants (CNPS, 2013), and the USFWS List of Federal Endangered and Threatened Species that may be Affected by Projects in the Chico Quad (USFWS, 2013). Conclusions regarding habitat suitability and species occurrence are based on a reconnaissance-level area assessment conducted by ESA biologists, as well as existing literature and databases described previously.

Table A-3 (see **Appendix A** of this initial study) lists special-status plants and animals with the potential to occur within the study area. Additionally, Table A-3 indicates the proposed project's "potential to impact" each species listed. The "Potential for Occurrence" category is defined as follows:

- Unlikely: The study area and/or immediate area do not support suitable habitat for a particular species. Study area is outside of the species known range.
- Low Potential: Study area and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate study area.
- Medium Potential: The study area and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.
- High Potential: The study area and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and within the potential area of impact.

Table 2 (below) provides a summary of the special-status plants, animals, and critical habitat designations that are considered to have a "**Medium**" or "**High Potential**" to occur within the project sites and surrounding area.

TABLE 2
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Invertebrates			
Desmocerus californicus dimorphus **Valley elderberry longhorn beetle**	FT/--/--	Breeds and forages exclusively on elderberry shrubs (*Sambucus mexicana*) typically associated with riparian forests, riparian woodlands, elderberry savannas, and other Central Valley habitats. Occurs only in the Central Valley of California. Prefers to lay eggs in elderberries 2–8 inches in diameter; some preference shown for "stressed" elderberries.	**High**. Suitable habitat is present in the Project area; numerous elderberry shrubs (some with exit holes) were identified in the vicinity of the Physical Science Bridge. No elderberry shrubs were observed in the vicinity of the Selvester's Café Bridge.
Fish			
Oncorhynchus mykiss **Central Valley steelhead**	FT/--/--	This evolutionary significant unit (ESU) enters the Sacramento and San Joaquin Rivers and their tributaries from July to May; spawning from December to April. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	**High.** Migratory route in Big Chico Creek. Critical habitat is designated in Big Chico Creek within the study area.
Oncorhynchus tshawytscha **Central Valley spring-run Chinook**	FT/ST/--	This ESU enters the Sacramento and San Joaquin Rivers and tributaries March to July; spawning from late August to early October. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	**High.** Migratory route in Big Chico Creek. Critical habitat is designated in Big Chico Creek within the study area.
Reptiles			
Actinemys marmorata **Western pond turtle**	--/SSC/--	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable upland habitat for egg-laying. Nest sites most often characterized as having gentle slopes with little vegetation or sandy banks.	**Medium.** Suitable aquatic habitat is present and species may use Big Chico Creek as a dispersal corridor.
Birds			
Buteo swainsonii **Swainson's hawk**	--/ST/--	Forages in open and agricultural fields and nests in mature trees usually in riparian corridors.	**Medium.** Suitable nesting habitat exists within the study area.
Dendroica petechial brewsteri **Yellow warbler**	--/SSC/--	Breeds in shrubby thickets and woods, particularly along watercourses and in wetlands. Common trees include willows, alders, and cottonwoods. May also be found in suburban or less densely settled areas, orchards and parks, and may breed there.	**Medium.** Potential nesting and foraging habitat is present within the study area.
Mammals			
Antrozous pallidus **Pallid bat**	--/SSC/--	Arid deserts and grasslands of low elevations in California; often near rocky outcrops and water. Usually roosts in rock crevice or building, less often in cave, tree hollow, mine, etc. Prefers narrow crevices in caves as hibernation sites.	**Medium.** Suitable roosting habitat may be present in the mature trees and within buildings in the vicinity of the study area.

TABLE 2
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Critical Habitat			
Oncorhynchus mykiss **Central Valley steelhead**	Critical Habitat	Critical habitat designated in Tehama, Whitmore, Redding, Eastern Tehama, Sacramento Delta, Valley Putah – Cache, American River, Marysville, Yuba River, Valley – American, Colusa Basin, Butte Creek, Ball Mountain, Shasta Bally, North Valley Floor, Upper Calaveras, Stanislaus River, San Joaquin Valley Floor, Delta – Mendota Canal, North Diablo Range, and San Joaquin Delta Hydrologic Units in CA.	**High.** Critical Habitat unit occurs within Big Chico Creek.
Oncorhynchus tshawytscha **Central Valley spring-run Chinook**	Critical Habitat	Critical habitat designated in Tehama, Whitmore, Redding, Eastern Tehama, Sacramento Delta, Valley – Putah Cache, Marysville, Yuba River, Valley – American, Colusa Basin, Butte Creek, and Shasta – Bally Hydrological Units in CA.	**High.** Critical Habitat unit occurs within Big Chico Creek.

SOURCE: USFWS, 2013; CDFG, 2013; CNPS, 2013.
*Species with medium or high potential to occur in the study area are shown in **bold**.

KEY:

Federal: (USFWS)
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FC = Candidate for listing by the Federal Government

State: (CDFG)
SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SR = Listed as Rare by the State of California (plants only)
SSC = California Species of Concern
SFP = Fully protected by the State of California

CNPS: (California Native Plant Society)
List 1A = Plants presumed extinct in California
List 1B = Plants rare, threatened, or endangered in California and elsewhere
List 2 = Plants rare, threatened, or endangered in California but more common elsewhere
List 3 = Need more information
0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California
– = No Listing

Discussion

a) The following sub-sections provide a discussion of potential effects to special-status plant and animal species.

Special-Status Plants

The project sites do not provide habitat for any special-status plant species. No special-status plant species are likely to occur within the study area itself due to the high degree of disturbance associated with surrounding developed land uses. The project sites are situated within a narrow strip of riparian forest along Big Chico Creek. The surrounding area is a highly developed university campus. Bridge replacement/restoration activities and pedestrian use of the bridge will not permanently impact adjacent habitats to the project sites. Therefore, implementation of the proposed project will have ***no impact*** on special-status plants.

Special-Status Wildlife – Aquatic Species

Potential habitat for Central Valley steelhead, Central Valley spring-run chinook, Sacramento River winter-run chinook, and western pond turtle occur within Big Chico Creek.

Intermittent tributaries such as Big Chico Creek have proven to be optimal nonnatal rearing habitats in the Big Chico watershed (Maslin et al, 1996). Records dating back to 1938 indicate that Big Chico Creek and Mud Creek once supported runs of steelhead and salmon (Big Chico Creek Existing Conditions Report [BCCECR]). However, by the time studies were conducted in the 1980s to assess steelhead and chinook runs, populations were low and distorted by hatchery plantings (BCCECR). In comparison with other east-side tributaries of the Sacramento River, Big Chico Creek is the fourth most significant spring-run salmon stream. Neighboring creeks that exceed Big Chico include Butte, Deer, and Mill Creek (Brown, 1994).

The lower reaches of Big Chico Creek and parts of Lindo Channel are subject to nonnatal rearing of fall-, late-fall-, spring- (Maslin et al, 1999) and winter-run chinook, with more recent observations of steelhead (Brown, 1999). Therefore, there is the potential for steelhead and chinook to be present within the study area year-round. Although adult winter-run Chinook do not spawn in Big Chico Creek, juveniles may use lowermost segment of Big Chico Creek (downstream of work limits, near the confluence with the Sacramento River) for nonnatal rearing during downstream outmigration.

Big Chico Creek provides suitable foraging habitat for western pond turtle as it is situated within a narrow strip of riparian forest with areas of relatively shallow, slow moving water. Consequently, there is the potential for this species to utilize Big Chico Creek as a dispersal corridor to more suitable habitat upstream and downstream of the study area and may be present during construction-related activities.

The proposed project could indirectly impact special-status aquatic species such as Central Valley steelhead, Central Valley spring-run chinook, Sacramento River winter-run chinook, and western pond turtle. Increased sedimentation rates could result if fine sediment is discharged into Big Chico Creek during the construction phase of the proposed project. Increased sedimentation may adversely affect water quality and channel substrate composition. Specific rates of sedimentation are dependent upon the duration, volume, and frequency at which sediments are contributed to the surface water flow. Substantial sedimentation rates may smother fish eggs and fish food (i.e., benthic invertebrates) and degrade spawning habitat. Furthermore, suspended sediments increase the turbidity of the water. High rates of turbidity can result in direct mortality or deleterious sublethal effects (e.g., gill abrasion, decreased visibility during foraging) to fish.

Dewatering activities could potentially impact special-status aquatic species if they were present in Big Chico Creek. Potential impacts include direct harm to a species that could potentially come into contact with construction personnel and/or equipment, temporarily inhibiting movement through the study area, as well as exposure to an increased chance of predation or physical harm if they were to become trapped in the dewatered area, were trying to escape or move around the dewatered area, or were disturbed by construction activities. Implementation of the various species avoidance/compensation measures and water quality best management practices as set forth in **Mitigation Measure BIO-1 "Implement Special Status Fish Avoidance and Compensation Measures**" and **Mitigation Measure HWQ-1 "Implement Water Quality Best Management Practices"** (see Hydrology and Water Quality section), during the construction phase (including dewatering activities) of the proposed project would reduce or avoid impacts to special-status fish species to a ***less-than-significant*** level.

Dispersal habitat for the western pond turtle occurs within Big Chico Creek. Potential impacts to this species would be a temporary loss of foraging and dispersal habitat. However, implementation of the various species avoidance measures and water quality best management practices as set forth in **Mitigation Measure BIO-2a "Conduct Pre-construction Surveys for Western Pond Turtle"**, **Mitigation Measure BIO-2b "Implement Western Pond Turtle Avoidance Measures"**, and **Mitigation Measure HWQ-1 "Implement Water Quality Best Management Practices"** (see Hydrology and Water Quality section), during the construction phase (including dewatering activities) of the proposed project would reduce or avoid impacts to the western pond turtle to a ***less-than-significant*** level.

Nesting Songbirds and Raptors

Riparian habitat associated with Big Chico Creek may provide suitable nesting habitat for special-status raptors such as Swainson's hawk, and other special-status listed and non-listed birds such as the yellow warbler that utilize aquatic and riparian habitats. Construction-related activities could directly affect active nest sites through tree removal or cause indirect impacts such as nest abandonment. Valley oaks and cottonwoods and other large trees which grow within the riparian corridor along Big Chico Creek provide suitable nesting sites for many raptors and other birds. Construction

activity within the vicinity of an active nest site can cause parent birds to abandon the nest. However, implementation of the various species/nesting avoidance measures as set forth in **Mitigation Measure BIO-3a "Remove Vegetation outside Nesting/Breeding Season"**, **Mitigation Measure BIO-3b "Conduct Pre-construction Nesting Bird Surveys"**, and **Mitigation Measure BIO-3c "Implement Avoidance Measures for Active Bird Nest Sites"** prior to the construction phase of the proposed project would reduce or avoid impacts to nesting songbird and raptor species to a ***less-than-significant*** level.

Bat Species

The pallid bat is the most widely described special-status bat species in central California. Potentially suitable roosting habitat may be present within the riparian corridor surrounding Big Chico Creek, as well as within the attics of the surrounding university buildings. If bats are found roosting within the foliage of the riparian trees, they will have to relocate to another suitable roost site potentially exposing them to increased stress and chance of predation. Other potential impacts to these species during project construction include the potential for destruction of individual bats, if present, and the loss of suitable nesting and foraging habitat. However, implementation of the various species avoidance measures as set forth in **Mitigation Measure BIO-4a "Conduct Pre-Construction Survey for Bat Species"**, and **Mitigation Measure BIO-4b "Implement Bat Species Exclusion Measures Prior to Active Season"** prior to the construction phase of the proposed project would reduce or avoid impacts to bat species to a ***less-than-significant*** level.

Invertebrates

Blue elderberry shrubs with stems measuring 1" or more in diameter at ground level represent suitable habitat for the valley elderberry longhorn beetle occur within the project area in the vicinity of the Physical Science footbridge. No elderberry shrubs were observed in the vicinity of the Selvester's Café footbridge. Several shrubs are located within the footprint of the proposed 20-foot Emergency Access Bridge and the 10-foot Pedestrian Bridge and would require removal as part of project implementation. Additionally, several shrubs are located within 100 feet of proposed project activities and may be indirectly impacted by project activities. Potential impacts to valley elderberry longhorn beetle include direct removal of elderberry shrubs with stems containing 1" or more in diameter at ground level, trimming of suitable branches/stems, root disturbance from earth-work, dust, and water quality impacts. However, implementation of the various VELB avoidance/compensation measures as set forth in **Mitigation Measure BIO-5a "Implement VELB Avoidance Measures"**, and **Mitigation Measure BIO-5b "Implement VELB Habitat Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid VELB impacts to a ***less-than-significant*** level.

b) Sensitive natural communities that occur within the project sites and surrounding area include valley foothill riparian forest. This community provides habitat for a range of terrestrial wildlife species, including several species of songbirds, small mammals, mesocarnivores, and herpetofauna. The potential impacts include temporary disturbance and permanent displacement.

Direct impacts, such as tree removal, may result from removal of the existing footbridge adjacent to the Physical Science Building and installation of the new bridge. Dewatering of Big Chico Creek could also temporarily affect additional riparian vegetation growing adjacent to the project boundaries, depending on the length of time necessary to complete work and the season of construction. Indirect impacts to riparian vegetation may occur under unanticipated circumstances, which would result in adverse impacts to riparian resources such as disturbance during cleanup operations. However, riparian habitat avoidance and compensation measures as set forth in **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid riparian habitat impacts to a ***less-than-significant*** level.

c) While a formal wetland delineation was not conducted at the time of the reconnaissance survey, Big Chico Creek was identified as a potential waters of the U.S. and falls under the jurisdiction of the Corps per Section 404 of the CWA. Implementation of the proposed project is not expected to result in permanent impacts to potential waters of the U.S., as all project features (i.e., abutments, etc.) would continue to be placed outside of these wetland areas. However, temporary impacts are anticipated through a variety of construction-related activities (including the placement of scaffolding, equipment, and dewatering, etc.). As part of the proposed project, the following permits are expected to be obtained prior to construction: a Clean Water Act Section 404 Nationwide Permit from the Corps; a Clean Water Act Section 401 Water Quality Certification Waiver from the Regional Water Quality Control Board; and a California Fish and Game Code 1600-1602 Streambed Alteration Agreement from the CDFW. All permit requirements will be implemented to mitigate impacts to waters of the U.S. and reduce impacts to water quality during construction. Additionally, the implementation of the various water quality BMPs and habitat avoidance/compensation measures as set forth in **Mitigation Measure HWQ-1 "Implement Water Quality Best Management Practices"** and **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures" would** reduce or avoid impacts to a ***less-than-significant*** level.

d) Riparian habitat within the project site that is concentrated along the banks of Big Chico Creek may provide rearing and nesting habitat for wildlife (aquatic and terrestrial) and function as a movement and dispersal corridor. This riparian habitat also extends into portions of the study area where the Physical Science footbridge will be removed and installed. Terrestrial wildlife may use this portion of the riparian habitat as a movement and dispersal corridor and as foraging and nesting habitat. There is the potential for the riparian habitat along Big Chico Creek will be subject to permanent impacts associated

with tree removal during construction activities and temporary impacts associated with dewatering. However, riparian habitat avoidance and compensation measures as set forth in **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid riparian habitat impacts to a ***less-than-significant*** level.

e) The City of Chico has a tree-preservation policy to preserve large historic oaks and native trees. While a formal tree survey has not been conducted for the Project area, native oak species and other species protected by the City of Chico were observed during the field visit along the banks Big Chico Creek. Construction activities may occur within the dripline of native oak trees or landmark trees, or may result in the direct removal of native oak trees or landmark trees. Work within the dripline of trees may cause permanent damage to the root system and the subsequent loss of the tree. The City of Chico General Plan calls for a minimum 25 foot setback from the top of creek banks as well as preserving and enhancing Chico's creeks and riparian corridors. In addition to the General Plan, a separate tree preservation policy is also in place under the City of Chico municipal code. The tree preservation policy calls for a tree removal permit prior to construction activities as well as replacement plantings which require for every six inches in DBH removed, a new 15 gallon tree will be planted on-site. Replacement trees will be of similar species and shall be placed in areas dedicated for tree plantings. However, native tree avoidance and compensation measures as set forth in **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid native tree impacts to a ***less-than-significant*** level.

f) Although the study area is located within the Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan (Plan) planning area, the proposed conservation plan has not yet been approved. The Butte County Association of Governments is developing a Habitat Conservation and Natural Community Conservation Plan. Therefore, the proposed project will have ***no impact*** on any Habitat Conservation Plan or Natural Community Conservation Plan.

Mitigation Measures

Mitigation Measure BIO-1: Implement Special Status Fish Avoidance and Compensation Measures. CSU Chico shall complete and/or ensure that the construction contractor implements the following special status fish avoidance/compensation measures:

- To avoid and minimize water quality impacts associated with a dewatering plan (should it be required), site preparation and dewatering activities will occur from June 1 to October 1 (but may be extended to November 1 with approval by NMFS). This is a period of the year when NMFS' Endangered Species Act (ESA) listed species are least likely to occur in the Project area.
- Prior to dewatering, a qualified fisheries biologist will design and conduct a fish and wildlife rescue and relocation effort to collect fish and other wildlife species from the area

within the dewatering area involving the capture and return of those animals to suitable habitat within Big Chico Creek. To ensure compliance, a fisheries biologist will provide observation during initial dewatering activities. The fish rescue plan will be approved by NMFS, USFWS, and CDFW prior to dewatering activities.

- An approved biologist will permanently remove, from within the project site, any exotic wildlife species, such as bullfrogs and crayfish, to the extent possible.
- After construction activities are finalized, the stream channel will be restored to preconstruction conditions.
- Purchase rearing habitat credits at a 1:1 ratio (or as determined in consultation with the NMFS) for the placement of bank stabilization materials within the project site at a NMFS approved anadromous fish conservation bank for impacts to Chinook and steelhead fish species.
- If gabion mats or other bank stabilization methods are placed on the stream bank, use a soil-rock mixture to facilitate re-vegetation of the project site. A ratio of rock to soil (70:30) is recommended. NMFS suggests a soil-rock mixture on top of the rock revetment to allow native riparian vegetation to be planted to ensure shaded riverine aquatic (SRA) habitat is replaced.

Mitigation Measure BIO-2a: Conduct Pre-construction Surveys for Western Pond Turtle. No more than two weeks prior to the commencement of ground-disturbing activities, CSU Chico shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles and their nests. The results of these surveys will be documented in a technical memorandum that will be submitted to CDFW (if turtles are documented). If the pre-construction surveys do identify western pond turtle nests within areas that may be affected by site construction, species avoidance measures shall occur through implementation of **Mitigation Measure BIO-2b.**

Mitigation Measure BIO-2b: Implement Western Pond Turtle Avoidance Measures. Should a western pond turtle nest be located within a work area, CSU Chico shall ensure that a qualified biologist (with the appropriate permits from the CDFW) relocate the eggs to a suitable facility for incubation and release hatchlings into the creek system in late fall. The biologist will be present on the project area during initial ground clearing, grading, and during all other construction activities.

Mitigation Measure BIO-3a: Remove Vegetation outside Nesting/Breeding Season. If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31). If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), pre-construction surveys (**Mitigation Measure BIO-3b** and **BIO-3c**) would be performed prior to the start of project's construction phase.

Mitigation Measure BIO-3b: Conduct Pre-construction Nesting Bird Surveys. Should project-related construction or grading activities be scheduled during bird nesting season (February 1 to August 31), pre-construction surveys would be required by a qualified wildlife biologist to identify active Swainson's hawk nests within ½-mile of proposed construction activities and nests of other species within 250 feet of proposed construction activities. The surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of construction. The results of the survey would be emailed to CDFW at least three days prior to construction. Surveys would be conducted by a qualified biologist. For Swainson's hawk surveys, guidelines provided in the *Recommended Timing and Methodology for Swanson's Hawk Nesting Survey in the Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) would be followed where possible**.**

If the pre-construction surveys do not identify any nesting raptors or other nesting migratory bird species within areas potentially affected by construction activities, no further mitigation would be required. If the pre-construction surveys do identify nesting raptors or other nesting bird species within areas that may be affected by site construction, nest avoidance measures shall occur through implementation of **Mitigation Measure BIO-3c**.

Mitigation Measure BIO-3c: Implement Avoidance Measures for Active Bird Nest Sites. Should active nest sites be discovered within areas that may be affected by construction activities, CSU Chico shall ensure that the construction contractor implement the following nest avoidance measures:

- **Swainson's Hawk:** If active nests are found, CDFW would be notified and construction-related impacts to nesting birds would be avoided by establishment of appropriate no-work buffers to limit project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the CDFW, although a ¼ mile buffer would be used when possible. The no-work buffer zone would be delineated by highly visible temporary construction fencing. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird(s). No project-related construction activity would commence within the no-work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active.
- **Yellow Warbler:** If active nests are found, project-related construction impacts would be avoided by establishment of appropriate no-work buffers to limit Project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the CDFW although a 500-foot would be used when possible. The no-work buffer zone would be delineated by highly visible temporary construction fencing. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. No project-related construction activity would commence within the no-work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active.

Mitigation Measure BIO-4a: Conduct Pre-Construction Survey for Bat Species. A bat survey shall be conducted by a qualified biologist to establish the presence or absence of roosting bats prior to May 1st in order to put exclusionary measures into place before the active season of

this species (no exclusionary efforts should be conducted during May 1st to August 31st of the construction year) and to prevent bats from utilizing the bridge structure. If no roosting bats are found, no further mitigation would be necessary;

Mitigation Measure BIO-4b: Implement Bat Species Exclusion Measures Prior to Active Season. If pallid bats or other bat species are detected within the roost at the time of implementation of **Mitigation Measure BIO-4a**, excluding any bats from roosts will be accomplished by a qualified biologist prior to the removal of roost trees and the bridge. The timing and other methods of exclusionary activities will be developed by the qualified biologist in order to reduce the stress on the bats to the amount feasible while taking into account project schedule. Exclusionary devices, such as plastic sheeting, plastic or wire mesh, can be used to allow for bats to exit but not re-enter any occupied roosts. Expanding foam and plywood sheets can be used to prevent bats from entering unoccupied roosts.

Mitigation Measure BIO-5a: Implement VELB Avoidance Measures. CSU Chico shall ensure that the construction contractor maintain a setback of 100 feet from all elderberry shrubs to avoid impacts to valley elderberry longhorn beetle. If the 100 foot setback is not feasible, the construction contractor shall implement a number of avoidance measures (in consultation and approval by the USFWS). Such measures may include installing fencing around the shrubs, providing construction worker awareness training, transplanting of shrubs, and requiring biological monitoring during construction. The *1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS, 1999) provides applicable avoidance and minimization measures. No construction shall occur within 100 feet of all elderberry shrubs identified onsite until final approvals are received from the USFWS (Biological Opinion or concurrence letter). Upon USFWS approvals, the construction contractor shall create a minimum of 20-foot buffer around each potentially affected shrub. Work crews shall be briefed on the status of the beetle, the need to protect its host plant (elderberries), requirements to avoid damaging elderberry shrubs, and possible penalties for not complying with identified avoidance and minimization measures. In addition, construction workers should be made aware of the habitat needs of valley elderberry longhorn beetle and the location of protection areas on the site.

Mitigation Measure BIO-5b: Implement VELB Habitat Compensation Measures. To compensate for temporary and permanent impacts to elderberry shrubs (through removal or damage during construction activities), CSU Chico shall consult (and implement) with the USFWS on compensatory mitigation for permanent and temporary impacts; mitigation may be purchased at a USFWS-approved mitigation bank if approved by the USFWS. If transplantation is advised by the USFWS, locations of transplanted shrubs and conservation areas shall be approved by USFWS prior to transplanting. USFWS associated species planting requirements shall also be followed. All transplants shall follow the procedures outlined in the *USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle.*

Mitigation Measure BIO-6: Implement Riparian Habitat Avoidance and Compensation Measures. CSU Chico shall implement the following riparian habitat avoidance and compensation measures:

- Prior to removal of any trees, an ISA Certified Arborist will conduct a tree survey in areas that may be impacted by construction activities. This survey will document tree resources that may be adversely impacted by implementation of the proposed project. The survey will follow standard professional practices.
- Current riparian vegetation and oaks will be retained to extent feasible. A Tree Protection Zone (TPZ) will be established around any tree or group of trees to be retained. The TPZ will be delineated by an ISA Certified Arborist. The TPZ will be defined by the radius of the dripline of the tree(s) plus one foot. The TPZ of any protected trees will be demarcated using fencing that will remain in place for the duration of construction activities.
- Construction-related activities will be limited within the TPZ to those activities that can be done by hand. No heavy equipment or machinery will be operated within the TPZ. Grading will be prohibited within the TPZ. No construction materials, equipment, or heavy machinery will be stored within the TPZ.
- To ensure that there is no net loss of riparian habitat, CSU Chico will create or restore riparian habitat that is of a like function and value to the habitats lost. The permanent degradation of riparian habitat will be compensated for at a 1:1 ratio through the purchase of similar habitat value from a CDFW-approved conservation bank. Compensation will take the form of riparian preservation or creation in accordance with CDFW mitigation requirements, as required under project permits. Preservation and creation may occur onsite through a conservation agreement or offsite through purchasing credits at a Corps approved mitigation bank.
- This mitigation will include compensation for the loss of riparian habitat and will include the planting of Valley foothill/floodplain/ mixed riparian as appropriate. The planting plan will be implemented as detailed in a Restoration Plan approved by CDFW. The plan will includes performance standards for revegetation that will ensure successful restoration of the riparian areas.
- CSU Chico will replace any trees removed to ensure no net loss of habitat functions or values. All trees planted will be purchased from a locally adapted genetic stock obtained within 50 miles of the project site, where feasible. All species will be replaced at a 1:1 ratio.
- CSU Chico will protect other wetlands, riverine and associated riparian habitats located in the vicinity of the project site by installing protective fencing. Protective fencing will be installed along the edge of construction areas including temporary and permanent access roads where construction will occur within 200 feet of the edge of wetland and riverine habitat (as determined by a qualified biologist). The location of fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Signs will be erected along the protective fencing at a maximum spacing of one sign per 50 feet of fencing. The signs will state: “This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment.” The signs will be clearly readable at a distance of 20 ft, and will be maintained for the duration of construction activities in the area.
- Where riparian vegetation occurs along the edge of the construction easement, CSU Chico will minimize the potential for long-term loss of riparian vegetation by trimming vegetation

rather than removing the entire plant. Trimming will be conducted per the direction of a biologist and/or Certified Arborist.

Cultural Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
4.	**CULTURAL RESOURCES — Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Setting

A Cultural Resources Technical Report completed by ESA for the proposed project includes additional information regarding the historic context of the Physical Science Bridge, the Selvester's Café Bridge, and the surrounding CSU Chico campus, as well as a detailed evaluation of the bridges consistent with local, state, and federal register criteria (ESA, 2014).

As part of the analysis conducted for the technical report, ESA completed an archival review of records maintained at the Northeast Information Center (NEIC) of the California Historical Resources Information System at CSU Chico, a pedestrian field survey in August 2013, and contact with the Native American Heritage Commission (NAHC) as well as interested Native American tribes and individuals.

The NEIC records search conducted on August 15, 2013 (File No. W13-139) indicated that fourteen cultural resource studies had been previously conducted within the ½-mile records search study radius. Additionally, the records search identified ten cultural resources previously recorded within the records search radius, including the University Center Building (Site Designation #04-3136) and the Relocation Site of Bidwell's Indians (approximately from 1849-1868) (Site Designation #BUT-5488?295). The University Center Building is no longer in existence. Other identified resources under the NEIC records search remain unevaluated. No additional historic or prehistoric period resources were identified during the field survey of the project sites.

The evaluations of the Physical Science and the Selvester's Café bridges concluded that both bridges are not considered eligible for listing in the local, state or federal registers (ESA, 2014).

The NAHC was contacted on August 23, 2013 to request a database search for sacred lands or other cultural properties of significance within or adjacent to the project area. A response was received on September 3, 2013. The sacred lands survey did not identify the presence of cultural

resources in the project area. The NAHC provided a list of Native American contacts that might have further knowledge of the project area with respect to cultural resources. Each person or organization identified by the NAHC was contacted by letter on December 17, 2013. An email from the Mechoopda Indian Tribe of Chico Rancheria was received by CSU Chico on December 19, 2013. However, the email provided no additional information regarding the presence of identified cultural resources within and in close proximity to the project area. To date, no additional responses have been received.

Discussion

a) The proposed project would not likely cause a significant impact to the eligibility of a historical resource. As discussed above, the evaluations of the Physical Science and Selvester's Café bridges concluded that both bridges are not considered eligible for listing in the local, state or federal registers. No additional historic resources were identified within the project sites. Therefore, implementation of the proposed project would result in ***no impacts*** to the significance of a historical resource (as defined in §15064.5) and no mitigation measures are required.

b) The records search of all pertinent survey and data performed at the NEIC did not identify any recorded archaeological resources on or near the project site. The NAHC was contacted on August 23, 2013 and was requested to search their Sacred Lands File. The NAHC's September 3, 2013 response stated that a record search of the sacred lands file failed to indicate the presence of Native American cultural resources within the project site. Although no archaeological remains have been identified within the project site, there is a chance that construction activities associated with the proposed project could result in accidentally discovering archaeological resources. Implementation of **Mitigation Measures CR-1 "Discovery of Cultural Resources During Ground-Disturbing Activities"** and **CR-2 "Halt Work if Human Skeletal Remains are Identified During Construction"** would ensure that previously unidentified cultural resources (including prehistoric, historic or paleontological subsurface cultural resources) are appropriately identified and protected in the event of an unexpected discovery. Therefore, the impact would be less***-than-significant*** with incorporation of mitigation.

c) Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils – particularly vertebrate fossils – are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are considered highly significant records of ancient life.

No known paleontological resources or unique geologic features exist within the project site; therefore, the proposed project is not likely to destroy, either directly or indirectly, a unique paleontological resource or site, or geological feature. As described above under Item b), if such a resource should be encountered during construction, work would stop

until the resource can be evaluated and a determination made of its significance and need for recovery, avoidance, and/or mitigation. With implementation of **Mitigation Measures CR-1** and **CR-2**, the proposed project would result in a ***less-than-significant*** impact on paleontological resources or unique geologic features.

d) Based upon a records search, no human remains are known to exist within the project site. In the unlikely event that human remains are discovered, work within the area will be stopped and the Butte County Coroner will be notified immediately. Work will only resume after the investigation and in accordance with any requirements and procedures imposed by the Butte County Coroner. In the event that the bone most likely represents a Native American interment, the NAHC will be notified so that the most likely descendants can be identified and appropriate treatment can be implemented. Therefore, with the incorporation of **Mitigation Measures CR-1** and **CR-2**, the proposed project would result in a ***less-than-significant*** impact with respect to disturbing any human remains, including those interred outside of formal cemeteries.

Mitigation Measures

Mitigation Measure CR-1: Discovery of Cultural Resources During Ground-Disturbing Activities. The construction contractor shall cease work if prehistoric, historic or paleontological subsurface cultural resources are discovered during ground-disturbing activities. If cultural resources are discovered during ground-disturbing activities, all activity in the vicinity shall cease until the discovery is evaluated by an archaeologist or paleontologist who meets the requirements of the Secretary of the Interior's Qualification Standards. If the archaeologist/paleontologist determines that the resources may be significant, no further work in the vicinity of the resources shall take place until appropriate treatment is determined and implemented.

The need for archaeological and Native American monitoring during the remainder of the project will be re-evaluated by the archaeologist as part of the treatment determination, if deemed appropriate. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, the project proponent will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.

Mitigation Measure CR-2: Halt Work if Human Skeletal Remains are Identified During Construction. If human skeletal remains are uncovered during project construction, work must immediately halt and the Butte County Coroner must be contacted to evaluate the remains; the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines must be followed. If the County Coroner determines that the remains are Native American, the project proponent will contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to

generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

Energy

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
5. ENERGY — Would the project:				
a) Result in a substantial increase in overall or per capita energy consumption?	☐	☐	☒	☐
b) Result in wasteful or unnecessary consumption of energy?	☐	☐	☒	☐
c) Require or result in the construction of new sources of energy supplies or additional energy infrastructure capacity the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Conflict with applicable energy efficiency policies or standards?	☐	☐	☒	☐

Discussion

a-e) The proposed project will result in temporary use of energy as fuels for construction equipment. Construction activities are estimated to last approximately four to five months. The proposed project involves bridge replacement/restoration activities and would not result in the development of land uses (i.e., residential, commercial, etc.) that would increase the demand for local or regional sources of energy. The use of energy for the construction of the proposed project is minimal and would not require the construction of new sources of energy or energy infrastructure for implementation of the proposed project. The proposed project will also not conflict with any energy efficiency policies or standards. The impact to energy resources is considered ***less-than-significant***.

Geology, Soils, and Seismicity

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
6. GEOLOGY, SOILS, AND SEISMICITY — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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 wastewater?	☐	☐	☐	☒

Environmental Setting

Soils

The proposed project site is located in the Sacramento Valley, within the northern portion of the Great Valley Geomorphic Province of California. Formation of the valley occurred by tectonic shifting of the Sierran Block; the western side dropping to form the valley and the eastern side being uplifted to form the Sierra Nevada. The valley is filled with a thick deposit of heterogeneous marine and lacustrine sediments, and surficial alluvial materials, which derived from erosion of the adjacent Sierra Nevada to the east and the Coast Ranges to the west. The depth of the sediments varies from a thin veneer at the edges of the valley to depths in excess of 50,000 feet (CSU Chico, 2005b).

According to the Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California, the near-surface deposits in the vicinity of the campus consist of the upper member of the Modesto Formation. These deposits generally consist of fine-

grained sand, silt and clay derived from the same sources of modern alluvium. The thickness of the basin deposits ranges from a few feet along the valley perimeter to as much as 200 feet in the center of the valley (CSU Chico, 2005b).

According to the U.S.D.A. Soil Conservation Service Report and General Soil Map for Butte County, the Chico area, including the CSU Chico campus, is characterized by two major soil associations: Vina-Farwell and Honcut. Vina-Farwell association soils are of a medium to moderately fine texture, very deep, and well-drained with slow to moderate permeability. Honcut association soils are moderately course textured recent alluvial deposits of mixed origin that are very deep, gravelly in places, and well-drained. Erosion is slight and is confined to stream banks. Permeability is moderate to rapid (CSU Chico, 2005b).

Faults and Seismicity

According to the City of Chico General Plan's Safety Element, Chico and the surrounding area are relatively free from significant seismic and geologic hazards. Furthermore, there are no known or inferred active faults within the City (City of Chico, 2011), and there are no Alquist-Priolo Special Studies Zones within the CSU Chico campus or nearby vicinity. The nearest known active fault is the Cleveland Hill fault, which is located 26 miles southeast of the campus (CSU Chico, 2005b).

Discussion

a.i – iv) As described in the Environmental Setting discussion above, the proposed project is located within a region of low-seismic activity. Given that the project area is relatively free from significant seismic activity, impacts related to ground rupture, shaking, failure, or landslides are considered less than significant. Nevertheless, development of all structures on the CSU Chico campus, including the proposed bridge replacement, is required to be built to the seismic requirements of the Uniform Building Code (UBC). As a part of the design process, CSU Chico will ensure that bridge design is conducted in accordance with State law. Building plans must also be approved by the Division of the State Architect for compliance with handicapped access regulations. Plans are also reviewed by the Seismic Peer Review Board. Adherence to the standards identified above will ensure that the proposed project will be designed such that potential impacts to people from ground rupture, shaking, failure, or landslides are ***less-than-significant***, with no further mitigation measures required.

b) Implementation of the proposed project would involve bridge restoration (i.e., painting) and the demolition of the existing Physical Science Bridge along with its replacement with a wider pedestrian, cyclist, and emergency vehicle access bridge. Equipment staging and removal of the existing bridge has the potential to disturb and weaken soil on either bank of the Big Chico Creek. Similarly, construction of the replacement bridge would require the installation of forms and supports into the Creek's banks that has the potential to result in erosion and the loss of topsoil. Soil erosion has the potential to destabilize the Creek's banks, as well as create water quality issues (on this latter issue, see Hydrology

and Water Quality). Implementation of **Mitigation Measure GS-1 "Implement Soil Erosion Best Management Practices**.[1]**"** would ensure that a variety of sediment retention and erosion control practices (i.e., placement of fiber rolls, silt fences, etc.) are implemented during construction-related activities. Therefore, the impact would be ***less-than-significant*** with incorporation of mitigation.

c, d) As described in the Environmental Setting discussion above, the project area is characterized by two major soil associations: Vina-Farwell and Honcut. These are not considered expansive soils as identified in Table 18-1-B of the UBC. Of these two soil types, Honcut, which is confined to stream banks, is subject to "slight" erosion. The proposed project, as described previously, would be required to be built to the seismic requirements of the UBC. Building plans must also be approved by the Division of the State Architect for compliance with handicapped law. Plans are also reviewed by the Seismic Peer Review Board. Adherence to the standards identified in the UBC will ensure that the proposed project is designed to withstand potential damage from landslides, lateral spreading, subsidence, or liquefaction that may be caused by seismic ground shaking. Furthermore, **Mitigation Measure GS-1**, as identified in the previous impact discussion, will ensure that existing soils at the project site is retained and not eroded during construction activities. Through adherence to the above-identified standards and mitigation measure, potential impacts related to damage from landslides, lateral spreading, subsidence, or liquefaction as a result of the proposed project are considered ***less-than-significant***.

e) The proposed project does not involve the installation of a septic tank or alternative wastewater disposal system. Therefore, there is ***no impact*** associated with the installation of these kinds of features into unsuitable soil.

Mitigation Measures

Mitigation Measure GS-1: Implement Soil Erosion Best Management Practices. Prior to and during demolition and construction activities, CSU Chico will ensure that the contractor implements the following soil erosion best management practices (BMPs):

- Placing fiber rolls around onsite drain inlets to prevent sediment and construction-related debris from entering inlets.
- Placing fiber rolls along the perimeter of the site to reduce runoff flow velocities and prevent sediment from leaving the site.
- Placing silt fences down gradient of disturbed areas to slow down runoff and retain sediment.
- Specifying that all disturbed soil will be seeded, mulched, or otherwise protected by October 15th.

