

Section 3 Affected Environment and Environmental Consequences

3.1 Introduction

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Both CEQA and NEPA require that cumulative impacts are discussed when the project's incremental effect is cumulatively considerable. These impacts are discussed when appropriate in the relevant issue areas discussed below.

The cumulative setting includes past, present and reasonably foreseeable future actions not part of the proposed action but related to cumulative effects. This includes projected growth and zoning as detailed in the City General Plan. There is one major development project within the immediate vicinity of the project site: the Public Plaza at the Historic Folsom Station. This project would involve the development of street level retail shops, restaurants, retail, and office space adjacent to the public plaza surrounding the historic turn table. The Public Plaza project is in the initial phases of development.

3.2 Aesthetics

3.2.1 Regulatory Setting

Federal

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S.C. 4331[b][2]).

State

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with...enjoyment of aesthetic, natural, scenic and historic environmental qualities." (CA Public Resources Code Section 21001[b]).

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

The Folsom Lake State Recreation (FLSRA) and Folsom Powerhouse State Historic Park (FPSHP) General Plan/ Resource Management Plan (GP/RMP) defines the management framework for the development, ongoing management, and public use of the FLSRA and the FPSHP by providing a defined purpose and vision with long-term goals and guidelines. The document guides future efforts to balance recreation and conservation, protect natural and cultural resources, and expand opportunities for public enjoyment of the Sierra Nevada Foothills setting.

Reclamation and State Parks began working on the Preliminary GP/RMP in 2002, and subsequently released the associated Draft Environmental Impact Statement/ Environment Impact Report (EIS/EIR) for public review on February 5, 2008. The Final EIS/EIR was made available for public review on January 26, 2010. The California State Park and Recreation Commission approved the General Plan and certified the EIR on October 8, 2009. A Notice of Determination was filed with the State Clearinghouse on October 13, 2009. State Parks considers the General Plan a finalized document. Reclamation suspended completion of the Record of Decision on the Final EIS in 2010, while Reclamation and State Parks negotiated a new Managing Partners Agreement for the Folsom SRA. Until such a time that Reclamation completes the ROD Reclamation intends to use the GP/RMP as a guidance document. Relevant guidelines related to aesthetics are provided below.

- VISUAL-1 Expand recreation and interpretation opportunities associated with the visual and scenic resources of the SRA. Opportunities include view-oriented day use facilities and interpretive programming in key locations (e.g., Lake Overlook on Lake Natoma) and enhanced interpretation of distinctive landscape features (e.g., Natoma Bluffs, dredge tailings along Lake Natoma, and the Peninsula).
- VISUAL-5 Buildings, structures, and landscaping should be sited to be sensitive to scenic views from and into the park. Site facilities should minimize the impact on views from key viewpoints (e.g., Nimbus Flat, Lake Overlook, Begro Bar, Beals Point, Granite Bay, Brown's Ravine, and Folsom Point). Landscape design and planting should be used to visually buffer developed areas, enhance visual quality, and integrate the surrounding native landscape.

Local

City General Plan

The City of Folsom General Plan, adopted in 1993, is the guiding document for development in the City, which includes the project site. Relevant goals and policies contained within the City's General Plan related to aesthetics are provided below.

Policy 1.2: Existing viewsheds and opportunities for viewsheds should be incorporated into the design of new developments.

Policy 1.6: Folsom's Historic District shall be enhanced and maintained through the improvement of public facilities.

American River Parkway Plan

The American River Parkway (Parkway) is a regional open space greenbelt which extends approximately 29 miles from Folsom Dam to the northeast to the American River's confluence with the Sacramento River to the southwest (County of Sacramento, 2008). The American River Parkway Plan (Plan), adopted by Sacramento County as an element of the 1973 County General Plan and updated in 1985 and 2008, is a guide for land managers to assist in policy decisions affecting the Parkway. The Plan addresses the entire length of the Parkway and includes areas in the unincorporated County, City of Sacramento, the City of Rancho Cordova, and the Lake Natoma portion of the Folsom Lake State Recreational Area

(FLSRA). It contains policy statements to provide guidance to the preservation and management of the Parkway. Its goals are:

- To provide, protect and enhance for public use a continuous open space greenbelt along the American River extending from the Sacramento River to Folsom Dam.
- To provide appropriate access and facilities so that present and future generations can enjoy the amenities and resources of the Parkway which enhance the enjoyment of leisure activities.
- To preserve, protect, interpret and improve the natural, archaeological, historical and recreational resources of the Parkway, including an adequate flow of high quality water, anadromous and resident fishes, migratory and resident wildlife, and diverse natural vegetation.
- To mitigate adverse effects of activities and facilities adjacent to the Parkway.
- To provide public safety and protection within and adjacent to the Parkway.

The County of Sacramento has the principle responsibility for the administration and management of the Parkway as guided by the Plan. However, there are several portions of the Parkway that are owned and/or managed by State and Federal land managers.

The land within the portion of the Parkway from Hazel Avenue upstream to the Folsom Dam, known as Lake Natoma, is mostly administered by State Parks (including on Reclamation lands) as part of the FLSRA and the Folsom Powerhouse State Historic Park (FPSHP). State Parks has acquired fee title to additional lands around Lake Natoma, including the FPSHP and the FLSRA, and also manages these State fee title lands as part of the two park units.

3.2.2 Affected Environment

The Proposed Project is located within FLSRA, adjacent to the Lake Natoma section of the American River and the Folsom Historic District, within the American River Parkway. State Parks, through an agreement with Reclamation, manages the project site for public use and recreation. The alignment of the Proposed Project from the East Lake Natoma Bike Trail east of Folsom Boulevard includes sloped woodland, paved bike paths, wood bridges, and disturbed unpaved trails. The alignment of the Proposed Project from the East Lake Natoma Bike Trail west of the Folsom Boulevard Bridge includes sloped woodland, sparsely wooded open space, existing paved bike paths, wood bridges, and disturbed unpaved trails. These existing trails are part of the Folsom Lake SRA trail system, managed by California State Parks through a MPA with Reclamation.

Sensitive Receptors

A sensitive receptor is defined as an individual that is especially sensitive to changes in aesthetic qualities, which could include for example, changes in lighting, shadows, or surrounding visual character. Land uses that serve as sensitive receptors, i.e., residential uses and business centers, are located along the southern boundary of the project site. The residences along the East Lake Natoma Bike Trail, west of Folsom Boulevard, and across Lake Natoma on the other side of the shore have largely unobstructed views of the project site. East of Folsom Boulevard along Gold Lake Drive there are several residences and a business center with several restaurants, but views are largely obstructed by large trees and other vegetation. The northern boundary of the Proposed Project is bounded by the Lake Natoma section of the American River.

Scenic Resources

There is no comprehensive list of specific features that automatically qualify as scenic resources; however, certain characteristics can be identified which contribute to the determination of a scenic resource. The following is a partial list of visual qualities and conditions that if present, may indicate the presence of a scenic resource:

- A tree that displays outstanding features of form or age.
- A landmark tree or a group of distinctive trees accented in a setting as a focus of attention.
- An unusual planting that has historical value.
- A unique, massive rock formation.
- A historic building that is a rare example of its period, style, or design, or which has special architectural features and details of importance.
- A feature specifically identified in applicable planning documents as having a special scenic value.
- A unique focus or a feature integrated with its surroundings or overlapping other scenic elements to form a panorama.
- A vegetative or structural feature that has local, regional, or statewide importance.

The project area is located within the FLSRA, which is considered a visual and scenic resource, as many of the FLSRA's shoreline coupled with its hilly topography provide significant variety in both viewpoint orientation and available viewsheds to create a wealth of viewing conditions and opportunities (U.S. Bureau of Reclamation, 2007).

The project site is not located within a scenic vista or designated state scenic highway. The nearest scenic resource or feature would be the FPSHP, located approximately one-quarter mile to the northeast of the project. The visual characteristics of the project site and vicinity are limited to existing urban development, residences, oak woodlands, existing bike paths, unpaved trails, and open space. The City General Plan describes the project site as open space and it is appreciated by locals and travelers utilizing the East Lake Natoma Bike Trail.

Light and Glare

The project site currently has no sources of light or glare. The most notable lighting in the vicinity of the project site is the business center south of the Proposed Project and the surrounding urban development of the City. Nearby urban residences, street lights, cars, and other urban features generate artificial lighting throughout the day, but mainly during evening hours and the night time.

3.2.3 Environmental Consequences***No Action***

Under the No Action Alternative, no impact would occur because the project would not be constructed. The existing aesthetic resources would remain the same, and no additional impacts would occur.

Proposed Action

The majority of the proposed pedestrian trail will be constructed on existing paved and unpaved trails, including the East Lake Natoma Bike Trail; however, implementation of the Proposed Project would introduce several new paved pathways which would require grading and vegetation removal, thereby impacting visual resources for some sensitive receptors. However, the nature of the Proposed Project, to create ADA accessible pedestrian trail over existing unpaved and paved trails that connects to the East Lake Natoma Bike Trail, would fit with the overall recreational character of the project area.

A paved pathway from the intersection of Gold Lake Drive to Folsom Boulevard heading east down to the existing paved bike path will be constructed to allow ADA and pedestrian access to the new paved path. This portion would require grading and vegetation removal and would be partially visible to several businesses located to the south of the Proposed Project. Once constructed, the trail will be screened from the business center due to the sloping nature of the local terrain.