[1] **Mitigation Measure GS/HW-1** was originally set forth in the EIR for the CSU Chico Campus Master Plan 2004 (SCH# 2004092071) (see Mitigation Measure #3.5-3). Because the proposed project was not an identified project in the Campus Master Plan, however, the measure has been reintroduced in this Initial Study for the purpose of reducing potential impacts associated with erosion to less-than-significant levels.

- Stabilizing construction entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- Applying hydraulic mulch that temporarily protects exposed soil from erosion by raindrop impact or wind.

Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion

a) The purpose of the proposed project is to replace the Physical Science Bridge and restore the Selvester's Café Bridge to ensure vehicle emergency access and adequate, accessible, and safe travel for CSU Chico campus users. Consequently, the proposed construction projects are considered small, short-term in nature and would not generate substantial air quality (including greenhouse gas emission) pollutant concentrations. The proposed project would not increase roadway facilities or service capabilities that would induce unplanned growth or remove an existing obstacle to growth. The proposed project would not increase long-term traffic levels and there would be no operational impacts associated with greenhouse gas emissions. Impacts are considered ***less-than-significant.***

b) Both the Physical Science and the Selvester's Café bridges are predominately for pedestrian/bicycle use. Implementation of the proposed project will ensure the continued safe use of these bridges by pedestrian/bicycle users, which support activities that result in reduced levels of greenhouse gas emissions. Consequently, the proposed project would result in ***no impact*** by not conflicting with local/regional greenhouse gas reduction plans, policies or regulations.

Hazards and Hazardous Materials

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
8. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Environmental Setting

The proposed project is located on the CSU Chico campus, which is not included on any list of hazardous materials sites (CSU Chico, 2005b). The project site is also less than two miles from Ranchero Airport, a private use airport located west of the CSU Chico campus. Chico High School is located about 800 feet north of the project sites. Rosedale Elementary School is located about 3,000 feet to the west.

Discussion

a – c) Implementation of the proposed project would not lead to the direct, long-term use or disposal of any hazardous materials. Construction activities will involve the use of petroleum-based fuels for maintenance and construction equipment, which would be transported to the site periodically by vehicle and would be present at the site for short

periods of time. None of these materials would be permanently stored on site. Furthermore, all hazardous materials used for the construction of the proposed replacement bridge would be used, stored, and transported according to applicable federal, state, and University requirements. While typical bridge restoration activities (including paint application and recycling, etc.) will include the use of a variety of hazardous materials, the construction contractor is obligated to store and handle these materials (and associated wastes) in compliance with all Federal, State, and local regulations, as well as in adherence to Occupational Safety and Health (OSHA) worker safety standards, which includes worker training related to onsite personal safety, hazardous materials storage and handling procedures (including container labeling, completion of material safety data sheets, employee training, and emergency response procedures. Additionally, the construction contractor would be responsible for developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) (see Hydrology and Water Quality, below). Therefore, impacts associated with the transport, use, or disposal of hazardous materials, the release of hazardous materials into the environment, and the possibility of hazardous emissions into the environment near existing or proposed schools is considered ***less-than-significant,*** with no further mitigation measures required.

d) As described in the Environmental Setting discussion, the proposed project is not located on a site that is included in a list of hazardous materials sites. Therefore, implementation of the proposed project would not create a significant hazard to the public or the environment through exposure to known hazardous materials. There is ***no impact.***

e) The closest public-use airport to the proposed project is Chico Municipal Airport, which is located over three miles away from the project site to the northeast. No safety hazards are anticipated for workers at the project site and there is ***no impact***.

f) The proposed project is located less than two miles away from Ranchero Airport, which is a privately owned airport west of the project site. The proposed project would result in the replacement of an existing bridge on the CSU Chico campus, which is an existing education facility within an urban setting. The proposed project would not result in the intensification (more people/acre) of any existing or new land uses near the Airport, nor would it result in the creation of dust, smoke, hazardous wildlife attractants, or other features that would potentially obstruct aircraft operating out of Ranchero Airport. Therefore, the proposed project would have ***no impact*** to the safety of those living and working in the vicinity of Ranchero Airport.

g) One of the purposes of the proposed bridge replacement is to expand the Physical Science Bridge to allow for emergency vehicle access. The current bridge that traverses Big Chico Creek is only wide enough to accommodate pedestrian traffic. Currently, emergency vehicles seeking to reach the central portions of the southern CSU Chico campus are required to enter via access roads from Warner Street or West 2nd Street. Installation of a new access bridge that would allow emergency vehicles an additional

point of entry to the southern portions of the campus has the potential to reduce emergency response times. As such, the proposed project would have a positive impact on emergency response or evacuation plans. Therefore, there is ***no impact***.

h) Implementation of the proposed project would result in the replacement/restoration of existing bridges on the CSU Chico campus. The campus is in an urbanized section of the City of Chico, and is removed from the foothill region, which the City of Chico General Plan Safety Element characterizes as the area most "prone to wildland fire" (City of Chico, 2011). The proposed project would not result in the creation of new buildings or residences that would intensify the number of people currently using this section of the University. Furthermore, construction activities would be required to adhere to all applicable state, regional, and University policies related to the transportation, use, and storage of hazardous materials that may cause a fire, and no hazardous materials would be stored on site. Given the urbanized setting and the above described factors dictating the use of hazardous materials during construction, impacts associated with exposing people or structures to a significant risk of loss, injury, or death involving wildlife fires as a result of the proposed project are ***less-than-significant,*** with no further mitigation measures required.

Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in 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 a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
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?	☐	☐	☒	☐
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

Environmental Setting

The proposed project site is located within and adjacent to the Big Chico Creek stream channel. The Big Chico Creek watershed originates from a series of springs, at an elevation of about 5,400 feet, northeast of the City of Chico, forming its main channel near Butte Meadows. Big Chico Creek enters the City of Chico through Upper and Lower Bidwell Park and reaching One-Mile Dam just east of the Vallombrosa and Mangrove/Pine intersection. The creek then flows

westward through the CSU Campus. Within the City, the creek banks remain in a relatively natural state.

Section 303(d) of the federal Clean Water Act (CWA) requires states to identify the waters of the state that do not meet the CWA's national goal of "fishable, swimmable" and to develop total maximum daily loads (TMDLs) for such waters, with oversight of the United States Environmental Protection Agency (USEPA). These waters are commonly referred to as "impaired." A TMDL is a quantifiable assessment of potential water quality issues, contributing sources, and load reductions or control actions needed to restore or protect bodies of water. The Big Chico Creek watershed is not listed on the 303(d) list.

Discussion

a) Bridge replacement activities at the project site have the potential to expose bare soil and potentially generate other water quality pollutants that could be exposed to precipitation and subsequent entrainment in surface runoff to Big Chico Creek. Construction activities related to the bridge replacement project will involve soil disturbance, pile driving, excavation, cutting/filling, and grading activities could result in increased erosion and sedimentation to Big Chico Creek and waters downstream. If precautions are not taken to contain contaminants, construction could produce contaminated stormwater runoff (nonpoint source pollution), a major contributor to the degradation of water quality. Bridge restoration activities would not result in large-scale ground disturbing or earth moving activities and no in-water maintenance activities are proposed that would directly affect water quality or aquatic life.

Construction is estimated to take approximately five months. Prior to in-channel bridge replacement activities, the area of the channel where construction activities will occur will be dewatered. Dewatering the construction area will help minimize the potential for transport of sediments and pollutants from construction activities. Additionally, a variety of design measures (including, use of a wash water containment system; limiting the size and location of project staging areas away from the river channel; and the use of specialized equipment, including paint blaster/recycling machine and dust collector, that will prevent the release of hazardous materials into the creek) and compliance with federal, state, and local regulations regarding the storage, handling, use, and disposal of hazardous materials will significantly minimize these water quality impacts as part of the bridge restoration phase of the project. However, erosion and inadvertent spills of oil or fuels from maintenance equipment could still be a source of contamination to Big Chico Creek. However, with implementation of **Mitigation Measure GS-1: Implement Soil Erosion Best Management Practices** (see above under Geology, Soils, and Seismicity) and **Mitigation Measure HWQ-1 Implement Water Quality Best Management Practices**, the proposed project would ensure that no project-related water quality impacts would occur. Therefore, the impact would be ***less-than-significant*** with incorporation of mitigation.

b) The proposed bridge replacement/restoration project would not construct a significant amount of new impervious surfaces that would impede surface water drainage into the soil or generate additional demand for groundwater water resources that affect groundwater levels. There is ***no impact***.

c, d, e) The proposed project would remove the existing Physical Science Bridge and replace with two bridges that would result in a slightly greater impervious surface area. Consequently, the proposed project would result in a slight increase in runoff over existing conditions from the increase in surface area of the new bridges. However, the new bridges would not result in a significant increase in drainage and erosion from the project site that would generate a substantial amount of runoff that would exceed the capacity of Big Chico Creek. This impact is ***less-than-significant,*** with no further mitigation measures required.

f) See discussion under a) above.

g, h, i) The proposed bridge replacement/restoration project will not construct housing or other structures that would result in the exposure of people or structures to 100-year flood hazards. Additionally, the proposed project will not result in the construction of structures that would impede or redirect flood flows in Big Chico Creek. This impact is ***less-than-significant***, with no further mitigation measures required.

j) The project site is not located near any tidally influenced water bodies nor is it near any large bodies of water that could be affected by a tsunami or seiche. Additionally, the project site is flat and the lack of water bodies nearby limits the possibility of a mudflow hazard to the project site. There is ***no impact***.

Mitigation Measures

Mitigation Measure HWQ-1: Implement Water Quality Best Management Practices. CSU Chico will ensure that the project contractor comply with the requirements of a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the contractor would be required to prepare and implement a SWPPP into their construction plans, prior to initiating construction activities, identifying BMPs to be used to avoid or minimize any adverse effects before, during, and after construction to surface waters. The following BMPs will be incorporated into the project as part of the construction specifications:

- Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on applicable access roads, construction areas, and stockpiles.
- Properly dispose of oil or other liquids.
- Fuel and maintain vehicles in a specified area that is designed to capture spills. All fueling and maintenance of vehicles and other equipment (including staging areas), will be located at least 20 meters from Big Chico Creek and any other drainages on site.

- Fuels and hazardous materials would not be stored on site.
- Inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids.
- Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are expected to begin in the spring/summer of 2015. If rains are forecasted during construction, additional erosion and sedimentation control measures would be implemented.
- Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event.
- Train construction workers in storm water pollution prevention practices.
- Revegetate disturbed areas in a timely manner to control erosion.

Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
10. NOISE — Would the project:				
a) Result in 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?	☐	☒	☐	☐
b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Setting

Noise is defined as unwanted sound that evokes a subjective reaction to the physical characteristics of a physical phenomenon. Ambient noise in the project area is generated primarily by traffic along adjacent surface streets (i.e. Arcadian Avenue and Mansion Avenue) and by land uses adjacent to the project site (i.e., CSU Chico and residential land uses). Existing noise levels in the project area are in the range of 60 to 70 decibels (dB) day-night sound level (Ldn), with ambient noise generated by surrounding land uses and traffic on adjacent streets.

The City of Chico has established policies and regulations concerning the generation and control of noise that could adversely affect their citizens and noise-sensitive land uses. The City of Chico Municipal Code, Chapter 9.38 "Categorical Exemptions" contains the following guidelines related to construction noise:

> *The following activities or sources of noise are exempt from the provisions of this chapter:*
>
> *B. Construction and Alteration of Structures. Notwithstanding any other provision of this chapter, between the hours of ten a.m. and six p.m. on Sundays and holidays, and seven a.m. and nine p.m. on other days, construction, alteration or repair of structures shall be subject to one of the following limits:*

1. No individual device or piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to twenty-five (25) feet from the equipment.

2. The noise level at any point outside of the property plane of the project shall not exceed eighty-six (86) dBA.

Although bridge replacement/restoration activities and equipment may cause a noticeable increase in ambient noise levels near the project site and construction staging areas, all project-related noise increases are considered to be temporary and short-term in nature. Project-related noise would fluctuate, depending on replacement/restoration activity, equipment type, and duration of use, distance between noise source and receptor, and presence or absence of barriers between noise source and receptor. The nearest residences to the project site are located approximately 120 feet to the north of the project site along Arcadian and Mansion avenues. Campus uses including classrooms are also located adjacent to the project site. Trees and shrubbery would provide for some attenuation of the noise.

Discussion

a-d) **Construction Noise Effects:** The proposed project would generate temporary construction noise and vibration resulting from bridge replacement/restoration activities. Construction activity noise levels at and near the project sites would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment (see Table 1 "Construction Equipment", above). Noise would be generated by equipment such as air compressors, paint recyclers/applicators, water trucks, cranes, backhoes, pile drivers, and other miscellaneous equipment. Construction worker vehicles (10 to 20 average daily vehicle trips) and material/equipment deliveries would also raise ambient noise levels along site access routes, depending on the number of haul trips made and types of vehicles used. **Table 3** shows typical noise levels produced by various types of construction equipment. The exact type and number of construction equipment will be based on the contractor's judgment and what equipment is reasonably necessary to complete the project, using industry standard means and methods.

Construction noise is a temporary impact. The City of Chico Municipal Code (Section 9.38 "Categorical Exemptions") exempts construction-related noise if the construction takes place between the hours of 7:00 a.m. and 9:00 p.m., on Monday through Saturday and does not exceed the noise level limits identified above under the "Environmental Setting" section.

While a detailed inventory of maintenance equipment that would be used for the proposed project is not available; this analysis estimates project-related noise assuming that typical construction equipment would be used during restoration activities. Table 3 presents a list of noise generation levels for typical equipment types similar to those

anticipated for the proposed project. A conservative but reasonable assumption is that some of the pieces of equipment (backhoe, paint applicators, air compressors, etc.) would operate simultaneously and continuously over at least a 1-hour period. If all of these pieces of equipment were to operate simultaneously, the combined-source noise level would be 86 dBA at a distance of 50 feet. The single-family residences located near the eastern side of the project site are all roughly 300 feet away from the nearest project site boundary. The combined noise levels would be less than 78 dBA (assuming 6 dBA attenuation) at 300 feet.

TABLE 3
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Level[a] (dBA, Leq at 50 Feet)
Dump truck	88
Portable air compressor	78
Concrete mixer (truck)	85
Scraper	88
Jackhammer	88
Dozer	87
Paver	89
Generator	76
Backhoe	85
Tucks	74-81
Paint Recycler	83 (dBA) at 120 feet

Source: (1) Paint Recycler, (Reed, personal communication). All other equipment types, Federal Transit Administration, 2006)

Construction activities for the proposed project, including hours of operation, would comply with the requirements set forth in the City of Chico Municipal Code. While the proposed project would not exceed City noise standards, implementation of **Mitigation Measure N-1**, which would require the project proponent to implement a series of noise-reducing measures, will further ensure that project site noise levels are maintained at acceptable standards. Because project construction activities would comply with the City's Municipal Code, and the project proponent would be required to adhere to the measures set forth in **Mitigation Measure N-1 "Implement Construction-Related Noise Reduction Measures"**, the impact from maintenance noise would be ***less-than-significant***.

Operational Noise Effects. The proposed project would have no long-term effects on noise levels, since the proposed project would not increase capacity at the project site or the connecting roadway. Once construction is completed noise levels would return to levels similar to the existing noise environment.

e) There are no airports within two miles of the proposed project. There would be ***no impact*** from airports upon people residing or working in the vicinity of the proposed project.

f) There are no private airstrips within two miles of the proposed project. There would be ***no impact*** from airstrips upon people residing or working in the vicinity of the proposed project.

Mitigation Measures

Mitigation Measure N-1: Implement Construction-Related Noise Reduction Measures. CSU Chico will ensure that the project contractor shall implement the following noise reducing measures:

- Maintenance equipment and vehicle noise would be minimized during project construction by muffling and shielding intakes and exhaust on maintenance/construction equipment (per the manufacturer's specifications) and by shrouding or shielding paint application/recycling equipment.
- All equipment, haul trucks, and worker vehicles would be turned off when not in use for more than 10 minutes.
- Residences and businesses would be notified about the type and schedule of maintenance activities at least two weeks prior to mobilization.

Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
11. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☐	☒

Environmental Setting

The following public services are located in the vicinity of the proposed project site.

Fire Protection

The City of Chico Fire Department (CFD) provides first response to emergencies in the unincorporated area through the Chico Urban Area, including CSU Chico's main campus. The CFD operates six fire stations and a Fire Training Center.

Under the command of a Fire Chief, the Department has 75 full-time personnel, 72 of which are uniformed. The department also maintains a force of 25 volunteer firefighters who are used on large emergencies for a total of 100 personal (CFD, 2013).

The nearest fire stations to the main campus are Station #1 (182 East 5th Avenue) and Station #2 (842 Salem Street). Station #2 is staffed by three firefighters and is equipped with a 1,500 Gallon per Minute (GPM) Engine and a 110 foot aerial ladder truck and would respond to an emergency on the main campus on the north side of Big Chico Creek. Station #1 is staffed with four firefighters with the same equipment as Station #2 and would be the first station to respond to an emergency on the main campus that is on the south side of Big Chico Creek (CSU Chico, 2005b).

Police Protection

The law enforcement service for the CSU Chico campus is provided by the University Police Department (UPD), which is located in the UPD Building at the corner of West 2nd and Chestnut Street. The UPD is a full-service state police agency staffed by fifteen sworn officers, operating 7 days a week, 24 hours a day. UPD officers enforce local, state and federal laws both on and off

campus and as state officers, their police authority includes concurrent jurisdiction with the Chico Police Department on adjacent streets and in the surrounding community. The UPD provides 24-hour patrol protection of university buildings, property, parking lots, and residence halls. Officers investigate crimes, alarms and suspicious incidents and persons, and provide responses to medical and fire incidents on premises.

Other law enforcement agencies include the City of Chico Police Department and the Butte County Sheriff's Office. Both are available to provide backup if needed, per existing agreements (CSU Chico, 2005b).

Schools and Parks

There are several elementary, middle school, and high schools throughout the Chico area. The nearest school to the proposed project site, besides the University itself, is Chico High School, which is located less than a mile away to the north. Several park and recreation facilities are also located in close proximity to the proposed project, including the Bidwell Mansion State Historic Park, the Bidwell Bowl Amphitheater, Ringel Park, and Children's Playground, all of which are generally located less than a mile east of the project site.

Hospitals

There are several hospitals/clinics within the vicinity of the CSU Chico campus and the Agricultural Teaching and Research Center/University Farm (ATRC). The main hospital in the City of Chico is Enloe Medical Center, which is located on 1531 Esplanade approximately one mile north from the main campus. The Enloe Medical Center severs as the region's Level II trauma center, rehabilitation center, and several other major treatment centers including cancer therapy, cardiac care, rehabilitation, behavioral health, orthopedic, neuroscience and maternity (CSU Chico, 2005b).

The Acute Care area of the Student Health Service on the CSU Chico campus functions as a walk-in clinic. It is designed to accommodate students who need immediate medical attention. The Acute Care Clinic also makes time to address minor problems as well. The clinic has thirty-two staffed personal, from registered nurses to administrative staff. The clinic offers x-rays, a Student Laboratory which is certified as a high complexity laboratory by the Federal Government, a pharmacy which is licensed by the State of California, and women health care services (CSU Chico, 2005b).

There are several Emergency Medical Services (EMS) that provided EMS services within the Chico area. Fire Stations #1 and #2 provide first response care and depending on the type of emergency, either First Responder EMS or Enloe Medical Center Ambulance Service. First Responder EMS covers 911-response areas in Butte County, including the City of Chico. However, the City of Chico service area is covered cooperatively with Enloe Medical Center Ambulance on a North/South response area rotation (CSU Chico, 2005b).

Discussion

a.i – v) Implementation of the proposed project would result in replacement/restoration activities for campus bridges, which currently connects the southern and northern banks of Big Chico Creek. Due to its size, the existing bridge is only accessible to pedestrians. The proposed project would replace the current bridge with a wider one, which would accommodate emergency vehicles attempting to access the southern portions of the CSU Chico campus from Arcadian Avenue. Currently, emergency vehicles and police responders can only approach the southern portion of the campus via access roads from Warner Street or West 2nd Street. Consequently, implementation of the proposed project would potentially have a positive effect on the response times for police, fire, and medical emergency responders. This is considered a positive impact. Furthermore, given that the existing bridge is not currently an access point for emergency vehicles, construction activities will not disrupt or delay response times for emergency responders. Therefore, the proposed project would have ***no impact*** on the response time or service ratio of fire, police, or medical emergency responders.

As identified in the Environmental Setting above, in addition to CSU Chico itself, several schools and parks are located in the vicinity of the proposed project. Construction of the proposed replacement bridge would not increase the usage rates of any of the surrounding school and park facilities, as the new bridge is intended to more adequately serve an existing user group and improve access to southern portions of the CSU Chico campus for emergency responders. While construction activities may increase commute times for students or park users who might otherwise utilize affected campus pedestrian bridges, given that these delays are temporary and mitigated through the availability of other nearby footbridges that cross Big Chico Creek, the overall impact is considered ***less-than-significant,*** with no further mitigation measures required.

Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
12. RECREATION — Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Environmental Setting

Several park and recreation facilities are also located in close proximity to the proposed project, including the Bidwell Mansion State Historic Park, the Bidwell Bowl Amphitheater, Ringel Park, and a children's playground, all of which are generally located less than a mile east of the project site.

Discussion

a, b) The proposed project involves bridge replacement/restoration activities on the CSU Chico campus that traverses Big Chico Creek. The project sites are located adjacent to and serve as one potential access point for several parks, including the Bidwell Mansion State Historic Park. While the proposed project will widen the Physical Science Bridge, it is not anticipated that this improvement will increase the usage rate of existing recreational facilities, as the project is intended to cater to existing user groups and students on the CSU Chico campus, and would only provide vehicular access for emergency responders. Conversely, construction activities would temporarily close an access point to these recreational facilities for pedestrians, who can access the nearby parks from the existing footbridge via Sol-Wil-Le-No Avenue. Any decrease in park use, however, would be insignificant, as other, more direct access points will remain available to people seeking to access Bidwell Mansion State Historic Park, the Bidwell Bowl Amphitheater, or any of the other recreational facilities located east of the project site.

Given that the proposed bridge replacement/restoration projects do not include the construction of new facilities (with resultant impacts) or would not increase the usage rate or deterioration of existing parks, ***no impacts*** to recreational facilities are anticipated.

Transportation and Traffic

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
13. TRANSPORTATION AND TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Environmental Setting

Vehicle Circulation

According to the CSU Chico Master Plan, major access streets to the University campus include: 2nd Street along the southern portion of the campus; Esplanade, which runs north and south on the eastern side of campus; Highway (HWY) 32, which acts as a north/south route serving the western portions of the campus; and West Sacramento Avenue, which is used to access northern parts of the campus and serves as a link to Warner Street, the other major north/south street that provides access to central portions of the campus (CSU Chico, 2005a). Esplanade, which is designated by the City of Chico as an arterial road (City of Chico, 2011), is the closest major access road to the proposed project site. Vehicles seeking to access the proposed project site would likely travel southbound via Esplanade, which provides access to Sol-Wil-Le-No Avenue and Arcadian Avenue (via West Lincoln Avenue or West Frances Willard Avenue).

Pedestrian Circulation

Pedestrian circulation around the CSU Chico campus is defined by a network of opens spaces and pathways that provide linkage to campus buildings. According to the CSU Chico Master Plan,

there are five major types of open spaces on the campus, which in turn are interconnected and/or traversed by pedestrian paths:

1. The primary pedestrian spine system of concentrated pedestrian activity interconnecting major campus activity centers;
2. The quad and mall spaces that are formed by campus building groups and connected with prime pedestrian spine systems;
3. Sports fields which are concentrated on the western side of campus;
4. The Big Chick Creek riparian zone, which meanders across the center of the campus, both visually and functionally dividing the campus along an east-west axis; and
5. Ancillary active open space often consisting of building fore courts, building court yard type spaces and small lawns off major pathways (CSU Chico, 2005a).

The existing bridge sites are located within the riparian zone, as defined by the CSU Chico Master Plan. Though the existing bridge connects to several ancillary active open space areas, it is not connected to any area that has been identified by the Master Plan as a part of the primary pedestrian spine for the CSU Chico campus (CSU Chico, 2005a).

Bicycle Circulation

Around 30 percent of CSU Chico students use bicycles as their primary form of travel to the campus (CSU Chico, 2005a). According to the CSU Chico Master Plan, the Physical Science Bridge is not currently considered a part of the existing CSU Chico bicycle route. However, several major bicycle parking areas are located adjacent to the project site, including one next to Holt Hall (north of Big Chico Creek) and two adjacent to Ayres Hall and the Physical Science Building (south of Big Chico Creek) (CSU Chico, 2005a).

Discussion

a, b) Implementation of the proposed project would result in the removal and replacement of a pedestrian footbridge that is located entirely on the CSU Chico campus. Construction vehicles would access the site via roads that are maintained and under the jurisdiction of the City of Chico. Primary access to the site would be gained via Arcadian Avenue and Sol-Wil-Le-No Avenue, which are accessible from Esplanade.

The proposed project does not involve the construction of residential or commercial land uses that would generate additional, permanent vehicle trips in the City or region. Temporary construction workers (estimated at 10 to 20) associated with the proposed project are assumed to come from the existing labor pool of residents in Chico (and nearby communities) and would not generate a large number of vehicle trips (10 to 20) that would degrade peak hour roadway/intersection level of service standards. Additionally, once bridge replacement activities are complete, project-related vehicle traffic would cease; returning nearby roadway peak hour traffic volumes to pre-project conditions.

Project-related traffic would include a number of equipment/material deliveries (by heavy trucks) to the project site, which may result in minor, temporary roadway access conflicts along Sol-Wil-Le-No Avenue and Arcadian Avenue. While these effects are anticipated to be minor, implementation of **Mitigation Measure T-1 "Implement Traffic Control Plan"** will further ensure that any potential roadway/access issues are reduced through adherence to a series of traffic control measures that would be outlined in a traffic control plan.

Furthermore, the proposed project will disrupt pedestrians and cyclists commuting between the north and south ends of the CSU Chico campus. While the existing bridge is not considered a part of the "primary pedestrian spine" of the campus, removal and construction activities will temporarily require pedestrians to choose alternate routes to gain access to destinations in the northern and southern portions of the campus. However, given that alternative bridges are located approximately 400 and 500 feet to the west and east of the project site, respectively, temporary pedestrian detours as a result of the proposed project are considered less than significant.

Given the short-term nature of the proposed project, the low number of daily vehicle trips it would generate, and implementation of **Mitigation Measure T-1 "Implement Traffic Control Plan",** impacts to level of service standards and other circulation goals identified by the City of Chico and CSU Chico are considered ***less-than-significant***.

c) The proposed project would not result in changes to air traffic patterns associated with operations from either Ranchero Airport or Chico Municipal Airport. There is ***no impact***.

d, e) Currently, the existing Physical Science Bridge only accommodates pedestrians seeking to access points on the north and south ends of the CSU Chico campus. The proposed bridge replacement/restoration activities would not include an activity or design feature that would increase hazards on the CSU Chico campus. Implementation of the proposed project would enable emergency vehicles to access portions of the southern CSU Chico campus via the proposed replacement bridge. This would provide emergency responders with an additional access option, as vehicles can only enter the south campus via access roads from Warner Street or West 2nd Street. The addition of another access option would improve response times for emergency vehicles, which is considered a positive effect. Overall, the proposed project would have ***no impact*** on emergency access on the CSU Chico campus or surrounding area.

f) As described in the Environmental Setting above, the existing Physical Science Bridge provides pedestrian access to northern and southern portions of the CSU Chico campus. The current bridge, however, is not identified as a part of the primary pedestrian spine in the CSU Chico Master Plan. Closure of the existing bridge during construction will temporarily remove one connection point to the northern and southern portions of the CSU Chico campus. However, given the availability of other, nearby pedestrian bridges that provide access to the two sides of the campus, the temporary closure of the Physical

Science Bridge is considered a ***less-than-significant*** impact, with no further mitigation measures required.

Mitigation Measures

Mitigation Measure T-1: Implement Traffic Control Plan. CSU Chico will ensure that the project contractor develop and implement a Traffic Control Plan, which would be reviewed and approved by the City of Chico and CSU Chico prior to construction. This plan would include the following measures:

- Do not permit construction vehicles to block any roadways or private driveways.
- Designate specific parking areas for worker's personal vehicles.
- Provide access for emergency vehicles at all times.
- Select travel routes to avoid schools, parks, and high pedestrian use areas when possible. Crossing guards provided by the contractor would be used when truck trips coincide with schools hours and when travel routes cross student travel path.
- Obey all speed limits, traffic laws, and transportation regulations during construction. If speed limits are not posted, construction vehicles would not exceed 15 miles per hour on unpaved levee roads.
- Use signs and flagmen, as needed, to alert motorists, bicyclists, and pedestrians to avoid conflict with construction vehicles or equipment.
- Construction employee parking would be restricted to the designated staging areas.
- No road closures are anticipated; however, in the event that road closures are necessary, local agencies and affected organizations would be notified prior to construction.
- Closure of levee roads, construction sites, and public access areas for construction use would be clearly fenced and delineated with appropriate closure signage.
- Require cyclists to dismount and walk bikes when bike/pedestrian path is narrowed to eight feet.

Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
14. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental Setting

Water Supply/Wastewater Systems

The main water supply for the University is obtained from California Water Service Company (Cal Water), Chico District located at 2222 Dr. Martin Luther King Jr. Parkway. Landscape water is obtained from a non-potable well on the campus. Water supply for the ATRC is supplied by onsite wells that supply drinking and landscape water.

CSU Chico wastewater is treated at the City's Wastewater Treatment Plant located on River Road west of Chico (CSU Chico, 2005b).

Drainage and Flood Control

The City of Chico Public Works Department is responsible for the City and Urban Area storm water drainage conveyance system, which includes gutters, swells, ditches, culverts, storm drain inlets, catch basins, storm drainage pipes, and detention facilities. The City is 28.7 square miles, while the Urban Area encompasses 56 square miles. There are five channels traversing the Urban Area that accept storm water runoff. They are Comanche Creek, Little Chico Creek, Big Chico Creek, Lindo Channel, and Mud/Sycamore Creek.

All of the channels that traverse the Urban Area are tributary to the Sacramento River, a source of drinking and agricultural water for the State of California. The City operates and maintains a vast municipal storm drainage system that consists of miles of pipe, open drainage ditches and detention basins. The detention basins have water quality features incorporated into them (CSU Chico, 2005b).

Solid Waste Management

All solid waste generated on the main campus is currently disposed of at the Neal Road Landfill in Durham, California, approximately ten to fifteen miles from the project sites. North Valley Disposal Transfer collects and transfers the waste to the Neal Road landfill on a weekly basis form the main campus and ATRC. The Neal Road landfill is owned and operated by Butte County Public Works Department. The facility is located on 165 acres with a disposal area of 101 acres (CSU Chico, 2005b). The landfill has a max permitted capacity of 25,271,900 cubic yards, and as of July 1, 2009, it had a remaining capacity of 20,847,970. Neal Road Landfill's max permitted throughput is 1,500 tons per day (CalReycle, 2013).

Utility Services

Electricity and natural gas service is provided by Pacific Gas and Electric Company (PG&E). SBC and AT&T provide communication services to the main campus (CSU Chico, 2005b).

Discussion

a – e) Implementation of the proposed project involves the removal and replacement of the existing Physical Science Bridge that connects the northern and southern portions of the CSU Chico campus. The proposed project will not include the construction of new residential or commercial land uses, or include a project feature that would significantly generate the need for additional utility services (including water supply, wastewater, or drainage). Because the proposed project would not result in the need for new or additional utility services, ***no impacts*** to public services such as water supply, wastewater, and utility services are anticipated.

f, g) Implementation of the proposed project would result in the removal and replacement of the existing Physical Science Bridge that connects the northern and southern portions of the CSU Chico campus. Demolition of the existing bridge will generate solid waste that would be disposed of at the Neal Road Landfill. It is estimated that approximately two tons (or .13 percent of the landfill's max permitted daily intake) of solid waste would be generated by demolition activities. Furthermore, construction of the replacement bridge is also estimated to generate approximately one tone of solid waste refuse over the course of the construction period. No additional solid waste would be generated by the proposed project, once construction activities have ceased. In total, the proposed project is estimated to generate approximately three tons of solid waste, which represents .2 percent of Neal Road Landfill's daily maximum permitted intake, or .0005 percent of its annual permitted intake. Solid waste generated through implementation of the proposed project would have a ***less-than-significant*** impact on the capacity of the Neal Road Landfill

Lastly, solid waste anticipated to be generated by the proposed project includes wood, steel, concrete, and green waste. Therefore, the proposed project would not involve the creation or disposal of any hazardous materials. Disposal of all other materials would comply with applicable federal, state, and local policies regarding the disposal of solid waste. Therefore, ***no impacts*** would occur as a result of non-compliance with an applicable federal, state, or local policy related to solid waste.

Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporation*	*Less Than Significant Impact*	*No Impact*
15. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) 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 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?	☐	☒	☐	☐
b) 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)?	☐	☒	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) Per the impact discussions above, the potential of the proposed project to substantially degrade the environment is ***less-than-significant,*** with incorporated mitigation measures.

b) The purpose of the proposed project is to improve the structural safety and functionality of two CSU Chico pedestrian bridge structures. The impacts of the proposed project are mitigated to a less-than-significant level, limited to the construction phase of the proposed project, and generally site specific. No other projects are proposed that would overlap or interact with the proposed project. The cumulative impact of the proposed project is ***less-than-significant***, with incorporated mitigation measures.

c) The proposed project would not cause substantial adverse effects on human beings. Effects related to cultural resources, hazardous materials, hydrology and water quality, geologic hazards, air quality, transportation and noise are discussed above, and would not result in any significant and unavoidable impacts. This impact is considered ***less-than-significant,*** with incorporated mitigation measures.

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APPENDIX A
Biological Resources

Environmental Setting

Data Sources/Methodology

Biological resources within the study area were identified through field reconnaissance by ESA biologists Lindsay Tisch on August 15, 2013 and LeChi Huynh on January 9, 2014. Prior to the reconnaissance surveys, a review of pertinent literature and database queries were conducted for the project sites and surrounding area. The reconnaissance surveys consisted of a pedestrian survey of the study area in its entirety. The primary sources of data referenced for this study include the following:

- "Federal Endangered and Threatened Species that may be Affected by Projects in the Chico, California 7.5-Minute Topographic Quadrangle" (United States Fish and Wildlife Service [USFWS], 2013);
- California Natural Diversity Database (CNDDB), Rarefind computer program (v5)(California Department of Fish and Wildlife [CDFW], 2013);
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (v8-02) (CNPS, 2013).

A list of special-status species with potential to occur on the study area was compiled from these sources and from information collected during the field reconnaissance. This appendix includes the special-status species lists for the region.

Regional and Study Area Ecology

Regionally, the study area is located in the northeastern portion of the Sacramento Valley. Historically, this region supported extensive marshes, riparian woodlands intermixed with oak woodland, vernal pools, and grasslands. Intensive agricultural and urban development has resulted in substantial changes and conversions of these habitats. Because most native habitats have been altered by changes in land use, native plant communities are typically limited to areas along water courses and drainages, within designated reserves, or on untilled pasture lands. Present terrestrial habitats are characterized by urban development and valley foothill riparian. Aquatic habitats present within the study area include a perennial drainage (Big Chico Creek).

Data from the Western Regional Climate Center for the Chico Experiment (041715) weather station indicates that average annual precipitation is 25.66 inches. The average maximum annual

temperature is 75.2 degrees (F) and average minimum annual temperature is 46.8 degrees (F) (Western Regional Climate Center, 2013).

Elevation of the study area is approximately 204 to 274 feet above mean sea level (msl). The project sites are situated on nearly flat terrain along the north and south banks of Big Chico Creek. Surrounding vegetation communities consist of urban/developed and valley foothill riparian.

Site Description

Project sites are located within the CSU Chico campus and include Big Chico Creek. Land uses surrounding the sites and study area include urban (residential) and open space (parkway along Big Chico Creek) uses. Urban habitat types include landscape or planted vegetation, as well as developed urban lands with little or no native vegetation types and urban lands where a portion of the area is barren. Within the urban residential zone, approximately 40 percent of the land's surface is covered by impervious material (parking areas, etc.). Species occurring within this habitat type are typically common and well-adapted to an urban environment. Open space areas include valley foothill riparian habitat and public parks along Big Chico Creek (see Figure 3 of the initial study).

Vegetation Communities and Wildlife Habitats

Wildlife habitats were classified using the CDFWs *A Guide to Wildlife Habitats* (Mayer and Laudenslayer 1988), which is integrated with the California Wildlife Habitat Relationships (CWHR) System. Wildlife habitats generally correspond to plant communities. Habitats or vegetative communities are assemblages of plant species that occur together in the same area, which are defined by species composition, relative abundance, and repetition across landscapes. Plant communities within the study area were identified using field reconnaissance and aerial photography. The CWHR habitat classification scheme supports the CWHR System, a wildlife information system and predictive model for California's regularly occurring birds, mammals, reptiles and amphibians. The plant communities described below generally correlate with wildlife habitat types found within the study area.

Urban/Developed

Urban areas are typically landscaped with ornamental plant species, paved, or otherwise developed and generally lack natural vegetation. Urban areas within the study area include paved and unpaved pathways and parking lots, university buildings, and public works infrastructure. Tree species observed within the project sites and within the nearby vicinity include American elm (*Ulnus americana*), dawn redwood (*Metasequoia glyptostroboides*), shiny xylosma (*Xylosma congestum*), and American chestnut (*Castanea dentata*), among others. Although these species are not native to California, they are mature trees that may contribute to the overall quality of habitat for wildlife when grown adjacent valley foothill riparian habitat. Urban/developed environments generally provide limited habitat for common wildlife species such as rock pigeon (*Columba livia*), house sparrow (*Passer domesticus*), American crow (*Corvus brachyrhynchos*), house mouse (*Mus musculus*), and opossum (*Didelphis virginiana*).