Construction and grading activities would occur along the eastern portion of the project site which will be partly visible to several sensitive receptors to the south, southeast, and across Lake Natoma. With the exception of a segment near the eastern boundary of the project site, the trail will be screened from view by vegetation and down-sloping terrain. However, development of the Proposed Project that would not alter the current scenic vista and visual quality of the area and would not adversely effect, damage, or degrade the current visual characteristics of the project area through the addition of handrails, retaining walls, or paved pathways.

The portion of the trail beneath the Lake Natoma Crossing Bridge will be constructed to include an accessible path to the water that would double as a water landing for canoes and kayaks on Lake Natoma. This segment of the trail will require excavation and construction of a rip-rap and boulder retaining wall. However construction will occur below the Lake Natoma Crossing Bridge in an area that is currently disturbed and will not impact local aesthetics.

West of Folsom Boulevard construction of the Proposed Project will include the grading and paving of existing bike pathways and unpaved trails, the demolition and construction of two new bridges, as well as the construction of a new, bisecting bike pathway beginning at the proposed picnic table heading upwards southeast through the project site and terminating at the western entrance of the East Lake Natoma Bike Trail, just west of Folsom Boulevard. Sensitive receptors north and across Lake Natoma of this new bike pathway, will be screened from direct views by vegetation and terrain.

During the construction phase of the Proposed Project, vegetation will be removed but no feature or landmark will be removed or impacted that has specific aesthetic value or importance.

Cumulative Impacts

The Proposed Project would not cumulatively impact visual resources in the vicinity of the project. Any future proposed project in the immediate vicinity of the project site would either require Reclamation and/or City approval which would include appropriate environmental review pursuant to NEPA and/or CEQA. Therefore, the Proposed Project would not result in a cumulatively considerable degradation to the aesthetic resources or character.

3.3 Water Resources

3.3.1 Regulatory Setting

Federal

Clean Water Act

The Clean Water Act (CWA) (33 USC § 1251-1376), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality on federal lands. The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” Important sections of the Act are as follows:

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- Section 401 (Water Quality Certification) requires an applicant for any federal permit that proposes an activity, which may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the Act. There are no waivers for Water Quality Certifications in the State of California, and the Water Quality Certification serves as both a certification of a federal permit, under Section 401 of the Clean Water Act, as well as a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act. Additionally, under Section 401 of the Clean Water Act, the State of California can review and approve or deny all federal permits that may result in a discharge to waters of the State, including wetlands.
- Section 402 establishes the National Pollutant Discharge Elimination System, a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the State Water Resources Control Board (SWRCB) and is discussed in detail below.
- Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by the United States Army Corps of Engineers (USACE) and the United States Environmental Protection Agency (USEPA).

Antidegradation Policy

The antidegradation policy of the CWA is designed to protect water quality and water resources. The policy directs states to adopt a statewide policy that includes the following primary provisions: (1) existing instream uses and the water quality necessary to protect those uses shall be maintained and protected; (2) where existing water quality is better than necessary to support fishing and swimming conditions, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development; and (3) where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

Federal Emergency Management Agency

The City is a participant in the National Flood Insurance Program (NFIP), a Federal program administered by FEMA. Participants in the NFIP must satisfy certain mandated floodplain management

criteria. The National Flood Insurance Act of 1968 adopted a desired level of protection that would protect developments from floodwater damage associated with an Intermediate Regional Flood (IRF), a flood which is defined as having an average frequency of occurrence on the order of once in 100 years, although such a flood may occur in any given year.

NPDES Program - Construction Activity

The USEPA will require that the Proposed Action and Proposed Project comply with the provisions established by the National Pollutant Discharge Elimination System (NPDES). The NPDES program regulates municipal and industrial storm water discharges under the requirements of the CWA. California is authorized to implement the discharge permitting program on Federal lands in lieu of the USEPA, with the SWRCB (through the individual regional water quality control boards) as the permitting agency.

Reclamation and the City must comply with the requirements of the most recent version of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ). This permit regulates discharges from construction sites that disturb one acre of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance must comply with the provisions of this NPDES permit. The permitting process requires the development and implementation of an effective Storm Water Pollution Prevention Plan (SWPPP). The project applicant must submit a Notice of Intent to the SWRCB to be covered by a NPDES permit and prepare the SWPPP prior to the beginning of construction. The SWPPP must include best management practices (BMPs) to reduce pollutants and any more stringent controls necessary to meet water quality standards. Dischargers must also comply with water quality objectives as defined in the Central Valley Basin Plan. If Basin Plan objectives are exceeded, corrective measures would be required.

State

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) provides the basis for water quality regulation within California. The Act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. The Central Valley Regional Water Quality Control Board (CVRWQCB) implements waste discharge requirements identified in the Report.

State Water Resources Control Board and Regional Water Quality Control Board

The SWRCB administers water rights, water pollution control, and water quality functions, while the Regional Water Quality Control Boards conduct planning, permitting, and enforcement activities on state lands. State lands in the project region are under the jurisdiction of the CVRWQCB.

Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

The CVRWQCB uses planning, permitting, and enforcement authorities to meet this responsibility, and has adopted the Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River

and San Joaquin River Basins (Basin Plan) (CVRWQCB, 2009) to implement plans, policies, and provisions for water quality management. The Basin Plan was prepared in compliance with the federal CWA and the State Porter-Cologne Water Quality Control Act. The Basin Plan establishes beneficial uses for major surface waters and their tributaries, water quality objectives that are intended to protect the beneficial uses, and implementation programs to meet stated objectives.

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

Goals relevant to watershed protection contained within the GP/RMP are provided below:

Goal

Protect water quality in Folsom Lake and Lake Natoma and the streams within the SRA that feed into these water bodies. Protect water quantity in the creeks that feed into Folsom Lake and Lake Natoma.

Local

City General Plan

Relevant goals and policies, contained within the City's General Plan related to water resources are provided below.

Policy 1.9: Development proposed along streams shall be in conformance with a comprehensive development and management plan to be prepared for stream waterbeds prior to project approval.

Policy 25.1: The surface and groundwater quality of Folsom shall not be degraded from City standards.

Policy 28.2: The quality and quantity of surface water runoff from a property shall not exceed existing flows or existing quality or shall comply with City standards for off-site drainage. The City shall implement a surface-runoff water quality monitoring program to ensure compliance with City standards.

Policy 29.3: The City shall develop standards for building within 100 year floodway to assure that the water flows above stream and down streams from a property will not be altered from existing levels.

Policy 29.4: The City shall work with the U.S. Army Corp of Engineers in developing standards for development within the inundation boundary resulting from failure of Folsom Dam or the dikes retaining Folsom Lake.

American River Parkway Plan

Please refer above for the discussion of the American River Parkway Plan in the **Section 3.2.1** of this IS-EA.

3.3.2 Affected Environment

Surface Water

The Proposed Project site is adjacent to Lake Natoma, which is a regulating reservoir for water releases from Folsom Lake, and is flanked by Nimbus Dam to the west and Folsom Dam to the east. Water is released as needed from this reservoir via the Nimbus Dam into the American River to the west. Flow and water levels within Lake Natoma adjacent to the project site fluctuate between 4 to 7 feet daily based on power operations. Waters of the United States and wetlands are addressed in **Section 3.9, Biological Resources**.

Water Quality

The quality of local surface water from Folsom Lake and the American River is considered excellent for both irrigation and municipal and industrial purposes. As presented in the Basin Plan, the beneficial uses relating the Folsom Lake to the American River are as follows (CVRWQCB, 2009):

- Municipal and Domestic Supply;
- Agricultural Supply;
- Industrial Service Supply;
- Hydropower generation;
- Industrial Processes;
- Water Contact, Canoeing and Rafting, and Other Non-Contact Recreational purposes;
- Warm and cold freshwater habitat;
- Warm and Cold Migratory Routes;
- Warm and Cold Spawning habitat; and
- Wildlife habitat.

Water quality objectives for Folsom Lake and the American River in the vicinity of the project site are summarized below in **Table 3-1**. Although the soil types of the project site have not been rated for sheet and rill erosion potential (refer to **Section 3.5.2**), visual assessment of the banks and unpaved trails within the project site indicate disturbances from the development and use of the trails has resulted in exposing soils and decreasing soil stability. During storm events, these exposed soils are susceptible to erosion resulting in the release of sediment into Lake Natoma.

Drainage and Flooding

The project site typically drains northwest towards Lake Natoma. The FEMA Flood Insurance Rate Map (FIRM) for the area (FIRM #0602630003B), last revised January 6, 1982, indicates that the northern portions of the project site along the American River are located in “Zone B” flood designations. FEMA defines this designation as “(a)reas between the limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from base flood” (FEMA, 1982). The remaining portions of the project area are categorized as “Zone C” which is defined as “Areas of minimal flooding” (FEMA, 1982).

TABLE 3-1
WATER QUALITY OBJECTIVES FOR INLAND SURFACE WATERS

Constituent	Objective
Bacteria	In waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml. l.
Chemical Constituents	Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses. The chemical constituent objectives in Table III-1 apply to the water bodies specified. Metal objectives in the table are dissolved concentrations. Selenium, molybdenum, and boron objectives are total concentrations.
Biostimulatory Substances	Water shall not contain biostimulatory substances which promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
pH	The pH shall not be depressed below 6.5 nor raised
Pesticides	Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15. Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/l.
Radioactivity	Radionuclides shall not be present in concentrations that are harmful to human, plant, animal or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life.
Total Dissolved Solids	Shall not exceed 125 mg/l (90 percentile).
Source: CVRWQCB, 2009.	

Dam Failure

If the earthen dikes on the south side of Folsom Dam Complex were to fail, the project site and the immediate vicinity would become inundated within a short period of time. Failure of the Mormon Island Auxiliary Dam also has the potential to significantly flood the project site depending on the degree of failure of the dam. However, failure of the Folsom Dam or any of the dikes or auxiliary dams surrounding Folsom Lake is based on relatively remote conditions. The dam is rated to provide flood control for up to a 60-year storm, with on-going improvements to the Folsom Facility to safely pass a 200-year storm.

Groundwater

Groundwater recharge in the project area occurs generally through infiltration from Lake Natoma, Folsom Lake, and the American River. In general, groundwater levels in the project area remained constant until the 1940's, then declined through the middle of the century at a rate of approximately one foot per year.

3.3.3 Environmental Consequences

No Action

Under the No Action Alternative, water quality would continue to be impacted because the existing exposed soils along the banks and unpaved trails within the project site would continue to erode during

storm events unless repair and maintenance of existing trails is performed. Without needed repair and maintenance, increased use of the area will result in further degradation and increased eroding of the unpaved trails.

Proposed Action

The majority of the proposed project will be constructed on existing pathways and unpaved hardpacked trails. During construction, equipment and materials have the potential to leak, thereby discharging pollutants into stormwater. Construction site pollutants may include particulate matter, sediment, oils, greases, concrete, paint, and adhesives. Discharge of these pollutants could result in contamination of Lake Natoma, causing exceedance of surface water quality objectives. Grading and earth moving activities associated with the construction of the Proposed Project would potentially result in soil erosion, siltation, and contamination of stormwater, this is considered a potentially adverse impact.

In order to comply with the State's NPDES General Permit, a Notice of Intent will be filed with the CVRWQCB, and a SWPPP will be prepared prior to construction. A copy of the SWPPP must be current and remain on the project site. As required by **Mitigation Measure LR-1 in Section 3.5.4** below, the SWPPP shall identify the best management practices (BMPs) that will be used to reduce the potential for surface water contamination from construction activities to a minimal level.

The Proposed Project would consist of the development of a paved pedestrian trail over existing unpaved hardpacked trails. The existing drainage pattern of the site or area would remain the same and there would not be a substantial increase in the impermeable surface area that would result in increased runoff rates leading substantial erosion or siltation on- or off-site. Anticipated runoff from the proposed trail would discharge to Lake Natoma but would not result in a substantial source of polluted runoff. With the implementation of **Mitigation Measure LR-1 in Section 3.5.4**, adverse impacts are considered to be minimal. The minimal increase in impermeable surface area resulting from the construction of a paved pedestrian trail would not impact groundwater re-charge rates, as runoff would drain to Lake Natoma where recharge would occur and there would not be a net deficit in aquifer volume or a lowering of the local groundwater table level. Additionally, installation of the retaining walls along steep slopes and paving of the unpaved pathways would provide a minimal reduction in erosion and sedimentation compared to existing conditions.

The Proposed Project does not involve construction of any habitable structures and would not impede or redirect flood flows nor would it expose people or structures to a significant risk of loss, injury, or death as a result of flooding.

Cumulative Impacts

As discussed above, the Proposed Project includes project features which reduce potential impacts associated with water quality, drainage, and flooding. With the implementation of project features detailed in **Section 2.0** and **Mitigation Measure LR-1**, the Proposed Project's contribution to cumulative impacts related to water quality and hydrology would not be cumulatively considerable. Compliance with State stormwater pollution prevention requirements will prevent off-site development, in combination with the Proposed Project, from causing cumulatively significant stormwater related impacts.

3.4 Land Use

3.4.1 Regulatory Setting

State

Williamson Act

The California Legislature passed the California Land Conservation Act (commonly referred to as the “Williamson Act”) in 1965 to preserve agricultural lands and open space by discouraging premature and unnecessary conversion to urban uses. Under the Williamson Act, private landowners contract with counties and cities to voluntarily restrict privately-owned land to agricultural and compatible open-space uses. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than their potential market value. The vehicle for these agreements is a rolling-term, ten-year contract that is automatically renewed unless either party files a “notice of nonrenewal.” There are no parcels within the project site are currently subject to Williamson Act contracts.

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

The project area is designated as Low Intensity Recreation/Conservation in the Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan (GP/RMP). These designated areas exhibit natural and cultural resource values that will be protected and restored while accommodating lower intensity recreation and interpretation that is compatible with and dependent on the resource values. Recreation use and facilities occur in these areas; however, the level of use is generally lower in intensity than Recreation areas. While some developed facilities are located in these areas, there tend to be fewer and less developed facilities than in Recreation areas and direct vehicle access may not always exist. Recreation use and facilities, while present, do not dominate these areas. These areas offer opportunities for more challenging recreational activities in a natural setting. Resource management in Low Intensity Recreation/Conservation areas emphasizes protecting and restoring natural processes with only minor modification of non-sensitive resources permitted to accommodate additional visitor use as appropriate. Relevant policies contained within the GP/RMP are provided below:

- NATSHORE/N-2: Improve trail connection and access with the City of Folsom trails and provide pedestrian access from the City of Folsom Historic District. Provide a connection for the paved bike trail from where the paved trail currently ends at the Folsom Boulevard Bridge and the Folsom Powerhouse Parking Lot
- NATSHORE/N-3: Improve access to Lake Natoma from the City of Folsom Historic District where appropriate and feasible. Evaluate the feasibility and suitability of providing a small dock for hand launching and landing of small boats at this location. Consider concession opportunities as one potential means to provide access to the water at this location.
- ADA-1: Ensure that ADA-compliant access to facilities and activities in the SRA is provided to the greatest extent feasible. Evaluate the design of all proposed facilities and site improvements in SRA for compliance with ADA standards.

- VISIT-53: Expand opportunities in the trail system for people with disabilities by providing ADA compatible facilities wherever feasible.
- VISIT-60: Work with local trail providers- such as Sacramento, Placer, and El Dorado counties, City of Folsom, Reclamation, and the Bureau of Land Management- to jointly fund and/or manage certain facilities such as trailheads and trail links that connect trail system with outside system and serve the local population.

Local

City General Plan

Relevant goals and policies, contained within the City's General Plan related to land use are provided below.

Policy 1.6: Folsom's historic district shall be enhanced and maintained through the improvement of public facilities.

American River Parkway Plan

Please refer above for the discussion of the American River Parkway Plan in the **Section 3.2.1** of this IS-EA.

3.4.2 Affected Environment

The majority of the project area is federal property managed by State Parks as part of FLSRA through a MPA with Reclamation. Land uses within the proposed trail corridor consist of an existing paved bike trail, existing dirt trails and open space adjacent to Lake Natoma and Folsom Historic District. Land uses immediately adjacent to the project site mainly consist of commercial, recreational, and historic uses. Lake Natoma is immediately adjacent to the northeastern and north western segments of the Proposed Project. Residences are located south of the project site beyond the Historic District. Land within the Proposed Project area is not designated as Prime Farmland, Unique Farmland, Timber land, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program (FMMP). The Proposed Project would be adjacent to the existing East Lake Natoma Bike Trail. The project site is designated by Folsom's General Plan as open space.

3.4.3 Environmental Consequences

No Action

Under the No Action Alternative, no land use resources would be impacted because the project would not be constructed. The existing land use conditions would remain the same.

Proposed Action

The Proposed Project is consistent with the goals of the FLSRA and FPSHP General Plan/Resource Management Plan (Plan) which designates the project site as a management area for "Low Intensity Recreation/Conservation", or "areas whose natural and cultural resource values will be protected and restored while accommodating lower intensity recreation and interpretation that is compatible with and

dependant on the resource values...resource management in conservation areas emphasizes protecting and restoring natural processes with only minor modification of non-sensitive resources permitted to accommodate additional visitor use as appropriate.” Impacts to the project site would be minimal and in accordance with the Plan’s conservation and recreational goals. It would also be generally consistent with all applicable General Plan policies. The Proposed Project would enhance recreational facilities adjacent to the American River, Lake Natoma, the FPSHP and FLSRA, which is consistent with City of Folsom General Plan Policy 1.6 which promotes the enhancement and maintenance of the Historic District. Therefore, the Proposed Action would not conflict with any applicable local land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Cumulative Impacts

Because the Proposed Project would not result in land use conflicts or inconsistencies with adopted land use plans, the project would not have cumulative impacts to land use.

3.5 Land Resources

3.5.1 Regulatory Setting

Federal

National Pollutant Discharge Elimination System

As noted in the **Section 3.3.1** above, the USEPA delegated the permitting authority under the CWA to the SWRCB for potential impacts regarding erosion and sediment control. Refer to the **Section 3.3.1** for a more comprehensive discussion of the regulatory framework for water quality as it relates to the project.