Valley Foothill Riparian

Riparian habitats are vegetated corridors along stream and river banks. Valley foothill riparian habitat occurs within the study area and generally along the banks of Big Chico Creek. This habitat is composed of a tree -dominated overstory with shrub and herbaceous understory. Dominant plant species observed in this community include valley oak (*Quercus lobata*), American elm, white alder (*Alnus rhombifolia*), silver maple (*Acer saccharinum*), sycamore (*Platanus occidentalis*), box elder (*Acer negundo*), and buckeye (*Aesculus californica*). The understory consists of yarrow (*Achillea millefolium*), creeping Oregon grape (*Mahonia repens*), mugwort (*Artemisia douglasiana*), California grape (*Vitis californica*), California blackberry (*Rubus ursinus*), Himalayan blackberry (*Rubus armeniacus*), and Santa Barbara sedge (*Carex barbarae*). Limited areas of the understory consist of common periwinkle (*Vinca minor*) and English ivy (*Hedera helix*). Blue elderberry shrubs (*Sambucus nigra* ssp. *caerulea*) occur in the vicinity of the Physical Science Bridge.

Riparian corridors, such as those found in the project sites and immediate surroundings, are important wildlife areas that provide nesting habitat for migratory songbirds such as warblers, vireos, grosbeaks, raptors, and flycatchers. Riparian areas also provide foraging habitat for many species of reptiles and amphibians and act as migration and movement corridors for many wildlife species. The canopy and sub-canopy layers provide shade and protection of the water features and their aquatic inhabitants. Many fish inhabiting the waterways of riparian habitats require the shade of streamside vegetation and undercut banks.

Riverine

Riverine habitat includes larger open water channels with water depths greater than two meters (approximately 6.5 feet) beyond the depth of rooted emergent vegetation. Big Chico Creek is classified as riverine habitat.

Riverine aquatic habitats are distinguished by intermittent or continually flowing water, and often occur in association with a variety of terrestrial habitats such as riparian and freshwater wetlands. The open water portion of Big Chico Creek does not support emergent vegetation. The banks of Big Chico Creek typically support species common to the riparian areas as described above under valley foothill riparian.

The open water zones of large rivers or waterways provide resting and escape cover for many species of waterfowl. Mallard (*Anas platyrhynchos*), American coot (*Fulica americana*), common moorhen (*Gallinula chloropus*), and snowy egret (*Egretta thula*) are a few species common to this habitat. Some of the more common mammals found in riverine habitats include river otter (*Lontra canadensis*), mink (*Mustela vison*), muskrat (*Ondatra zibethicus*) and beaver (*Castor canadensis*). Riverine habitat provides habitat for aquatic species such as fish and invertebrates as well as waterfowl, amphibians, and some reptiles. During the reconnaissance survey, juvenile salmonids (species unidentified) were present within Big Chico Creek.

Wetland and Other Waters of the U.S.

Site Hydrology Overview

The study area is situated on nearly flat terrain within the riparian corridor of Big Chico Creek. Big Chico Creek drains a watershed of approximately 72 square miles and begins within the boundaries of Lassen National Forest in the northern portion of Butte County. The creek is formed by the confluence of two small unnamed tributaries near the community of Chico Meadows at an elevation of approximately 4400 feet. Big Chico Creek flows in a south-southwest direction for approximately 45 river miles where it empties into the Sacramento River. For the first 35 miles from its origin, Big Chico Creek flows through relatively steep terrain with rugged canyon walls. The remaining 10 miles of the creek flow through the Central Valley floor until it meets the Sacramento River. Big Chico Creek passes directly through the City of Chico, which is about 5.5 river miles west of the Sacramento River.

Jurisdictional Waters of the U.S

While a formal wetland delineation has not been conducted for the study area, reconnaissance surveys conducted on August 15th, 2013 and January 9th, 2014 indicate that wetlands and other waters of the U.S. are limited to Big Chico Creek.

Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as deserving special consideration. Some of these species receive specific legal protection pursuant to federal or state endangered species legislation. Others lack such legal protection, but have been characterized as "sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special-status species" in this report because of their federal or state designation or other regulatory status as follows:

- plants or animals listed or proposed for listing as threatened or endangered under the federal ESA (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);
- plants or animals that are candidates for possible future listing as threatened or endangered under the federal ESA (61 FR 40, February 28, 1996);
- plants or animals listed or proposed for listing by the State of California as threatened or endangered under the California ESA (14 California Code of Regulations [CCR] 670.5);
- plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
- plants that meet the definitions of rare and endangered under CEQA (State CEQA Guidelines, Section 15380);
- plants considered under the CNPS to be "rare, threatened or endangered in California" (Lists 1A, 1B, and 2 in CNPS 2001);

- plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in CNPS 2001), which may be included as special-status species on the basis of local significance or recent biological information;
- animal species of special concern to CDFW;
- animals fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]); and
- birds of prey protected under the federal Bald and Golden Eagle Protection Act.

Potentially Affected Listed and Proposed Species

A list of special-status plant and animal species that have the potential to occur within the vicinity of the study area was compiled based on data in the CNDDB (CDFW, 2013), CNPS Inventory of Rare and Endangered Plants (CNPS, 2013), and the USFWS List of Federal Endangered and Threatened Species that may be Affected by Projects in the Chico Quad (USFWS, 2013). Conclusions regarding habitat suitability and species occurrence are based on a reconnaissance-level area assessment conducted by ESA biologists, as well as existing literature and databases described previously.

Table A-1 lists special-status plants and animals with the potential to occur within the study area. Additionally, the table also indicates the proposed project's "potential to impact" each species listed. The "Potential for Occurrence" category is defined as follows:

- Unlikely: The study area and/or immediate area do not support suitable habitat for a particular species. Study area is outside of the species known range.
- Low Potential: Study area and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate study area.
- Medium Potential: The study area and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.
- High Potential: The study area and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and within the potential area of impact

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Invertebrates			
Branchinecta conservatio Conservancy fairy shrimp	FE/--/--	Found in ephemeral freshwater habitats including alkaline pools, clay flats, vernal pools, vernal lakes, vernal swales, and other types of seasonal wetlands.	**Unlikely.** No suitable habitat is present in the study area.
Branchinecta lynchi Vernal pool fairy shrimp	FT/--/--	Occurs in vernal pools, seasonally ponded areas within vernal swales, rock outcrop ephemeral pools, playas and alkali flats from Shasta County through most of the length of the Central Valley to Tulare County. Pools are grass or mud bottomed, with clear to tea-colored water, and are often in basalt flow depression pools in grasslands	**Unlikely.** No suitable habitat is present in the study area.
Desmocerus californicus dimorphus **Valley elderberry longhorn beetle**	FT/--/--	Breeds and forages exclusively on elderberry shrubs (*Sambucus mexicana*) typically associated with riparian forests, riparian woodlands, elderberry savannas, and other Central Valley habitats. Occurs only in the Central Valley of California. Prefers to lay eggs in elderberries 2–8 inches in diameter; some preference shown for "stressed" elderberries.	**High**. Suitable habitat is present in the Project area; numerous elderberry shrubs (some with exit holes) were identified in the vicinity of the Physical Science bridge. No elderberry shrubs were observed in the vicinity of the Selvester's Café bridge.
Lepidurus packardi Vernal pool tadpole shrimp	FE/--/--	Found in ephemeral freshwater habitats including alkaline pools, clay flats, vernal pools, vernal lakes, vernal swales, and other types of seasonal wetlands.	**Unlikely.** No suitable habitat is present in the study area.
Fish			
Hypomesus transpacificus Delta smelt	FT/ST/--	Open surface waters in the Sacramento/San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators.	**Unlikely.** Study area is not located within the species' known range.
Oncorhynchus mykiss **Central Valley steelhead**	FT/--/--	This evolutionary significant unit (ESU) enters the Sacramento and San Joaquin Rivers and their tributaries from July to May; spawning from December to April. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	**High.** Migratory route in Big Chico Creek. Critical habitat is designated in Big Chico Creek within the study area.
Oncorhynchus tshawytscha **Central Valley spring-run Chinook**	FT/ST/--	This ESU enters the Sacramento and San Joaquin Rivers and tributaries March to July; spawning from late August to early October. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	**High.** Migratory route in Big Chico Creek. Critical habitat is designated in Big Chico Creek within the study area.
Oncorhynchus tshawytscha Sacramento River winter-run Chinook	FE/SE/--	This ESU enters the Sacramento River December to May; spawning peaks May and June. Upstream movement occurs more quickly than in spring run population. Young move to rearing areas in and through the Sacramento River, Delta, and San Pablo and San Francisco.	**Low.** Adults do not spawn in Big Chico Creek; however, juveniles may use lowermost segment of Big Chico Creek (downstream of work limits, near confluence with Sacramento River) for nonnatal rearing during downstream outmigration.

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Amphibians			
Rana draytonii **California red-legged frog**	FT/SSC/--	Breeds in slow moving streams, ponds, and marshes with emergent vegetation and an absence or low occurrence of predators.	**Unlikely.** Study area is not located within the species' known range.
Spea hammondii Western spadefoot	--/SSC/--	Occurs seasonally in grasslands, prairies, chaparral, and woodlands, in and around wet sites. Breeds in shallow, temporary pools formed by winter rains. Takes refuge in burrows.	**Unlikely.** No shallow, temporary pools were observed within the study area.
Reptiles			
Actinemys marmorata **Western pond turtle**	--/SSC/--	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable upland habitat for egg-laying. Nest sites most often characterized as having gentle slopes with little vegetation or sandy banks.	**Medium.** Suitable aquatic habitat is present and species may use Big Chico Creek as a dispersal corridor.
Thamnophis gigas Giant garter snake	FT/ST/--	Found primarily in marshes, sloughs, drainage canals, and irrigation ditches, especially around rice fields, and occasionally in slow-moving creeks in California's interior.	**Unlikely**. No suitable habitat is present within the study area.
Birds			
Agelaius tricolor Tricolored blackbird	--/SSC/--	Nests in colonies within vicinity of fresh water/ marshy areas. Colonies prefer heavy growths of cattails and tules.	**Unlikely.** No suitable habitat is present within the study area.
Athene cunicularia Burrowing owl	--/SSC/--	Open, dry, annual or perennial grasslands and scrublands characterized by low-growing vegetation. Subterranean nester dependent upon burrowing mammals, specifically California ground squirrel. May also be found around golf courses, and disturbed/ruderal habitat in urban areas.	**Unlikely.** No suitable habitat is present within the study area.
Buteo swainsonii **Swainson's hawk**	--/ST/--	Forages in open and agricultural fields and nests in mature trees usually in riparian corridors.	**Medium.** Suitable nesting habitat exists within the study area.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FC/SE/--	Found in willow-cottonwood riparian forests in isolated areas of the Sacramento Valley.	**Low.** While suitable riparian habitat is present along Big Chico Creek it is in a highly developed area.
Dendroica petechial brewsteri **Yellow warbler**	--/SSC/--	Breeds in shrubby thickets and woods, particularly along watercourses and in wetlands. Common trees include willows, alders, and cottonwoods. May also be found in suburban or less densely settled areas, orchards and parks, and may breed there.	**Medium.** Potential nesting and foraging habitat is present within the study area.
Falco peregrinus anatum American peregrine falcon	--/SFP/--	Breed in open landscapes with cliffs (or skyscrapers) for nest sites. They can be found nesting at elevations up to about 12,000 feet, as well as along rivers and coastlines or in cities.	**Unlikely.** No suitable habitat is present within the study area.

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Haliaeetus leucocephalus Bald eagle	BEPA/SE/--	Nests in large stands with tree heights usually over 30 m tall typically within one mile of water. In California, year round resident of the Sierra Nevada and Coastal Mountains as well as most of the northern portion of the state. Winter range includes all of California.	**Unlikely.** No suitable habitat is present within the study area.
Lanius ludovicianus Loggerhead shrike	--/SSC/--	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	**Unlikely.** No suitable habitat is present within the study area.
Laterallus jamaicensis coturniculus California black rail	--/ST, SFP/--	Majority of population found in the tidal salt marshes of the northern San Francisco Bay region, primarily in San Pablo and Suisun Bays; also found in freshwater marshes in the foothills of the Sierra Nevada.	**Unlikely.** No suitable habitat is present within the study area.
Pandion haliaetus Osprey	--/WL/--	Nests near water at the top of tall trees and manmade structures such as power and phone poles, duck blinds, channel markers, navigation aids, and wooden docks.	**Unlikely.** No suitable habitat is present within the study area.
Riparia riparia Bank swallow	--/ST/--	Banks of rivers, creeks, lakes, and seashores; nests in excavated dirt tunnels near the top of steep banks.	**Unlikely.** No suitable habitat is present within the study area.
Mammals			
Antrozous pallidus **Pallid bat**	--/SSC/--	Arid deserts and grasslands of low elevations in California; often near rocky outcrops and water. Usually roosts in rock crevice or building, less often in cave, tree hollow, mine, etc. Prefers narrow crevices in caves as hibernation sites.	**Medium.** Suitable roosting habitat may be present in the mature trees and within buildings in the vicinity of the study area.
Eumops perotis californicus Western mastiff bat	--/SSC/--	Cliff-dwelling species, roosting generally under exfoliating rock slabs (e.g., granite, sandstone or columnar basalt). It has also been found in similar crevices in large boulders and buildings. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 m below the entrance for flight. Most frequently encountered in broad open areas and foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. Known to travel considerable distances from roosting sites.	**Low.** Marginal roosting habitat may be present in the within the surrounding buildings within the study area.
Lasiurus blossevillii Western red bat	--/SSC/--	Associated with riparian habitat. Roosts primarily in the foliage of trees or shrubs, but may also occasionally use caves. Day roosts commonly in edge habitats.	**Low.** This species may intermittently roost in riparian habitat in the study area.
Taxidea taxus American badger	--/SSC/--	Requires sufficient food, friable soils to excavate dens and pursue prey, and relatively open, uncultivated ground.	**Unlikely.** No suitable habitat is present within the study area.

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Plants			
Astragalus tener var. *ferrisiae* Ferris' milk-vetch	--/--/1B.1	Annual herb occurring in vernally mesic meadow and seeps, and sub alkaline flats in valley and foothill grasslands. Blooms Apr-May. Elevation: 2 to 75 meters.	**Unlikely.** No suitable habitat is present within the Project area.
Balsamorhiza macrolepis Big-scale balsamroot	--/--/1B.2	Annual herb occurring in chaparral, cismontane woodland, valley & foothill grasslands, often on serpentine. Blooms Apr-Oct. Elevation 100 to 1,500 meters.	**Unlikely.** No suitable habitat is present within the study area.
Brasenia schreberi Watershield	--/--/2B.3	Perennial rhizomatous herb occurring in freshwater marshes and swamps. Blooms June-Sept. Elevation: 30 – 2,200 meters.	**Unlikely.** No suitable habitat is present within the study area.
California macrophylla Round-leaved filaree	--/--/1B.1	Annual herb found in cismontane woodland and valley and foothill grassland with clay soil. Blooms March-May. Elevation: 15-1,200 meters.	**Unlikely**. No suitable habitat is present within the study area.
Campylopodiella stenocarpa Flagella-like atractylocarpus	--/--/2B.2	Moss occurring in cismontane woodland habitats. Elevation: 100 - 500 meters.	**Unlikely**. No suitable habitat is present within the study area.
Cardamine pachystigma var. *dissectifolia* Dissected-leaved toothwort	--/--/1B.2	Perennial rhizomatous herb occurring in serpentinite, rocky soils in chaparral and lower montane coniferous forest. Blooms: Feb-May. Elevation: 255 – 2,100 meters.	**Unlikely.** No suitable habitat is present within the study area.
Castilleja rubicundula var. *rubicundula* Pink creamsacs	--/--/1B.2	Hemiparasitic annual herb occurring in serpentinite soils in chaparral (openings), cismontane woodland, meadows and seeps, valley and foothill grassland. Blooms Apr-June. Elevation: 20 - 910 meters.	**Unlikely.** No suitable habitat is present within the study area.
Chamaesyce hooveri Hoover's spurge	FT/--/1B.2	Annual herb found in vernal pools. Blooms July-Sept, occasionally extending into Oct. Elevation: 25-250 meters.	**Unlikely.** No suitable habitat is present within the study area.
Clarkia gracilis ssp. albicaulis white-stemmed clarkia	--/--/1B.2	Annual herb occurring in chaparral and cismontane woodland habitats (sometimes serpentinite). Blooms May-July. Elevation: 245-1,085 meters.	
Delphinium recurvatum Recurved larkspur	--/--/1B.2	Perennial herb occurring in chenopod scrub; cismontane woodland; and in alkali valley and foothill grassland. Blooms March-June. Elevation: 10 to 2,460 ft msl.	**Unlikely.** No suitable habitat is present within the study area.
Didymodon norrisii Norris' beard moss	--/--/2B.2	Moss occurring on intermittently mesic, rock in cismontane woodland and lower montane coniferous forest. Elevation: 600-1,973 meters.	**Unlikely.** No suitable habitat is present within the study area.
Eriogonum umbellatum var. ahartii Ahart's buckwheat	--/--1B.2	Perennial herb that occurs in serpentinite soils on slopes and in openings within chaparral and cismontane woodland habitats. Blooms June to September. Elevations: 400 - 2000 meters.	**Unlikely.** No suitable habitat is present within the study area.
Fritillaria pluriflora adobe-lily	--/--/1B.2	Perennial bulbiferous herb found in chaparral; cismontane woodland; and valley and foothill grassland (often adobe soil). Blooms Feb-April. Elevation: 60-705 meters.	**Unlikely.** No suitable habitat is present within the study area.

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Hibiscus lasiocarpus var. *occidentalis* Woolly rose-mallow	--/--/1B.2	Perennial rhizomatous emergent herb found in freshwater marshes and swamps. Blooms June-Sept. Elevation: 0 to 393 ft msl.	**Unlikely.** No suitable habitat is present within the study area.
Imperata brevifolia California satintail	--/--/2B.1	Perennial rhizomatous herb found in chaparral; coastal scrub; Mojavean desert scrub; meadows and seeps (often alkali); riparian scrub (mesic). Blooms Sept.-May. Elevation: 0 to 1,215 meters.	**Unlikely.** No suitable habitat is present within the study area.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--/--/1B.1	Annual herb found in chaparral; cismontane woodland; meadows and seeps; vernal pools; and valley and foothill grasslands. Blooms March-May. Elevation 35-1,250 meters.	**Low.** Limited suitable habitat is present within the study area.
Limnanthes floccosa ssp. *californica* Butte County (Shippee) meadowfoam	FE/CE/1B.1	Annual herb found in mesic valley and foothill grasslands and vernal pools. Blooms March – May. Elevation: 46 to 930 meters msl.	**Unlikely.** No suitable habitat is present within the study area.
Monardella venosa veiny monardella	--/--/1B.1	Annual herb occurring in heavy clay soils in cismontane woodland, valley and foothill grassland. Blooms May-July. Elevation: 60 - 410 meters.	**Unlikely.** No suitable habitat is present within the study area.
Paronychia ahartii Ahart's paronychia	--/--/1B.1	Annual herb occurring in cismontane woodland, valley and foothill grassland, and vernal pools. Blooms Feb-June. Elevation: 30-510 meters.	**Unlikely.** No suitable habitat is present within the study area.
Rhynchospora californica California beaked-rush	--/--/1B.1	Perennial rhizomatous herb occurring in bogs and fens, lower montane coniferous forest, meadows and seeps (seeps), marshes and swamps (freshwater). Blooms May-July. Elevation: 45 - 1010 meters.	**Low.** Limited suitable habitat is present within the study area.
Rhynchospora capitellata brownish beaked-rush	--/--/2B.2	Perennial herb occurring in mesic lower montane coniferous forest, meadows and seeps, marshes and swamps, and upper montane coniferous forest. Blooms July-August. Elevation: 45 - 2000 meters.	**Low.** Limited suitable habitat is present within the study area.
Sidalcea robusta Butte County checkerbloom	--/--/1B.2	Perennial rhizomatous herb occurring in chaparral and cismontane woodland habitats. Blooms Apr-June. Elevation: 90 - 1600 meters.	**Unlikely.** No suitable habitat is present within the study area.
Stuckenia filiformis ssp. alpina slender-leaved pondweed	--/--/2B.2	Perennial rhizomatous herb occurring in assorted shallow freshwater marshes and swamps. Blooms May-July. Elevation: 300 – 2,150 meters.	**Unlikely.** No suitable habitat is present within the study area.
Trifolium jokerstii Butte County golden clover	--/--/1B.2	Annual herb occurring in valley and foothill grassland (mesic), vernal pools. Blooms March-May. Elevation: 50-385 meters.	**Unlikely.** No suitable habitat is present within the study area.
Tuctoria greenei Greene's tuctoria	FE/CR/1B.1	Annual herb found in vernal pools. Blooms May-July (sometimes extending into Sept). Elevation: 30-1,070 meters.	**Unlikely.** No suitable habitat is present within the study area.
Wolffia brasiliensis Brazilian watermeal	--/--/2B.3	Perennial aquatic herb found in freshwater marshes and swamps. Blooms April-Dec. Elevation: 20-100 meters.	**Unlikely.** No suitable habitat is present within the study area.

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Critical Habitat			
Branchinecta lynchi Vernal pool fairy shrimp	Critical Habitat	Critical habitat designated in Shasta, Tehama, Butte, Yuba, Placer, Napa, Sonoma, San Joaquin, Contra Costa, Alameda, Stanislaus, Merced, Mariposa, Fresno, Tulare, Kings, San Benito, Monterey, San Luis Obispo, Santa Barbara, and Ventura Counties.	**Unlikely.** There are no vernal pools within the study area.
Lepidurus packardi Vernal pool tadpole shrimp	Critical Habitat	Critical habitat designated in Shasta, Tehama, Colusa, Tehama, Butte, Yuba, Sacramento, San Joaquin, Amador, Fresno, Merced, Stanislaus, Tulare, Alameda, and Santa Clara Counties.	**Unlikely.** There are no vernal pools within the study area.
Oncorhynchus mykiss **Central Valley steelhead**	Critical Habitat	Critical habitat designated in Tehama, Whitmore, Redding, Eastern Tehama, Sacramento Delta, Valley Putah – Cache, American River, Marysville, Yuba River, Valley – American, Colusa Basin, Butte Creek, Ball Mountain, Shasta Bally, North Valley Floor, Upper Calaveras, Stanislaus River, San Joaquin Valley Floor, Delta – Mendota Canal, North Diablo Range, and San Joaquin Delta Hydrologic Units in CA.	**High.** Critical Habitat unit occurs within Big Chico Creek.
Oncorhynchus tshawytscha **Central Valley spring-run Chinook**	Critical Habitat	Critical habitat designated in Tehama, Whitmore, Redding, Eastern Tehama, Sacramento Delta, Valley – Putah Cache, Marysville, Yuba River, Valley – American, Colusa Basin, Butte Creek, and Shasta – Bally Hydrological Units in CA.	**High.** Critical Habitat unit occurs within Big Chico Creek.
Limnanthes floccosa ssp. *californica* Butte County (Shippee) meadowfoam	Critical Habitat	Critical habitat designated in Tehama and Butte Counties.	**Unlikely.** There are no grasslands or vernal pools within the study area.
Natural Communities			
Coastal and Valley Freshwater Marsh	Natural Community	Quiet sites (lacking significant current) permanently flooded by fresh water (rather than brackish, alkaline, or variable). Prolonged saturation permits accumulation of deep, peaty soils. Dominated by perennial, emergent monocots to 4-5m tall. Often forming completely closed canopies.	**Unlikely.** Natural community does not occur within study area.
Great Valley Cottonwood Riparian Forest	Natural Community	A dense, broadleafed, winter-deciduous riparian forest dominated by *Populus fremontii* and *Salix goodingii*. Understories are dense, with abundant vegetative reproduction of canopy dominants.	**Unlikely.** Natural community does not occur within study area.
Great Valley Mixed Riparian Forest	Natural Community	Tall, dense, deciduous, broad-leaved riparian forest found along floodplains of low gradient streams in California's Sacramento and San Joaquin Valleys.	**Unlikely.** Natural community does not occur within study area.
Great Valley Oak Riparian Forest	Natural Community	A medium to tall (rarely to 100 feet) broadleafed, winter-deciduous, closed-canopy riparian forest dominated by *Quercus lobata*. Understories include scattered *Fraxinus latifolia*, *Juglans hindsii*, and *Platanus racemosa* as well as young *Quercus lobata*.	**Unlikely.** Natural community does not occur within study area.

TABLE A-1
SPECIAL-STATUS SPECIES THAT MAY OCCUR IN THE STUDY AREA

Species	Fed/State/CNPS Status	General Habitat	Potential for Project to Impact Species
Great Valley Willow Scrub	Natural Community	An open to dense, broadleafed, winter-deciduous shrubby streamside thicket dominated by any of several Salix species. Dense stands usually have little understory or herbaceous component. More open stands have grassy understories, usually dominated by introduced species. Along all of the major rivers and most of the smaller streams throughout the Great Valley watershed, usually below 1,000 feet.	**Unlikely.** Natural community does not occur within study area.

SOURCE: USFWS, 2013; CDFG, 2013; CNPS, 2013.
*Species with medium or high potential to occur in the study area are shown in **bold**.

KEY:

Federal: (USFWS)
FE = Listed as Endangered by the Federal Government
FT = Listed as Threatened by the Federal Government
FC = Candidate for listing by the Federal Government

State: (CDFG)
SE = Listed as Endangered by the State of California
ST = Listed as Threatened by the State of California
SR = Listed as Rare by the State of California (plants only)
SSC = California Species of Concern
SFP = Fully protected by the State of California

CNPS: (California Native Plant Society)
List 1A = Plants presumed extinct in California
List 1B = Plants rare, threatened, or endangered in California and elsewhere
List 2 = Plants rare, threatened, or endangered in California but more common elsewhere
List 3 = Need more information
0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California
– = No Listing

Regulatory Setting

Federal Regulations

U.S. Fish and Wildlife Service

The USFWS administers the Federal Endangered Species Act (FESA) (16 United States Code [USC] 153 et seq.), the Migratory Bird Treaty Act (16 USC 703–711), and the Bald Eagle Protection Act (16 USC 668), among other programs discussed below.

Federal Endangered Species Act

Under FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC 1533[c]). Two federal agencies oversee FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, and the National Marine Fisheries (NMFS) has jurisdiction over anadromous and marine fish as well as mammals. Section 7 of FESA mandates that all federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. FESA prohibits the "take"[1] of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Section 10 of FESA requires the issuance of an incidental take permit before any public or private action may be taken that could harm, harass, injure, kill, capture, collect, or otherwise hurt any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that provides specific measures to offset project impacts on endangered or threatened species.

The USFWS also publishes a list of candidate species. Species on this list receive "special attention" from federal agencies during environmental review, although they are not protected otherwise under the FESA. The candidate species are those for which the USFWS has sufficient biological information to support a proposal to list as endangered or threatened. Project impacts on such species are considered significant under this environmental document. Species of Concern is an informal term, not defined in the federal Endangered Species Act. The Sacramento Office of the United States Fish and Wildlife Service no longer maintains a Federal Species of Concern list.

Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the project area and whether the project action would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]). Consultation with the USFWS and NMFS may be required when federally listed species (i.e., listed under the FESA) are at risk and the consultation process may

[1] "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

require that a Biological Assessment be prepared to determine the effects on listed species. Under both USFWS and California Department of Fish and Wildlife (CDFW) policy, species of concern are not subject to the same consultation requirements as listed endangered, rare, or threatened species, but the agencies encourage informal consultation for species of concern that may become officially listed before completion of the CEQA process.

Federal Essential Fish Habitat

The Sustainable Fisheries Act of 1996 (Public Law 104-297), amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to establish new requirements for Essential Fish Habitat (EFH) descriptions in federal Fisheries Management Plans (FMPs) and to require federal agencies to consult with the NMFS on activities that may adversely affect EFH. The Magnuson-Stevens Act requires all fishery management councils to amend their FMPs to describe and identify EFH for each managed fishery. The Act also requires consultation for all federal agency actions that may adversely affect EFH (i.e., direct versus indirect effects); it does not distinguish between actions in EFH and actions outside EFH. Any reasonable attempt to encourage the conservation of EFH must take into account actions that occur outside of EFH, such as upstream and upslope activities that may have an adverse effect on EFH. Therefore, EFH consultation with NMFS is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH, regardless of the activity's location. Under section 305(b)(4) of the Magnuson-Stevens Act, NMFS is required to provide EFH conservation and enhancement recommendations to federal and state agencies for actions that adversely affect EFH. However, state agencies and private parties are not required to consult with NMFS unless state or private actions require a federal permit or receive federal funding. Although the concept of EFH is similar to that of critical habitat under the FESA, measures recommended to protect EFH by NMFS are advisory, not proscriptive.

NMFS strongly encourages efforts to streamline EFH consultation and other federal consultation processes. EFH consultation can be consolidated, where appropriate, with interagency consultation, coordination and environmental review procedures required by other statutes such as the National Environmental Policy Act (NEPA), Fish and Wildlife Coordination Act, Clean Water Act, FESA, and Federal Power Act. EFH consultation requirements can be satisfied using existing review procedures if they provide NMFS timely notification of actions that may adversely affect EFH and the notification meets requirements for EFH Assessments (i.e., a description of the proposed action, an analysis of the effects, and the Federal agency's views regarding the effects of the action on EFH and proposed mitigation, if applicable).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703, Supp. I, 1989) prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except in accordance with regulations prescribed by the Secretary of the Interior.

Riparian Communities in California

Riparian communities have a variety of functions, including providing high-quality habitat for resident and migrant wildlife, stream bank stabilization, and runoff water filtration. Throughout the United States, riparian habitats have declined substantially in extent and quality compared with their historical distribution and condition. These declines have increased concerns about dependent plant and wildlife species, leading federal agencies to adopt policies to arrest further loss. USFWS mitigation policy identifies California's riparian habitats as belonging to resource Category 2, for which no net loss of existing habitat value is recommended (46 FR 7644, January 23, 1981).

U.S. Army Corps of Engineers

Section 404 of the Clean Water Act

The term "waters of the United States" is defined in the Code of Federal Regulations (33 CFR 328.3[a]; 40 CFR 230.3[s]), and includes waters that could be used in interstate or foreign commerce, interstate wetlands, and other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, sloughs, wet meadows, playa lakes, or natural ponds, where the use, degradation, or destruction of which could affect interstate or foreign commerce[2]. Waters of the United States do not include prior converted cropland, stock watering ponds, and agricultural irrigation ditches created in upland areas. Wetlands are defined by the federal government (CFR, Section 328.3(b), 1991) as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

State Regulations

California Department of Fish and Wildlife

The CDFW administers a number of laws and programs, discussed below, designed to protect fish and wildlife resources.

California Endangered Species Act

The California Endangered Species Act of 1984 (CESA) – Fish and Game Code Section 2050 et seq – regulates the listing and "take" of endangered and threatened species. A "take" of such a species may be permitted by CDFW through issuance of permits pursuant to Fish and Game Code section 2081, except for designed "fully protected" species (see subsection below).

[2] Since the SWANCC decision (Solid Waste Agency of Northern Cook County v. Corps), waters covered solely by this definition by virtue of their use as habitat by migratory birds are no longer considered "waters of the United States." The Supreme Court's opinion did not specifically address what other connections with interstate commerce might support the assertion of CWA jurisdiction over "nonnavigable, isolated, intrastate waters" under this definition, and the Corps is recommending case by case consideration. A factor that may be relevant to this consideration includes, but is not limited to, the following: Jurisdiction of isolated, intrastate, and nonnavigable waters may be possible if their use, degradation, or destruction could affect other "waters of the United States," thus establishing a significant nexus between the water in question and other "waters of the United States" (Corps, undated memorandum).

Fully Protected Species

Prior to enactment of CESA, the designation of "Fully Protected" was used by CDFW to identify species that had been given special protection by the California Legislature by a series of statutes in the California Fish and Game Code. (See §§ 3503.5, 3505, 3511, 3513, 4700, 4800, 5050, 5515). Many fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations; however, the original statutes have not been repealed, and the legal protection they give the species identified within them remains in place. Fully Protected species may not be taken or possessed at any time; and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Because endangered or threatened species can be "taken" for development purposes with the issuance of a permit by CDFW, "fully protected species" actually enjoy a greater level of legal protection than "listed" species.

Protection of Nesting Birds

Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy the nests or eggs of any such bird of prey (i.e., species in the orders Falconiformes and Strigiformes) except otherwise provided by this code or any other regulation adopted hereto." Active nests of all other birds (except English sparrow (*Passer domesticus)* and European starling (*Sturnus vulgaris*) are similarly protected under Section 3503 of the California Fish and Game Code, as well as birds designated in the International Migratory Bird Treaty Action under Section 3513 of the California Fish and Game Code. Disturbance that causes nest abandonment and/or loss of reproductive failure is considered a take by the CDFW. This statute does not provide for the issuance of an incidental take permit.

Species of Special Concern

CDFW also designates Species of Special Concern (SSC) which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species but may be added to official lists in the future. The SSC list is intended by CDFW as a management tool for consideration in future land use decisions. Under CDFW policy, SSC are not subject to the same consultation requirements as listed endangered, rare, or threatened species, but the agency encourages informal consultation for Species of Special Concern that may become officially listed before completion of the CEQA process.

Native Plant Protection Act

California Fish and Game Code Section 1900–1913, also known as the Native Plant Protection Act, is intended to preserve, protect, and enhance endangered or rare native plants in California. The act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more cause. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. The act also directs the California Fish and Game

Commission to adopt regulations governing the taking, possessing, propagation, or sale of any endangered or rare native plant.

California Native Plant Society

Vascular plants listed as rare or endangered by the CNPS (CNPS, 2013), but which may have no designated status or protection under federal or state endangered species legislation, are defined as follows:

- **List 1A:** Plants presumed extinct in California.
- **List 1B:** Plants rare, threatened, or endangered in California and elsewhere.
- **List 2:** Plants rare, threatened, or endangered in California, but more numerous elsewhere.
- **List 3:** Plants about which more information is needed (a review list).
- **List 4:** Plants of limited distribution (a watch list).

In general, plants appearing on CNPS List 1A, 1B, or 2 are considered to meet the criteria of CEQA Guidelines Section 15380 and effects to these species are considered significant in this environmental document. Additionally, plants listed on CNPS List 1A, 1B, or 2 meet the definition of Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (California Endangered Species Act) of the California Fish and Game Code.

Lake and Streambed Alteration Program

CDFW is authorized under the California Fish and Game Code Sections 1600–1607 to develop mitigation measures and enter into a Streambed Alteration Agreements with applicants who propose projects that would obstruct the flow of, or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams.

State Water Resources Control Board

Section 401 of the Clean Water Act

Section 401 of the Clean Water Act requires an applicant for any federal permit (e.g. a 404 (b) (1) permit from the Corp for "fill" of wetlands) that proposes an activity which may result in a discharge to "waters of the United States" obtain certification from the State Water Resources Control Board (SWRCB), acting through the Regional Water Quality Control Board (RWQCB), that the Corps permit action meets state water quality objectives.

Section 401 grants the State of California, through the RWQCB, the right to ensure its interests are protected on any federally permitted activity occurring in or adjacent to waters of the State. Therefore, if a proposed project requires a 404 permit and has the potential to impact waters of the State, the RWQCB will regulate the project and associated activities through a Water Quality Certification determination. The United States Army Corps of Engineers (Corps) will not issue a 404 permit until the RWQCB has been notified and the applicant has obtained a certification.

Porter-Cologne Act

If the Corps determines that wetlands or other waters of the U.S. are isolated waters and not subject to regulations under Section 401 of the Clean Water Act, the RWQCB may choose to exert jurisdiction over these waters under the Porter-Cologne Act as waters of the state.

Local Regulations

City of Chico General Plan

The City of Chico General Plan identifies open space conservation goals, objectives, and policies for biological resources. These guidelines are included in several elements of the City's General Plan and include the following goals, which are applicable to the proposed project.

Goals, Policies, and Actions:

BIOLOGICAL RESOURCES

Goal OS-1: Protect and conserve native species and habitats.

- **Policy OS-1.1** (Native Habitats and Species) – Preserve native species and habitat through land use planning, cooperation, and collaboration.
    - **Action OS-1.1.1** (Development/Preservation Balance) – Direct development to appropriate locations consistent with the Land Use Diagram, and protect and preserve areas designated Open Space and areas that contain sensitive habitat and species.
    - **Action OS-1.1.2** (Regional Conservation Planning) – Actively participate in regional conservation planning efforts, in particular the Butte County Habitat Conservation Plan process, sponsored by the Butte County Association of Governments, which seeks the preservation of habitat areas needed for the ongoing viability of native species.
    - **Action OS-1.1.3** (Sustainable Community Strategy) – In support of AB 32, work with the Butte County Association of Governments to implement the Sustainable Community Strategy (SB 375), which directs smart-growth development to urbanized areas.
    - **Action OS-1.1.4** (Community Collaboration) – Consult with conservation groups to identify sites and projects for fund-raising and volunteer participation in public education, enhancement, maintenance, and protection of natural resources within the City's Sphere of Influence.
    - **Action OS-1.1.5** (Control Invasive Species) – Prioritize efforts to remove non-native species within Bidwell Park and other City greenways, and condition new development adjacent to Bidwell Park and greenways to protect native species and habitat from the introduction of invasive species.
- **Policy OS-1.2** (Regulatory Compliance) – Protect special-status plant and animal species, including their habitats, in compliance with all applicable state, federal and other laws and regulations.

- **Action OS-1.2.1** (State and Federal Guidelines) – Ensure that project-related biological impacts are considered and mitigated, and require applicants to obtain all necessary local, state and federal permits for projects that may affect special-status species or their habitat.

Open Space

Goal OS-2: Connect the community with a network of protected and maintained open space and creekside greenways to build knowledge and appreciation of these resources.

- **Policy OS-2.1** (Planning and Managing Open Space) – Continue acquisition, management, and maintenance of open space to protect habitat and promote public access.
  - **Action OS-2.1.1** (Open Space Plan) – Develop and adopt an Open Space and Greenways Master Plan that catalogues the City's open space land holdings, ensures that management and maintenance programs are in place, identifies long-term funding, coordinates with other public and private open space holdings, and prioritizes additional open space acquisitions, dedications, and easements to enhance connectivity, protect resources, and facilitate public access and circulation.
  - **Action OS-2.1.2** (Funding for Open Space) – Pursue outside funding sources for open space acquisition, management, maintenance, and restoration.
- **Policy OS-2.2** (Creek Corridors and Greenways) – Expand creekside greenway areas for open space and additional pedestrian/bicycle routes.
  - **Action OS-2.2.1** (Creekside Greenway Program) – Continue collecting fees for creekside greenway acquisition, and purchase properties as opportunities arise.
  - **Action OS-2.2.2** (Greenway Expansion) – Seek easements and dedications along the City's creeks to expand the greenway system.
- **Policy OS-2.5** (Creeks and Riparian Corridors) – Preserve and enhance Chico's creeks and riparian corridors as open space for their aesthetic, drainage, habitat, flood control, and water quality values.
  - **Action OS-2.5.1** (Setbacks from Creeks) – Consistent with the City's Municipal Code, require a minimum 25-foot setback from the top of creek banks to development and associated above ground infrastructure as a part of project review, and seek to acquire an additional 75 feet. In addition, require a larger setback where necessary to mitigate environmental impacts.
- **Policy OS-2.6** (Oak Woodlands) – Protect oak woodlands as open space for sensitive species and habitat.