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972; it prohibits the placement of structures intended for human occupancy from being built across active fault traces in California. The Act requires delineation of zones (Alquist-Priolo zones) along active faults in order to address seismic concerns as they relate to public safety and project design. The Act only addresses the hazards of surface fault rupture and is not intended to regulate activities relating to other earthquake hazards such as liquefaction, landslides, or tsunamis. Cities and counties are required to regulate development projects within Alquist-Priolo zones.

Seismic Hazards Mapping Act

This Seismic Hazards Mapping Act requires cities, county, and local permitting agencies to regulate urbanization development and redevelopment projects within seismic hazard zones that have been delineated by the State Geologist. Before a development permit can be granted to a proposed project located near a seismic hazard zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design.

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

Policies relevant to land resources contained within the GP/RMP are provided below:

- GEO-5 Site facilities to avoid geologic hazards. Where existing facilities are already located in hazardous areas, examine the feasibility of relocating the facility or mitigating any risks to human life or property.
- SOILS-1: Minimize soil excavation, erosion and soil migration in the construction and operation of facilities. Minimize human-induced erosion by reducing concentrated run-off, avoiding over-watering with irrigation systems and limiting disturbance to fragile soils.

Local

City General Plan

The General Plan does not contain any geology or soils goals or policies.

3.5.2 Affected Environment

Topography

The topography of the project site is defined by the sloping eastern shore of Lake Natoma. Along the southern (upland) portion of the project site, the elevation ranges from 136 feet above mean sea level (amsl) near the western edge of the project near the intersection of Segments 2 and 3, to 162 feet amsl at the eastern edge of the upslope portion of the project along Segment 1. The northern (down slope) section of the project site adjacent to the Lake Natoma waterfront exhibits a relatively stable shoreline elevation ranging from 127 amsl to 137 amsl. The eastern portion of the project site experiences steep sloping between the northern and southern alignments of the proposed trail. The western portion, particularly along Segments 2 and 3 east of the Lake Natoma Crossing Bridge, exhibit moderate sloping between the northern and southern portions of the project site.

Soils

Soils Surveys

A summary of the soil characteristics for the major map units found on the project site is provided in **Table 3-2**.

Expansive Soils

The potential for soils to demonstrate expansive properties is primarily dependent upon clay content. Clay particles can swell by absorbing large amounts of water relative to their volume, such as during periods of heavy rains, and the ground can rise several inches. Conversely, when these particles dry out, they shrink. The soils located on the project site are not rated for soil expansiveness.

TABLE 3-2
PROJECT SITE SOILS

Map Unit Symbol	Map Unit Name	Soil Properties	Percentage on Project Site
243	Xerolls ¹ , 30 to 70 percent slopes	These soils are not rated for soil expansiveness or susceptibility to sheet and rill erosion	67
245	Xerorthents ¹ , dredge tailings, 2 to 50 percent slopes	These soils are not rated for soil expansiveness or susceptibility to sheet and rill erosion	30
247	Water	N/A	3
Source: Appendix A.			

¹ Xerolls/Xerorthents: are soils types categorized based on similar physical and source properties.

Soil Erosion

Soil erosion involves the removal of the soil materials from the ground surface and the transportation of soil materials resulting in deposition in a remote location. Mechanisms of soil erosion include natural phenomena such as stormwater runoff and wind, as well as human activities, such as changes in drainage patterns and removal of vegetation. Factors that influence soil erosion include physical properties of the soil, topography (slope), annual precipitation, and peak rainfall intensity. The project site contains exposed banks from the development of unpaved trails and therefore, the soils within the exposed banks and along the unpaved trails on the project site are susceptible to erosion due to human disturbance of the soils cohesiveness.

Seismicity

Active Faults

According to the Alquist-Priolo Act, active faults are defined as those that have shown seismic activity within the past 11,000 years, which are classified as Holocene faults by the United States Geological Survey (USGS). The USGS definition, adopted by the California Geological Survey (CGS), defines active faults as faults showing signs of activity up to the beginning of the Quaternary age (1.6 million years ago). There are no major faults which transect the immediate vicinity of the project site. The closest active faults are the Bear Mountain fault zone, located approximately 12 miles northeast of the project site, and Dunnigan Hills Fault, located approximately 39 miles northwest of the project site. The Dunnigan Fault is believed to be capable of producing an earthquake. However, both the Bear Mountain and Dunnigan faults have not shown signs of activity for some time.

Surface Rupture

Surface ruptures occur when movement along both sides of faults, which are located deep underground, produces enough energy to cause a fracture on the surface. The Alquist-Priolo Act limits development on lands within a potential fault rupture zone. The project site is not within a potential fault rupture zone as the nearest fault is located 12 miles northeast of the site.

Liquefaction

When subjected to energy associated with the shaking intensity of a considerably sized earthquake (MMI VIII and above), certain soils when saturated with water may lose their solid structure and act as liquids. Soils comprised of sand and sandy loams, in areas with high groundwater tables or rainfall, are subject to liquefaction. Ground subject to liquefaction may sink or pull apart. Liquefaction may lead to lateral spreading, where slopes even out, changing the topography of the area. Although the project site is located in close proximity to Lake Natoma and has the potential for water saturated soils, the potential for a considerably sized earthquake is minimal and therefore the potential for liquefaction to occur at the project site is minimal.

Landslides

Areas susceptible to landslides are comprised of weak soils on sloping terrain. Landslides can be induced by weather, such as heavy rains, or strong seismic shaking events. Most of the proposed alignments of the trail segments are relatively flat, or traverse up minor slopes (portion of Segment 2 and the by-pass trail that connects to the upslope East Lake Natoma Bike Trail). However, various alignments along Segments 1 and 2 are adjacent to steep banks that may have the potential for landslides, if disturbed.

3.5.3 Environmental Consequences*No Action*

Under the No Action Alternative, no geological resources would be impacted because the project would not be constructed. The existing geological and soil conditions would remain the same and the steep banks along the northern portion of the site would remain unprotected.

Proposed Action

As noted previously, the Proposed Project would grade and pave an existing pedestrian pathway to provide a dedicated ADA accessible pedestrian waterfront trail. The project site is not located within an Alquist-Priolo Act Earthquake Fault Zone and there are no known potential fault rupture hazards on the project site. The project site does not have significant potential to experience topsoil liquefaction as the potential for a considerably sized earthquake is minimal, and soils in the area have not been identified as being susceptible to liquefaction. Although parts of the project site have some susceptibility for landslides, incorporation of the retaining walls in the project design would reduce the potential for landslides to a minimal level.

As the pathway would be built on existing paved and unpaved trails, the greatest chance of impacts from erosion occurs during grading and construction activities. As noted in the **Section 3.3.1** above, erosion control measures are an integral component of the SWPPP required under the Clean Water Act's NPDES permit required for construction sites disturbing over one-acre of soil. With a total disturbance area greater than one acre, Reclamation and the City will be required to apply for coverage under NPDES permitting system. To comply with the State's NPDES General Permit, a Notice of Intent will be filed with the CVRWQCB and a SWPPP will be prepared prior to construction. A copy of the SWPPP must be current and remain on the project site. The CVRWQCB requires that all construction sites have adequate control measures to prevent the discharge of sediment and other pollutants to streams or rivers. With the incorporation of the provisions of the NPDES and the CVRWQCB requirements and **Mitigation**

Measure LR-1, adverse impacts from the construction of the Proposed Project on soil erosion would be minimal.

Cumulative Impacts

The Proposed Project has a low probability of exposing people and structures to seismic related hazards. With the implementation of **Mitigation Measure LR-1**, the Proposed Project's adverse impact on soils would be minimal. The development of the Public Plaza at the Historic Folsom Station requires compliance with state and local soils and seismic hazard regulations and therefore would not significantly contribute to cumulative impacts.

3.5.4 Mitigation Measures

- LR-1** Erosion control measures shall be required prior to and throughout the rainy season. Erosion and water quality control measures identified in the SWPPP could include but would not be limited to the following:
- Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) shall be employed for disturbed areas. No disturbed surfaces will be left without erosion control measures in place during the winter and spring months.
 - Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures.
 - A spill prevention and countermeasure plan shall be developed that will identify proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on-site. The plan will also require the proper storage, handling, use, and disposal of petroleum products.
 - Construction activities shall be scheduled to minimize land disturbance during peak runoff periods and to the immediate area required for construction. Soil conservation practices shall be completed during the fall or late winter to reduce erosion during spring runoff. Existing vegetation will be retained where possible. To the extent feasible, grading activities shall be limited to the immediate area required for construction.
 - Surface water runoff shall be controlled by directing flowing water away from critical areas and by reducing runoff velocity. Diversion structures such as terraces, dikes, and ditches shall collect and direct runoff water around vulnerable areas to prepared drainage outlets. Surface roughening, berms, check dams, hay bales, or similar devices shall be used to reduce runoff velocity and erosion.
 - Sediment shall be contained when conditions are too extreme for treatment by surface protection. Temporary sediment traps, filter fabric fences, inlet protectors, vegetative filters and buffers, or settling basins shall be used to detain runoff water long enough for sediment particles to settle out. Store, cover, and isolate construction materials, including topsoil and chemicals, to prevent runoff losses and contamination of groundwater.

- Topsoil removed during construction shall be carefully stored and treated as an important resource. Stockpiles will be covered and berms shall be placed around topsoil stockpiles to prevent runoff during storm events.
- Establish fuel and vehicle maintenance areas away from all drainage courses and design these areas to control runoff.
- Disturbed areas will be re-vegetated with native plant species after completion of construction activities.
- All necessary permits and approvals shall be obtained.
- Provide sanitary facilities for construction workers.

3.6 Hazards and Hazardous Materials

3.6.1 Regulatory Setting

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The primary federal laws regulating hazard wastes/materials are the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA is to ensure sites that have records of hazardous materials release, storage, and generation and are considered a threat to human health and the environment are cleaned up to a level that is considered safe. RCRA provides “cradle to grave” regulations that ensure hazardous wastes are handled, transported, and disposed according to state, federal, and local laws. These “cradle to grave” regulations provide hazardous materials generators a system of tracking hazardous materials use, storage, and transportation for RCRA compliance.

Emergency Planning and Community Right-to-Know Act (EPCRA)

The EPCRA (42 U.S.C. 11001 et seq) provides for emergency planning and notification that enables states and communities to prepare and respond to emergency releases of hazardous substances in Subtitle A; imposes the reporting requirements in Subtitle B; and, along with other provisions, imposes civil, criminal, and administrative penalties for reporting violations. Sacramento County requires a Hazardous Materials Business Plan be submitted by businesses that handle a hazardous material, or a mixture containing a hazardous material, in quantities equal to or greater than:

- 500 pounds of a solid.
- 55 gallons of a liquid.
- 200 cubic feet of a compressed gas at standard temperature and pressure
- The federal Threshold Planning Quantity (TPQ) for Extremely Hazardous Substances
- Radioactive materials in quantities for which an Emergency Plan is required as per Parts 30, 40, or 70, Chapter 1 of Title 10 of Code of Federal Regulations (CFR) (Sacramento County, 2011).

State

California Health and Safety Code

Chapter 6.11, division 20, of the Health and Safety Code section 25404 et seq. created the Unified Hazardous Waste and Hazardous Materials Management Regulation Program (Unified Program). The regulations to implement this program are located in title 27 of the California Code of Regulations. The Unified Program is a merger of the administration of the six previously existing programs specified in Health and Safety Code section 25404 (c) and in section 15100 et seq of title 27 of the California Code of Regulations. The six program elements and related laws are:

1. Hazardous Materials Release Response Plans and Inventory – Health and Safety Code division 20, article 1, section 15500 et seq; and title 19 of the of the California Code of Regulations, sections 2620 – 2734, also known as the ‘right-to-know’ or ‘hazardous materials inventory’ programs.
2. California Accident Release Prevention (CalARP) Program – Health and Safety Code division 20, article 2, section 15531 et seq; and title 19 of the California Code of Regulations, sections 2735.1 – 2785.1.
3. Underground Tank Program – Health and Safety Code division 20, chapter 6.7, section 25280 et seq; and title 23 of the California Code of Regulations, section 2620 et seq.
4. Aboveground Storage Tank Program – Health and Safety Code division 20, chapter 6.67, section 25270.5 (c); and by reference federal regulations in part 112 of title 40 of the CFR.
5. Hazardous Waste Generator Program and Hazardous Waste Onsite Treatment activities – Health and Safety Code division 20, chapter 6.5; and title 22 of the California Code of Regulations, division 4.5.
6. Hazardous Materials Management Plan and Hazardous Materials Inventory Statement requirements – California Fire Code title 24, part 9, sections 8001.3.2 and 8001.3.3.

Department of Toxic Substances Control

The California Department of Toxic Substance Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous chemical waste within the state. Through the “cradle-to-grave” regulatory system; generators of hazardous chemicals and hazardous waste are required to handle it in a manner that protects human health and the environment. Persons who generate, transport, or offer for transport, treat, store, or dispose of hazardous waste generally must have an EPA Identification Number, which is used to identify the hazardous waste handler and to track the waste from its point of origin to its final disposal.

Most hazardous waste falls into two types in California: waste regulated by the federal government under RCRA and waste that is only regulated by California law; waste regulated by California law alone is known as “non-RCRA” or “California-only” waste. All hazardous waste (RCRA and non-RCRA) in California is regulated under state statutes and regulations.

The DTSC is required to maintain information on hazardous materials and hazardous waste generators in the state. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by State

and local agencies and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites and sites that generate hazardous waste. Government Code section 65962.5 requires the California Environmental Protection Agency (Cal EPA) to develop an updated Cortese List annually. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

3.6.2 Affected Environment

Hazardous materials are not known to be present in the immediate vicinity of the site. The project is located within vegetative areas and during dry conditions may be susceptible to grasslands and wildfires.

3.6.3 Environmental Consequences

No Action

Under the No Action Alternative, there would be no impacts because the project would not be constructed.

Proposed Action

No hazardous materials would be associated with operation of the Proposed Action; however, during grading and construction, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, and hydraulic fuel would be brought and stored on-site. As with any liquid and solid, during handling and transfer from one container to another, the potential for an accidental release exists. The accidental release could pose both a hazard to construction employees as well as the environment. With the implementation of **Mitigation Measures HM-1** through **HM-5**, adverse impacts associated with hazardous materials handling during construction would be minimized. Equipment used during grading and construction activities may create sparks, which could ignite dry grass or shrubbery on the project site. This risk, similar to that found at other construction sites, is considered moderate. However, with **Mitigation Measures HM-4** and **HM-5**, impacts associated with fire hazards during construction would be minimized. Additionally, construction activities may cause temporary delays in traffic near the Lake Natoma Bridge and Gold Lake Drive. Such delays would be typical for a construction project of this nature, and are not anticipated to interfere with or impact any adopted emergency response plan or emergency evacuation plan.

Cumulative Impacts

Development of the project in combination with other similar projects has the potential to increase the risk for accidental release of hazardous materials. Each individual project would require an evaluation as to potential hazardous materials risks and threat to public safety including risks associated with transportation/use/disposal of hazardous materials, accidental release of hazardous materials into the environment, hazards to sensitive receptors (including schools), and listed hazardous materials sites that could affect environmental conditions along roadway alignments. Each related project would be required to follow local, state, and federal laws pertaining to hazards and hazardous materials. Through compliance with these laws, cumulative projects would minimize future cumulative impacts. Therefore, through full compliance with local, state, and federal laws pertaining to hazardous materials, impacts associated with hazards and hazardous materials would not be cumulatively considerable, and no mitigation is required.

3.6.4 Mitigation Measures

- HM-1** To reduce the potential for accidental releases, fuel, oil, and hydraulic fluids shall be transferred directly from service trucks to construction equipment tanks and shall not otherwise be stored on site.
- HM-2** Personnel shall follow written Standard Operating Procedures (SOPs) for filling and servicing construction equipment and vehicles. The SOPs, which are designed to reduce the potential for incidents involving hazardous materials, shall include the following:
- Refueling shall be conducted only with approved pumps, hoses, and nozzles;
 - Catch pans shall be placed under equipment to catch potential spills during servicing;
 - All disconnected hoses shall be placed in containers to collect residual fuel from the hose;
 - Vehicle engines shall be shut down during refueling;
 - No smoking, open flames, or welding shall be allowed in refueling or service areas;
 - Refueling shall be performed away from bodies of water to prevent contamination of water in the event of a leak or spill;
 - Service trucks shall be provided with fire extinguishers and spill containment equipment, such as absorbents;
 - Should a spill contaminate soil, the soil shall be put into containers and disposed of in accordance with local, State, and Federal regulations;
 - All containers used to store hazardous materials shall be inspected at least once per week for signs of leaking or failure. All maintenance and refueling areas shall be inspected monthly. Results of inspections shall be recorded in a logbook that would be maintained on site; and
 - The amount of hazardous materials used in project construction and operation shall be consistently kept at the lowest volumes needed.
- HM-3** If suspected soil contamination is encountered during excavation and grading activities, all work shall be halted and a qualified individual, in consultation with the CVRWQCB and/or the U.S.EPA, shall determine the appropriate course of action.
- HM-4** During construction, staging areas, welding areas, or areas slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak.
- HM-5** Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.

3.7 Traffic and Transportation

3.7.1 Regulatory Setting

State

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

Relevant policies contained within the GP/RMP are provided below:

CIRCULATE-5: Ensure that day use areas in the SRA provide facilities that encourage and support alternate modes of transportation to the SRA, including pedestrian, equestrian, bicycle, boat, and transit, as a means of minimizing future increases in traffic and the demand for parking.

Local

City General Plan

Relevant goals and policies, contained within the City's General Plan related to transportation are provided below.

Policy 17:1: The City shall plan for an integrated circulation system which provides for travel by private vehicles, commercial vehicle routes, a public transportation system and for pedestrian and bicycle routes.

Policy 17.10: The City should develop and maintain a bikeways and pedestrian master plan that links residential developments with sources of employment, public open spaces, parks, schools, neighborhood shopping areas, the central commercial district, other major recreational destinations, and adjoining communities.

1. The City should ensure that new residential developments incorporate pedestrian and bicycle paths or routes when there are nearby schools, parks, public open spaces, sources of employment or other destinations for such travel. Such paths or routes should be designed so that schools and parks are accessible to area residents. Pedestrian/bicycle over- or under-crossings may be provided when necessary to cross arterial roads or expressways.
2. The existing bicycle and pedestrian paths along the American River shall be preserved.
3. The City should establish and maintain an internal pathway system that links parks sources of employment and public open spaces using rights-of-way and parkways.
4. Where on-street bikeways are not feasible, the City should provide for Class I off-street bikeways
5. The City should endeavor to provide routes paralleling the major arterial routes for long distance bicycle travel.
6. The City should endeavor to provide routes for recreational travel, providing access to important recreational areas of the City, including Folsom Lake.