URBAN FOREST

Goal OS-6: Provide a healthy and robust urban forest.

- **Policy OS-6.1** (Healthy Urban Forest) – Ensure the continued protection and management of the urban forest to reduce energy demand, increase carbon sequestration, and reduce urban heat gain.
  - **Action OS-6.1.1** (Urban Forest Maintenance) – Maintain and expand the urban forest by:
    - Maintaining existing City trees through regular, scheduled service. •

- Planting new trees to replace those that require removal and to enhance the street tree canopy, where needed.
- Requiring street and parking lot tree planting in new development.
- Working with commercial parking lot owners to improve the shade canopy.
- Implementing the Municipal Code's tree protection regulations.
- Using volunteer groups and property owners to plant new trees, care for newly planted trees, maintain young trees, and provide information and instructions regarding such care and maintenance.

- **Action OS-6.1.2** (Utility Impacts) – Where feasible, require new underground utilities that are in close proximity to trees to be designed and installed to minimize impacts to trees through consultation with the Urban Forester.
- **Action OS-6.1.3** (Tree Planting Program) – Develop and implement a tree planting program as a mitigation method to reduce air quality impacts and improve carbon sequestration.

Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan

The Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan, under preparation by the Butte County Association of Governments in consultation with local jurisdictions, is a voluntary plan that will provide comprehensive species, wetlands, and ecosystem conservation. The goals and objectives of the conservation plan will contribute to the recovery of endangered species within Butte County and provide individual projects with a more streamlined process for environmental permitting.

Impact Discussion

a) **Less-than-Significant with Mitigation**. The following sub-sections provide a discussion of potential effects to special-status plant and animal species.

Special-Status Plants

The project sites do not provide habitat for any special-status plant species. No special-status plant species are likely to occur within the study area itself due to the high degree of disturbance associated with surrounding developed land uses. The project sites are situated within a narrow strip of riparian forest along Big Chico Creek. The surrounding area is a highly developed university campus. Bridge replacement/restoration activities and pedestrian use of the bridge will not permanently impact adjacent habitats to the project sites. Therefore, implementation of the proposed project will have ***no impact*** on special-status plants.

Special-Status Wildlife – Aquatic Species

Potential habitat for Central Valley steelhead, Central Valley spring-run chinook, Sacramento River winter-run chinook, and western pond turtle occur within Big Chico Creek.

Intermittent tributaries (such as Big Chico Creek) have proven to be optimal nonnatal rearing habitats in the Big Chico watershed (Maslin et al, 1996). Records dating back to 1938 indicate that Big Chico Creek and Mud Creek once supported runs of steelhead and salmon (Big Chico Creek Watershed Alliance, 2014). However, by the time studies were conducted in the 1980s to assess steelhead and chinook runs, populations were low and distorted by hatchery plantings (Big Chico Creek Watershed Alliance, 2014). In comparison with other east-side tributaries of the Sacramento River, Big Chico Creek is the fourth most significant spring-run salmon stream. Neighboring creeks that exceed Big Chico include Butte, Deer, and Mill Creek (Brown, 1994).

The lower reaches of Big Chico Creek and parts of Lindo Channel are subject to nonnatal rearing of fall-, late-fall-, spring- (Maslin et al, 1999) and winter-run chinook, with more recent observations of steelhead (Brown, 1999). Therefore, there is the potential for steelhead and chinook to be present within the study area year-round.

Big Chico Creek provides suitable foraging habitat for western pond turtle as it is situated within a narrow strip of riparian forest with areas of relatively shallow, slow moving water. Consequently, there is the potential for this species to utilize Big Chico Creek as a dispersal corridor to more suitable habitat upstream and downstream of the study area and may be present during construction-related activities.

The proposed project could indirectly impact special-status aquatic species such as Central Valley steelhead, Central Valley spring-run chinook, Sacramento River winter-run chinook, and western pond turtle. Increased sedimentation rates could result if fine sediment is discharged into Big Chico Creek during the construction phase of the proposed project. Increased sedimentation may adversely affect water quality and channel substrate composition. Specific rates of sedimentation are dependent upon the duration, volume, and frequency at which sediments are contributed to the surface water flow. Substantial sedimentation rates may smother fish eggs and fish food (i.e., benthic invertebrates) and degrade spawning habitat. Furthermore, suspended sediments increase the turbidity of the water. High rates of turbidity can result in direct mortality or deleterious sublethal effects (e.g., gill abrasion, decreased visibility during foraging) to fish.

Dewatering activities could potentially impact special-status aquatic species if they were present in Big Chico Creek. Potential impacts include direct harm to a species that could potentially come into contact with construction personnel and/or equipment, temporarily inhibiting movement through the study area, as well as exposure to an increased chance of predation or physical harm if they were to become trapped in the dewatered area, were trying to escape or move around the dewatered area, or were disturbed by construction activities. Implementation of the various species avoidance/compensation measures and

water quality best management practices as set forth in **Mitigation Measure BIO-1 "Implement Special Status Fish Avoidance and Compensation Measures**" and **Mitigation Measure HWQ-1 "Implement Water Quality Best Management Practices"** (see Hydrology and Water Quality section), during the construction phase (including dewatering activities) of the proposed project would reduce or avoid impacts to special-status fish species to a ***less-than-significant*** level.

Dispersal habitat for the western pond turtle occurs within Big Chico Creek. Potential impacts to this species would be a temporary loss of foraging and dispersal habitat. However, implementation of the various species avoidance measures and water quality best management practices as set forth in **Mitigation Measure BIO-2a "Conduct Pre-construction Surveys for Western Pond Turtle"**, **Mitigation Measure BIO-2b "Implement Western Pond Turtle Avoidance Measures"**, and **Mitigation Measure HWQ-1 "Implement Water Quality Best Management Practices"** (see Hydrology and Water Quality section), during the construction phase (including dewatering activities) of the proposed project would reduce or avoid impacts to special-status fish species to a ***less-than-significant*** level.

Nesting Songbirds and Raptors

Riparian habitat associated with Big Chico Creek may provide suitable nesting habitat for special-status raptors such as Swainson's hawk, and other special-status listed and non-listed birds such as the yellow warbler that utilize aquatic and riparian habitats. Construction-related activities could directly affect active nest sites through tree removal or cause indirect impacts such as nest abandonment. Valley oaks and cottonwoods and other large trees which grow within the riparian corridor along Big Chico Creek provide suitable nesting sites for many raptors and other birds. Construction activity within the vicinity of an active nest site can cause parent birds to abandon the nest. However, implementation of the various species/nesting avoidance measures as set forth in **Mitigation Measure BIO-3a "Remove Vegetation outside Nesting/Breeding Season"**, **Mitigation Measure BIO-3b "Conduct Pre-construction Nesting Bird Surveys"**, and **Mitigation Measure BIO-3c "Implement Avoidance Measures for Active Bird Nest Sites"** prior to the construction phase of the proposed project would reduce or avoid impacts to nesting songbird and raptor species to a ***less-than-significant*** level.

Bat Species

The pallid bat is the most widely described special-status bat species in central California. Potentially suitable roosting habitat may be present within the riparian corridor surrounding Big Chico Creek, as well as within the attics of the surrounding university buildings. If bats are found roosting within the foliage of the riparian trees, they will have to relocate to another suitable roost site potentially exposing them to increased stress and chance of predation. Other potential impacts to these species during project construction

include the potential for destruction of individual bats, if present, and the loss of suitable nesting and foraging habitat. However, implementation of the various species avoidance measures as set forth in **Mitigation Measure BIO-4a "Conduct Pre-Construction Survey for Bat Species"**, and **Mitigation Measure BIO-4b "Implement Bat Species Exclusion Measures Prior to Active Season"** prior to the construction phase of the proposed project would reduce or avoid impacts to bat species to a ***less-than-significant*** level.

Invertebrates

Blue elderberry shrubs with stems measuring 1" or more in diameter at ground level represent suitable habitat for the valley elderberry longhorn beetle occur within the project area in the vicinity of the Physical Science footbridge. No elderberry shrubs were observed in the vicinity of the Selvester's Café footbridge. Several shrubs are located within the footprint of the proposed 20-foot Emergency Access Bridge and the 10-foot Pedestrian Walkway and would require removal as part of project implementation. Additionally, several shrubs are located within 100 feet of proposed project activities and may be indirectly impacted by project activities. Potential impacts to valley elderberry longhorn beetle include direct removal of elderberry shrubs with stems containing 1" or more in diameter at ground level, trimming of suitable branches/stems, root disturbance from earth-work, dust, and water quality impacts. However, implementation of the various VELB avoidance/compensation measures as set forth in **Mitigation Measure BIO-5a "Implement VELB Avoidance Measures"**, and **Mitigation Measure BIO-5b "Implement VELB Habitat Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid VELB impacts to a ***less-than-significant*** level.

b) **Less-than-significant.** Sensitive natural communities that occur in the Project area include valley foothill riparian forest. This community provides habitat for a range of terrestrial wildlife species, including several species of songbirds, small mammals, mesocarnivores, and herpetofauna. The potential impacts include temporary disturbance and permanent displacement.

Direct impacts, such as tree removal, may result from removal of the existing footbridge adjacent to the Physical Sciences building and installation of the new bridge. Dewatering of Big Chico Creek could also temporarily affect additional riparian vegetation growing adjacent to the Project boundaries, depending on the length of time necessary to complete work and the season of construction. Indirect impacts to riparian vegetation may occur under unanticipated circumstances, which would result in adverse impacts to riparian resources such as disturbance during cleanup operations. However, riparian habitat avoidance and compensation measures as set forth in **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid riparian habitat impacts to a ***less-than-significant*** level.

c) **Less-than-significant.** While a formal wetland delineation was not conducted at the time of the reconnaissance survey, Big Chico Creek was identified as a potential waters of the U.S. and falls under the jurisdiction of the Corps per Section 404 of the CWA. Implementation of the proposed project is not expected to result in permanent impacts to potential waters of the U.S., as all project features (i.e., abutments, etc.) would continue to be placed outside of these wetland areas. However, temporary impacts are anticipated through a variety of construction-related activities (including the placement of scaffolding, equipment, and dewatering, etc.). As part of the proposed project, the following permits are expected to be obtained prior to construction: a Clean Water Act Section 404 Nationwide Permit from the Corps; a Clean Water Act Section 401 Water Quality Certification Waiver from the Regional Water Quality Control Board; and a California Fish and Game Code 1600-1602 Streambed Alteration Agreement from the CDFW. All permit requirements will be implemented to mitigate impacts to waters of the U.S. and reduce impacts to water quality during construction. Additionally, the implementation of the various water quality BMPs and habitat avoidance/compensation measures as set forth in **Mitigation Measure HWQ-1 "Implement Water Quality Best Management Practices"** and **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** would reduce or avoid impacts to a ***less-than-significant*** level.

d) **Less-than-significant.** Riparian habitat within the project site that is concentrated along the banks of Big Chico Creek may provide rearing and nesting habitat for wildlife (aquatic and terrestrial) and function as a movement and dispersal corridor. This riparian habitat also extends into portions of the study area where the Physical Science footbridge will be removed and installed. Terrestrial wildlife may use this portion of the riparian habitat as a movement and dispersal corridor and as foraging and nesting habitat. There is the potential for the riparian habitat along Big Chico Creek will be subject to permanent impacts associated with tree removal during construction activities and temporary impacts associated with dewatering. However, riparian habitat avoidance and compensation measures as set forth in **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid riparian habitat impacts to a ***less-than-significant*** level.

e) **Less-than-significant**. The City of Chico has a tree-preservation policy to preserve large historic oaks and native trees. While a formal tree survey has not been conducted for the Project area, native oak species and other species protected by the City of Chico were observed during the field visit along the banks Big Chico Creek. Construction activities may occur within the dripline of native oak trees or landmark trees, or may result in the direct removal of native oak trees or landmark trees. Work within the dripline of trees may cause permanent damage to the root system and the subsequent loss of the tree. The City of Chico General Plan calls for a minimum 25 foot setback from the top of creek banks as well as preserving and enhancing Chico's creeks and riparian corridors. In addition to the General Plan, a separate tree preservation policy is also in place under the

City of Chico municipal code. The tree preservation policy calls for a tree removal permit prior to construction activities as well as replacement plantings which require for every six inches in DBH removed, a new 15 gallon tree will be planted on-site. Replacement trees will be of similar species, unless otherwise approved by the urban forest manager, and shall be placed in areas dedicated for tree plantings. However, native tree avoidance and compensation measures as set forth in **Mitigation Measure BIO-6 "Implement Riparian Habitat Avoidance and Compensation Measures"** prior to the construction phase of the proposed project would reduce or avoid native tree impacts to a ***less-than-significant*** level.

f) **No impact**. Although the study area is located within the Butte Regional Habitat Conservation Plan and Natural Community Conservation Plan (Plan) planning area, the proposed conservation plan has not yet been approved. The Butte County Association of Governments is developing a Habitat Conservation and Natural Community Conservation Plan. Therefore, the proposed project will have ***no impact*** on any Habitat Conservation Plan or Natural Community Conservation Plan.

Mitigation Measures

Mitigation Measure BIO-1: Implement Special Status Fish Avoidance and Compensation Measures. CSU Chico shall complete and/or ensure that the construction contractor implements the following special status fish avoidance/compensation measures:

- To avoid and minimize water quality impacts associated with a dewatering plan (should it be required), site preparation and dewatering activities will occur from June 1 to October 1 (but may be extended to November 1 with approval by NMFS). This is a period of the year when NMFS' Endangered Species Act (ESA) listed species are least likely to occur at the project site.
- Prior to dewatering, a qualified fisheries biologist will design and conduct a fish and wildlife rescue and relocation effort to collect fish and other wildlife species from the area within the dewatering area involving the capture and return of those animals to suitable habitat within Big Chico Creek. To ensure compliance, a fisheries biologist will provide observation during initial dewatering activities. The fish rescue plan will be approved by NMFS, USFWS, and CDFW prior to dewatering activities.
- An approved biologist will permanently remove, from within the project site, any exotic wildlife species, such as bullfrogs and crayfish, to the extent possible.
- After construction activities are finalized, the stream channel will be restored to preconstruction conditions.
- Purchase rearing habitat credits at a 1:1 ratio (or as determined in consultation with the NMFS) for the placement of bank stabilization materials within the project site at a NMFS approved anadromous fish conservation bank for impacts to Chinook and steelhead fish species.
- If gabion mats or other bank stabilization methods are placed on the stream bank, use a soil-rock mixture to facilitate re-vegetation of the project site. A ratio of rock to soil (70:30) is recommended. NMFS suggests a soil-rock mixture on top of the rock revetment

to allow native riparian vegetation to be planted to ensure shaded riverine aquatic (SRA) habitat is replaced.

Mitigation Measure BIO-2a: Conduct Pre-construction Surveys for Western Pond Turtle. No more than two weeks prior to the commencement of ground-disturbing activities, CSU Chico shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles and their nests. The results of these surveys will be documented in a technical memorandum that will be submitted to CDFW (if turtles are documented). If the pre-construction surveys do identify western pond turtle nests within areas that may be affected by site construction, species avoidance measures shall occur through implementation of **Mitigation Measure BIO-2b.**

Mitigation Measure BIO-2b: Implement Western Pond Turtle Avoidance Measures. Should a western pond turtle nest be located within a work area, CSU Chico shall ensure that a qualified biologist (with the appropriate permits from the CDFW) relocate the eggs to a suitable facility for incubation and release hatchlings into the creek system in late fall. The biologist will be present on the project site during initial ground clearing, grading, and during all other construction activities.

Mitigation Measure BIO-3a: Remove Vegetation outside Nesting/Breeding Season. If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31). If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), pre-construction surveys (**Mitigation Measure BIO-3b** and **BIO-3c**) would be performed prior to the start of project's construction phase.

Mitigation Measure BIO-3b: Conduct Pre-construction Nesting Bird Surveys. Should project-related construction or grading activities be scheduled during bird nesting season (February 1 to August 31), pre-construction surveys would be required by a qualified wildlife biologist to identify active Swainson's hawk nests within ½-mile of proposed construction activities and nests of other species within 250 feet of proposed construction activities. The surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of construction. The results of the survey would be emailed to CDFW at least three days prior to construction. Surveys would be conducted by a qualified biologist. For Swainson's hawk surveys, guidelines provided in the *Recommended Timing and Methodology for Swanson's Hawk Nesting Survey in the Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) would be followed where possible**.**

If the pre-construction surveys do not identify any nesting raptors or other nesting migratory bird species within areas potentially affected by construction activities, no further mitigation would be required. If the pre-construction surveys do identify nesting raptors or other nesting bird species

within areas that may be affected by site construction, nest avoidance measures shall occur through implementation of **Mitigation Measure BIO-3c**.

Mitigation Measure BIO-3c: Implement Avoidance Measures for Active Bird Nest Sites. Should active nest sites be discovered within areas that may be affected by construction activities, CSU Chico shall ensure that the construction contractor implement the following nest avoidance measures:

- **Swainson's Hawk:** If active nests are found, CDFW would be notified and construction-related impacts to nesting birds would be avoided by establishment of appropriate no-work buffers to limit project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the CDFW, although a ¼ mile buffer would be used when possible. The no-work buffer zone would be delineated by highly visible temporary construction fencing. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird(s). No project-related construction activity would commence within the no-work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active.
- **Yellow Warbler:** If active nests are found, project-related construction impacts would be avoided by establishment of appropriate no-work buffers to limit Project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the CDFW although a 500-foot would be used when possible. The no-work buffer zone would be delineated by highly visible temporary construction fencing. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. No project-related construction activity would commence within the no-work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active.

Mitigation Measure BIO-4a: Conduct Pre-Construction Survey for Bat Species. A bat survey shall be conducted by a qualified biologist to establish the presence or absence of roosting bats prior to May 1st in order to put exclusionary measures into place before the active season of this species (no exclusionary efforts should be conducted during May 1st to August 31st of the construction year) and to prevent bats from utilizing the bridge structure. If no roosting bats are found, no further mitigation would be necessary;

Mitigation Measure BIO-4b: Implement Bat Species Exclusion Measures Prior to Active Season. If pallid bats or other bat species are detected within the roost at the time of implementation of **Mitigation Measure BIO-4a**, excluding any bats from roosts will be accomplished by a qualified biologist prior to the removal of roost trees and the bridge. The timing and other methods of exclusionary activities will be developed by the qualified biologist in order to reduce the stress on the bats to the amount feasible while taking into account project schedule. Exclusionary devices, such as plastic sheeting, plastic or wire mesh, can be used to allow for bats to exit but not re-enter any occupied roosts. Expanding foam and plywood sheets can be used to prevent bats from entering unoccupied roosts.

Mitigation Measure BIO-5a: Implement VELB Avoidance Measures. CSU Chico shall ensure that the construction contractor maintain a setback of 100 feet from all elderberry shrubs to avoid impacts to valley elderberry longhorn beetle. If the 100 foot setback is not feasible, the construction contractor shall implement a number of avoidance measures (in consultation and approval by the USFWS). Such measures may include installing fencing around the shrubs, providing construction worker awareness training, transplanting of shrubs, and requiring biological monitoring during construction. The *1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS, 1999) provides applicable avoidance and minimization measures. No construction shall occur within 100 feet of all elderberry shrubs identified onsite until final approvals are received from the USFWS (Biological Opinion or concurrence letter). Upon USFWS approvals, the construction contractor shall create a minimum of 20-foot buffer around each potentially affected shrub. Work crews shall be briefed on the status of the beetle, the need to protect its host plant (elderberries), requirements to avoid damaging elderberry shrubs, and possible penalties for not complying with identified avoidance and minimization measures. In addition, construction workers should be made aware of the habitat needs of valley elderberry longhorn beetle and the location of protection areas on the site.

Mitigation Measure BIO-5b: Implement VELB Habitat Compensation Measures. To compensate for temporary and permanent impacts to elderberry shrubs (through removal or damage during construction activities), CSU Chico shall consult (and implement) with the USFWS on compensatory mitigation for permanent and temporary impacts; mitigation may be purchased at a USFWS-approved mitigation bank if approved by the USFWS. If transplantation is advised by the USFWS, locations of transplanted shrubs and conservation areas shall be approved by USFWS prior to transplanting. USFWS associated species planting requirements shall also be followed. All transplants shall follow the procedures outlined in the *USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle.*

Mitigation Measure BIO-6: Implement Riparian Habitat Avoidance and Compensation Measures. CSU Chico shall implement the following riparian habitat avoidance and compensation measures:

- Prior to removal of any trees, an ISA Certified Arborist will conduct a tree survey in areas that may be impacted by construction activities. This survey will document tree resources that may be adversely impacted by implementation of the proposed project. The survey will follow standard professional practices.
- Current riparian vegetation and oaks will be retained to extent feasible. A Tree Protection Zone (TPZ) will be established around any tree or group of trees to be retained. The TPZ will be delineated by an ISA Certified Arborist. The TPZ will be defined by the radius of the dripline of the tree(s) plus one foot. The TPZ of any protected trees will be demarcated using fencing that will remain in place for the duration of construction activities.
- Construction-related activities will be limited within the TPZ to those activities that can be done by hand. No heavy equipment or machinery will be operated within the TPZ. Grading will be prohibited within the TPZ. No construction materials, equipment, or heavy machinery will be stored within the TPZ.

- To ensure that there is no net loss of riparian habitat, CSU Chico will create or restore riparian habitat that is of a like function and value to the habitats lost. The permanent degradation of riparian habitat will be compensated for at a 1:1 ratio through the purchase of similar habitat value from a CDFW-approved conservation bank. Compensation will take the form of riparian preservation or creation in accordance with CDFW mitigation requirements, as required under project permits. Preservation and creation may occur onsite through a conservation agreement or offsite through purchasing credits at a Corps approved mitigation bank.
- This mitigation will include compensation for the loss of riparian habitat and will include the planting of Valley foothill/floodplain/ mixed riparian as appropriate. The planting plan will be implemented as detailed in a Restoration Plan approved by CDFW. The plan will includes performance standards for revegetation that will ensure successful restoration of the riparian areas.
- CSU Chico will replace any trees removed to ensure no net loss of habitat functions or values. All trees planted will be purchased from a locally adapted genetic stock obtained within 50 miles of the project site, where feasible. All species will be replaced at a 2:1 ratio.
- CSU Chico will protect other wetlands, riverine and associated riparian habitats located in the vicinity of the project site by installing protective fencing. Protective fencing will be installed along the edge of construction areas including temporary and permanent access roads where construction will occur within 200 feet of the edge of wetland and riverine habitat (as determined by a qualified biologist). The location of fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Signs will be erected along the protective fencing at a maximum spacing of one sign per 50 feet of fencing. The signs will state: “This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment.” The signs will be clearly readable at a distance of 20 ft, and will be maintained for the duration of construction activities in the area.
- Where riparian vegetation occurs along the edge of the construction easement, CSU Chico will minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire plant. Trimming will be conducted per the direction of a biologist and/or Certified Arborist.

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APPENDIX B
Comments and Responses

Appendix B includes the comment letters received during the agency/public review period for the Initial Study/Mitigated Negative Declaration (from March 19, 2014 to April 17, 2014). A summary of the comment letters received is provided below in **Table B-1**, with the individual comment letters and CSU Chico's response to the comment letters provided on the following pages.

TABLE B-1
DRAFT IS/MND COMMENTS

Item	Agency/Commenter	Dated	Received by CSU Chico	Comment Summary
1.	Dug Ringel	March 20, 2014	March 20, 2014	Granting of easements from the City and other jurisdictional matters.
2.	LaDona Knigge	March 20, 2014	March 20, 2014	Opportunity to create a bicycle lane through campus.
3.	Central Valley Regional Water Quality Control Board (CVRWQCB)	March 25, 2014	March 27, 2014	Impacts to jurisdictional waters must be avoided through implementation of mitigation measures and permits for construction activities must be acquired.
4.	Central Valley Flood Control Protection Board (CVFCPB)	April 3, 2014	April 8, 2014	Big Chico Creeks is under CVFCPB's jurisdiction and a permit for construction activities will be required. Measures to avoid impacts to Big Chico Creek should be implemented.
5.	City of Chico	April 18, 2014	April 18, 2014	Authorization to construct in the area of Big Chico Creek; tree preservation; consideration for the riparian and flood zone.

Phil Wade

From: Ray Weiss
Sent: Thursday, March 27, 2014 1:03 PM
To: Phil Wade
Subject: FW: Physical Science Bridge Replacement and the Selvester's Café Bridge Restoration CEQA

Hey Phil - these are just email comments. We should still include as part of the Final.

-----Original Message-----
From: Wright, Jenna [mailto:jlwright@csuchico.edu]
Sent: Tuesday, March 25, 2014 9:04 AM
To: Ray Weiss
Subject: FW: Physical Science Bridge Replacement and the Selvester's Café Bridge Restoration CEQA

Comment 1

-----Original Message-----
From: Ringel, Dug (Retired)
Sent: Thursday, March 20, 2014 10:47 AM
To: Planning, Design & Construction
Subject: Physical Science Bridge Replacement and the Selvester's Café Bridge Restoration CEQA

Attn: Jenna Wright

In a brief review of the document it states a temporary construction easement will be obtained from the City of Chico. I believe both construction sites lie within either a Grant of License or Agreement of License from the city to CSUC. If that is the case the license documents preclude permanent construction activities within the confines of the license. As a practical matter this was ignored at the time the ADA ramp on the north end of the Selvester Cafe bridge took place and nothing came of it. But as part of due diligence you might want to check the documents as to how they read and perhaps review with the city folks. A

On a related matter, at one point in the past CSUC approached the city asking if they would consider transfer of ownership of Alumni Glen to the college. They were agreeable to the idea in concept but it was never pursued. It might be worthwhile at some point to further investigate clearing up the jurisdictional confusion created by the numerous grants and licenses from the city. B

One final note you may want to consider is that I recall during construction of the O'Connell utility bridge, which also falls within a city agreement, someone raised a question about ownership of air space above the bridge. I don't recall the particulars but you may want to review records of that construction as to what the concern was and how it was resolved. C

Dug Ringel

Letter 1 Dug Ringel

Response 1A: Comment noted. No additional response is warranted.

Response 1B: Comment noted. No additional response is warranted.

Response 1C: Comment noted. No additional response is warranted.

Phil Wade

From: Ray Weiss
Sent: Thursday, March 27, 2014 1:03 PM
To: Phil Wade
Subject: FW: SUBJECT: CEQA - INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE PHYSICAL SCIENCE BRIDGE REPLACEMENT AND SELVESTER'S CAFÉ BRIDGE RESTORATION PROJECTS

Phil – here you go!

From: Wright, Jenna [mailto:jlwright@csuchico.edu]
Sent: Tuesday, March 25, 2014 9:04 AM
To: Ray Weiss
Subject: FW: SUBJECT: CEQA - INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE PHYSICAL SCIENCE BRIDGE REPLACEMENT AND SELVESTER'S CAFÉ BRIDGE RESTORATION PROJECTS

Comment 2

From: Knigge, LaDona
Sent: Thursday, March 20, 2014 4:15 PM
To: Planning, Design & Construction
Subject: SUBJECT: CEQA - INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE PHYSICAL SCIENCE BRIDGE REPLACEMENT AND SELVESTER'S CAFÉ BRIDGE RESTORATION PROJECTS

The bridge replacement and enhancement of emergency lanes presents an opportunity to create a bicycle lane through campus. The designated emergency route could be an excellent route for bicyclists to cross campus. A

LaDona Knigge

LaDona Knigge, PhD
Associate Professor
GIS Coordinator
Dept. of Geography and Planning
California State University, Chico
507 Butte Hall
Chico, CA 95929-0425

Letter 2 LaDona Knigge

Response 2A: Comment noted. No additional response is warranted.

California Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

Central Valley Regional Water Quality Control Board

25 March 2014

Ms. Jenna Wright
California State University, Chico
400 West First Street
Chico, CA 95929

COMMENTS ON THE MITIGATED NEGATIVE DECLARATION FOR PROPOSED PHYSICAL SCIENCE BRIDGE REPLACEMENT & SELVESTER'S CAFÉ BRIDGE RESTORATION PROJECT, CHICO, BUTTE COUNTY

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) is a responsible agency for this project, as defined by the California Environmental Quality Act (CEQA). On 19 March 2014, we received your request for comments on the Mitigated Negative Declaration for the Physical Science Bridge Replacement & Selvester's Café Bridge Restoration Project.

California State University, Chico is proposing to replace the existing Physical Science Bridge that spans Big Chico Creek with two new bridges that will facilitate emergency vehicle and pedestrian access between the CSU Chico campus and Arcadian Avenue. The existing Physical Science Bridge is a narrow steel truss bridge that currently provides an important connection point over Big Chico Creek to both sides of the CSU Chico campus. The existing bridge is a 5 ½-foot wide by 81-foot long, 2-span, reinforced concrete slab between steel girders. The existing structure was constructed during the 1940's and was only meant as a pedestrian foot bridge; therefore, it is incapable of emergency vehicle access across campus. The bridge is also not considered ADA compliant based on a number of conditions.

Based on our review of the information submitted for the proposed project, we have the following comments:

Clean Water Act (CWA) Section 401, Water Quality Certification

The Central Valley Water Board has regulatory authority over wetlands and waterways under both the Federal Clean Water Act (CWA) and the California Water Code, Division 7 (CWC). Discharge of dredged or fill material to waters of the United States requires a CWA Section 401 Water Quality Certification from the Central Valley Water Board. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. 401 Certifications are issued in combination with CWA Section 404 Permits issued by the Army Corps of Engineers. The proposed project must be evaluated for the presence of jurisdictional waters, including wetlands and other waters of the State. Steps must be taken to first avoid and minimize impacts to these waters, and then mitigate for unavoidable impacts. Both the Section 404 Permit and Section 401 Water Quality Certification must be obtained prior to site disturbance. A

General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP)

Construction activity, including demolition, resulting in a land disturbance of one acre or more must obtain coverage under the CGP. The Physical Science Bridge Replacement & Selvester's Café Bridge Restoration Project must be conditioned to implement storm water pollution controls during construction and post-construction as required by the CGP. To apply for coverage under the CGP the property owner must submit Permit Registration Documents electronically prior to construction. Detailed information on the CGP can be found on the State Water Board website:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/gen_const.shtml

B

Post-Construction Storm Water Requirements

Studies have found the amount of impervious surface in a community is strongly correlated with the impacts on community's water quality. New development and redevelopment result in increased impervious surfaces in a community. Post-construction programs and design standards are most efficient when they involve (i) low impact design; (ii) source controls; and (iii) treatment controls. To comply with Phase II Municipal Storm Water Permit requirements the City of Chico must ensure that new developments comply with specific design strategies and standards to provide source and treatment controls to minimize the short and long-term impacts on receiving water quality. The design standards include minimum sizing criteria for treatment controls and establish maintenance requirements. The proposed project must be conditioned to comply with post construction standards adopted by the City of Chico in compliance with their Phase II Municipal Storm Water Permit.

C

Dewatering Alternative 1: Discharge to Storm Drains or Waters of the United States

A dewatering permit, *General Order for Dewatering and Other Low Threat Discharges to Surface Waters*, (Central Valley Water Board Order No. R5-2008-0082, adopted 12 June 2008) may be required for pump testing, pipeline dewatering and/or construction activities. This general NPDES (National Pollutant Discharge Elimination System) permit covers the discharge to waters of the United States of clean or relatively pollutant-free wastewater that poses little or no threat to water quality. The following categories are covered by the dewatering permit: well development water; construction dewatering; pump/well testing; pipeline/tank pressure testing; pipeline/tank flushing or dewatering; condensate discharges; water supply system discharges; miscellaneous dewatering/low threat discharges. The dewatering permit applies only to direct discharges to waters of the United States.
Failure to obtain a dewatering permit, when required, may result in enforcement action. An application form and a copy of the permit are available at this office.

D

Dewatering Alternative 2: Discharges to Land

Construction and system test dewatering discharges that are contained on land (i.e., will not enter waters of the United States) are allowed under Central Valley Water Board Resolution No. 2003-0003-DWQ provided the following conditions are met: (1) the dewatering discharge is of a quality as good as or better than underlying groundwater; and (2) there is a low risk of nuisance. Examples of dewatering discharges to land include a terminal basin, irrigation (with no return to waters of the United States), and dust control. You may request written confirmation from this office that the waiver is applicable.

E

If you have any questions or comments regarding this matter please contact me at (530) 224-4784 or by email at szaitz@waterboards.ca.gov.

Scott A. Zaitz, R.E.H.S.
Environmental Scientist
Storm Water & Water Quality Certification Unit

SAZ:wrb:lmw

cc w/o
enclosures: Ms. Leah Fisher, U.S. Army Corp of Engineers, Sacramento
Department of Fish and Wildlife, Region 2, Rancho Cordova
State Clearing House Number (2014032059)

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Letter 3 Central Valley Regional Water Quality Control Board

Response 3A: The Draft IS/MND notes on pg. 32 that, "…Big Chico Creek was identified as a potential waters of the U.S. and falls under the jurisdiction of the Corps per Section 404 of the CWA." The Draft IS/MND goes on to state that "Implementation of the proposed project is not expected to result in permanent impacts to potential waters of the U.S., as all project features (i.e., abutments, etc.) would continue to be placed outside of these wetland areas. However, temporary impacts are anticipated through a variety of construction-related activities (including the placement of scaffolding, equipment, and dewatering, etc.)." The Draft IS/MND acknowledges that as part of the proposed project, a Clean Water Act Section 404 Nationwide Permit from the Corps, a Clean Water Act Section 401 Water Quality Certification Waiver from the Regional Water Quality Control Board, and a California Fish and Game Code 1600-1602 Streambed Alteration Agreement from the CDFW will need to be obtained prior to the start of construction activities (Draft IS/MND; pg. 32).

Response 3B: The proposed project area is less than one acre in size; therefore, the proposed project does not require coverage under the CGP.

Response 3C: CSU Chico will coordinate with CVRWQCB regarding specific pre- and post-construction permitting requirements for the proposed project.

Response 3D: Comment noted. If required, CSU Chico will comply with CVRWQCB's dewatering permit requirements.

Response 3E: This comment is not applicable as dewatering, if required, will not be discharged onto land.

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2380 FAX: (916) 574-0682

April 3, 2014

Ms. Jenna Wright
California State University, Chico
400 W. First Street
Chico, California 95929-0018

Subject: CEQA Comments: CSU, Chico: Physical Science Bridge Replacement Project and the Selvester's Cafe Bridge Restoration Project, Mitigated Negative Declaration, SCH No. 2014032059

Location: City of Chico, Butte County

Dear Ms. Wright:

Central Valley Flood Protection Board (Board) staff has reviewed the subject document and provides the following comments:

The proposed project crosses Big Chico Creek which is under Board jurisdiction. The Board enforces its Title 23, California Code of Regulations (23 CCR) for the construction, maintenance, and protection of adopted plans of flood control that protect public lands from floods. Adopted plans of flood control include federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways. The geographic extent of Board jurisdiction includes the Central Valley, and all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins (23 CCR, Section 2).

A Board permit is required prior to working in the Board's jurisdiction for the following:

- Placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (23 CCR Section 6);

- Existing structures that predate permitting, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (23 CCR Section 6);

- Vegetation plantings require submission of detailed design drawings; identification of vegetation type; plant and tree names (both common and scientific); quantities of each type of plant and tree; spacing and irrigation method; a vegetative management plan for maintenance to prevent the interference with flood control operations, levee maintenance, inspection, and flood fight procedures (23 CCR Section 131).

A

Other local, federal and State agency permits may be required and are the responsibility of the applicant to obtain.

Board permit application forms and our complete 23 CCR regulations can be found on our website at http://www.cvfpb.ca.gov/. Maps of the Board's jurisdiction including all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and Board designated floodways are also available on a Department of Water Resources website at http://gis.bam.water.ca.gov/bam/.

Additional Considerations Related to Potential Impacts of Vegetation and Hydraulics

Accumulation and establishment of woody vegetation that is not managed may have negative impacts on channel capacity and may increase the potential for levee over-topping or other failure. When vegetation develops and becomes habitat for wildlife, maintenance to initial baseline conditions typically becomes more difficult as the removal of vegetative growth may be subject to federal and State resource agency requirements for on-site mitigation. The proposed project should include mitigation measures to avoid decreasing floodway channel capacity. B

Adverse hydraulic impacts of proposed encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The proposed project should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. If possible off-site mitigation outside of the Board's jurisdiction should be used when mitigating for vegetation removed at the project location. C

If you have any questions please contact James Herota at (916) 574-0651, or via email at james.herota@water.ca.gov.

Sincerely,

for Len Marino, P.E.
Chief Engineer

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

Letter 4 Central Valley Flood Protection Board

Response 4A: Comment noted. CSU Chico will comply with all applicable requirements set forth under a CVFPB permit.

Response 4B: The proposed project does not include features or activities that would impede the floodway, nor will the proposed project impede future maintenance activities on the creek.

Response 4C: Implementation of the proposed project would not impede flood flows, reroute flood flows, or increase sediment accumulation. Furthermore, Mitigation Measure BIO-6 proposes the off-site replacement of certain riparian habitat and trees, as appropriate, that may be removed as a result of the proposed project (Draft IS/MND; pp. 36 – 37).

Phil Wade

From: Dan Efseaff [dan.efseaff@Chicoca.gov]
Sent: Friday, April 18, 2014 3:21 PM
To: Planning, Design & Construction
Cc: Bob Greenlaw
Subject: Comments on Notice of Intent - Physical Science Bridge replacement

Hello,

I just wanted to make you aware of a couple of points that may help you with the project:

- I am sure that this will be examined, but as some of the ownership of land in that area of Big Chico Creek belongs to the City and under long term agreement for CSUC use, there may be some permission or authorizations that may have to be completed. A
- Under the Chico Municipal Code, Tree Preservation Regulations (Chapter 16.66) there may be requirements to obtain a City permit related to tree removal. Under the code may also be requirements for replacement (for example, for every 6 inches dbh removed a new tree may need to be planted). B
- As a riparian corridor, we support the removal of invasive and non-native trees and shrubs, and best management practices to minimize the importation of invasive propagules (seed, fragments, organisms, etc). C
- As it appears, the design appears to be well above the riparian area and flood zone, minimizing impacts to riparian vegetation, stream banks, and flood flows (and the potential of trapping debris). We urge consideration of those factors in the design. D

We appreciate the opportunity to comment and can work with you as the project moves forward if you have any questions.

Sincerely,

Dan Efseaff |Park and Natural Resource Manager
Public Works Department | City of Chico
965 Fir Street | Chico, California 95927
530.896.7801 | dan.efseaff@Chicoca.gov
www.chicoca.gov

Letter 5 City of Chico

Response 5A: Comment noted. No additional response is warranted.

Response 5B: Comment noted. The Draft IS/MND notes on pg. 33 the City of Chico Municipal Code's Tree Preservation regulations. Pursuant to Mitigation Measure BIO-6 (Draft IS/MND; pg. 36), removed trees shall be replaced in accordance with the City's requirements at a 1:1 ratio.

Response 5C: Comment noted. No additional response is warranted.

Response 5D: Comment noted. No additional response is warranted.

APPENDIX C
Mitigation Monitoring and Reporting Program

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to describe the roles and responsibilities in the mitigation monitoring process for the proposed project, pursuant to CEQA Guidelines §15097. A reporting and monitoring program ensures that measures adopted to mitigate or avoid significant environmental impacts are implemented. It is a working guide to facilitate not only the implementation of mitigation measures, but also the monitoring, compliance, and reporting activities.

Compliance Checklist

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the CSU Chico Bridge Replacement/Restoration Project (proposed project). This MRRP is intended to be used by CSU staff and mitigation monitoring personnel to ensure compliance with the approved mitigation measures during all phases of project implementation. Mitigation measures identified in this MMRP were developed as part of the IS/MND prepared for the proposed project. Mitigation is defined by CEQA as a measure which:

- Avoids the impact 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 the impact by repairing, rehabilitating, or restoring the impacted environment.
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project.
- Compensates for the impact by replacing or providing substitute resources or environments.

The intent of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by the CSU Chico. **Table C-1** identifies the mitigation measure, the monitoring action for the mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. CSU Chico will be responsible for fully understanding and effectively implementing the mitigation measures contained within the MMRP.

Mitigation Monitoring and Reporting

As the Lead Agency, CSU Chico is responsible for ensuring full compliance with the mitigation measures adopted for the proposed project. CSU Chico will monitor and report on all mitigation activities, which shall be implemented at different stages of development throughout the project area. As such, the responsibilities for implementation shall be assigned to CSU Chico, a contractor, or a combination thereof.

If, during the course of project implementation, any of the mitigation measures identified herein cannot be successfully implemented, CSU Chico shall be immediately informed, and CSU Chico will then inform any affected responsible agencies. CSU Chico, in conjunction with any affected responsible agencies, will then determine if modification to the proposed project is required and/or whether alternative mitigation is appropriate.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
Aesthetics				
AS-1: Minimize Light and Glare Impacts. CSU Chico staff will ensure that the bridge lighting system shall include spill and glare shields and shall be of a cutoff style directed downward whenever feasible. Installation of the lighting system shall include a site visit by the manufacturer's engineer, or qualified representative, to "fine tune" the spill and glare control for off-site spill light.	Prior to construction	Project Engineer; CSU Chico	CSU Chico	Project designs will be reviewed and approved by CSU Chico prior to construction
Air Quality				
AQ-1: Implement Construction-Related Emission Control Practices. CSU Chico staff will ensure that the construction contractor implement the following applicable BCAQMD recommended fugitive dust emission measures (consistent with Rule 205, Fugitive Dust Emissions) and standard diesel PM emission control measures: • Stabilizing of backfill material, wind erodible surfaces, demolition debris, staging areas, stockpiled, and disturbed materials at all phases of activity. Also stabilize traffic areas, and stabilize areas during trenching, loading of trucks, and turf overseeding activities. • Maintain stability of soil through pre-watering, during, and immediately after clearing and grubbing activities and cut and fill activities. • Use of water spray, sweeping and water spray, or vacuum system to clear forms. • In unpaved areas limit vehicles to established unpaved roads and parking lots, and limit on-site vehicles to a speed of 15 mph on unpaved roads. • Land clearing, grading, earth moving or excavation activities suspended when winds exceed 20 miles per hour. • Install wheel washers or wash all trucks and equipment leaving the site. • Non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operation and hydroseed area. • Plant vegetative ground cover in disturbed areas as soon as possible. • Cover inactive storage piles. • Paved streets adjacent to the development site shall be swept or washed at the end of each day as necessary to remove excessive accumulations of silt and/or mud which may have accumulated as a	Prior to contract issuance	Contractor	CSU Chico	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
result of activities on the development site. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. • Maintain all equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.				
Biological Resources				
BIO-1: Implement Special Status Fish Avoidance and Compensation Measures. CSU Chico shall complete and/or ensure that the construction contractor implements the following special status fish avoidance/compensation measures: • To avoid and minimize water quality impacts associated with a dewatering plan (should it be required), site preparation and dewatering activities will occur from June 1 to October 1 (but may be extended to November 1 with approval by NMFS). This is a period of the year when NMFS' Endangered Species Act (ESA) listed species are least likely to occur in the Project area. • Prior to dewatering, a qualified fisheries biologist will design and conduct a fish and wildlife rescue and relocation effort to collect fish and other wildlife species from the area within the dewatering area involving the capture and return of those animals to suitable habitat within Big Chico Creek. To ensure compliance, a fisheries biologist will provide observation during initial dewatering activities. The fish rescue plan will be approved by NMFS, USFWS, and CDFW prior to dewatering activities. • An approved biologist will permanently remove, from within the project site, any exotic wildlife species, such as bullfrogs and crayfish, to the extent possible. • After construction activities are finalized, the stream channel will be restored to preconstruction conditions. • Purchase rearing habitat credits at a 1:1 ratio (or as determined in consultation with the NMFS) for the placement of bank stabilization materials within the project site at a NMFS approved anadromous fish conservation bank for impacts to Chinook and steelhead fish species.	Prior to contract issuance	Contractor	CSU Chico	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
• If gabion mats or other bank stabilization methods are placed on the stream bank, use a soil-rock mixture to facilitate re-vegetation of the project site. A ratio of rock to soil (70:30) is recommended. NMFS suggests a soil-rock mixture on top of the rock revetment to allow native riparian vegetation to be planted to ensure shaded riverine aquatic (SRA) habitat is replaced.				
BIO-2a: Conduct Pre-construction Surveys for Western Pond Turtle. No more than two weeks prior to the commencement of ground-disturbing activities, CSU Chico shall retain a qualified biologist to perform surveys for western pond turtle within suitable aquatic and upland habitat within the project site. Surveys will include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits) will temporarily move any identified western pond turtles upstream of the construction area, and temporary barriers will be placed around the construction area to prevent ingress. Construction will not proceed until the work area is determined to be free of turtles and their nests. The results of these surveys will be documented in a technical memorandum that will be submitted to CDFW (if turtles are documented). If the pre-construction surveys do identify western pond turtle nests within areas that may be affected by site construction, species avoidance measures shall occur through implementation of **Mitigation Measure BIO-2b.**	Prior to construction activities	CSU Chico	CSU Chico; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate CSU Chico planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
BIO-2b: Implement Western Pond Turtle Avoidance Measures. Should a western pond turtle nest be located within a work area, CSU Chico shall ensure that a qualified biologist (with the appropriate permits from the CDFW) relocate the eggs to a suitable facility for incubation and release hatchlings into the creek system in late fall. The biologist will be present on the project area during initial ground clearing, grading, and during all other construction activities.				
BIO-3a: Remove Vegetation outside Nesting/Breeding Season. If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally September 1 through January 31). If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through August 31), pre-construction surveys (**Mitigation Measure BIO-3b** and **BIO-3c**) would be performed prior to the start of project's construction phase.				
Mitigation Measure BIO-3b: Conduct Pre-construction Nesting Bird Surveys. Should project-related construction or grading activities be scheduled during bird nesting season (February 1 to August 31), pre-construction surveys would be required by a qualified wildlife	Prior to construction activities	CSU Chico	CSU Chico; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate CSU Chico

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
biologist to identify active Swainson's hawk nests within ½-mile of proposed construction activities and nests of other species within 250 feet of proposed construction activities. The surveys would be conducted no less than 14 days and no more than 30 days prior to the beginning of construction. The results of the survey would be emailed to CDFW at least three days prior to construction. Surveys would be conducted by a qualified biologist. For Swainson's hawk surveys, guidelines provided in the *Recommended Timing and Methodology for Swanson's Hawk Nesting Survey in the Central Valley* (Swainson's Hawk Technical Advisory Committee 2000) would be followed where possible**.** If the pre-construction surveys do not identify any nesting raptors or other nesting migratory bird species within areas potentially affected by construction activities, no further mitigation would be required. If the pre-construction surveys do identify nesting raptors or other nesting bird species within areas that may be affected by site construction, nest avoidance measures shall occur through implementation of **Mitigation Measure BIO-3c**.				planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
BIO-3c: Implement Avoidance Measures for Active Bird Nest Sites. Should active nest sites be discovered within areas that may be affected by construction activities, CSU Chico shall ensure that the construction contractor implement the following nest avoidance measures: • **Swainson's Hawk:** If active nests are found, CDFW would be notified and construction-related impacts to nesting birds would be avoided by establishment of appropriate no-work buffers to limit project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the CDFW, although a ¼ mile buffer would be used when possible. The no-work buffer zone would be delineated by highly visible temporary construction fencing. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird(s). No project-related construction activity would commence within the no-work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active. • **Yellow Warbler:** If active nests are found, project-related construction impacts would be avoided by establishment of appropriate no-work buffers to limit Project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the CDFW although a 500-foot would be used when possible. The no-work buffer zone would be delineated by	Prior to and during construction	Contractor; CSU Chico	CSU Chico; CDFW	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
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Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
highly visible temporary construction fencing. In consultation with CDFW, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to adversely affect the nest or nesting behavior of the bird. No project-related construction activity would commence within the no-work buffer area until a qualified biologist and CDFW confirms that the nest is no longer active.				
BIO-4a: Conduct Pre-Construction Survey for Bat Species. A bat survey shall be conducted by a qualified biologist to establish the presence or absence of roosting bats prior to May 1st in order to put exclusionary measures into place before the active season of this species (no exclusionary efforts should be conducted during May 1st to August 31st of the construction year) and to prevent bats from utilizing the bridge structure. If no roosting bats are found, no further mitigation would be necessary.	Prior to construction activities	CSU Chico	CSU Chico; CDFW	Results of the survey and any recommended avoidance measures must be provided to the appropriate CSU Chico planner prior to the start of construction. Ongoing avoidance measures will be overseen by a qualified biological monitor and/or construction inspector.
BIO-4b: Implement Bat Species Exclusion Measures Prior to Active Season. If pallid bats or other bat species are detected within the roost at the time of implementation of **Mitigation Measure BIO-4a**, excluding any bats from roosts will be accomplished by a qualified biologist prior to the removal of roost trees and the bridge. The timing and other methods of exclusionary activities will be developed by the qualified biologist in order to reduce the stress on the bats to the amount feasible while taking into account project schedule. Exclusionary devices, such as plastic sheeting, plastic or wire mesh, can be used to allow for bats to exit but not re-enter any occupied roosts. Expanding foam and plywood sheets can be used to prevent bats from entering unoccupied roosts.	Prior to and during construction	Contractor; CSU Chico	CSU Chico; CDFW	This measure shall be added to general notes on construction specifications, plans, and bid documents.
BIO-5a: Implement VELB Avoidance Measures. CSU Chico shall ensure that the construction contractor maintain a setback of 100 feet from all elderberry shrubs to avoid impacts to valley elderberry longhorn beetle. If the 100 foot setback is not feasible, the construction contractor shall implement a number of avoidance measures (in consultation and approval by the USFWS). Such measures may include installing fencing around the shrubs, providing construction worker awareness training, transplanting of shrubs, and requiring biological monitoring during construction. The *1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS, 1999) provides applicable avoidance and minimization measures. No construction shall occur within 100 feet of all elderberry shrubs identified onsite until final	Prior to and during construction	Contractor; CSU Chico	CSU Chico; USFWS	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
approvals are received from the USFWS (Biological Opinion or concurrence letter). Upon USFWS approvals, the construction contractor shall create a minimum of 20-foot buffer around each potentially affected shrub. Work crews shall be briefed on the status of the beetle, the need to protect its host plant (elderberries), requirements to avoid damaging elderberry shrubs, and possible penalties for not complying with identified avoidance and minimization measures. In addition, construction workers should be made aware of the habitat needs of valley elderberry longhorn beetle and the location of protection areas on the site.				
BIO-5b: Implement VELB Habitat Compensation Measures. To compensate for temporary and permanent impacts to elderberry shrubs (through removal or damage during construction activities), CSU Chico shall consult (and implement) with the USFWS on compensatory mitigation for permanent and temporary impacts; mitigation may be purchased at a USFWS-approved mitigation bank if approved by the USFWS. If transplantation is advised by the USFWS, locations of transplanted shrubs and conservation areas shall be approved by USFWS prior to transplanting. USFWS associated species planting requirements shall also be followed. All transplants shall follow the procedures outlined in the *USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle.*	Prior to construction activities	CSU Chico	CSU Chico; USFWS	Proof of purchase of mitigation credits or recordation of mitigation easement.
BIO-6: Implement Riparian Habitat Avoidance and Compensation Measures. CSU Chico shall implement the following riparian habitat avoidance and compensation measures: • Prior to removal of any trees, an ISA Certified Arborist will conduct a tree survey in areas that may be impacted by construction activities. This survey will document tree resources that may be adversely impacted by implementation of the proposed project. The survey will follow standard professional practices. • Current riparian vegetation and oaks will be retained to extent feasible. A Tree Protection Zone (TPZ) will be established around any tree or group of trees to be retained. The TPZ will be delineated by an ISA Certified Arborist. The TPZ will be defined by the radius of the dripline of the tree(s) plus one foot. The TPZ of any protected trees will be demarcated using fencing that will remain in place for the duration of construction activities. • Construction-related activities will be limited within the TPZ to those activities that can be done by hand. No heavy equipment or machinery will be operated within the TPZ. Grading will be prohibited within the TPZ. No construction materials, equipment, or heavy	Prior to and during construction	Contractor; CSU Chico	CSU Chico	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
machinery will be stored within the TPZ. • To ensure that there is no net loss of riparian habitat, CSU Chico will create or restore riparian habitat that is of a like function and value to the habitats lost. The permanent degradation of riparian habitat will be compensated for at a 1:1 ratio through the purchase of similar habitat value from a CDFW-approved conservation bank. Compensation will take the form of riparian preservation or creation in accordance with CDFW mitigation requirements, as required under project permits. Preservation and creation may occur onsite through a conservation agreement or offsite through purchasing credits at a Corps approved mitigation bank. • This mitigation will include compensation for the loss of riparian habitat and will include the planting of Valley foothill/floodplain/ mixed riparian as appropriate. The planting plan will be implemented as detailed in a Restoration Plan approved by CDFW. The plan will includes performance standards for revegetation that will ensure successful restoration of the riparian areas. • CSU Chico will replace any trees removed to ensure no net loss of habitat functions or values. All trees planted will be purchased from a locally adapted genetic stock obtained within 50 miles of the project site, where feasible. All species will be replaced at a 1:1 ratio. • CSU Chico will protect other wetlands, riverine and associated riparian habitats located in the vicinity of the project site by installing protective fencing. Protective fencing will be installed along the edge of construction areas including temporary and permanent access roads where construction will occur within 200 feet of the edge of wetland and riverine habitat (as determined by a qualified biologist). The location of fencing will be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications will contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Signs will be erected along the protective fencing at a maximum spacing of one sign per 50 feet of fencing. The signs will state: “This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment.” The signs will be clearly readable at a distance of 20 ft, and will be maintained for the duration of construction activities in the area. • Where riparian vegetation occurs along the edge of the construction				

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
easement, CSU Chico will minimize the potential for long-term loss of riparian vegetation by trimming vegetation rather than removing the entire plant. Trimming will be conducted per the direction of a biologist and/or Certified Arborist.				
Cultural Resources				
CR-1: Discovery of Cultural Resources During Ground-Disturbing Activities. The construction contractor shall cease work if prehistoric, historic or paleontological subsurface cultural resources are discovered during ground-disturbing activities. If cultural resources are discovered during ground-disturbing activities, all activity in the vicinity shall cease until the discovery is evaluated by an archaeologist or paleontologist who meets the requirements of the Secretary of the Interior's Qualification Standards. If the archaeologist/paleontologist determines that the resources may be significant, no further work in the vicinity of the resources shall take place until appropriate treatment is determined and implemented. The need for archaeological and Native American monitoring during the remainder of the project will be re-evaluated by the archaeologist as part of the treatment determination, if deemed appropriate. The archaeologist shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. In considering any suggested mitigation proposed by the archaeologist in order to mitigate impacts to cultural resources, the project proponent will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted.	During construction activities	Contractor; CSU Chico	CSU Chico; NAHC	The NAHC shall be contacted by CSU Chico in the event potential resources are discovered, who will in turn contact appropriate Tribal authorities. A letter of compliance shall be submitted to CSU Chico as proof of compliance with this measure.
CR-2: Halt Work if Human Skeletal Remains are Identified During Construction. If human skeletal remains are uncovered during project construction, work must immediately halt and the Butte County Coroner must be contacted to evaluate the remains; the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines must be followed. If the County Coroner determines that the remains are Native American, the project proponent will contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further	During construction activities	Contractor; CSU Chico	CSU Chico; County Coroner; NAHC	The NAHC shall be contacted by the Butte County Coroner in the event potential resources are discovered, who will in turn contact appropriate Tribal authorities. A letter of compliance shall be submitted to CSU Chico as proof of compliance with this measure.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.				
Geology, Soils, and Seismicity				
GS-1: Implement Soil Erosion Best Management Practices. Prior to and during demolition and construction activities, CSU Chico will ensure that the contractor implements the following soil erosion best management practices (BMPs): • Placing fiber rolls around onsite drain inlets to prevent sediment and construction-related debris from entering inlets. • Placing fiber rolls along the perimeter of the site to reduce runoff flow velocities and prevent sediment from leaving the site. • Placing silt fences down gradient of disturbed areas to slow down runoff and retain sediment. • Specifying that all disturbed soil will be seeded, mulched, or otherwise protected by October 15th. • Stabilizing construction entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles. • Applying hydraulic mulch that temporarily protects exposed soil from erosion by raindrop impact or wind.	Prior to and during construction	Contractor; CSU Chico	CSU Chico	This measure shall be added to general notes on construction specifications, plans, and bid documents.
Hydrology and Water Quality				
HWQ-1: Implement Water Quality Best Management Practices. CSU Chico will ensure that the project contractor comply with the requirements of a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB), Central Valley Region. As part of the permit, the contractor would be required to prepare and implement a SWPPP into their construction plans, prior to initiating construction activities, identifying BMPs to be used to avoid or minimize any adverse effects before, during, and after construction to surface waters. The following BMPs will be incorporated into the project as part of the construction specifications: • Implement appropriate measures to prevent debris, soil, rock, or other material from entering the water. Use a water truck or other appropriate measures to control dust on applicable access roads, construction areas, and stockpiles. • Properly dispose of oil or other liquids.	Prior to and during construction	Contractor; CSU Chico	CSU Chico; CVRWQCB	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
• Fuel and maintain vehicles in a specified area that is designed to capture spills. All fueling and maintenance of vehicles and other equipment (including staging areas), will be located at least 20 meters from Big Chico Creek and any other drainages on site. • Fuels and hazardous materials would not be stored on site. • Inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids. • Schedule construction to avoid the rainy season as much as possible. Ground disturbance activities are expected to begin in the spring/summer of 2015. If rains are forecasted during construction, additional erosion and sedimentation control measures would be implemented. • Maintain sediment and erosion control measures during construction. Inspect the control measures before, during, and after a rain event. • Train construction workers in storm water pollution prevention practices. • Revegetate disturbed areas in a timely manner to control erosion.				
Noise				
N-1: Implement Construction-Related Noise Reduction Measures. CSU Chico will ensure that the project contractor shall implement the following noise reducing measures: • Maintenance equipment and vehicle noise would be minimized during project construction by muffling and shielding intakes and exhaust on maintenance/construction equipment (per the manufacturer's specifications) and by shrouding or shielding paint application/recycling equipment. • All equipment, haul trucks, and worker vehicles would be turned off when not in use for more than 10 minutes. • Residences and businesses would be notified about the type and schedule of maintenance activities at least two weeks prior to mobilization.	Prior to and during construction	Contractor; CSU Chico	CSU Chico	This measure shall be added to general notes on construction specifications, plans, and bid documents.
Transportation and Traffic				
T-1: Implement Traffic Control Plan. CSU Chico will ensure that the project contractor develop and implement a Traffic Control Plan, which would be reviewed and approved by the City of Chico and CSU Chico prior to construction. This plan would include the following measures: • Do not permit construction vehicles to block any roadways or private	Prior to and during construction	Contractor; CSU Chico	CSU Chico	This measure shall be added to general notes on construction specifications, plans, and bid documents.

TABLE C-1
MITIGATION MONITORING AND REPORTING PLAN

Mitigation Measure	Mitigation Timing	Responsible/Reporting Entity	Monitoring Agency	Method of Assurance
driveways. • Designate specific parking areas for worker's personal vehicles. • Provide access for emergency vehicles at all times. • Select travel routes to avoid schools, parks, and high pedestrian use areas when possible. Crossing guards provided by the contractor would be used when truck trips coincide with schools hours and when travel routes cross student travel path. • Obey all speed limits, traffic laws, and transportation regulations during construction. If speed limits are not posted, construction vehicles would not exceed 15 miles per hour on unpaved levee roads. • Use signs and flagmen, as needed, to alert motorists, bicyclists, and pedestrians to avoid conflict with construction vehicles or equipment. • Construction employee parking would be restricted to the designated staging areas. • No road closures are anticipated; however, in the event that road closures are necessary, local agencies and affected organizations would be notified prior to construction. • Closure of levee roads, construction sites, and public access areas for construction use would be clearly fenced and delineated with appropriate closure signage. • Require cyclists to dismount and walk bikes when bike/pedestrian path is narrowed to eight feet.				

BRIDGE REPLACEMENT/RESTORATION PROJECT

Final Initial Study/Mitgated Negative Declaration

Prepared for
California State University – Chico

December 2014

Addendum Prepared by
NorthStar Engineering

ADDENDUM

This Addendum is an attachment to the Final Initial Study/Mitigated Negative Declaration for the California State University (CSU Chico) Physical Science Bridge Replacement and Selvester's Café Bridge Restoration Projects, SCH#2014032059, approved in June 2014.

Overview

The original CSU Chico Physical Science Bridge Replacement Project included the installation of two bridges, one pedestrian and one vehicular bridge, at the Physical Science Bridge location. The project also included the restoration of the Selvester's Café/Gus Manolis Bridge located approximately 350 feet downstream.

In September 2014 a large sycamore along the bank of Big Chico Creek fell and destroyed the Selvester's Café/Gus Manolis Bridge) after a storm event. The bridge was originally slated for restoration as part of the CSU Chico Bridge Replacement/Restoration Project. However, given the damaged sustained from the fallen tree, which included the bridge being knocked clear from the northern stream abutment and no longer connected to the patio overhang adjacent to Selvester's Café, restoration was no longer possible. In October 2014, the collapsed structure and associated abutments were removed for public safety purposes (Notice of Exemption, per CEQA Guidelines Section15269, SCH#2014108013). Therefore, CSU Chico is now proposing to replace, rather than restore, the Selvester's Café/Gus Manolis Bridge.

This Addendum to the IS/MND has been prepared consistent with CEQA Guidelines Section 15164. Technical changes to the proposed project include:

- Installing only the vehicular bridge rather than the two bridges, one pedestrian and one vehicular bridge, at the Physical Science Bridge location.

- Shifting the pedestrian bridge from the Physical Science Bridge location to the Selvester's Café location, and subsequently replace rather than restore the pedestrian bridge.

Although these changes and additions are necessary given the damage and removal of the Selvester's Café/Gus Manolis Bridge, the proposed project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the project does not require the preparation of a Subsequent Negative Declaration per CEQA Guidelines Section 15162.

CSU Chico is preparing an Addendum to the IS/MDN per CEQA Guidelines Section 15164, which states:

> *(a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*
>
> *(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*
>
> *(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.*
>
> *(d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*
>
> *(e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency"s findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.*

Technical Changes

Changes to the Project Description contained in the IS/MND are provided further below. These revisions primarily pertain to the relocation of the proposed pedestrian bridge at the Physical Science location to the Selvester's Café location and the replacement rather than the restoration of the Selvester's Café/Gus Manolis Bridge. These revisions are technical changes and do not change the significance of any of the environmental impact conclusions within the IS/MND.

Mitigation Measures

The mitigation measures identified in the IS/MND are still applicable to both bridge projects; no new or expanded mitigation would be required as a result of project changes.

ENVIRONMENTAL CHECKLIST

Initial Study

1. Project Title:	California State University, Chico: Physical Science Bridge Replacement Project and the Selvester's Café Bridge Restoration Project
2. Lead Agency Name and Address:	California State University, Chico 400 West First Street Chico, CA 95929
3. Contact Person and Phone Number:	Jenna Wright Campus Planner & Financial Analyst (530) 898-6235
4. Project Location:	CSU Chico Campus at Arcadian Avenue Chico, CA
5. Project Sponsor's Name and Address:	(see Lead Agency)
6. General Plan Designation(s):	Public Facilities & Services (PFS)
7. Zoning Designation(s):	Public/Quasi Public Facilities (PQ)

8. Description of Project:

Introduction and Location

The California State University, Chico (CSU Chico) proposes to replace the existing Physical Science Bridge (proposed project) that spans Big Chico Creek with ~~two new bridges~~ a new vehicular bridge that will facilitate emergency vehicle and pedestrian access between the CSU Chico campus and Arcadian Avenue. The existing Physical Science Bridge is a narrow steel truss bridge that currently provides an important connection point over Big Chico Creek to both sides of the CSU Chico campus. The existing bridge is a 5 ½ -foot wide by 81-foot long, 2 span, reinforced concrete slab between steel girders. The existing structure was constructed during the 1940s and was only meant as a pedestrian foot bridge; therefore, it is incapable of emergency vehicle access across campus. The bridge is also not considered ADA compliant based on a number of conditions. **Figure 1** shows the project site and surrounding vicinity.

Located approximately 350 feet downstream from the Physical Science Bridge, as a smaller and separate project, CSU Chico proposes to ~~restore (i.e., clean, paint, and service)~~ replace the Selvester's Café/Gus Manolis Bridge.

On Thursday, September 25, 2014 a large sycamore along the bank of Big Chico Creek fell and destroyed the Gus Manolis Bridge (also referred to as the Selvester's Café Bridge) after a storm event. The bridge was knocked clear from the northern channel abutment and was no longer connected to the patio overhang adjacent to Selvester's Café on the southern side of the channel. Emergency authorization from the CVFCB to remove the structure was provided in October and the collapsed structure and associated abutments were removed. ~~This~~ The former bridge, was constructed in 1961, ~~also spans~~ and spanned Big Chico Creek. ~~and is located downstream approximately 350 feet.~~ It is very similar in construction to the Physical Science Bridge and ~~is~~ was a 5 ½ foot wide, 55 ft. long. This bridge serveds~~s~~ pedestrians only, and ~~is~~ was incapable of vehicular access. The project site for this bridge restoration project is also shown in **Figure 1**.

The change from the Selvester's Café/Gus Manolis Bridge from a restoration project to a replacement project does not result in new environmental effects or a substantial increase in the severity of previously identified significant effects. This document will largely focus on the replacement of the Physical Science Bridge. Areas that apply to the work on the Selvester's Café Bridge will be noted accordingly.

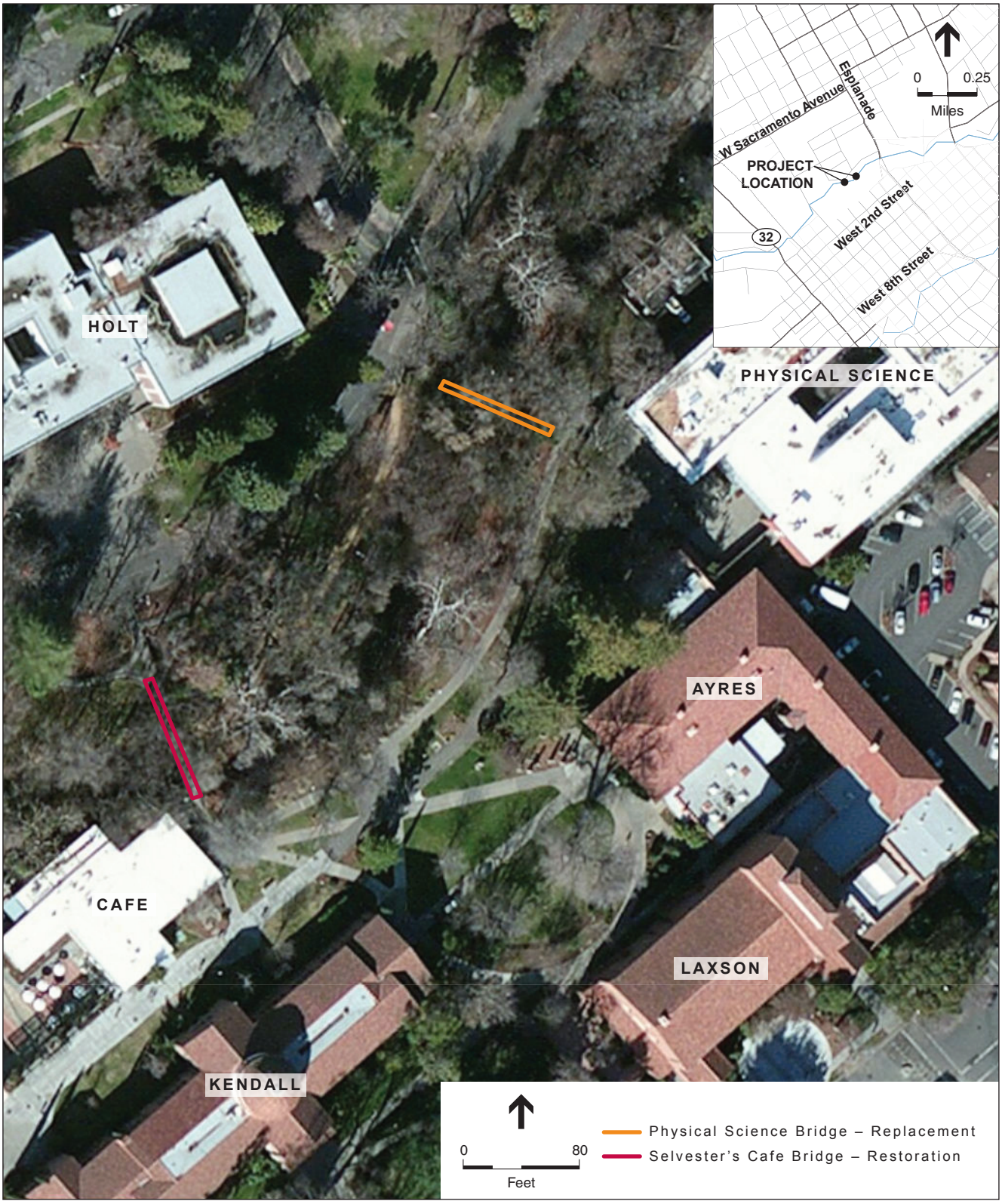
Project Background

Pedestrian, bicycle, and vehicular access is provided through a mixture of pedestrian pathways, sidewalks, open space, and service roads throughout the CSU Chico campus. Regular vehicle access to the campus core is very restricted with the use of bollards and access gates. One of these methods will also be used for the new bridge, as the vehicle portion of it is intended to be for emergency vehicles. While the west side of the campus has important emergency vehicle access across Big Chico Creek via the Mall Bridge, emergency vehicle access for the east side of campus is very limited due to the lack of a bridge that will accommodate emergency vehicles. This project proposes to correct the problem.

Project Purpose and Objectives

The purpose of the proposed project is to:

- Remove the existing Physical Science Bridge structure, which has been determined to be deficient for accessible path of travel and incapable of vehicular access;
- Replace with ~~two new separate~~ a new structure~~s~~: one that will meet design standards for vehicles, specifically emergency vehicles, utilizing this bridge, and ~~the other that will~~ provide adequate, accessible, and safe travel for campus users~~. This will minimize public safety conflicts by separating emergency response vehicles from non-motorized users of the bridge;~~



SOURCE: Microsoft, 2011; ESA, 2014

California State University, Chico Bridge Replacement/Restoration Project . 130142

Figure 1
Project Site

- Given the bridge's location within the environmentally sensitive Big Chico Creek, CSU Chico proposes to complete bridge replacement and restoration activities in a manner that minimizes environmental impacts to the creek corridor;
- Implement construction ~~and restoration~~ activities in a manner that maintains access, circulation, and connectivity to the surrounding CSU Chico campus as much as possible; and
- ~~Incorporate restoration activities (i.e., paint coatings, materials, etc.) that m~~ Maintain the aesthetic and design features of the existing bridges (i.e., paint coatings, materials, etc.).

Project Description

Physical Science Bridge Design

CSU Chico is proposing to replace the Physical Science Bridge at Arcadian Avenue with ~~two~~ a new bridge structures~~; one~~ to serve pedestrians and ~~one for~~ emergency vehicles when necessary. As previously described, the existing bridge is a narrow pedestrian bridge that does not adequately serve the east side of campus in terms of emergency vehicle access. The Physical Science Bridge, constructed in approximately the 1940s, has been identified as the best bridge on campus to replace for a second emergency vehicle access point. In coordination with the bridge replacement, the fire lane from the Physical Science Bridge to Kendall Hall will be improved, allowing emergency vehicles to enter the campus from Arcadian Avenue, cross the bridge, and exit via the campus fire lane to Warner Street.

The proposed Physical Science Bridge project will consist of one 22 foot wide bridge to allow access for emergency response vehicles. By designing one bridge several pedestrian safety, accessibility, right of way and environmental concerns associated with a single bridge structure were addressed by incorporating a reduced roadway/bridge approach that minimized the amount of additional fill material necessary for the proposed project. The originally proposed pedestrian bridge will be moved approximately 350 feet downstream to the Selvester's Café location.

~~The proposed project will consist of two separate bridges; one 20 foot wide bridge solely for emergency response vehicles and a 10 foot wide bridge for pedestrian use (see **Figure 2**). CSU Chico originally considered a single 30 foot wide by100 feet long single span replacement structure. However, by designing individual bridges for their respective functions (emergency vehicle access versus pedestrian connectivity), several pedestrian safety, accessibility, right of way and environmental concerns associated with a single bridge structure were addressed by incorporating a reduced roadway/bridge approach that minimized the amount of additional fill material necessary for the proposed project.~~

The proposed bridges will be designed to free-span the waterway, creating no additional obstruction to water flow at the design flood elevation. Supporting bridge abutments and piles will be located outside the existing channel as shown in **Figure 2**. The proposed Physical Science Bridge is designed as a single-span (free-spanning the waterway), removing the

existing one-foot wide pier and effectively reducing the existing flow obstruction. Supporting bridge abutments will be placed outside the existing bridge abutments and near the top of the existing channel. The abutment foundation will include a concrete abutment cap atop 5 30" cast-in-drilled-hole (CIDH) concrete piles at a depth of 35 feet below the existing grade. The proposed bridge is a chambered (arched) steel truss structure with 16' tall floor beams and a concrete deck that is 9" thick for a total structure depth of 25". ~~Preliminary design shows the bridge piles will likely be 24 inch cast-in-drilled-hole (CIDH) concrete piles at a depth of 35 feet below top of abutment. Preliminary design also shows the pedestrian bridge thickness at 14 inches (with a maximum approach slope of 4.5%) and the emergency vehicle access bridge thickness at 38 inches (with a maximum approach slope of 15%).~~

The bridge will provide lighting for safety and for path of travel code compliance. Lighting will match campus standard for site lighting, including compliance with 'dark sky' ordinances. Consistent with the CSU, Chico campus public art project, the proposed project will incorporate a decorative treatment consistent with the surrounding area and campus aesthetics.

Selvester's Café / Gus Manolis Bridge Design

On Thursday, September 25, 2014 a large sycamore along the bank of Big Chico Creek fell and destroyed the Selvester's Café/Gus Manolis Bridge after a storm event. The bridge was knocked clear from the northern channel abutment and was no longer connected to the patio overhang adjacent to Selvester's Café on the southern side of the channel. Emergency authorization from the CVFCB to remove the structure was provided in October and the collapsed structure and associated abutments were removed.

This original Selvester's Café Bridge was constructed in 1961 and was a narrow steel truss bridge approximately 6 ½ feet wide and 60 feet long.

The proposed replacement structure is a 72 foot long, 7 feet wide single-span steel truss with concrete deck pedestrian bridge. The proposed replacement Selvester's Cafe Bridge will follow the same horizontal alignment as the previous bridge with the majority of the existing elevated walkway on the channel right side to remain. The proposed bridge is longer than the previously existing bridge with both abutments being offset further away from the creek centerline; the left bank touchdown will be recessed into the existing cantilever concrete deck; and the right bank abutment will be placed to approximately 2 feet further away from the channel than the existing abutment. The bridge was lengthened to the extent possible (limited by the feasibility of meeting ADA requirements) to reduce the impact of the elevated walkway and maximize flow conveyance. The existing structure was vertically tilted; with the channel left side being elevated approximately 6" higher than the channel right side. The proposed structure will be set at the higher of these elevations, requiring reconstruction of the existing elevated walkway to elevate the walking surface to this higher elevation. The proposed bridge is a chambered (arched) steel truss structure with 5" tall floor beams and a concrete deck that is 5" thick for a total structure depth of 10".