Policy 31.9: The City should encourage bicycle usage through the development and maintenance of a safe and comprehensive bikeway system which includes:

1. The provision of securely anchored bicycle racks.
2. Sidewalks in residential development with protective curbing and adequate lighting.

3.7.2 Affected Environment

The Proposed Project is aligned adjacent to Folsom Boulevard and Gold Lake Drive in the Historic District of Folsom, California. The affected roadways carry a variety of vehicles whose destinations include Lake Natoma, numerous existing residential neighborhoods, the Lake Natoma Inn, and Historic District shops and restaurants. The existing traffic in the vicinity of the Proposed Project is generally free flowing, with few to no excessive delays during off peak hours. Peak hour traffic on Folsom Boulevard can cause short delays.

3.7.3 Environmental Consequences

No Action

Under the No Action Alternative, there would be no traffic impacts because the project would not be constructed. The existing traffic would remain the same as no additional impacts would occur.

Proposed Action

Construction

Construction worker and material delivery trips during the construction phase would account for approximately 16 round trips per day, which would be less than one percent of the existing traffic on Folsom Boulevard. This includes trips to import fill from existing stockpiles located at City corporation yards, worker trips, and delivery of construction materials. These delivery trips would not substantially increase the existing traffic load and capacity or cause an exceedance of the existing LOS during the construction phase of the Proposed Project. A negligible impact would occur to the existing roadways and intersection in the vicinity of the Proposed Project.

As stated in **Section 2.2.1**, a traffic control plan will be developed prior to the start of construction. The traffic control plan would require at least one lane to remain open at all locations at all times and include traffic control such as flaggers, lane change and caution signage, and lane closures only between the hours of 9:30 and 3:00 pm. Access to all points along Gold Lake Drive and Folsom Boulevard would be maintained. Emergency access may be slowed due to increased construction traffic from lane closure. Implementation of the traffic control plan would reduce traffic delays, which would result in a minimal impact to emergency services during construction.

Operation

The Proposed Project has the potential to minimally increase the traffic volumes in the vicinity of the Proposed Project. The Proposed Project would not cause an exceedance of the existing LOS on roadway and/or intersections in the vicinity of the Proposed Project during operation. Vehicle trips to and from the

project site during operation would not exceed vehicle trips that would occur during construction. Parking for the Proposed Project is available along Leidesdorff Street and the City's newly constructed parking garage at the corner of Gold Lake Drive and Leidesdorff Street. Project access from Leidesdorff Street and the City parking garage is provided by the pedestrian bridge along Leidesdorff Street. Due to dispersed project access and the small number of new visitors to the project site, project-related traffic would not cause an exceedance of the acceptable capacity on Gold Lake Drive, Leidesdorff Street, or Folsom Boulevard. Operation of the Proposed Project would result in a minimal impact to the transportation and emergency access.

Cumulative Impacts

With the development of the traffic control plan; concurrent construction of the Proposed Project and the Public Plaza at the Historic Folsom Station would have minimal cumulative impact on transportation in the vicinity of the project site. Operation of the Proposed Project would not significantly increase traffic on roadways in the vicinity of the project site; therefore, a minimal impact would occur.

3.8 Public Services

3.8.1 Regulatory Setting

State

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

Policies relevant to public services contained within the GP/RMP are provided below:

- | | |
|-----------|--|
| VISIT-1: | Provide public use facilities and associated services within the SRA as needed to facilitate public enjoyment of the natural setting. |
| VISIT-2: | Ensure that new and existing visitor facilities and associated services receive equal consideration between the need for recreation, resource protection, and interpretation and education. |
| VISIT-3: | Ensure that new and existing visitor facilities and associated services reflect the intent of the SRA land use designations with respect to resource protection, permitted uses, intensity of uses, and access. |
| VISIT-4: | Ensure that new and existing visitor facilities are designed to minimize dependence on regular, on-going maintenance operations and avoid activities that would be environmentally damaging to keep them operational. |
| VISIT-7: | Consider and evaluate services provided by neighboring jurisdictions when planning for new public use facilities and associated services to ensure that such facilities and services are complementary and reduce unnecessary duplication of services. |
| VISIT-53: | Expand opportunities in the trail system for people with disabilities by providing ADA compatible facilities wherever feasible. |

VISIT-60: Work with local trail providers- such as Sacramento, Placer, and El Dorado counties, City of Folsom, Reclamation, and the Bureau of Land Management- to jointly fund and/or manage certain facilities such as trailheads and trail links that connect trail system with outside system and serve the local population.

Local

City General Plan

Relevant goals and policies, contained within the City's General Plan related to public services are provided below.

Policy 1.3: Folsom's historic district shall be enhanced and maintained through the improvement of public facilities.

Policy 4.4: The City will expand its system of parks, open spaces, and recreational facilities as new development proceeds.

Policy 35.1: The City shall construct parks with originality and innovation in design that provide challenge and self-renewal to the user and viewer.

Policy 35.4: The City shall encourage, where appropriate, the inclusion of bikeways, walkways, and equestrian trails in parks, parkways, and open space acreage.

Policy 35.5: Where feasible, park sites throughout the City shall be integrated with the Bikeways Master Plan and bicycle trails outside the City such as the American River Bike Path.

Policy 37.3: The City shall encourage the incorporation into parks and recreation planning the needs of all age groups, handicapped, and special interest groups.

American River Parkway Plan

Please refer above for the discussion of the American River Parkway Plan in the **Section 3.2.1** of this IS-EA.

3.8.2 Affected Environment

Fire Protection/Emergency Medical Services

The City of Folsom Fire Department provides primary fire protection and emergency medical services to the study area. Service in the City is provided by four fire stations located throughout the City. Located one mile to the southeast, Station 35 is the closest fire station to the project site.

Emergency medical transport within the study area is provided by TLC Ambulance and Medical Transport (TLC) and First Response Ambulance, which serves the City of Folsom. Angel Medflight Worldwide Air Ambulance provides aero medical transportation to the project vicinity.

The nearest medical center to the project area is located at 223 Fargo Way, in Folsom, approximately 1 mile to the northeast of the project site. The Kindred Hospital - Sacramento includes an intensive care unit and pulmonary care unit.

Law Enforcement

The Folsom Police Department is the chief law enforcement agency for traffic- and criminal - related issues within the City's jurisdiction. Area offices are located at 46 Natoma Street adjacent to City Hall. The Folsom Police Department has a staff of approximately 110 employees. The lands surrounding the project site are under the jurisdiction of the Folsom Police Department.

California State Park Rangers

The California State Park Rangers are fully sworn peace officers who perform a variety of law enforcement activities under the jurisdiction of the State Parks and have jurisdiction over the project site in accordance with an agreement with Reclamation. Duties include interpretation of natural, historic, and cultural resources, resource protection, search and rescue, emergency medical response, law enforcement, park management, and patrol.

Schools

The project area is located within the Folsom Cordova Unified School District. The closest schools to the project site are Folsom Montessori School (0.3 miles), American River Montessori School (0.4 miles), Sutter Middle School (0.5 miles), and Folsom Lake High School (0.60 miles).

Parks

The project site is located within the American River Parkway and the FLSRA. The City General Plan designates this area as open space. The FPSHP is located less than one-quarter mile to the northeast. This site provides historical preservation of the first electricity generation facility in the Folsom Lake area. FLSRA and the FPSHP are both managed by State Parks. Tours of FPSHP are conducted throughout the week by special reservations.

Water Suppliers and Supply

The City of Folsom Department of Public Works supplies water to the project area. The City's water supply comes from Folsom Lake.

Solid Waste Collection and Disposal

Solid waste collection and disposal within the project area is currently provided by the City. Solid waste is disposed of at the Sacramento County Kiefer Landfill, a permitted landfill serving Sacramento County. The landfill is located on Kiefer Boulevard, southeast of Grant Line Road. The landfill is owned and operated by the County of Sacramento.

Wastewater Collection and Treatment

The City of Folsom Wastewater Division cleans, repairs, and maintains the 267 miles of pipeline and 9 lift stations in the City. Wastewater is ultimately discharged into the Sacramento Regional County Sanitation District interceptor sewer system and treated by the Sacramento Regional Wastewater Treatment Plant, located in Elk Grove.

3.8.3 Environmental Consequences

No Action

Under the No Action Alternative, no public services would be impacted because the project would not be constructed. The existing conditions with regards to public services would remain the same.

Proposed Action

Implementation of the project would not alter or restrict public service routes. The project will likely attract additional public use and may require additional patrol and law enforcement. The project will construct additional structures and developed facilities which will require greater maintenance and replacement costs than the current situation. These impacts would be less than significant and will be addressed in an operation and maintenance agreement between Reclamation, the City, and State Parks. The majority of new structures (paths, handrails, pathways, and bridges) would be built outside of existing roadways. The Proposed Project would enhance the existing recreation facilities through the creation of a new pedestrian pathway which would improve community access to the American River, Lake Natoma, and the Folsom Historical District while promoting the policies listed within the City's General Plan. As such, no significant impacts would occur.