The foundation will consist of two 30" cast-in-drilled-hole (CIDH) concrete piles at a depth of approximately 35 feet below the existing grade. A concrete abutment/ beam will span the two piles and serve to support and connect the bridge.

The existing rock slope protection (RSP) on the channel left bank will remain, and those areas disturbed will be replaced in-kind. The existing banks are moderately sloped at 2H:1V, and the disturbed area will remain at the top of the slope near the existing concrete deck and associated existing grade break.

Utilities

Campus infrastructure, such as steam, gas, electrical and data services will continue to be extended from the south side of campus, attached to the sides of the Physical Science Bridge, ~~bridges,~~ to the North side of Campus. All utility infrastructure connected to the bridge will comply with the applicable codes and for clearance above the flood plain.

Right-of-Way

No right-of-way issues are anticipated with the proposed project. A temporary construction easement by the City of Chico will be required.

Demolition and Construction – Equipment and Workers

The existing Physical Science Bridge will be removed as the first item of work. Removal of the existing bridge will include the removal of utilities, bridge superstructure, and the abutments/supports at each side of the creek.

The Selvester's Café/Gus Manolis Bridge was removed for public safety reasons and to prevent potential creek damage if the bridge were to shift location during a storm event. Removal of the existing bridge included the removal of two additional trees that posed safety risks. However, removal of bridge abutments/supports at each side of the creek still needs to occur.

Demolition will also include existing site facilities, vegetation, and tree removal as required for the new construction. Stabilization/replacement of soil where vegetation is removed will be a critical path activity. Erosion control and Best Management Practice (BMP) measures will be implemented to prevent erosion and protect water quality.

Typical construction equipment that may be used during bridge construction activities is identified below in **Table 1**.

TABLE 1
CONSTRUCTION EQUIPMENT

Equipment	Construction Purpose
Asphalt Concrete Paver	Paving roadways
Backhoe	Soil manipulation + drainage work
Bobcat	Fill distribution
Bulldozer / Loader	Earthwork construction + clearing and grubbing
Crane	Bridge construction
Excavator	Soil manipulation
Grader	Ground leveling
Truck with Seed Sprayer	Landscaping
Water Truck	Earthwork construction + dust control
Concrete Truck	Bridge construction
Concrete Pump Truck	Bridge construction
Equipment and Haul Truck	Bridge and fill material delivery + clearing and grubbing

~~The Selvester's Café Bridge Restoration Project will consist of preparation and painting of the steel support girders. No demolition or new construction is planned for this bridge. No in-channel work or ground disturbing activities will be required under this phase of the project. Specialized paint equipment will include a paint blaster/recycling machine, dust collector, and air compressors. The recycling machine stores, sorts and transports inbound and outbound blasting material streams. The dust collector filters and controls atmosphere within the paint containment tent. Air compressors provide air pressure to drive the recycling and collecting machines. A water containment system will be established to ensure that contaminated water used to wash and clean paint surfaces is fully captured without affecting the environment. All these machines come on wheeled trailers or carriages that spread out load below legal limits for operating on local streets, access ramps, and would be parked as close to the bridge as possible. Erosion control and BMPs will be implemented to prevent erosion and protect water quality.~~

An estimated 10 to 20 workers, which could vary based on construction/restoration activity, would be onsite each day. Construction activities would take place in compliance with the City of Chico Noise Ordinance. The noise ordinance indicates that construction-related noise is exempt from the ordinance, provided that construction occurs between the hours of 7:00 a.m. and 9:00 p.m., Monday through Saturday, and between 10:00 a.m. and 6:00 p.m., Sundays and holidays, and does not exceed 83 dBA 7.6 meters (25 feet) from the source or 86 dBA at any point outside of the property plane of the project.

Bridge construction ~~and restoration~~ activities will occur during summer months when the water is lowest and storm flows do not occur down Big Chico Creek. For the bridge replacement project<u>s</u>, minor dewatering activities may be required during the placement of the structural foundation. <u>Temporary installation and maintenance of scaffolding may need to be placed in the creek for the installation of falsework. Among the purposes of the</u>

temporary falsework would be for susupending the existing utilities on the Physical Science Bridge across the creek to maintain service (gas, fiber optic and telephone) and for the installation of the Selvester's Café/Gus Manolis Bridge, which is anticipated to be installed in two sections. Should dewatering be required, a dewatering plan would be prepared and implemented that includes measures to ensure that potential effects to any sensitive species that may be present in the creek (within the work area) would be avoided and/or minimized. The dewatering plan would include requirements for a qualified biological monitor to be present and to work with the construction contractor to isolate the work area, survey for the potential presence of aquatic species, and, if present, to remove and relocate these species to suitable habitats up or downstream from the work area. After the site is cleared of all potentially present aquatic species, dewatering activities would be allowed to commence. The biological monitor would remain onsite during dewatering to ensure that all activities are conducted in a manner that is protective of the creek environment. No in-channel work or ground disturbing activities will be required under the Selvester's Café Bridge restoration project. All construction activities for the Physical Science Bridge and Selvester's Café/Gus Manolis Bridge replacement projects are expected to be completed over a single season and would occur in 2015. ~~The schedule for restoration of the Selvester's Bridge is still to be determined.~~

Detour Route

Other existing bridge crossings will serve as pedestrian detour routes during the construction phase of the project. Student and staff population during the summer months is very low, which will reduce inconvenience to those who would normally use the bridge.

9. Surrounding Land Uses and Setting:

The proposed project is located in the southeastern portion of the CSU Chico campus. As previously described, the proposed replacement would span Big Chico Creek, which traverses the campus from east to west. Surrounding land uses are primarily associated with the CSU Chico, and include the Physical Science Building approximately twenty-six feet to the east, Ayres Hall 120 feet to the south, Holt Hall 73 feet to the west, and Modoc Hall 300 feet to the north of the project site. Other nearby land uses include residential uses approximately 311 feet to the north of the project site, Bidwell Mansion State Historic Park 450 feet to the northeast, the Bidwell Bowl Amphitheater 258 feet to the east, Children's Playground 456 feet to the east, and the Bidwell Presbyterian Church 330 feet to the southeast.

10. Other public agencies whose approval is required:

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

- U.S. Army Corps of Engineers (Corps) for work conducted above a Navigable Water as defined under section 10 of the federal Clean Water Act (CWA);
- U.S. Fish and Wildlife Service (USFWS) for impacts to federally threatened species per section 7 of the federal Endangered Species Act;

- California Department of Fish and Wildlife (CDFW) to address impacts within the banks of the river and associated riparian habitat per Section 1602 of State Fish and Game Code;
- Regional Water Quality Control Board (RWQCB) to address potential impacts to water quality that may result from discharges from the project site to the river or from diffused sources (e.g., erosion from soil disturbance or waste discharges to land) per Section 401 of the CWA;
- Central Valley Flood Protection Board (CVFPB) for work within a designated floodway; and
- City of Chico for approval of a temporary construction easement.

11. CEQA sections not requiring further review:

Due to the absence or nature of the resources identified below, the proposed project would have no impact in the following areas:

Agriculture and Forestry Resources

The project site is located entirely on the CSU Chico campus, which the City of Chico General Plan designates as "Public Services and Facilities". The "Public Services and Facilities" designation includes sites for schools, governmental offices, airports, and other facilities. The site is zoned as "Public/Quasi Public Facilities", which does not allow for agricultural uses, and there are no lands with Williamson Act contracts that would be affected by project activities. No existing agricultural or timber-harvest uses are located on or in the vicinity of the project site. Consequently, implementation of the proposed project would not result in impacts to agricultural resources and this issue is not discussed further in this initial study.

Land Use and Planning

The proposed project is located entirely within the CSU Chico campus, which is designated as "Public Services and Facilities" and zoned "Public/Quasi Public Facilities". As previously described above under Section 9 "Surrounding Land Uses and Setting", surrounding land uses include CSU Chico facilities, residential areas, park land, and a place of worship. As described above under Section #8 "Project Description", the project is a bridge replacement/restoration project that would not involve permanent land use changes within the CSU Chico Campus or City. Upon project completion, all project areas (staging/access areas) would be returned to pre-project conditions after construction activities are completed. Furthermore, though the footprint of the proposed bridge replacement would be larger than the existing one, implementation of the proposed project would not result in any land use changes and would not fundamentally change the function of the study area or its surroundings. Consequently the proposed project is consistent with planning designations in the City of Chico General Plan and Zoning Code, and land use and planning issues are not further discussed in this initial study.

Mineral Resources

As identified in the Draft EIR for the CSU Chico Campus Master Plan 2005, no known mineral resources exist within the CSU Chico planning area, which includes the proposed project site (CSU Chico, 2005b). Implementation of the proposed project would not result in the loss of a known mineral resource of local, regional, or statewide importance. Furthermore, the proposed project would not interfere with an existing mining operation. Therefore, the proposed project would have no impact on mineral resources and this issue will not be further discussed in this initial study.

Population and Housing

The proposed project does not involve construction of residential land uses that would generate new residents in the city or region. Temporary construction workers (estimated at 10 to 20 workers) serving the proposed project would reasonably be expected to come from the existing labor pool of residents in Chico and nearby communities. Additionally, the proposed bridge replacement/restoration project does not include the provision of additional infrastructure with the capacity to serve other un-served properties, or stimulate additional economic activity not currently planned for in the vicinity or region. Therefore, the project would not induce direct or indirect population growth. Consequently, the proposed project will not have an impact on population and housing and these issues are not described further in this initial study.

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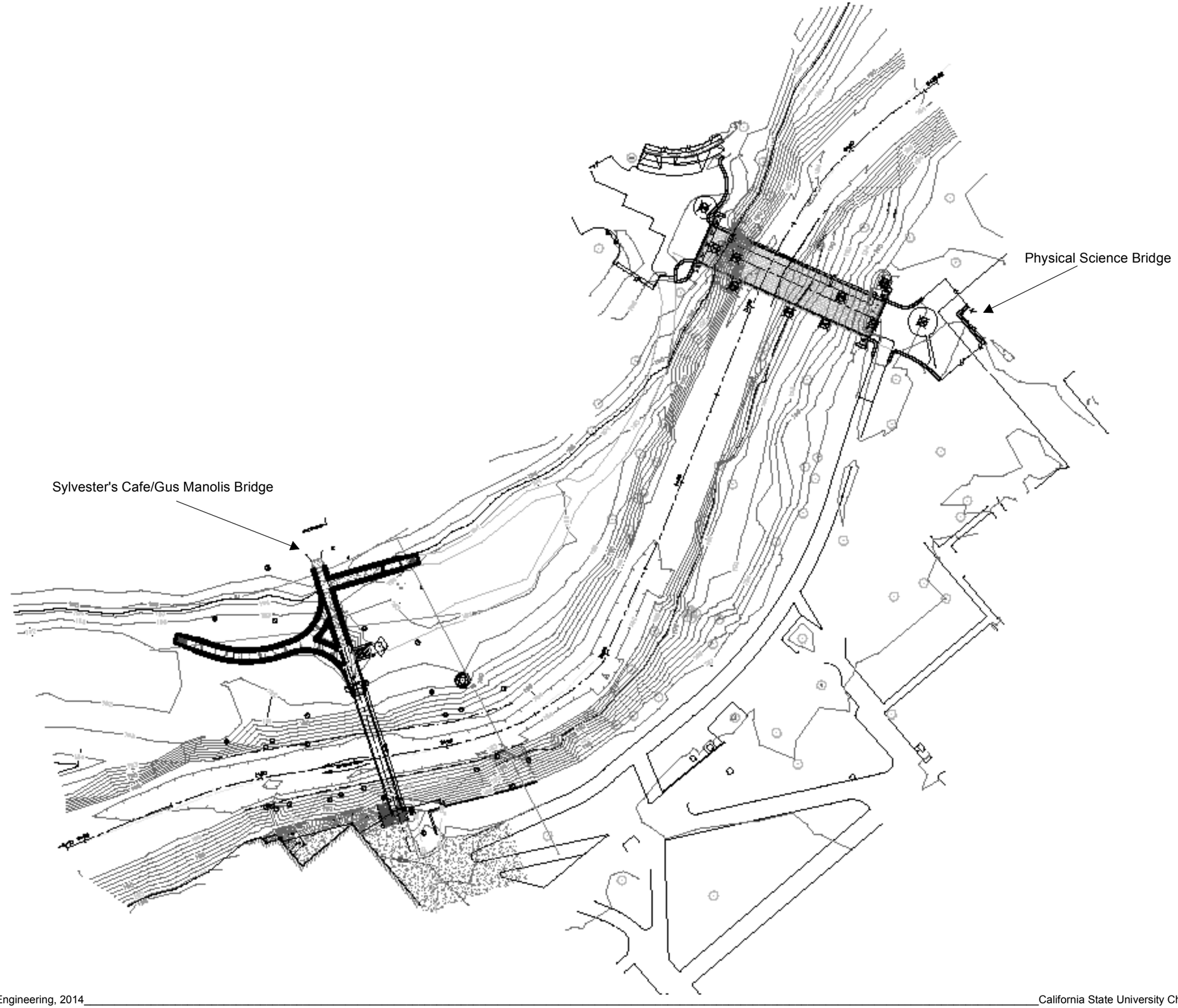

Source: CSU Chico/DLR Group/NorthStar Engineering, 2014

California State University Chico - Bridge Replacement/Restoration Project

Figure 2

CSU CHICO – BRIDGE REPLACEMENT/RESTORATION PROJECT

Cultural Resources Survey Report

Prepared for
California State University, Chico

July 2014

ESA

CSU CHICO – BRIDGE REPLACEMENT/RESTORATION PROJECT

Cultural Resources Survey Report

Prepared for
California State University, Chico

July 2014

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Statement of Confidentiality

This report identifies the locations of cultural resources in the vicinity of the CSU Chico – Bridge Replacement/Restoration Project (proposed project). Disclosure of this information to the public may be in violation of both federal and state laws. Federal regulations applicable to the proposed project include, but may not be limited to, Section 304 of the National Historic Preservation Act (16 United States Code [U.S.C.] 470w-3) and the Archaeological Resources Protection Act (16 U.S.C. Section 470h). The applicable state regulations include, but may not be limited to, Government Code Section 6250 et seq. and Section 6254 et seq. Disclosure of site location information to individuals other than those meeting the U.S. Secretary of the Interior's professional standards or the California State Personnel Board criteria for Associate State Archaeologist or State Historian II violates the California Office of Historic Preservation records access policy.

EXECUTIVE SUMMARY

The California State University, Chico (CSU Chico) proposes to replace the existing Physical Science Bridge that spans Big Chico Creek with two new bridges that will facilitate pedestrian and emergency vehicle access between the CSU Chico campus and Arcadian Avenue. The existing Physical Science Bridge is a narrow steel truss bridge that currently provides an important connection point over Big Chico Creek to both sides of the CSU Chico campus. The existing bridge is a 5 ½ -foot wide by 81-foot long, 3 span, reinforced concrete slab between steel girders. The existing structure was constructed during the 1940s and was only meant as a pedestrian foot bridge; therefore, it is incapable of emergency vehicle access across campus. The bridge is also not considered ADA compliant based on a number of conditions. Construction of the bridge requires permitting approval from both the U.S. Army Corps of Engineers (Corps) and the U.S. Fish and Wildlife Service (USFWS), and is subsequently required to comply with Section 106 of the National Historic Preservation Act (NHPA).

As a smaller and separate effort, CSU Chico proposes to paint the Selvester's Café Bridge (also known as the Gus Manolis Bridge). This bridge, constructed in 1961, also spans Big Chico Creek and is located downstream approximately 350 feet. It is very similar in construction to the Physical Science Bridge and is 5 ½ feet (ft.) wide and 55 ft. long. This bridge serves pedestrians only and is incapable of vehicular access.

Together, these two efforts (bridge replacement and painting) are considered to be the proposed project.

The bridges are within the CSU Chico Campus, in the City of Chico, Butte County, on the Chico(1979) Calif. USGS 7.5' topographic map in Township 22N; Range 1E. This report was prepared to inventory the cultural resources within the Area of Potential Effects (APE) for the project. Results from the records search indicated the presence of one previously recorded cultural resource within or adjacent to the project APE: the 1956 University Center Building. This building was recommended ineligible for listing in the National Register. ESA staff recommends the Physical Science Bridge as not eligible for the National Register, as archival research indicates that the structure does not meet any of the Criteria A-D. During a pedestrian survey of the area, ESA staff did not identify any archaeological remains.

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CSU CHICO – BRIDGE REPLACEMENT/ RESTORATION PROJECT

Cultural Resources Survey Report

1.0 Introduction

The CSU Chico proposes to replace the existing Physical Science Bridge that spans Big Chico Creek with two new bridges. As a smaller and separate effort, CSU Chico proposes to clean, paint, and service the Selvester's Café Bridge. Together, the bridge replacement and bridge painting constitute the proposed project.

Both bridges are within the CSU Chico campus, in the City of Chico, Butte County (**Figures 1 and 2**). The project is located in the Chico (1979) Calif. USGS 7.5' topographic map in Township 22N; Range 1E.

Construction of the new Physical Science bridges requires permitting approval from both the Corps and the USFWS, and is subsequently required to comply with Section 106 of the NHPA.

In accordance with Section 106, the purpose of this study is to:

- identify and evaluate historic properties in consultation with the Office of Historic Preservation and other interested parties;
- assess the effects of the undertaking on properties that are eligible for inclusion in the National Register of Historic Places;
- consult with the State Historic Preservation Officer (SHPO), other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation; and
- proceed with the proposed project according to the conditions of the agreement.

ESA staff that completed this study meets Secretary of the Interior professional qualification standards. Katherine Anderson has an M.A. in Public History and meets the standards for historian. R. Scott Baxter, has an M.A. in Anthropology, is a Registered Professional Archaeologist, and meets the standards for archaeology. Rebecca Allen Ph.D., RPA, who meets the standards for architectural history and archaeology, provided senior technical review and quality assurance.

2.0 Project Location and Description

CSU Chico proposes to replace the existing Physical Science Bridge that spans Big Chico Creek with two new bridges that will facilitate pedestrian and emergency vehicle access between the CSU Chico campus and Arcadian Avenue. The existing Physical Science Bridge is a narrow steel truss bridge that currently provides an important connection point over Big Chico Creek to both sides of the CSU Chico campus. The existing bridge is a 5 ½ -foot wide by 81-foot long, 3 span, reinforced concrete slab between steel girders. The existing structure was constructed during the 1940s and was only meant as a pedestrian foot bridge; therefore, it is incapable of emergency vehicle access across campus. The bridge is also not considered ADA compliant based on a number of conditions. **Figure 1** shows the project site and surrounding vicinity.

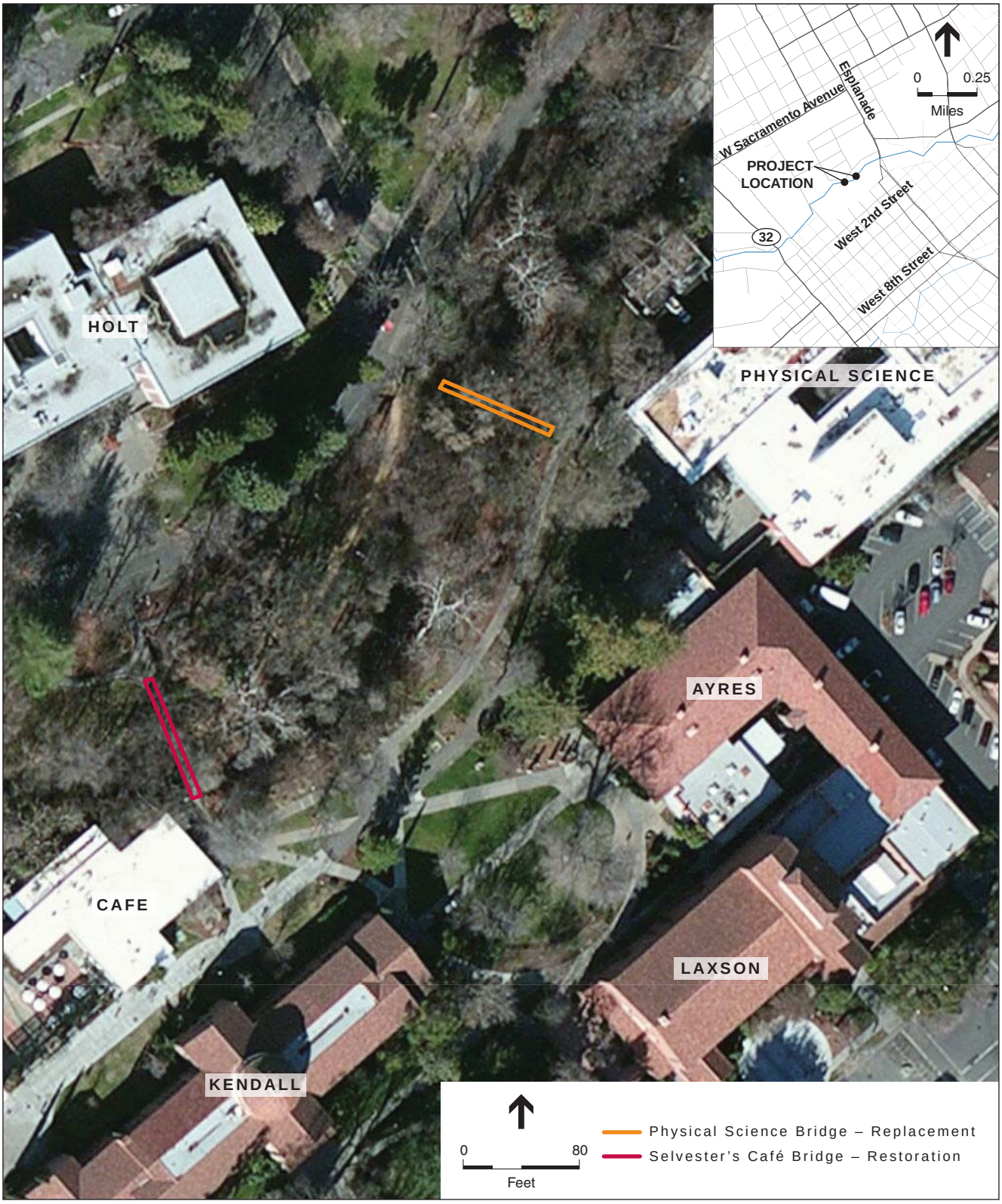
As a smaller and separate project, CSU Chico proposes to clean, paint, and service the Selevester's Café Bridge (also known as the Gus Manolis Bridge). This bridge, constructed in 1961, also spans Big Chico Creek, and is located downstream approximately 350 feet. It is very similar in construction to the Physical Science Bridge and is 5 ½ ft. wide and 55 ft. long. This bridge serves pedestrians only, and is incapable of vehicular access.

2.1 Bridge Design

CSU Chico is proposing to replace the Physical Science Bridge at Arcadian Avenue with two larger bridge structures to simultaneously serve pedestrians and emergency vehicles when necessary. As previously described, the existing bridge is a narrow pedestrian bridge that does not adequately serve the east side of campus in terms of emergency vehicle access. The Physical Science Bridge, constructed in approximately the 1940s, has been identified as the best bridge on campus to replace for a second emergency vehicle access point. Prior to the bridge replacement, and as a separate project, the fire lane from the Physical Science Bridge to Kendall Hall will be improved, allowing emergency vehicles to enter the campus from Arcadian Avenue, cross the bridge, and exit via the campus fire lane to Warner Street.

The proposed project will consist of two separate bridges: one 20-foot wide bridge solely for emergency response vehicles and a 10-foot wide bridge for pedestrian use (**Figure 2**). CSU Chico originally considered a single 30-foot wide by100 feet long single span replacement structure. However, by designing individual bridges for their respective functions (emergency vehicle access versus pedestrian connectivity), several right of way and environmental concerns associated with a single bridge structure were addressed by incorporating a reduced roadway/bridge approach that minimized the amount of additional fill material necessary for the proposed project.

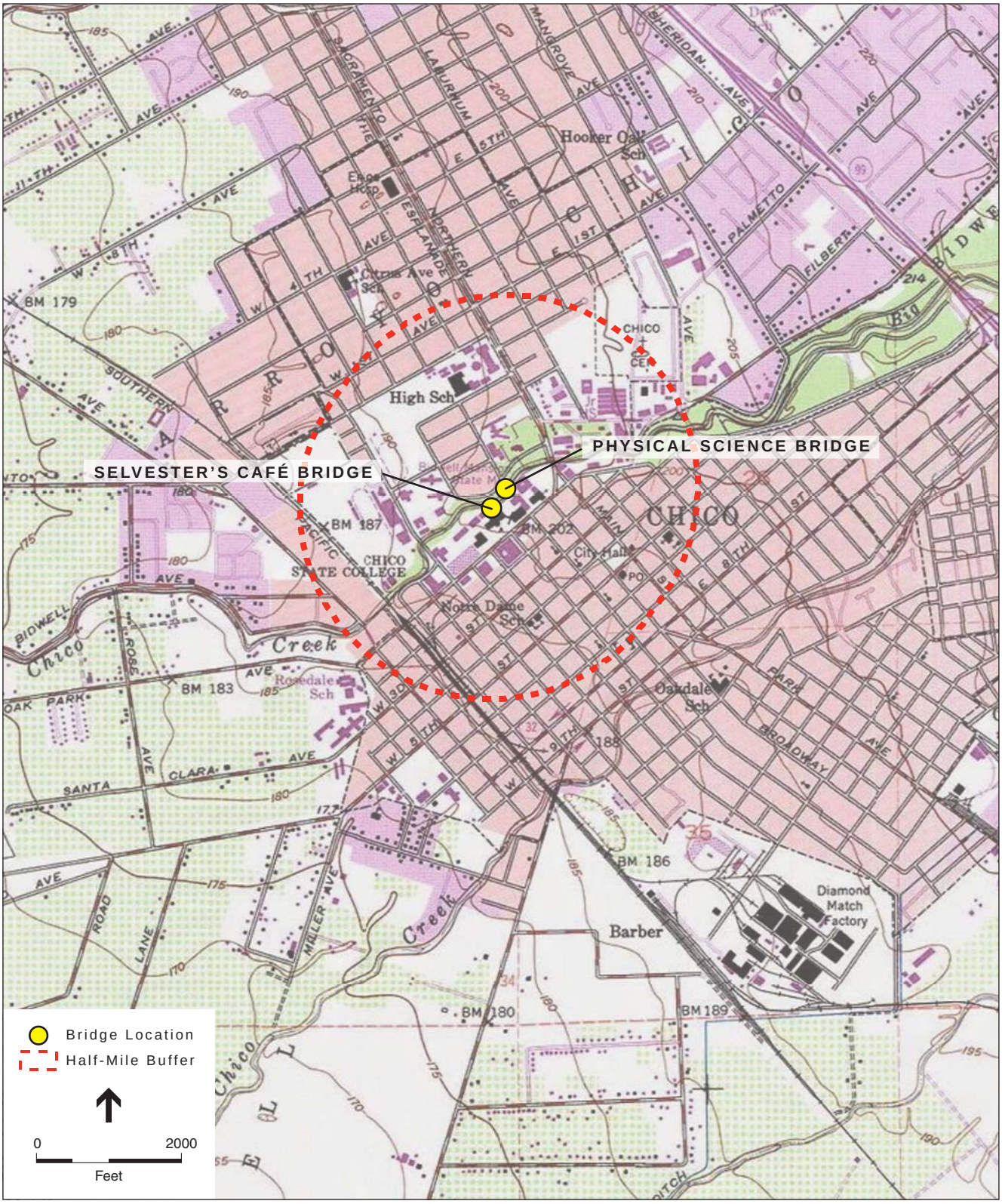
The proposed project will be designed to free-span the waterway, creating no additional obstruction to water flow at the design flood elevation. Supporting bridge abutments and piles will be located outside the existing channel, as shown in **Figure 2**. Preliminary design shows the bridge piles will likely be 24 inch cast-in-drilled-hole (CIDH) concrete piles at a depth of 35 feet below top of abutment. Preliminary design also shows the pedestrian bridge thickness at 14 inches (with an approach slope of 4.5%) and the emergency vehicle access bridge thickness at 38 inches (with an approach slope of 16.5%).



SOURCE: Microsoft, 2011; ESA, 2014

CSU Chico – Bridge Replacement/Restoration Project . 130142

Figure 1
Project Site



SOURCE: USGS, 1979; CSUC, 2013; ESA, 2014

CSU Chico – Bridge Replacement/Restoration Project . 130142

Figure 2
Project Location

The bridge will provide lighting for safety and for path of travel code compliance. Lighting will match campus standards for site lighting, including compliance with 'dark sky' ordinances. Consistent with the CSU, Chico campus public art project, the proposed project will incorporate a decorative treatment consistent with the surrounding area and campus aesthetics.

2.2 Utilities

Campus infrastructure, such as steam, chilled water, gas, electrical and data services are to be extended from the south side of campus, under the bridges, to the North side of Campus. Utilities will be suspended under the bridges, tight to underside of structure. Any items suspended under the bridge will comply with the applicable ordinances for secondary containment and for clearance above the flood plain.

2.3 Right-of-Way

A temporary construction easement by the City of Chico will be required. The temporary construction easement will be used as a construction staging/equipment laydown area.

2.4 Demolition and Construction

The existing bridge will be removed as the first item of work. Removal of the existing bridge will include the removal of utilities, bridge superstructure, and the abutments/supports at each side of the creek. Demolition will also include existing site facilities and vegetation as required for the new construction. Stabilization/replacement of soil where vegetation is removed will be a critical path activity.

Construction of the bridge will occur during summer months when the water is lowest and storm flows do not occur down Big Chico Creek. All construction activities are expected to be completed over a single season.

2.5 Detour Route

Other existing bridge crossings will serve as pedestrian detour routes during the construction phase of the project. Student and staff population during the summer months is very low, which will reduce inconvenience to those who would normally use the bridge.

2.6 Bridge Maintenance

The Selvester's Café bridge maintenance will consist of preparation and painting of the steel support girders. No demolition or new construction is planned for this bridge. No in-channel work or ground disturbing activities will be required under this phase of the project.

Specialized paint equipment will include a paint blaster/recycling machine, dust collector, and air compressors. The recycling machine stores, sorts and transports inbound and outbound blasting material streams. The dust collector filters and controls atmosphere within the paint containment tent. Air compressors provide air pressure to drive the recycling and collecting machines. A water containment system will be established to ensure that contaminated water used to wash and clean paint surfaces is fully captured without affecting the environment. All these machines come on wheeled trailers or carriages that spread out load below legal limits for operating on local streets, access ramps, and would be parked as close to the bridge as possible.

2.7 Regulatory Setting

Because implementation of the proposed project will include permitting approval from both the Corps and the USFWS, as noted above, the project is required to comply with Section 106 of the NHPA. It is generally the federal agency's responsibility to consult with the SHPO before granting permits, funding, or other authorization of the undertaking.

Archaeological and architectural resources (buildings and structures) are protected through the NHPA of 1966 (16 USC 470f) and it's implementing regulation, Protection of Historic Properties (36 CFR Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979.

Prior to implementing an "undertaking" (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies (e.g., Bureau of Indian Affairs, Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Army Corps Of Engineers, etc.), to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation (ACHP) and the SHPO a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing on the National Register of Historic Places. Section 101(d) (6) (A) of the NHPA allows properties of traditional religious and cultural importance to a tribe to be determined eligible for inclusion in the National Register.

Under NHPA, a find is significant if it meets the National Register listing criteria at 36 CFR 60.4, as stated below:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our history, or
>
> B. That are associated with the lives of persons significant in our past, or
>
> C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

The American Indian Religious Freedom Act of 1978 allows access to sites of religious importance to Native Americans. On federal land, the Archaeological Resources Protection Act (ARPA) and Native American Graves Protection and Repatriation Act (NAGPRA) would apply. The ARPA assigns penalties for vandalism and the unauthorized collection of archaeological resources on federal land and provides for federal agencies to issue permits for scientific excavation by qualified archaeologists. The NAGPRA assigns ownership of Native American graves found on federal land to their direct descendants or to a culturally affiliated tribe or organization and provides for repatriation of human remains and funerary items to identified Native American descendants.

Because federal permits from the Corps and USFWS are required for this project, the NHPA and its implementing regulations (16 USC 470 et seq., 36 CFR 800, 36 CFR 60, and 36 CFR 63) will apply. The NHPA establishes the federal government's policy on historic preservation and the programs, including the National Register, through which that policy is implemented. Under the NHPA, historic properties include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (16 USC 470w (5)).

2.8 Area of Potential Effects

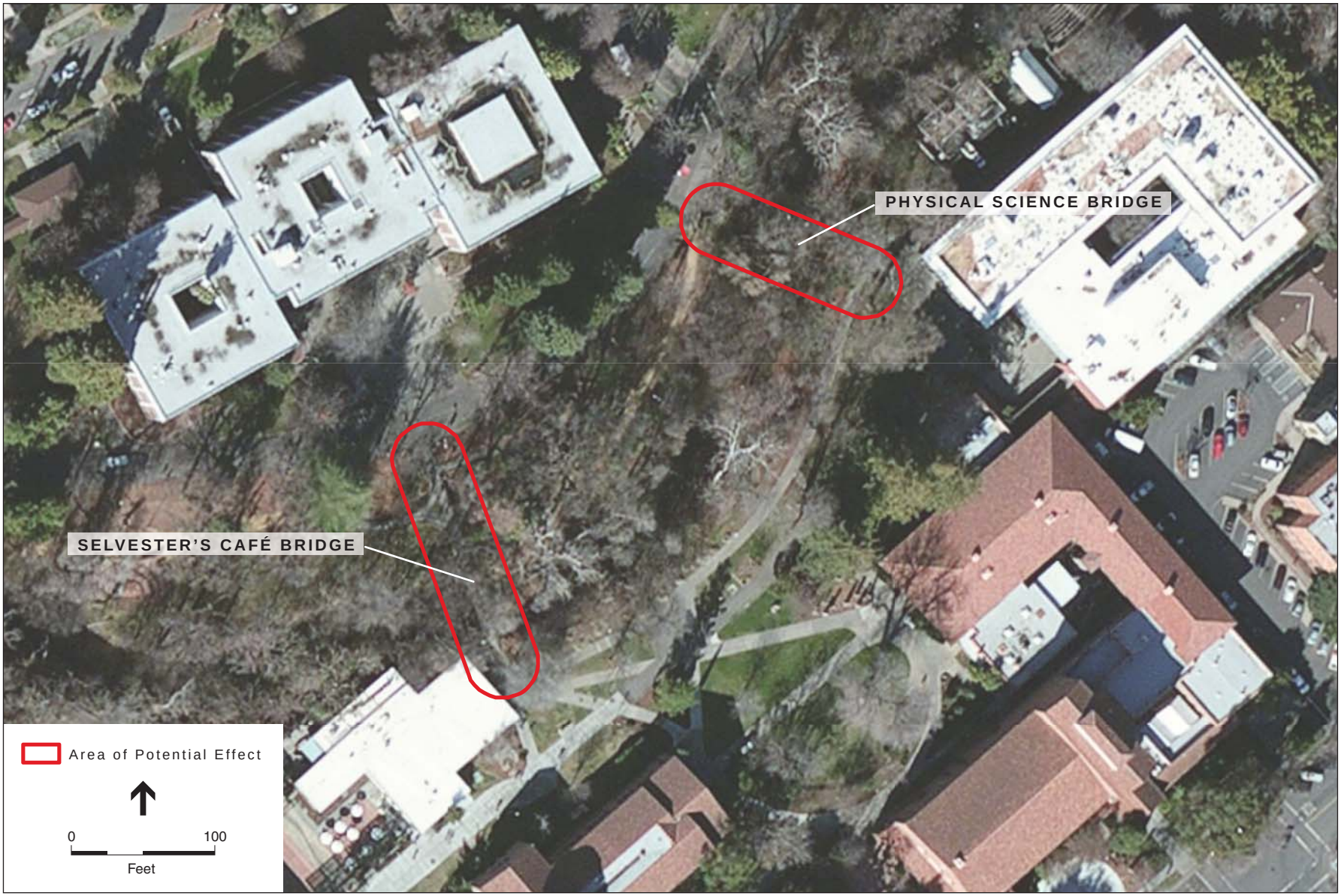
The APE for this project includes the individual bridges, as well as a 25-foot work buffer surrounding each bridge **(**see **Figure 3**). This encompasses all areas of potential ground disturbance for the Physical Science Bridge replacement, room to conduct maintenance on the Selvester's Café Bridge, and staging for both bridges.

3.0 Cultural History

This section summarizes the cultural history of the Chico and Butte County Region. Because archaeological regions can represent large geographic areas and display some cultural homogeneity throughout, a summary discussion of the prehistoric, ethnographic, and historic contexts is useful in order to evaluate the impacts to cultural resources in the project area.

3.1 Prehistoric Context

The project area is within the geographic area known as Sacramento Valley, which extends northwards from the Sacramento delta region. Archaeologists have categorized the prehistory of the Sacramento Valley into three major periods: The Windmiller Pattern (4000 to 2500 years ago), the Berkeley Pattern (3000 to 1500 years ago), and the Augustine Pattern (1500 to 250 years ago) (Moratto 1984).



SOURCE: Microsoft, 2012; CSUC, 2013; ESA, 2014

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Figure 3
Area of Potential Effect

The Windmiller Pattern represents the earliest intensive habitation period of the Sacramento Valley. Sites are characterized by large projectile points used for hunting deer, elk, pronghorn and other large game. Faunal assemblages indicate that rabbits, waterfowl, and fish were also a substantial component of their diet. Another important constituent of many sites are mortars and pestles used for pounding acorns into flour for use in making bread and a form of soup or gruel. Twined basketry was used for cooking, storage, and transportation of goods. Extensive trade with the coast is indicated by the presence of *Haliotis* and *Olivella* shell beads at sites from this period. Likewise obsidian was transported in from disparate areas of central and northern California (Huberland 2003; Moratto 1984).

The Berkeley Pattern developed in the Bay Area about 3000 years ago. This period is typified by a greater reliance on acorn. Site assemblages typically include mortars and pestles, highly developed bone tools, large concave-base projectile points, and distinctive *Olivella* and *Haliotis* beads and ornaments (Huberland 2003; Moratto 1984).