Cumulative Impacts

The Proposed Project would not impact public services in the cumulative condition; therefore, no impact would occur.

3.9 Biological Resources

3.9.1 Regulatory Setting

Federal

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) implement the Federal Endangered Species Act (FESA) of 1973 (16 USC Section 1531 et seq.). Under FESA, threatened and endangered species on the federal list and their habitats (50 CFR Subsection 17.11, 17.12) are protected from "take" (i.e., activities that harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect) as well as any attempt to engage in any such conduct, unless a Section 10 Permit is granted to an individual or a Section 7 consultation and a Biological Opinion with incidental take provisions are rendered from the lead federal agency. Pursuant to the requirements of FESA, an agency reviewing a Proposed Project within its jurisdiction must determine whether any federally listed species may be present within the project site and vicinity and determine whether the Proposed Project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536[3], [4]). Therefore, project-related impacts to these species, or their habitats, would be considered significant and require mitigation.

Under FESA, critical habitat may be designated by the Secretary of the Interior for any listed species. The term "critical habitat" for a threatened or endangered species refers to the following: specific areas

within the geographical range of the species at the time it is listed that contain suitable habitat for the species, which may require special management considerations or protection; and specific areas outside the geographical range of the species at the time it is listed that contain suitable habitat for the species and is determined to be essential for the conservation of the species. Under Section 7 of FESA, all federal agencies (including the USFWS and the NMFS) are required to ensure that any action they authorize, fund, or carry out will not likely jeopardize the continued existence of a listed species or modify their critical habitat.

Migratory Bird Treaty Act

Most bird species, (especially those that are breeding, migrating, or of limited distribution) are protected under federal and/or state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC Subsection 703-712), migratory bird species, their nests, and their eggs are protected from injury or death, as well as any project-related disturbances during the nesting cycle. As such, project-related disturbances must be reduced or eliminated during the nesting cycle.

Bald and Golden Eagle Protection Act

The Bald Eagle Protection Act was originally enacted in 1940 to protect bald eagles and was later amended to include golden eagles (16 USC Subsection 668-668). This Bald Eagle Protection Act prohibits the taking or possession of, and commerce in, bald and golden eagles, parts, feathers, nests, or eggs with limited exceptions. The definition of take includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb. Bald eagles may not be taken for any purpose unless a permit is issued prior to the taking. Activities which can be authorized by permit are: scientific collecting/research, exhibition, tribal religious, depredation, falconry, and the taking of inactive golden eagle nests, which interfere with resource development or recovery operations. The statute imposes criminal and civil sanctions as well as an enhanced penalty provision for subsequent offenses.

Wetlands and Waters of the U.S.

The U.S. Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern Waters of the U.S. (including wetlands), under Section 404 of the Clean Water Act (CWA). Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the U.S. The USACE requires that a permit be obtained if a project proposes the placement of structures within, over, or under navigable waters and/or discharging dredged or fill material into waters below the ordinary high water mark (OHWM). The USACE has established a series of nationwide permits (NWP) that authorize certain activities in waters of the U.S.

Waters of the U.S. are defined as: All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; and impoundments of these waters, tributaries of these waters, or wetlands adjacent to these waters (Section 404 of the CWA; 33 CFR Part 328). The limit of USACE jurisdiction for non-tidal waters (including non-tidal perennial and intermittent watercourses and tributaries to such watercourses) in the absence of adjacent wetlands is defined by the OHWM.

The OHWM is defined as: *The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas* (Section 404 of the CWA; 33 CFR Part 328).

Wetlands are defined as: Those areas that are inundated or saturated by surface or ground water 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 (Section 404 of the CWA; 33 CFR Part 328).

In addition, a Section 401 Water Quality Certification Permit was established to comply with CWA Sections 301, 302, 303, 306, and 307 and is regulated by the Regional Water Quality Control Board (RWQCB). Anyone that proposes to conduct a project that may result in a discharge to U.S. surface waters and/or “waters of the state” including wetlands (all types) year round and seasonal streams, lakes and all other surface waters would require a federal permit. At a minimum, any beneficial uses lost must be replaced by a mitigation project of at least equal function, value, and area. Waste Discharge Requirements Permits are required pursuant to California Water Code Section 13260 for any persons discharging or proposing to discharge waste, including dredge/fill, that could affect the quality of the waters of the state.

State

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the take of state-listed threatened and endangered species. Under CESA, state agencies are required to consult with the California Department of Fish and Game (CDFG) when preparing CEQA documents. Under CESA, the CDFG is responsible for maintaining a list of rare, threatened, and endangered species designated under state law (California Fish and Game Code 2070-2079). The CDFG also maintains lists of candidate species, species of special concern, and fully protected species. Candidate species are those taxa, which have been formally recognized by the CDFG and are under review for addition to the state threatened and endangered list. Species of special concern are those taxa, which are considered sensitive and this list serves as a “watch list.” Pursuant to the requirements of CESA, agencies reviewing proposed projects within their jurisdictions must determine whether any state-listed species have potential to occur within a proposed project site and if the proposed project would have any significant impacts upon such species. Project-related impacts to species on CESA’s rare, threatened, and endangered list would be considered significant and require mitigation. Impacts to species of concern would be considered significant under certain circumstances discussed in subsequent sections. The CDFG can authorize take, if an incidental take permit is issued by the Secretary of the Interior or Commerce in compliance with FESA, or if the director of the CDFG issues a permit under Section 2080 in those cases where it is demonstrated that the impacts are minimized and mitigated.

CEQA Guidelines Section 15380

Several federal and state statutes protect rare, threatened, and endangered species. The *CEQA Guidelines* Article 20, Section 15380 provides that a species not listed on the federal or state list of protected species

may be considered rare, threatened, or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions of endangered, rare, or threatened provided in FESA and CESA. This section of the *Guidelines* provides public agencies with the ability to protect a species from any potential impacts of proposed projects until the respective government agency has the opportunity to designate (list) that species as protected, if warranted.

The California Native Plant Society (CNPS) maintains an extensive list of plant species that it considers to be rare, threatened, or endangered, but have no designated status or protection under federal or state endangered species legislation. Impacts to CNPS listed species (e.g., CNPS list 1B and 2) are considered during CEQA environmental review.

California Fish and Game Code Sections 1600-1616

Under Sections 1600-1616, the CDFG regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. It derives this jurisdiction under CESA because the CDFG is responsible for the protection of fish or wildlife resources and their habitats (including wetlands). The CDFG provides comments on USACE Section 404 and 401 permits under the Fish and Wildlife Coordination Act, last amended in 1995. The CDFG is authorized under the California Fish and Game Code Sections 1600-1616 to develop mitigation measures and enter into Streambed Alteration Agreements with applicants whose proposed projects 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 and wetlands. Biological components of rivers, streams, or lakes may include aquatic and riparian vegetation, aquatic animals and fish, amphibians, reptiles, invertebrates, and terrestrial species that derive benefits from the stream system.

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

Goals relevant to native plant communities contained within the GP/RMP are provided below:

Goal

Preserve and restore native plant communities within the unit.

PLANTS-1: Pre-screen potential locations of new construction or site alteration activities based on the potential for special status plants to occur. Conduct site-specific surveys by a qualified biologist in areas with potential habitat for special status plants. If special status plant species are present, the goal is to avoid impacts to populations of special status species. If avoidance is not possible, mitigate as required and appropriate.

Goal

Protect riparian habitat.

RIPARIAN-1: To the degree feasible, avoid activities that would adversely impact riparian habitat. Such activities would likely require state and federal wetland permits (Section 1601

Streambed Alteration; Sections 401 and 404 Clean Water Act). If impacts are unavoidable, then design and implement mitigation measures as required..

City

General Plan

The following purpose and intent (12.16.010) identified within the City's General Plan associated with tree preservation (Chapter 12.16) are applicable to the Proposed Project.

- A. In order to promote the public health, safety and general welfare, to enhance the beauty of Folsom and to complement and strengthen zoning, subdivision and land use standards and regulations, while at the same time recognizing individual rights to develop private property, the city council finds it necessary to establish basic standards, measures and compliance for the preservation and protection of trees.
- B. The provisions of this chapter are enacted to:
 - 1. Establish and maintain the optimum amount of tree cover on public and private lands to enhance the natural scenic beauty, moderate climatic conditions, and sustain property values;
 - 2. Promote conservation of tree resources;
 - 3. Authorize the planning director to administer the tree ordinance;
 - 4. Implement the conservation goals of the General Plan (Ord. 826 § 1 (part), 1995).

Folsom Tree Ordinance

In accordance with Chapter 12.16 of the Folsom Municipal Code, the City requires that an application be submitted for development projects, which includes details regarding the number of trees scheduled for removal within a project site. The tree permit process (Section 12.16.040) is comprised of an application, which includes an application form, a justification statement, a site map, a preservation program, and an arborist report. The arborist report would be prepared to evaluate tree conditions, identify measures to protect trees for preservation, and to evaluate areas in which to plant replacement trees.

3.9.2 Affected Environment

Methodology

Biological resources information for the project site was obtained from a *Biological Resources Assessment* prepared for the Proposed Project (2011 BRA; Parus Consulting, 2011), updated lists of regionally occurring special status species, and a biological survey conducted on March 2, 2012. Regionally occurring special status species lists were obtained from the following sources: a USFWS list, database last updated September 18, 2011, of federally listed species with the potential to occur on or be affected by projects on the Folsom U.S. Geological Survey (USGS) quadrangle (quad) (USFWS, 2012); a CNPS inventory, dated April 16, 2012, of special status species known to occur on the Folsom quad and eight surrounding quads (Roseville, Rocklin, Pilot Hill, Citrus Heights, Clarksville, Carmichael, Buffalo Creek, and Folsom SE quads) (CNPS, 2012); a California Natural Diversity DataBase (CNDDB) query, dated March 2, 2012, of special status species known to occur on the Folsom quad and eight surrounding quads; and CNDDB records of special status species known to occur within five miles of the project site

(CDFG, 2003). The 2011 BRA and the updated USFWS, CNDDDB, and CNPS lists are provided in **Appendix B**.

Botanical surveys were conducted by California State University, Sacramento biologists within the project site during the blooming periods for potentially occurring special status plants on February 15, 2011, April 15, 2011, April 17, 2011, and May 2, 2011. The results of botanical surveys conducted within the project site are documented in a letter report provided as Appendix A of the 2011 BRA (2011 Botanical Report; Department of Biological Sciences, 2011).

An AES biologist conducted a general biological and floristic survey of the project site on March 2, 2012. The project site is defined as the proposed limit of work associated with the proposed project. The biological survey consisted of ground truthing the biological communities, wetland features, and potentially occurring special status species identified within the 2011 BRA. The habitat types and potential waters of the U.S. identified herein were obtained from the 2011 BRA and were modified based on the proposed limit of work associated with the Proposed Project (the biological communities and wetland features documented in the 2011 BRA are comprised of a study area that exceeds the size of the project site). A table summarizing special status species in the vicinity of the project site was compiled based on the updated USFWS file data, the CNPS inventory, and the CNDDDB query. Evaluations of whether the special status species has the potential to occur within the project site based on the presence of the species or its habitat was obtained from the 2011 BRA and the botanical survey results and was modified based on the results of the March 2, 2012 biological survey (**Appendix B**). Species without the potential to occur in the vicinity of the project site are not discussed further.

Environmental Setting

Habitat Types

Terrestrial habitat types within the project site include: ruderal/developed areas, blue oak/gray pine woodland, and riparian woodland. Aquatic habitat types within the project site include: spring and manmade stormwater basin. Aquatic habitat types are discussed under the *Potential Wetlands and Waters of the U.S.* heading. Terrestrial habitat types are discussed in detail below. A habitat map is provided in **Appendix B**.

Ruderal/Developed

The project site is comprised primarily of ruderal/developed areas along its southern edge, where the project site interfaces with urban development. These areas include an existing dirt path and adjacent disturbed land comprised of nonnative weedy or invasive ruderal species and/or ornamental landscaping. Dominant ruderal vegetation includes foxtail barley (*Hordeum murinum*), English plantain (*Plantago lanceolata*), field bindweed (*Convolvulus arvensis*), cheeseweed (*Malva parviflora*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), wild oat (*Avena fatua*), fescue (*Festuca* sp.), filaree (*Erodium botrys*), bristly ox-tongue (*Picris echioides*), and turkey mullein (*Croton setigerus*).

Blue Oak/Gray Pine Woodland

Blue oak/gray pine woodland occurs throughout the project site. Dominant overstory vegetation includes interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), and gray pine (*Pinus sabiniana*). Dominant shrubs and understory vegetation includes Himalayan blackberry (*Rubus armeniacus*), western poison oak (*Toxicodendron diversilobum*), blue elderberry (*Sambucus mexicanus*), alder (*Alnus rhombifolia*), western redbud (*Cercis occidentalis*), toyon (*Heteromeles arbutifolia*), and wild grape (*Vitis californica*). There are 21 blue oak/gray pine woodland trees ranging from 6 to 14 inches diameter at breast height (dbh) that are located within in the construction zone of the Proposed Project.

Riparian Woodland

Riparian woodland borders the shore of Lake Natoma along the northern portion of the project site. Dominant overstory vegetation includes Fremont cottonwood (*Populus fremontii*), willow (*Salix laevingata*), box elder (*Acer negundo*), alder, and interior live oak. Dominant understory vegetation includes Himalayan blackberry, miner's lettuce (*Claytonia perfoliata*), mugwort (*Artemisia douglasiana*), and pipevine (*Aristolochia californica*). There are 3 riparian woodland trees ranging from 14 to 26 inches dbh that are in the construction zone of the Proposed Project.

Wetlands and Waters of the U.S.

Potential waters of the U.S. within the project site include springs and a manmade stormwater basin comprised of riprap along the bed and banks. These features may be considered waters of the U.S. subject to USACE jurisdiction.

Spring

Three springs discharge perched groundwater from fractured bedrock and placer mining tailings below the project site (Parus Consulting, 2011). The springs drain northward to Lake Natoma.

Manmade Stormwater Basin

A manmade stormwater detention pond occurs at the southern abutments under the Natoma Crossing Bridge. Water is discharged here by the City's municipal stormwater system via corrugated metal pipes. This feature is not likely considered to be a potentially jurisdictional water of the U.S. (Parus Consulting, 2011). The manmade stormwater basin is lined with riprap and contains predominately upland, advantageous, ruderal species with minimal hydrophytic vegetation. The manmade stormwater basin drains the City's stormwater to Lake Natoma.

Special Status Species

For the purposes of this assessment, special status has been defined to include those species that are:

- Listed as endangered or threatened under FESA (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under CESA (or proposed for listing);

- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as species of concern to the CDFG; or,
- Defined as rare or endangered under CEQA.

Special status species with the potential to occur within the project site are discussed in detail below. Special status species documented within five miles of the project site are shown in **Appendix B**. The USFWS list identifies critical habitat for Central Valley steelhead (*Oncorhynchus mykiss*) and Sacramento Orcutt grass (*Orcuttia viscida*) on the Folsom quad. The project site does not occur within designated critical habitat for these species.

Special Status Plants

As described in Appendix A of the 2011 BRA, no special status plants were identified during the botanical surveys, which were conducted within the evident and identifiable blooming periods for all potentially occurring special status plants. No special status plants occur within the project site (Parus Consulting, 2011) (**Appendix B**).

Special Status Wildlife

As described in Appendix A of the 2011 BRA, one federal special-status animal species was determined to have potential to occur within the project site. An additional 5 non-federal species were identified as having potential to occur within the project site. The name, regulatory status, distribution, habitat requirements, and period of identification for all of these species are identified below.

Invertebrates

Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*; VELB)

Federal Status – Threatened

State Status – None

VELB are completely dependent on elderberry (*Sambucus* sp.) shrubs as their host plants during their entire life cycle. VELB inhabit elderberry shrubs in the vicinity of California's Central Valley. VELB larvae live within the soft pith of elderberry shrubs where they feed for one to two years. Adults emerge from pupation inside the wood of elderberry shrubs during the spring as the plants begin to flower. The adults feed on the elderberry foliage until they mate. Females lay their eggs in the crevices of elderberry bark. The larvae subsequently tunnel into shrub stems to feed upon hatching. VELB typically utilize stems that are greater than one inch in diameter at ground level (NatureServe, 2012).

The USFWS *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (USFWS Conservation Guidelines; 1999) state that no adverse effects to VELB are expected when project activities occur at least 100 feet from elderberry shrubs with stems measuring at least one inch diameter at ground level (dgl). The USFWS Conservation Guidelines also state that, in areas where encroachment into the 100-foot buffer is necessary, the encroachment must be approved by the USFWS and a minimum setback of 20

feet from the driplines of the elderberry shrubs must be maintained. Project activities that will encroach into the 20-foot minimum setback area are expected to adversely affect VELB.

No elderberry shrubs occur along the trail alignments. Ten blue elderberry shrubs are identified within 100 feet of the trail alignments and the presence of one VELB was documented during a survey conducted on April 4, 2011 (Paris Consulting, 2011) (**Appendix B**). The number of stems and whether exit holes are present is not documented in the 2011 BRA. The locations of the elderberry shrubs occurring within a 100-foot radius of the project site are identified on **Appendix B**. VELB habitat occurs within 100 feet of the project site. VELB is assumed to occur in the vicinity of the project site.

Reptiles

Western Pond Turtle (*Emys marmorata*)

Federal Status – None

State Status – Species of Concern

Western pond turtle is found along ponds, marshes, rivers, streams, and irrigation ditches with abundant aquatic vegetation. They require areas for basking and during warmer periods they may be found basking along shorelines or within the vegetation along the edges of these environments. Western pond turtle prefers pools with rocky or muddy bottoms in woodland, forest, or grassland areas. This species has been found in brackish and salt water. Nest sites are most often characterized as having gentle slopes less than 15 percent with little vegetation or sandy banks. This species is generally active from February to November. Western pond turtles will hibernate in mud under water during warmer periods in winter. During summer droughts, this species will aestivate in burrows in soft bottom mud (CaliforniaHerps.com, 2012).

The riparian woodland within the project site provides upland and nesting habitat for western pond turtle. The nearest historical siting is approximately 3 miles southwest of the project site along the American River Parkway. This species was not observed during the 2011 or 2012 biological surveys of the project site. This species has the potential to occur within the project site.

Birds

Swainson's