The Augustine Pattern developed about 1500 years ago. Evidence of intensive fishing, hunting, and gathering characterizes this period. This activity was enabled by large, dense populations, a highly developed exchange system, and social stratification. Site constituents include shaped mortars and pestles, well developed bone awls for making coiled baskets, and smaller projectile points for use with bow and arrow. This period was influenced by southward expanding Wintun people, bringing with them harpoons, flanged tubular pipes, and Gunther-barbed projectile points. After A.D. 1400, settlements proliferated, trade increased, clam shell disk beads came into use, and social and political systems became more complex (Huberland 2003; Moratto 1984).

3.2 Ethnographic Setting

The project area is encompassed by the ancestral homeland of the Konkow, also known as Northwestern Maidu, a linguistically distinct subdivision of the Penutian speaking Maidu (Kroeber 1976; Riddell 1978).

Maidu villages were primarily constructed on ridges overlooking waterways where salmon and other fish were a primary food source. Acorns were also a mainstay of the Konkow diet, and were processed with mortar and pestle. During summer months many Konkow traveled to the mountains to hunt deer and other large game, the meat of which was dried and brought back to the primary village sites (Riddell 1978).

Villages were autonomous units centered around a “dance house,” a large semi-subterranean structure used for ceremonial purposes. Individual family dwellings were also semi-subterranean structures; approximately three meters in diameter. Elevated granaries used to store acorns were also typically found at village sites (Riddell 1978).

Like most Native American Central Valley inhabitants, the Konkow were decimated by what is believed to be a malaria epidemic in 1833. The tribe was further impacted by the influx of immigrants that accompanied the Gold Rush of 1849 and subsequent decades, so that by 1910

only 900 Maidu (including Konkow) remained (Riddell 1978). Despite these low population numbers, the Konkow have been growing steadily in numbers throughout the 20th century, and there are now more than 3,500 tribal members.

3.3 Historic Period

The earliest exploration of Butte County, by non-indigenous people, occurred with the expeditions of Spanish explorer Gabriel Moraga in 1808. Moraga explored the lower reaches of the Feather River, potentially as far north as the Sutter Buttes. In 1820, Captain Luis Arguello, under orders from the Governor of California, led an expedition through the Sacramento Valley, discovering the Sutter Buttes and naming the Feather River. Trappers from the Hudson Bay Company and American Fur Company roamed the region from 1825 through 1840. Between 1840 and 1850 several land grants were issued within Butte County, including the Arroyo Chico land grant (Mansfield, 1919).

Governor Micheltorena presented the 22,214.47-acre Arroyo Chico Grant to William Dickey in 1844. The land covered by the grant extended east from the Sacramento River along Chico Creek to the north end of the Bidwell Park and northerly from Chico Creek; a distance of two or three miles. Dickey sold the grant to George McKistry in 1849, and John Bidwell eventually acquired the entire land grant from the McKistry family in two separate purchases in 1849 and 1851. During the 1840s and early 1850s, Bidwell established the Chico area as an agricultural, transportation, and commercial center, planting experimental orchards and opening a hotel to accommodate travelers on the stage line that passed through the area (Smith & Elliott, 1877).

Following the discovery of gold in Coloma, miners also discovered gold in the Feather and Yuba Rivers, establishing camps and mining towns along the rivers. In 1850, the California legislature incorporated Butte County, which at the time included all of present-day Butte and Plumas Counties, along with portions of Lassen, Tehama, Sutter, and Colusa Counties. In 1854, the legislature began dividing the county into smaller, more manageable segments, until it reached its final configuration in 1856 (Hoover, 2002).

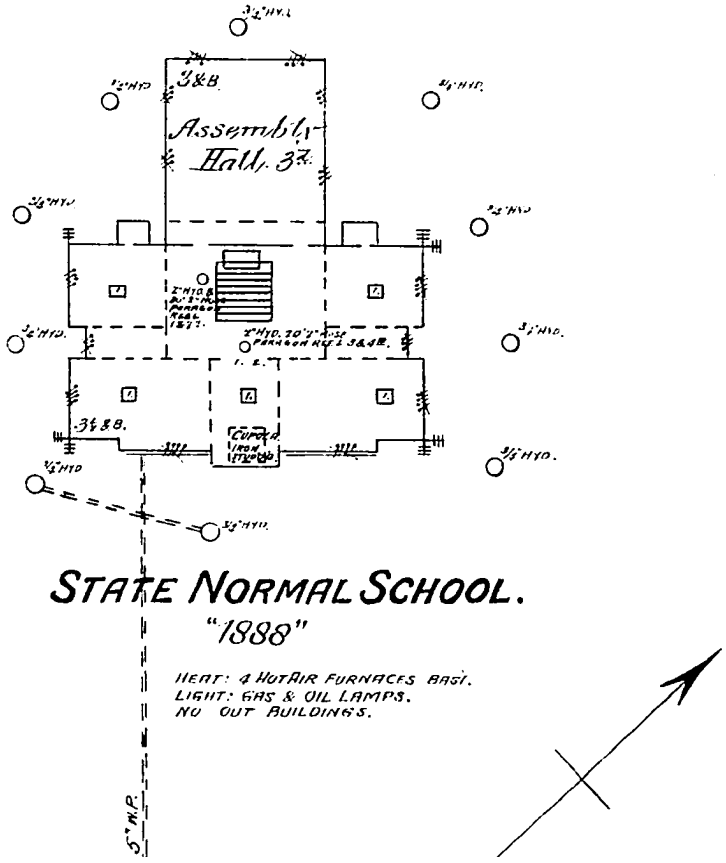
Bidwell, along with J.S. Henning, County Surveyor, laid out the town of Chico on Bidwell's ranch in 1860. Five hundred people inhabited the town by 1860; drawn in part by Bidwell's offer of free home sites to persons willing to settle along the streets he laid out. In 1872, the town incorporated, and by 1891 it boasted a population of 6,000 as well as:

> two well-established banks, six hotels, gas works, waterworks, electric light works, a flouring mill, a foundry, extensive lumber yards, planning mills, a brewery, a cannery, two daily and weekly newspapers, two large public school buildings running fourteen departments, two private academies, a State Normal School and seven churches, representing as many different denominations. (Lewis Publishing Company, 1891)

3.4 Development of California State University Chico

In 1862, state legislature established the first normal school in California in San Francisco; although in 1870 the school was relocated to San Jose. Normal schools trained teachers, provided them standards for teaching methodology, and granted teaching certificates to graduates. California eventually boasted eight normal schools, later converted to teaching colleges and state colleges (Moore, 1940).

As early as 1880s, elected officials in northern California, including John Bidwell, began promoting the idea of establishing a normal school in the region. In 1887, the state legislature voted to establish a "normal school" in northern California, with $50,000 appropriated for construction of the building or purchase of the site. John Bidwell donated the land for the school site, valued at $15,000, for the Northern Branch State Normal School in Chico. Bidwell's offer of the land helped establish the school in Chico. Construction began in September 1887, with the cornerstone laid in July 1888 (Lewis Publishing Company, 1891; Mansfield, 1919; Moore, 1940; Hoover, 2002; Bailey, 2013.; **Figure 4**).



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SOURCE: Sanborn, 1890

Figure 4

Chico State Normal School (1890)

The original school consisted of a "three story brick building with Elizabethan gables, and artificial stone trimming of Romanesque design" (**Figure 5**). The cost of construction included the $50,000 legislative appropriation, $10,000 donated by Chico citizens, an additional 1889 legislative appropriation of $40,000 to construct new wings and provide additional equipment, and an 1899 legislative appropriation of $25,000 to complete construction. The school opened its doors to 90 students in September 1889, increasing its number to 115 students the next semester.

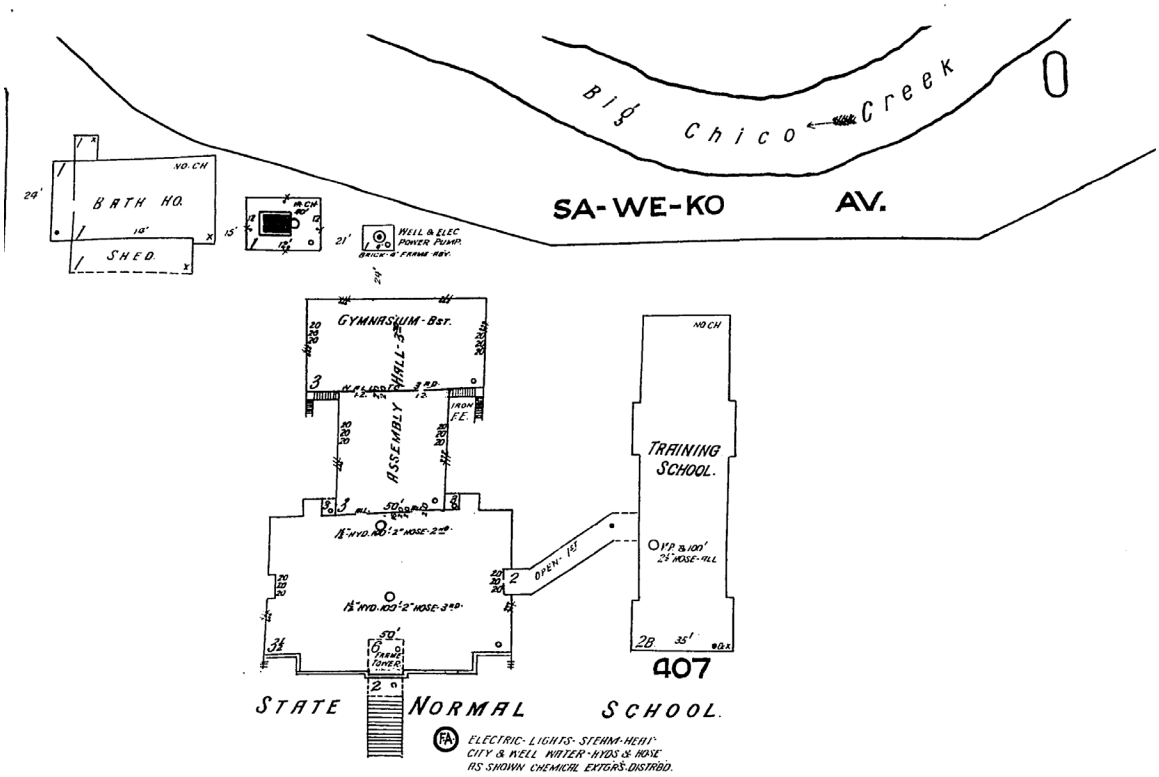
CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Booth, 2005

Figure 5

Chico State Normal School (1897)

In 1910, Mrs. Bidwell gifted two additional acres of the school, consisting of the area of land lying between the campus and the road beside the creek, to be used for work with elementary agriculture. That same year a training school was built adjacent to the Normal Building (**Figure 6**). Mrs. Bidwell gifted another parcel in 1911, an orange orchard described as "a lot 55x40 feet, adjoining the Normal grounds on the east and extending from Front Street to the creek road." The school constructed additional facilities, including classroom buildings, dormitories, and a swimming pool on site. In 1921, state legislature changed the name of the Normal School to Chico State Teacher's College, and in 1922 the state purchased the Bidwell Mansion and converted it into Bidwell Hall dormitory. The original Normal Building served as the centerpiece of the school until it was destroyed in a fire in 1927 (Moore, 1940). Construction of Kendall Hall, the Administration Building, incorporated the original cornerstone of the Normal Building, and was completed in 1929.



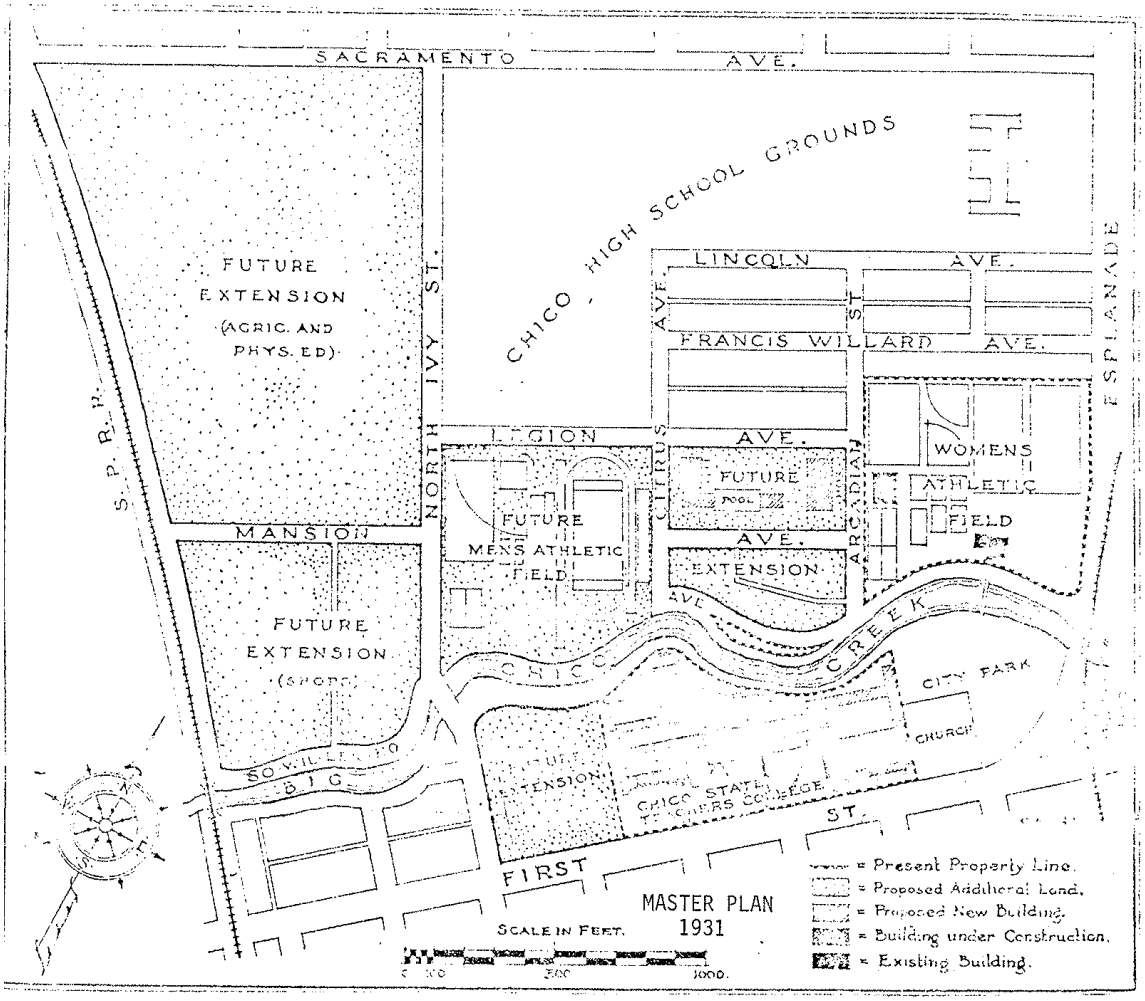
CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Sanborn, 1921

Figure 6

Chico State Normal School (1921)

In 1935, the State legislature again changed the school name, this time to Chico State College. While the campus had begun planning for expansion north of Big Chico Creek as early as 1931, development of the school at this time remained predominantly south of Big Chico Creek (**Figure 7)**. In 1938, enlargement of the campus was accomplished through the purchase of approximately 38 acres of land on the eastern side of campus. This expansion resulted in the construction of Laxson Auditorium, additional classrooms, and an athletic field (Bailey, 2013; **Figure 8**).

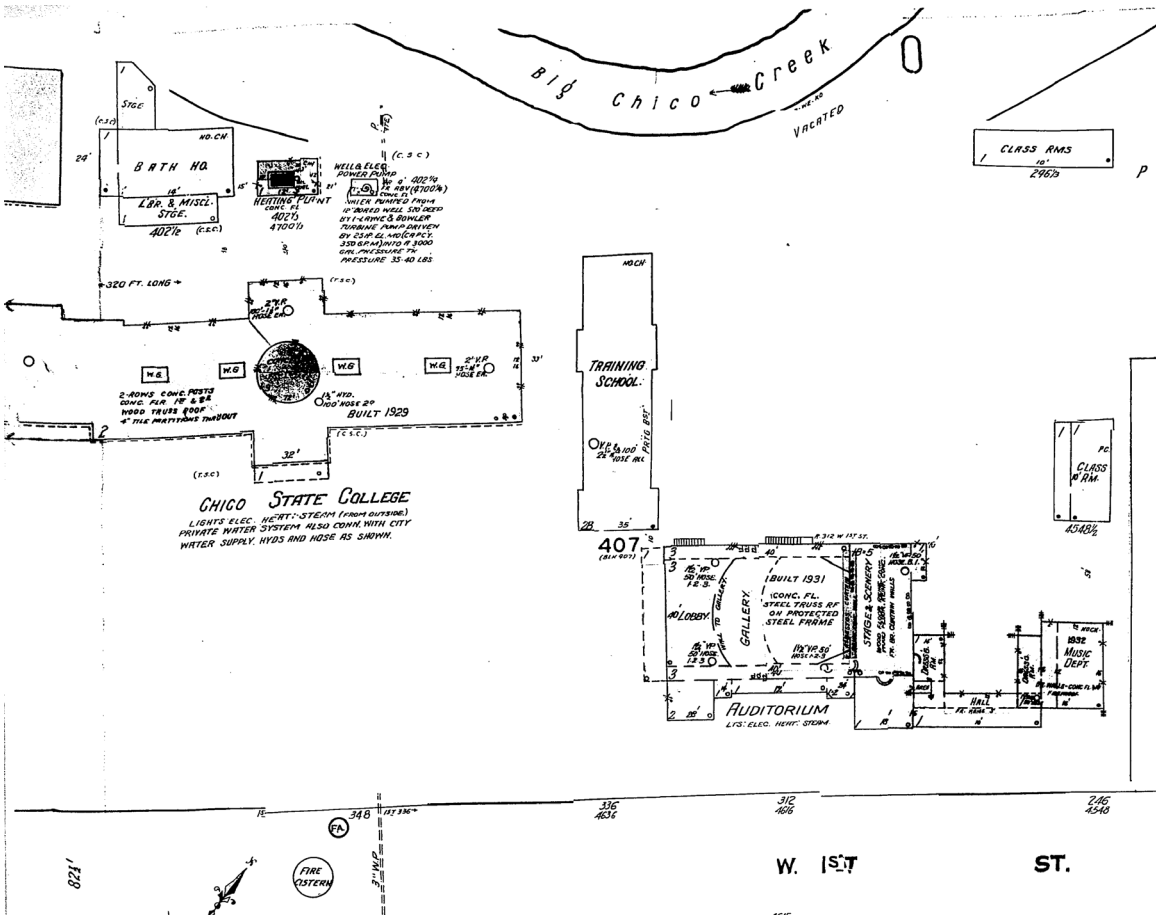


CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Chico State University, 1931

Figure 7

1931 Campus Master Plan



CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Sanborn, 1949

Figure 8
Chico State Normal School (1949)

Beginning in the 1950s, Chico State experienced a new wave of development to accommodate the surge in student population resulting from the returning veterans funded by the GI Bill. In 1950, the old Training Building was demolished, and new construction (including a new cafeteria managed by John Selvester) changed the architectural landscape of the campus. While Romantic brick dominated the pre-World War II (WWII) architectural style, the post war period resulted in an increase in modern architectural choices, including Holt Hall, the 1959 Library, 1959 Shasta and Lassen Halls, and the 1962 Physical Science Building (Bailey, 2013). Construction of the Selvester's Café bridge occurred in 1961.

In 1972, Chico State College became California State University, Chico. Major construction on campus essentially halted for two decades. In 1992, the O'Connell Technology Center and Tehama Hall were constructed. In 1999, the Gus Manolis Bridge was renovated in order to make the bridge more accessible to American Disabilities Act (ADA) standards for use by the disabled: ramps were added and slopes reduced, and uniform lighting was installed to make the bridge safer. The cost of the project was $171,190 (*Inside Chico State*, 11/11/1999).

4.0 Methods

The effort to identify cultural resources in the project APE consisted of researching archives, conducting a field survey, and contacting Native Americans organizations/individuals.

4.1 Archival Methods

A records search was conducted at the Northeast Information Center (NEIC) of the California Historical Resources Information System at Chico State University on August 15, 2013 (File No. W13-139). Records were accessed by reviewing the Chico 7.5-minute quadrangle base maps. Additional research was conducted using the files and literature at ESA. The records search included a half-mile radius around the project area in order to (1) determine whether known cultural resources had been recorded within or adjacent to the project area; (2) assess the likelihood of unrecorded cultural resources based on historical references and the distribution of environmental settings of nearby sites; and (3) develop a context for identification and preliminary evaluation of cultural resources.

Included in the review were the *California Inventory of Historical Resources* (California Department of Parks and Recreation 1976), *California Historical Landmarks* (1990), *California Points of Historical Interest* (1992), and the *Historic Properties Directory Listing* (2013). The Historic Properties Directory includes listings of the National Register and the California Register of Historical Resources, and the most recent listing (2013) of the California Historical Landmarks and California Points of Historical Interest. Historic-period maps were also reviewed.

4.2 Survey Methods

R. Scott Baxter conducted an intensive archaeological survey of the project area on August 16, 2013. Given the small size of the project area, standard transects were not employed. Instead, virtually every foot of ground was covered. The water level in the creek was extremely low, allowing full coverage of the project area. Ground visibility was excellent, with widely spaced trees and sparse to completely absent grasses. The creek bed itself was partially covered with small to medium sized cobbles. Limited portions of the project area were paved, obscuring the ground surface in these areas.

Katherine Anderson conducted an intensive architectural historical survey of the project area on August 15, 2013. Ms. Anderson photo-documented the Physical Science and Gus Manolis Bridges within the project area. Her field notes formed the basis of DPR 523 forms for the bridges, included in **Appendix A.**

4.3 Native American Consultation

Cultural institutions, lifeways, culturally valued viewsheds, places of cultural association, and other sacred places and trust assets must also be considered under the National Environmental

Policy Act (NEPA) (40 CFR 1501.2), Executive Order 12898 and sometimes other authorities (Executive Order 13175, Executive Order 13007, NAGPRA). Although it basically provides another rationale for consultation with tribes, Executive Order 13007 specifically deals with sacred sites.

The NAHC was contacted on August 23, 2013 to request a database search for sacred lands or other cultural properties of significance within or adjacent to the project area. A response was received on September 3, 2013. The sacred lands survey did not identify the presence of cultural resources in the project area. The NAHC provided a list of Native American contacts that might have further knowledge of the project area with respect to cultural resources. ESA contacted each person or organization identified by the NAHC by letter on December17, 2013. On January 17, 2014, ESA conducted follow up phone calls to the individuals and groups identified by the NAHC. Responses were received from the Mooretown Rancheria of Maidu Indians, T'si-Akim Maidu, and the Mechoopda Indian Tribe of Chico Rancheria. Most commenters indicated no concerns with the proposed project. **Appendix B** provides copies of all Native American correspondence. Mr. DeSpain (representing the Mechoopda Indian Tribe of Chico Rancheria) expressed a desire that a Native American monitor be present once work was underway.

5.0 Results

5.1 Records Search Results

As part of the cultural resource analysis, ESA conducted a cultural resources literature and records search at the California Historical Resources Information System (CHRIS) Northeast Information Center (NWIC) on August 15, 2013 (File No. W13-139).

Review of the previously completed records search identified 14 previously conducted cultural resources investigations within a half-mile radius of the Project APE (**Table 1**). Of the 14 previous investigations, two overlap portions of the Project APE.

Results from the records search indicated the presence of one previously recorded cultural resource within or adjacent to the project APE: the 1956 University Center Building. This resource was previously recommended ineligible for listing in the National Register. **Table 2** details the University Center and other sites recorded within a half-mile of the project APE.

TABLE 1
CULTURAL RESOURCES STUDIES IDENTIFIED WITHIN ½ MILE OF THE PROJECT APE

NEIC Survey Designation	Year	Author	Title	In APE?
164	1977	Janet Friedman	Emergency Archaeological Excavation and Surface Reconnaissance (Phase II) Chico Tree Improvement Center, Butte County, California	N
601	1981	Scientific Resource Surveys	Archaeological/Historical Test Report on the Proposed Student Housing Project Area Located on the Campus of California State University at Chico	N
5721	2003	Greg White	CSU, Chico: TII Project: Cultural Resources Found in Trench Located in the Quad Between Glenn Hall, Trinity Hall, and the Merriam Library Building	N
6685	2004	Quad Knopf	Cultural Resource Assessment of the California State University, Chico Master Plan 2004 Area, Butte County, California	Y
6752	2005	Cultural Resource Associates	An Archaeological Evaluation of the Bidwell Reach Project, Chico, Butte County, California	N
6810	2005	Far Western	Archaeological Survey and Test Augering of the Proposed Natural History Museum Parcel at California State University, Chico, Butte County	N
7491	2000	URS Corporation	Archaeological Survey Report for the Chico Urban Area Nitrate Compliance Plan Environmental Impact Report Project, Chico, California	N
7939	2007	URS Corporation	Cultural Resources Survey for the Wildcat Activity Center, California State University, Chico, Butte County, California	N
7944	2007	URS Corporation	Cultural Resources Survey for the University Housing and Food Services Phase I Project	N
8087	2007	Garcia and Associates	Archaeological Survey Report for the PG&E Chico-1 Former Manufactured Gas Plant Soil Removal Project, Chico, California	N
8873	2007	Cultural Resource Associates	An Archaeological Evaluation of Annie's Glen Project, Butte County, Chico, California	N
9465	2008	URS Corporation	Cultural Resources Survey for the CSU, Chico Track Restroom Improvement Project, Butte County, California	N
9800	2008	Jeff Reid	Cultural Resource Survey for the CSU Chico Alumni Glen Rehabilitation Project, Chico, California	Y
10893	2010	Cultural Resource Associates	An Archaeological Evaluation of 1st and 2nd Street Couplet Project, Butte County, Chico, California	N

SOURCE: Northeast Information Center, 2013

TABLE 2
CULTURAL RESOURCE SITES IDENTIFIED WITHIN HALF-MILE OF THE PROJECT APE

Site Designation	Age/ Built Date	Description	Eligibility Determination	In or adjacent to the APE?
04-2886	ca1945	Historic period trash scatter	unevaluated	N
04-2936	Late 1800s	Historic period trash scatter	unevaluated	N
04-3000	1880s-1910s	Subsurface remains of historic period buildings	unevaluated	N
04-3001	1919	Chico MGP Generator Building	Individual property locally listed	N
04-3136	1956	University Center Building	Recommended ineligible	Y
04-3137	1950s	California Water Service Company Water Tower and Tank	Determined ineligible for listing	N
04-3154	1902	749 West 5th Street. One story unsupported brick structure	Recommended ineligible	N
BUT-5296/459	Prehistoric	Former village site (clam shell disc bead, basalt scraper)	unevaluated	N
BUT-5483/574	Historic	Historic Rancheria associated with General Bidwell's estates (burials reported during construction in 1967)	unevaluated	N
BUT-5488/295	Prehistoric/ Historic	Relocation Site of Bidwell's Indians Approximately from 1849-1868. Artifacts identified during 1968 excavation included prehistoric (clam shell discs, glass beads, magnesite bead) and historic materials (glass, metal, china fragments). Annie K Bidwell originally reported site in 1896.	unevaluated	N

SOURCE: Northeast Information Center, 2013

5.2 Survey Findings

No archaeological resources were identified on the ground surface within the APE. Ms. Anderson identified the Physical Science and Gus Manolis/Selvester Cafe bridges within the project APE as meeting the National Register's 50-year threshold for historic resources. Evaluation of these resources under National Register criteria are detailed below.

Evaluation of the Physical Science Bridge

The Physical Science Bridge is a steel girder and concrete slab pedestrian bridge crossing Big Chico Creek on Chico State University's campus (**Figure 9**). The bridge measures approximately 5 ½ -ft. wide by 81-ft. long, and is a 3 span, reinforced concrete slab between steel girders. The existing structure was constructed during the mid-twentieth century as a pedestrian foot bridge to support the expanding campus during the post WWII era. No identifying information, such as date stamps or plaques were noted at the bridge.

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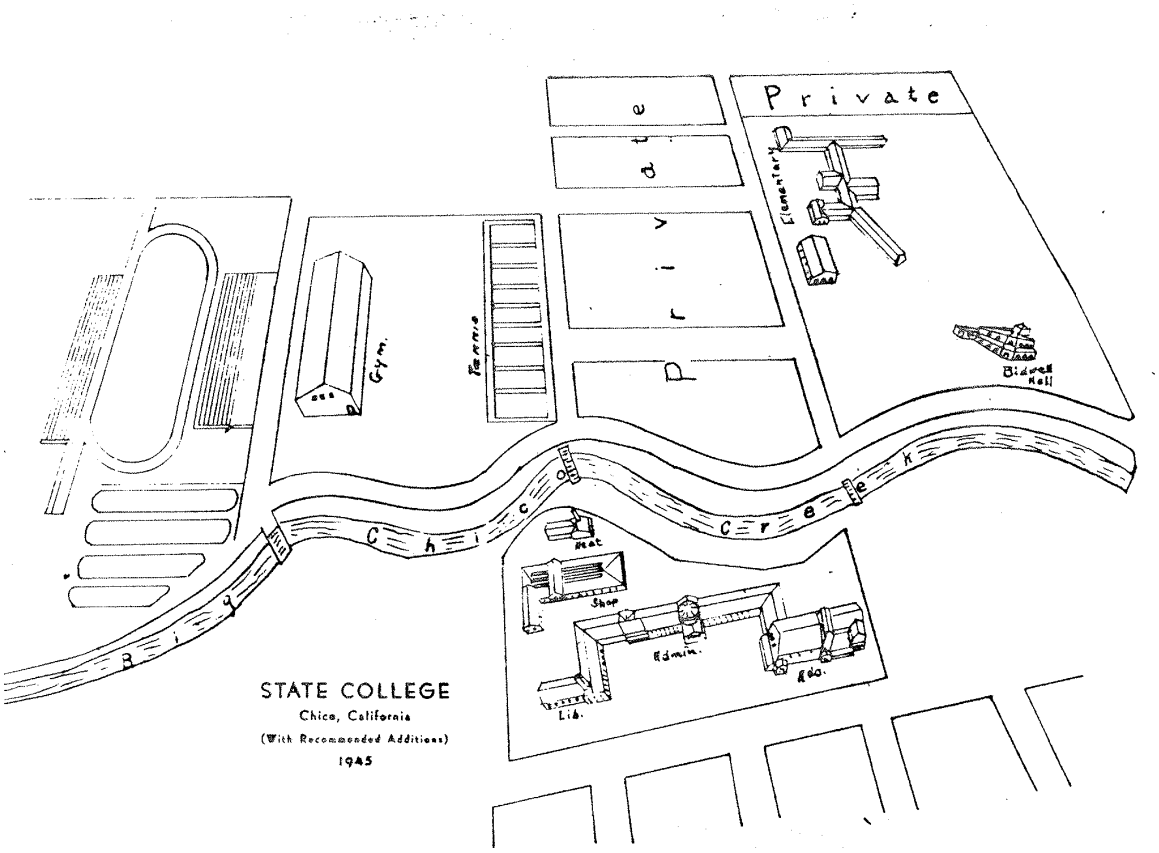
SOURCE: ESA, 2013

Figure 9

Physical Science Pedestrian Bridge

As described in the historic setting section above, the expansion of the campus to the area north of Big Chico Creek occurred as a result of the need for expanded services resulting from returning WWII veterans and the G.I. Bill. The Physical Science Bridge appears as a recommended addition on campus planning maps as early as 1945 (**Figure 10**), although it does not appear on subsequent County Assessor maps dating to 1953 (**Figure 11**).



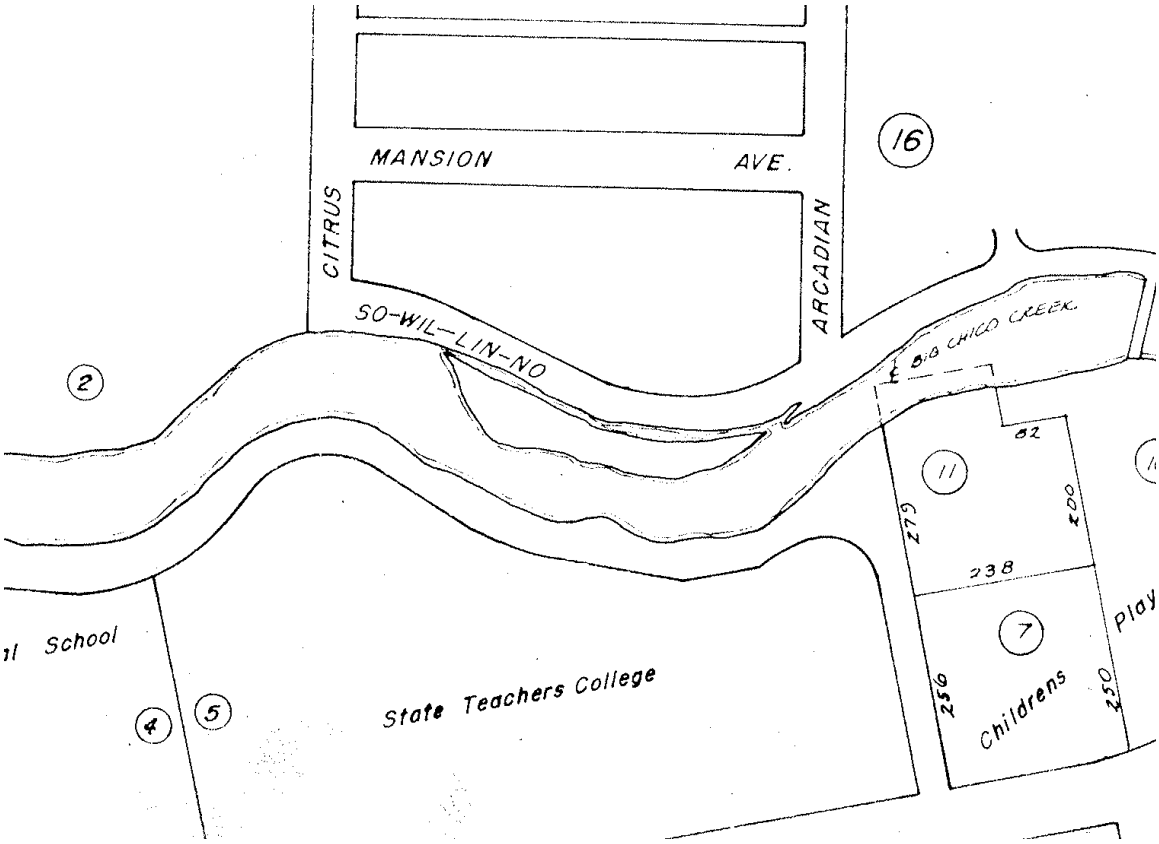
CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Chico State University, 1945

Figure 10

Chico State Planned Development (1945)

The Physical Science Bridge was one of several bridges constructed at this period to connect the two parts of campus. A photograph, dating to 1951, documents a similar bridge along Big Chico Creek, although the design of the railings on the bridge implies that it is not the same resource (**Figure 12**).



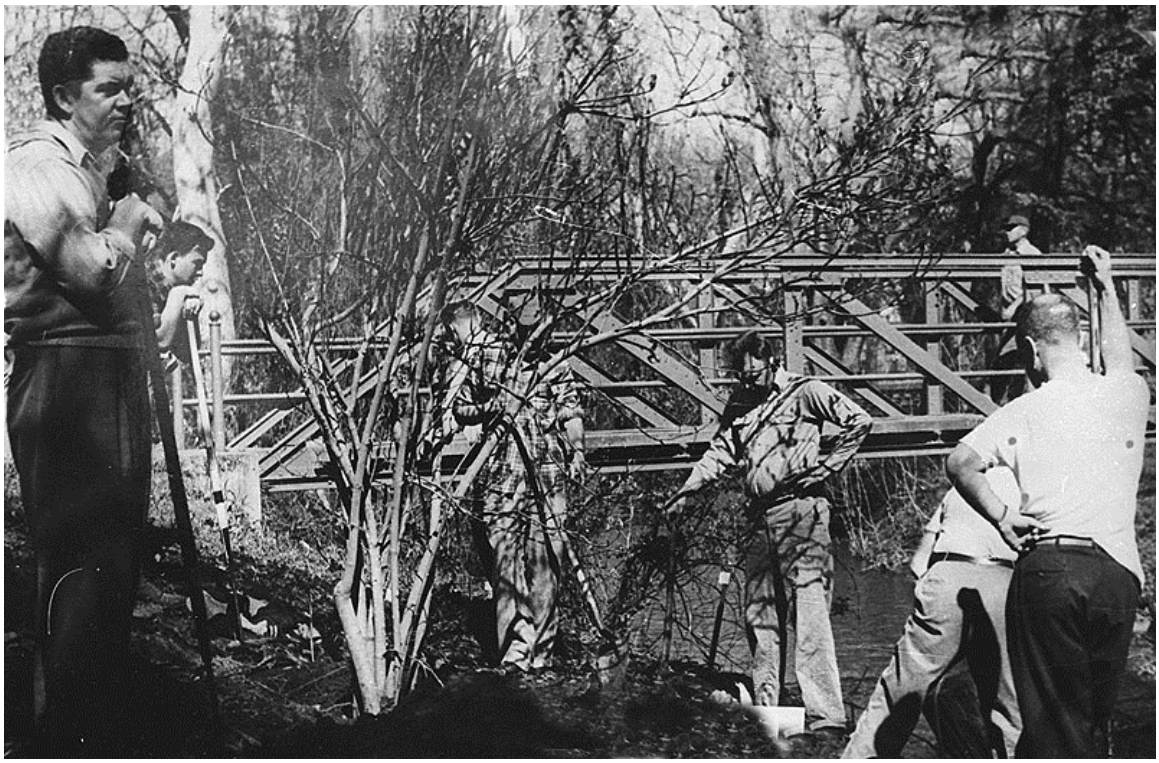
CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Butte County, 1953

Figure 11

Assessor Map No. 3-20 (1953)

By 1961, the Physical Science Bridge appears on campus maps, along with several other bridges connecting the newer and older portions of campus (**Figure 13**).



CSU Chico – Bridge Replacement/Restoration Project. 130142

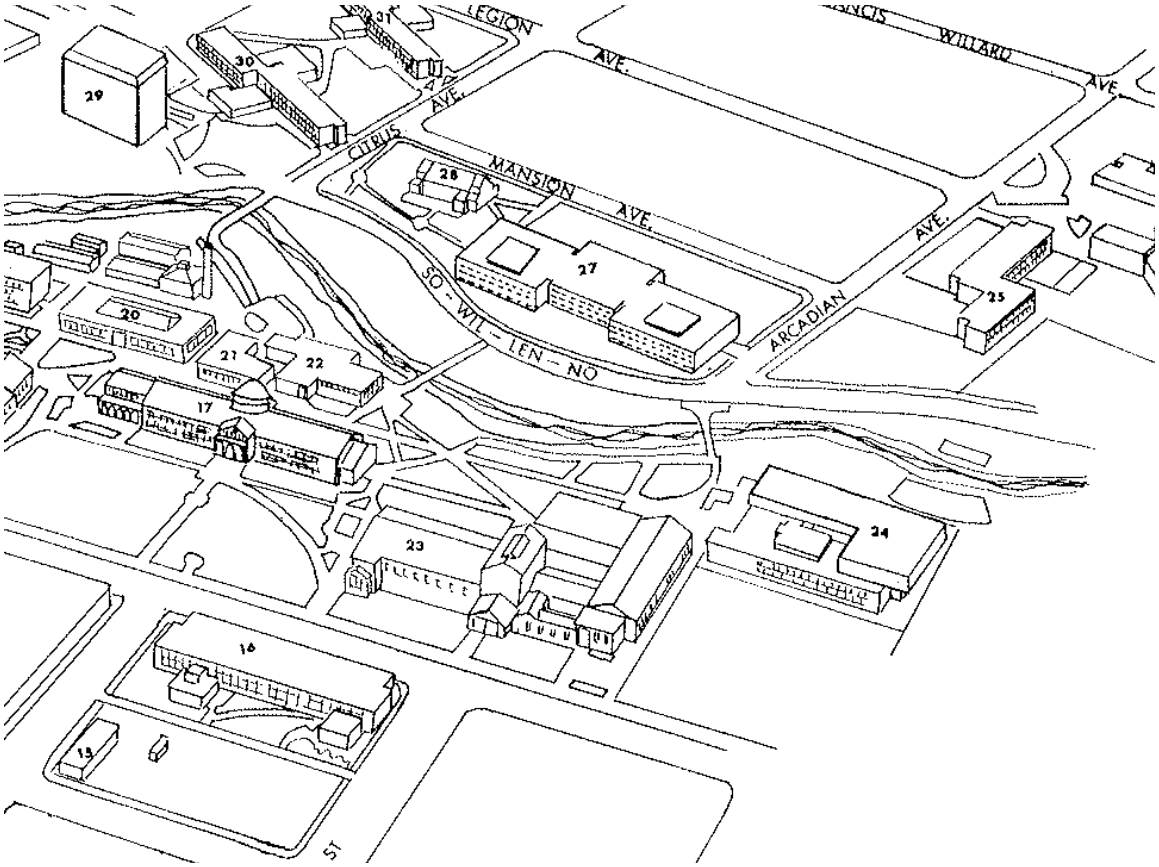
SOURCE: Chico State University, 1951

Figure 12

Chico State Bridge across Big Chico Creek, 1951

Research failed to indicate that the Physical Science Bridge is associated with events that have made a significant contribution to broad patterns in history (Criterion A). The bridge was constructed in response to the expanding need for campus infrastructure during the post WWII period with the influx of students resulting from the G.I. Bill. The bridge is subsequently associated with the post war development of the campus in the mid-twentieth century, but does not possess a unique association with this development. The Physical Science Bridge does not appear to be an individually significant resource under federal Criterion A.

Research did not reveal any important association with any prominent individuals. No distinct campus leader or individual were determined to have a specific association with the bridge. Therefore, the Physical Science Bridge does not appear to be individually significant under federal Criterion B (association with individuals).



CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Chico State University, 1961

Figure 13
Chico State Associated Students Campus Map (1961)

The Physical Science Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction. The bridge possesses a utilitarian design and was constructed in a typical fashion, and does not reflect a unique or distinct construction style. The bridge does not represent any typical style or time period in a unique or exemplary way. Archival research did not reveal any mention of any potential architectural significance the bridge may have had during its construction. As such, the Physical Science Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction and does not appear significant under federal Criterion C (architectural distinction).

Criterion D asks whether a proposed project has the potential to yield information important to pre-history or history. This criterion is typically associated with effects to archaeological resources, and not historic architectural resources. Nonetheless, a project-specific search of cultural resources literature, recorded archaeological and historic-period sites, and historic maps, was conducted at the California Historic Resources Information System—Northeast Information Center (NEIC). This archival research did not identify any recorded prehistoric or historic-period sites on or adjacent to the APE. In addition, there are no resources in the APE that would yield significant information that would expand our current knowledge or theories of design, methods

of construction, or other information that is not already known. As such, neither the bridge nor its immediate vicinity appears to be historically significant under Criterion D.

Archival and field review did not indicate that the bridge has been altered since its original construction, and appears to retain its physical integrity and integrity of setting. The bridge does not, however, appear to meet requirements of Criterion A through D of the National Register. ESA staff recommends the bridge as ineligible for listing in the National Register.

Evaluation of the Gus Manolis Bridge

The Gus Manolis Bridge is a steel girder and concrete slab pedestrian bridge crossing Big Chico Creek on Chico State University's campus (**Figure 14**). This bridge also spans Big Chico Creek and is located downstream of the Physical Science Bridge approximately 350 ft. It is very similar in construction to the Physical Science Bridge, measuring 5 ½ ft. wide and 55 ft. long. Like the Physical Science Bridge, the Gus Manolis Bridge was constructed as a pedestrian foot bridge to support the expanding campus. A plaque, dedicating the bridge in memory of Gus Manolis, is present on the bridge's south side.

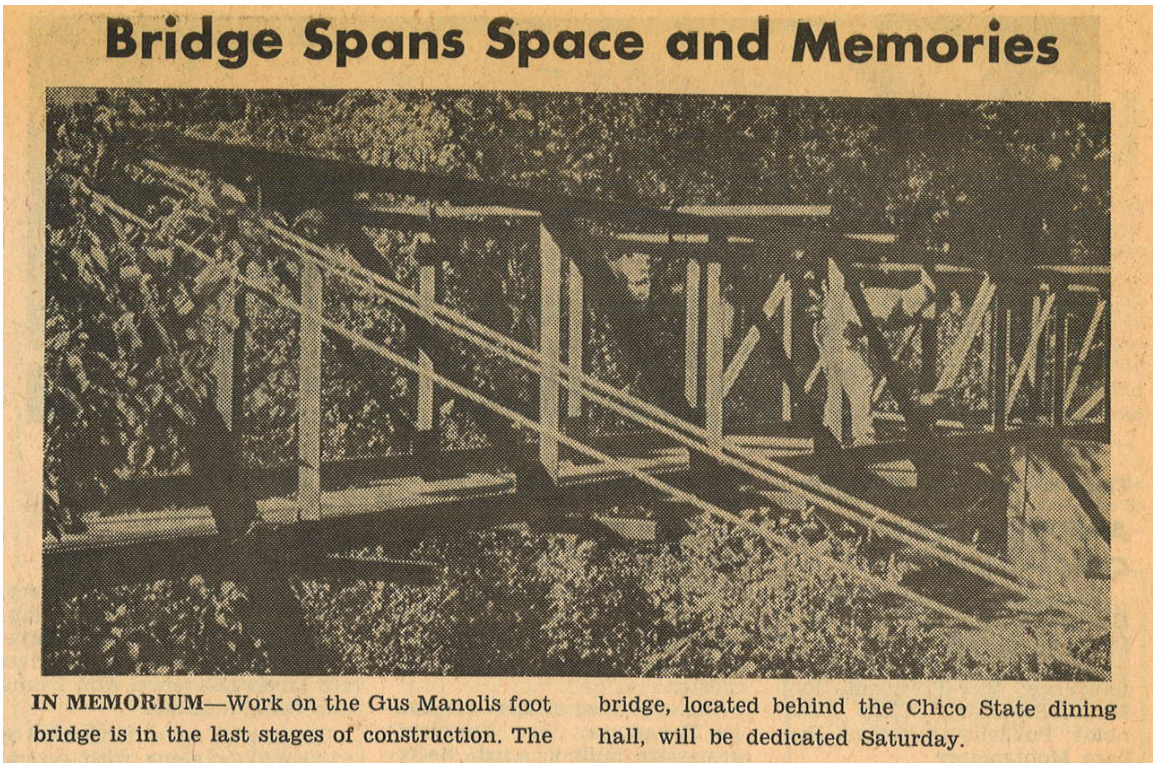
CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: ESA, 2013

Figure 14

Gus Manolis Pedestrian Bridge

In 1961, the school dedicated the bridge located between Kendall and Holt Halls in memory of Gus Manolis, a football coach at Chico State who died in 1957 at the age of 34 during a search for a lost boy scout in Mendocino. Construction of the bridge began in June 1961, and was funded in part through the work of Dave Hammond and the Alpha Phi Omega fraternity, who collected money to procure materials and the plaque. The college donated the cost of labor (Chico State Wildcat, 1961; *Inside Chico State*, 11/11/1999; Bailey, 2013; **Figure 15)**.



Bridge Spans Space and Memories

IN MEMORIUM—Work on the Gus Manolis foot bridge is in the last stages of construction. The bridge, located behind the Chico State dining hall, will be dedicated Saturday.

CSU Chico – Bridge Replacement/Restoration Project. 130142

SOURCE: Chico State Wildcat, 1961

Figure 15
Manolis Bridge Dedication

Research failed to indicate that the Gus Manolis Bridge is associated with events that have made a significant contribution to broad patterns in history (Criterion A). The bridge was constructed during a period of campus growth and expansion during the 1960s, but does not possess a unique association with campus development. The Gus Manolis Bridge does not appear to be individually significant resource under federal Criterion A.

Research did not reveal any important association with any prominent individuals. While the campus constructed Gus Manolis Bridge as a memorial to the football coach, Criterion B requires that the property be associated with a person's productive life, reflecting the time period when he or she achieved significance. Properties that pre- or post-date an individual's significant accomplishments are usually not eligible. The bridge, as a memorial constructed four years after Manolis' death, does not appropriately reflect his role as a football coach or college staff member.

Therefore, the Gus Manolis Bridge does not appear to be individually significant under federal Criterion B (association with individuals).

The Gus Manolis Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction. The bridge possesses a utilitarian design and was constructed in a typical fashion, and does not reflect a unique or distinct construction style. The bridge does not represent any typical style or time period in a unique or exemplary way. Archival research did not reveal any mention of any potential architectural significance the bridge may have had during it construction. As such, the Gus Manolis Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction and does not appear significant under federal Criterion C (architectural distinction).

Criterion D asks whether a proposed project has the potential to yield information important to pre-history or history. This criterion is typically associated with effects to archaeological resources, and not historic architectural resources. Nonetheless, a project-specific search of cultural resources literature, recorded archaeological and historic-period sites, and historic maps, was conducted at the California Historic Resources Information System—NEIC. Archival research and a pedestrian survey did not identify any recorded prehistoric or historic-period sites on or adjacent to the APE. In addition, there are no resources in the APE that would yield significant information that would expand our current knowledge or theories of design, methods of construction, or other information that is not already known. As such, the bridge does not appear to be historically significant under Criterion D.

Archival and field review did not indicate that the bridge has been altered since its original construction, and appears to retain its physical integrity and integrity of setting. The bridge does not, however, appear to meet requirements of Criterion A through D of the National Register; therefore, the bridge is recommended ineligible for listing in the National Register.

6.0 Recommendations

Findings from the NEIC records search and field survey identified no known eligible cultural resources within the project APE. The presence of previously documented prehistoric archaeological resources within the ½ mile buffer of the APE suggests the potential for identification of prehistoric archaeological resources during ground disturbing activities. The impacts discussions below recommend mitigation measure in the event of the inadvertent discovery of previously unknown cultural resources or human remains.

Impact 1: Project construction could affect unknown cultural resources. (Significant)

There is the possibility that buried archaeological deposits could be present, and accidental discovery could occur. To facilitate compliance with CEQA requirements, project personnel should be alerted to the possibility of encountering archaeological materials during construction, and apprised of the proper procedures to follow in the event that such materials are found.

Mitigation Measure 1.1: Any accidental discovery of cultural resources during construction will be evaluated by a qualified archaeologist. If the find is determined to be potentially significant, the archaeologist, in consultation with Chico State University and appropriate Native American group(s), will develop a treatment plan. All work in the immediate vicinity of the unanticipated discovery shall cease until the qualified archaeologist has evaluated the discovery, or the treatment plan has been implemented.

Mitigation Measure 1.2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition, pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

7.0 References

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APPENDIX A
DPR Forms

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State of California ¾ The Resources Agency	Primary #
DEPARTMENT OF PARKS AND RECREATION	HRI #
PRIMARY RECORD	Trinomial
	NRHP Status Code
Other Listings	
Review Code	Reviewer Date

Page 1 **of** 3 *__Resource Name or #:__ Chico State Physical Sciences Bridge

P1. Other Identifier: Chico State Physical Science Bridge

***P2. Location:** o **Not for Publication** n **Unrestricted** ***a. County:** Butte

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad:** Chico **Date:** 1979 **T** 22N; **R**1E; **¼ of ¼ of Sec ;** M.D. **B.M.**

c. Address: Chico State University City: Zip:

d. UTM: Zone: 10 ; mE/ mN (G.P.S.)

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:

The bridge is located north of the Physical Sciences building entrance, crossing Big Chico Creek.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Physical Sciences Bridge is a steel girder and concrete slab pedestrian bridge crossing Big Chico Creek on Chico State University's campus. The bridge measures approximately 5 ½ -feet wide by 81-feet long, and is a 3 span, reinforced concrete slab between steel girders. The existing structure was constructed during the mid-twentieth century as a pedestrian foot bridge to support the expanding campus during the post World War II era. No identifying information, such as date stamps or plaques, were noted at the bridge.

***P3b. Resource Attributes:** HP. 19 Bridge

***P4. Resources Present:** o Building n Structure o Object o Site o District o Element of District o Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo: Physical Science Bridge, looking Southeast

***P6. Date Constructed/Age and Sources:ca 1955** n Historic o Prehistoric o Both

***P7. Owner and Address:**
California State University, Chico

***P8. Recorded by:**
Katherine Anderson | ESA
2600 Capitol Ave, Ste 200
Sacramento, CA 95816

***P9. Date Recorded:** 08/15/2013

***P10. Survey Type:** Intensive

***P11. Report Citation:** ESA, 2014. East Campus Bridge Replacement Project. Prepared for Chico State University. January, 2014.

***Attachments:** o NONE o Location Map o Sketch Map n Continuation Sheet n Building, Structure, and Object Record o Archaeological Record o District Record o Linear Feature Record o Milling Station Record o Rock Art Record o Artifact Record o Photograph Record o Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6y

***Resource Name or #** Chico State Physical Sciences Bridge

B1. Historic Name: None
B2. Common Name: Chico State Physical Sciences Bridge
B3. Original Use: pedestrian bridge
B4. Present Use: pedestrian bridge
***B5. Architectural Style:** vernacular
***B6. Construction History:**
Ca 1955 Original construction

***B7. Moved?** n**No** o**Yes** o**Unknown** **Date:** **Original Location:**
***B8. Related Features:**

B9a. Architect: unknown
b. Builder: unknown
***B10. Significance: Theme:n/a** **Area: n/a**
Period of Significance: n/a **Property Type: n/a** **Applicable Criteria: n/a**

The Northern Branch State Normal School, which would eventually become California State University, Chico, was constructed in Chico in 1887. The school underwent several expansionsduring the late 19th and early 20th centuries. The expansion of the university campus to the area north of Big Chico Creek occurred as a result of the need for expanded services resulting from returning World War II veterans and the G.I. Bill. The Physical Sciences Bridge appears as a recommended addition on campus planning maps as early as 1945, although it does not appear on subsequent County Assessor maps dating to 1953. The Physical Sciences Bridge was one of several bridges constructed at this period to connect the two parts of campus divided by Big Chico Creek. A photograph, dating to 1951, documents a similar bridge along Big Chico Creek, although the design of the railings on the bridge implies that it is not the same resource. By 1961, the Physical Sciences Bridge appears on campus maps, along with several other bridges connecting the newer and older portions of campus.

(See continuation sheet)

B11. Additional Resource Attributes: none

***B12. References:**

Butte County, 1953. Assessor's Map No. 3-20. Maintained in archives at Chico State University.

(See continuation sheet)

B13. Remarks:

***B14. Evaluator:** Katherine Anderson | ESA
2600 Capitol Ave, Ste 200
Sacramento, CA 95816
***Date of Evaluation:** January, 2014

(This space reserved for official comments.)

***Recorded by:** Katherine Anderson | ESA
2600 Capitol Ave, Ste 200
Sacramento, CA 95816

***Date:** January, 2014 n Continuation o Update

*B10. Significance: Research failed to indicate that the Physical Sciences Bridge is associated with events that have made a significant contribution to broad patterns history (Criterion A). The bridge was constructed in response to the expanding need for campus infrastructure during the post WWII period with the influx of students resulting from the G.I. Bill. The bridge is subsequently associated with the post war development of the campus in the mid-twentieth century, but does not possess a unique association with this development. The Physical Sciences Bridge does not appear to be individually significant resource under federal Criterion A.

Research did not reveal any important association with any prominent individuals. No distinct campus leader or individual were determined to have a specific association with the bridge. Therefore, the Physical Sciences Bridge does not appear to be individually significant under federal Criterion B (association with individuals).

The Physical Sciences Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction. The bridge possesses a utilitarian design and was constructed in a typical fashion, and does not reflect a unique or distinct construction style. The bridge does not represent any typical style or time period in a unique or exemplary way. Archival research did not reveal any mention of any potential architectural significance the bridge may have had during it construction. As such, the Physical Sciences Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction and does not appear significant under federal Criterion C (architectural distinction).

Criterion D asks whether a proposed project has the potential to yield information important to pre-history or history. This criterion is typically associated with effects to archaeological resources, and not historic architectural resources. Nonetheless, a project-specific search of cultural resources literature, recorded archaeological and historic-period sites, and historic maps, was conducted at the California Historic Resources Information System—Northeast Information Center (NEIC). This archival research did not identify any recorded prehistoric or historic-period sites on or adjacent to the APE. In addition, there are no resources in the APE that would yield significant information that would expand our current knowledge or theories of design, methods of construction, or other information that is not already known. As such, neither the bridge nor its immediate vicinity appears to be historically significant under Criterion D.

Archival and field review did not indicate that the bridge has been altered since its original construction, and appears to retain its physical integrity and integrity of setting. The bridge does not, however, appear to meet requirements of Criterion A through D of the National Register. ESA staff recommends the bridge as ineligible for listing in the National Register.

*B12. References:

Chico State University, 1931. Master Plan Map. Maintained in archives at Chico State University.

Chico State University, 1945. State College Map with Recommended Additions. Maintained in archives at Chico State University.

Chico State University, 1951. Bridge over Big Chico Creek. Maintained in archives at Chico State University.

Chico State University, 1961. Associated Students Map. Maintained in archives at Chico State University.

Moore, Gail, 1940. History of Chico State College. A Thesis Submitted to Oregon State College. Maintained in archives at Chico State University.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code
Other Listings
Review Code Reviewer Date

 *Resource Name or #: Chico State Gus Manolis Bridge

P1. Other Identifier: Chico State Selvester's Cafe Bridge
***P2. Location:** o **Not for Publication** n **Unrestricted** ***a. County:** Butte
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b. USGS 7.5' Quad:** Chico **Date:** 1979 **T** 22N; **R**1E; **¼ of ¼ of Sec ;** M.D. **B.M.**
c. Address: Chico State University City: Zip:
d. UTM: Zone: 10 ; mE/ mN (G.P.S.)
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation:
The bridge is located north of the Selvester Cafe, crossing Big Chico Creek.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Gus Manolis Bridge is a steel girder and concrete slab pedestrian bridge crossing Big Chico Creek on Chico State University's campus. This bridge also spans Big Chico Creek and is located downstream of the Physical Sciences Bridge approximately 350 feet. It is very similar in construction to the Physical Science Bridge: 5 ½ feet wide and 55 feet long. Like the Physical Sciences Bridge, the Gus Manolis Bridge was constructed as a pedestrian foot bridge to support the expanding campus. A plaque, dedicated the bridge in memory of Gus Manolis, is present on the bridge's south side.

***P3b. Resource Attributes:** HP. 19 Bridge
***P4. Resources Present:** o Building n Structure o Object o Site o District o Element of District o Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo: Physical Science Bridge, looking Southwest

***P6. Date Constructed/Age and Sources: 1961** n Historic o Prehistoric o Both

***P7. Owner and Address:**
California State University, Chico

***P8. Recorded by:**
Katherine Anderson | ESA
2600 Capitol Ave, Ste 200
Sacramento, CA 95816

***P9. Date Recorded:** 08/15/2013
***P10. Survey Type:** Intensive

***P11. Report Citation:** ESA, 2014. East Campus Bridge Replacement Project. Prepared for Chico State University. January, 2014.

***Attachments:** o NONE o Location Map o Sketch Map n Continuation Sheet n Building, Structure, and Object Record o Archaeological Record o District Record o Linear Feature Record o Milling Station Record o Rock Art Record o Artifact Record o Photograph Record o Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

***NRHP Status Code** 6y

***Resource Name or #** Chico State Gus Manolis Bridge

B1. Historic Name: None
B2. Common Name: Chico State Physical Sciences Bridge
B3. Original Use: pedestrian bridge
B4. Present Use: pedestrian bridge
***B5. Architectural Style:** vernacular
***B6. Construction History:**
1961 Original construction
1999 ADA compliant redesign

***B7. Moved?** n**No** o**Yes** o**Unknown** **Date:** **Original Location:**
***B8. Related Features:**

B9a. Architect: unknown
b. Builder: unknown
***B10. Significance: Theme:n/a** **Area: n/a**
Period of Significance: n/a **Property Type: n/a** **Applicable Criteria: n/a**

The Northern Branch State Normal School, which would eventually become California State University, Chico, was constructed in Chico in 1887. The school underwent several expansionsduring the late 19th and early 20th centuries. The expansion of the university campus to the area north of Big Chico Creek occurred as a result of the need for expanded services resulting from returning World War II veterans and the G.I. Bill. In 1961, the school dedicated the bridge located between Kendall and Holt Halls in memory of Gus Manolis, a football coach at Chico State who died in 1957 at the age of 34 during a search for a lost boy scout in Mendocino. Construction of the bridge began in June 1961, and was funded in part through the work of Dave Hammond and the Alpha Phi Omega fraternity, who collected money to procure materials and the plaque. The college donated the cost of labor (Chico State Wildcat, 1961; Inside Chico State, 11/11/1999; Bailey, 2013). In 1999, the campus renovated the Gus Manolis Bridge in order to make the bridge more accessible to American Disabilities Act (ADA) standards for use by the disabled: ramps were been added and slopes reduced, and uniform lighting was installed to make the bridge safer. The campus undertook the project at a cost of $171,190 (Inside Chico State, 11/11/1999).

(See continuation sheet)

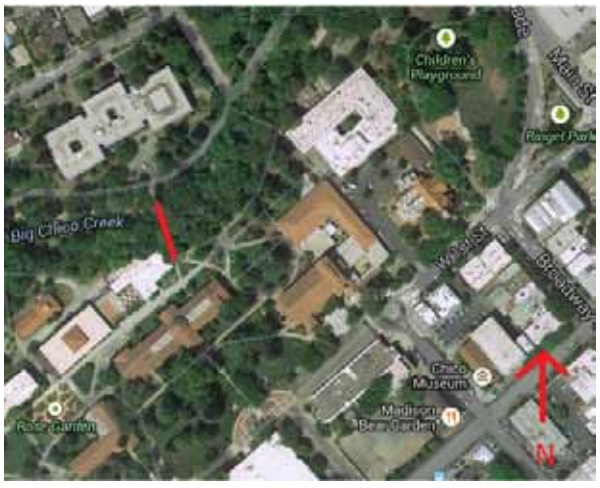
B11. Additional Resource Attributes: none

***B12. References:**

Bailey, 2013. Chico State Timeline. Available online at <http://www.csuchico.edu/lspr/time1.html>. Accessed January 8, 2014.

(See continuation sheet)

B13. Remarks:



***B14. Evaluator:** Katherine Anderson | ESA
2600 Capitol Ave, Ste 200
Sacramento, CA 95816
***Date of Evaluation:** January, 2014

(This space reserved for official comments.)

***Recorded by:** Katherine Anderson | ESA
2600 Capitol Ave, Ste 200
Sacramento, CA 95816

***Date:** January, 2014 n Continuation o Update

***B10. Significance:**

Research failed to indicate that the Gus Manolis Bridge is associated with events that have made a significant contribution to broad patterns history (Criterion A). The bridge was constructed during a period of campus growth and expansion during the 1960s, but does not possess a unique association with campus development. The Gus Manolis Bridge does not appear to be individually significant resource under federal Criterion A.

Research did not reveal any important association with any prominent individuals. While the campus constructed Gus Manolis Bridge as a memorial to the football coach, Criterion B requires that the property be associated with a person's productive life, reflecting the time period when he or she achieved significance. Properties that pre- or post-date an individual's significant accomplishments are usually not eligible. The bridge, as a memorial constructed four years after Manolis' death, does not appropriately reflect his role as a football coach or college staff member. Therefore, the Gus Manolis Bridge does not appear to be individually significant under federal Criterion B (association with individuals).

The Gus Manolis Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction. The bridge possesses a utilitarian design and was constructed in a typical fashion, and does not reflect a unique or distinct construction style. The bridge does not represent any typical style or time period in a unique or exemplary way. Archival research did not reveal any mention of any potential architectural significance the bridge may have had during it construction. As such, the Gus Manolis Bridge does not appear to embody the distinctive characteristics of a type, period, or method of construction and does not appear significant under federal Criterion C (architectural distinction).

Criterion D asks whether a proposed project has the potential to yield information important to pre-history or history. This criterion is typically associated with effects to archaeological resources, and not historic architectural resources. Nonetheless, a project-specific search of cultural resources literature, recorded archaeological and historic-period sites, and historic maps, was conducted at the California Historic Resources Information System—Northeast Information Center (NEIC). Archival research and pedestrian survey did not identify any recorded prehistoric or historic-period sites on or adjacent to the APE. In addition, there are no resources in the APE that would yield significant information that would expand our current knowledge or theories of design, methods of construction, or other information that is not already known. As such, the bridge does not appear to be historically significant under Criterion D.

Archival and field review did not indicate that the bridge has been altered since its original construction, and appears to retain its physical integrity and integrity of setting. The bridge does not, however, appear to meet requirements of Criterion A through D of the National Register, and is therefore the bridge recommended ineligible for listing in the National Register.

***B12. References:**

Chico State Wildcat, 1961. Bridge Dedication Park of Homecoming. October 19, 1961. Maintained in archives at Chico State University.

Inside Chico State, 1999. Gus Manolis Bridge Re-Opened. 11/11/1999

APPENDIX B

Native American Correspondence

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ESA Community Development

2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 phone
916.564.4501 fax

www.esassoc.com

August 23, 2013

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

SUBJECT: Request for Search of Sacred Lands Files and Native American Contact List

Dear Ms. Treadway:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

In an effort to provide an adequate appraisal of all potential impacts that may result from the proposed project, ESA is requesting that a search be conducted of the sacred lands files and records of traditional cultural properties that may exist within or adjacent to the project area. I would also like to request a list of Native American individuals and organizations that should be contacted about potential sites and resources of importance to Native Americans.

Thank you for your time and cooperation regarding this matter. Please contact me at 209-245-6339 if you have any questions.

Sincerely,

R. Scott Baxter
Senior Archaeologist

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

September 3, 2013

R.Scott Baxter
ESA
2600 Capitol Ave., Ste 200
Sacramento, cA 95816

Sent by Fax 916-564-4501

Number of Pages: 3

Re: CSU Chico East Campus Bridge Replacement project, Chico USGS Quadrangle, Butte County

Dear Mr. Baxter:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 651-1490.

Sincerely,

Rob Wood
Associate Government Program Analyst

Native American Contact List
Butte County
September 3, 2013

Berry Creek Rancheria of Maidu Indians
Cultural Resources Rep
5 Tyme Way — Tyme Maidu
Oroville , CA 95966
gmix@berrycreekrancheria.com
(530) 534-3859
(530) 534-1151 FAX

Mooretown Rancheria of Maidu Indians
James Sanders, Tribal Administrator
#1 Alverda Drive — Maidu
Oroville , CA 95966 — KonKow/Concow
(530) 533-3625
(530) 533-3680 FAX

Mechoopda Indian Tribe of Chico Rancheria
Dennis E. Ramirez, Chairperson
125 Mission Ranch Blvd — Mechoopda Maidu
Chico , CA 95926 — Concow
dramirez@mechoopda-nsn.gov
(530) 899-8922 ext 215
(530) 899-8517 - Fax

Berry Creek Rancheria of Maidu Indians
James Edwards, Chairperson
5 Tyme Way — Tyme Maidu
Oroville , CA 95966
jedward@berrycreekrancheria.com
(530) 534-3859
(530) 534-1151 FAX

Butte Tribal Council
Ren Reynolds
1693 Mt. Ida Road — Maidu
Oroville , CA 95966

(530) 589-1571

Enterprise Rancheria of Maidu Indians
Art Angle, Vice Chairperson
2133 Monta Vista Avenue — Maidu
Oroville , CA 95966
info@enterpriserancheria.com
(530) 532-9214
(530) 532-1768 FAX

Mooretown Rancheria of Maidu Indians
Gary Archuleta, Chairperson
#1 Alverda Drive — Maidu
Oroville , CA 95966 — KonKow / Concow
frontdesk@mooretown.org
(530) 533-3625
(530) 533-3680 Fax

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
2133 Monta Vista Ave — Maidu
Oroville , CA 95966
info@enterpriserancheria.com
(530) 532-9214
(530) 532-1768 FAX

KonKow Valley Band of Maidu
Chairperson
1706 Sweem Street — KonKow / Concow
Oroville , CA 95965 — Maidu
(530) 533-1504

T' si-Akim Maidu
Grayson Coney, Cultural Director
P.O. Box 1316 — Maidu
Colfax , CA 95713
akimmaidu@att.net
(530) 383-7234

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed CSU Chico East Campus Bridge Replacement Project, Chico USGS Quadrangle, Butte County

Native American Contact List
Butte County
September 3, 2013

Mechoopda Indian Tribe of Chico Rancheria
Mike DeSpain, Director - OEPP
125 Mission Ranch Blvd
Chico , CA 95926
mdespain@mechoopda-nsn.gov
(530) 899-8922 ext 219
(530) 899-8517 - Fax

Mechoopda Maidu
Concow

April Wallace Moore
19630 Placer Hills Road
Colfax , CA 95713
530-637-4279

Nisenan - So Maidu
Konkow
Washoe

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed CSU Chico East Campus Bridge Replacement Project, Chico USGS Quadrangle, Butte County

ESA

2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 phone
916.564.4501 fax

www.esassoc.com

December 17, 2013

Berry Creek Rancheria of Maidu Indians
Cultural Resources Representative
5 Tyme Way
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

To Whom it May Concern:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

In an effort to address any potential impact to archaeological or ethnographic resources, we are seeking comments from Native American representatives; your name was supplied to us by the Native American Heritage Commission as a contact for this area. We would appreciate your comments identifying any concerns or issues pertinent to this project.

Thank you for your time and cooperation regarding this matter. If you have any questions, please do not hesitate to contact me.

Sincerely,

R. Scott Baxter
Senior Archaeologist

Attachments

ESA

2600 Capitol Ave
Suite 200
Sacramento, CA 95816
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December 17, 2013

Berry Creek Rancheria of Maidu Indians
James Edwards, Chairperson
5 Tyme Way
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Chairperson Edwards:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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December 17, 2013

Mechooopda Indian Tribe of Chico Rancheria
Dennis E Ramirez, Chairperson
125 Mission Ranch Blvd
Chico, CA 95926

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Chairperson Ramirez:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County**.** The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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December 17, 2013

Mechooopda Indian Tribe of Chico Rancheria
Mike DeSpain, Director - OEPP
125 Mission Ranch Blvd
Chico, CA 95926

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Mr. DeSpain:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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December 17, 2013

April Wallace Moore
19630 Placer Hills Road
Colfax, CA 95713

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Ms. Moore:

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December 17, 2013

Butte Tribal Council
Ren Reynolds
1693 Mt Ida Rd
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Mr. Reynolds:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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December 17, 2013

Mooretown Rancheria of Maidu Indians
Gary Archuleta, Chairperson
1 Alverda Dr
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Chairperson Archuleta:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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December 17, 2013

Mooretown Rancheria of Maidu Indians
James Sanders, Tribal Advisor
1 Alverda Dr
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Mr. Sanders:

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December 17, 2013

KonKow Valley Band of Maidu
Chairperson
1706 Sweem St
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

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December 17, 2013

Enterprise Rancheria of Maidu Indians
Art Angle, Vice Chairperson
2133 Monte Vista Ave
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Mr. Angle:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County. The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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December 17, 2013

Enterprise Rancheria of Maidu Indians
Glenda Nelson, Chairperson
2133 Monte Vista Ave
Oroville, CA 95966

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Chairperson Nelson:

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December 17, 2013

Tsi-Akim Maidu
Grayson Coney, Cultural Director
PO Box 1316
Colfax CA 95713

Subject: CSU Chico East Campus Bridge Replacement Project

Dear Mr. Coney:

ESA is conducting environmental studies for the CSU Chico East Campus Bridge Replacement Project, Chico, Butte County**.** The project is located on the Chico USGS 7.5' Quad; T/R: 1E/22N/Rancho de Farwell (See attached map). CSU Chico is proposing the replacement of two bridges on Big Chico Creek within the main campus area: the existing pedestrian bridge near the Physical Science Building, and a pedestrian bridge near the Selvester Café. The pedestrian bridge by the Physical Science building would be replaced by a suspension bridge accommodating pedestrians, bicycles, and emergency vehicles and automobiles. The second bridge would be replaced with a pedestrian bridge similar to the existing bridge.

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Contact	Transaction			Comments
	Contact Letter	Phone Call	Fax	
Native American Heritage Commission (NAHC)	August 23, 2013			
NAHC			Response from NAHC letter sent August 23, 2013	No sites on file
Berry Creek Rancheria of Maidu Indians	December 17, 2013	January 17, 2014 Left message		
Mooretown Rancheria of Maidu Indians (James Sanders)	December 17, 2013	January 17, 2014 Spoke with representative		No concerns
Mechoopda Indian Tribe of Chico Rancheria (Dennis Ramirez)	December 17, 2013	January 17, 2014 Left message		
Berry Creek Rancheria of Maidu Indians (James Edwards)	December 17, 2013	January 17, 2014 Left message		
Butte Tribal Council	December 17, 2013	January 17, 2014 Left message		
Enterprise Rancheria of Maidu Indians (Art Angle)	December 17, 2013	January 17, 2014 Left message		
Mooretown Rancheria of Maidu Indians (Gary Archuleta)	December 17, 2013	January 17, 2014 Left Message		
Enterprise Rancheria of Maidu Indians (Glenda Nelson)	December 17, 2013	January 17, 2014 Left message		
Konkow Valley Band of Maidu	December 17, 2013	January 17, 2014 Left Message		
T'si-Akim Maidu (Grayson Coney)	December 17, 2013	January 17, 2014 Spoke with Grayson Coney		No concerns
Mechoopda Indian Tribe of Chico Rancheria (Mike DeSpain)	December 17, 2013	January 17, 2014 Left message February 12, 2014 Mike DeSpain left message for R. Scott Baxter February 19, 2014 Spoke with Mike DeSpain		On February 19, 2014 Mike DeSpain informed R. Scott Baxter that he had been in direct consultation with Lynda Miracle from Design & Planning at CSU, Chico. Ms. Miracle had

				provided Mr. DeSpain copies of the plans for the project and discussed earth moving activities, for which Mr. DeSpain wished to have a Native American monitor present once work was underway.
April Wallace Moore	December 17, 2013	January 17, 2014 Left message		

CSU, Chico: Physical Science Bridge Replacement Project and the Selvester's Cafe Bridge Restoration Project

SCH Number: 2014032059

Document Type: NOD - Notice of Determination

Project Lead Agency: California State University, Chico

Project Description

CSU Chico proposes to replace the existing Physical Science Bridge (proposed project) that spans Big Chico Creek with two new bridges that will facilitate emergency vehicle and pedestrian access between the CSU Chico campus and Arcadian Avenue. The existing Physical Science Bridge is a narrow steel truss bridge that currently provides an important connection point over Big Chico Creek to both sides of the CSU Chico campus. The existing bridge is a 5 1/2-foot wide by 81-foot long, 2 span, reinforced concrete slab between steel girders. The existing structure was constructed during the 1940s and was only meant as a pedestrian foot bridge; therefore, it is incapable of emergency vehicle access across campus. The bridge is also not considered ADA compliant based on a number of conditions.

Contact Information

Primary Contact:
Jenna Wright
California State University, Chico
(530) 898-6235
400 W. First Street
Chico, CA 95929-0018

Project Location

County: Butte
City: Chico
Region:
Cross Streets: Arcadian Ave. & Sol-Wil-Le-No Ave
Latitude/Longitude: 39° 43' 52.56" / 121° 50' 38.93" Map
Parcel No:
Township:
Range:
Section:
Base:
Other Location Info:

Determinations

This is to advise that the ☒ Lead Agency ☐ Responsible Agency CSU Chico has approved the project described above on 6/9/2014 and has made the following determinations regarding the project described above.

1. The project ☒ will ☐ will not have a significant effect on the environment.

2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

3. Mitigation measures ☒ were ☐ were not made a condition of the approval of the project.

4. A Statement of Overriding Considerations ☐ was ☒ was not adopted for this project.

5. Findings ☐ were ☒ were not made pursuant to the provisions of CEQA.

Final EIR Available at: CSU Chico 400 West First Street Chico, CA 95929

Date Received: 6/11/2014
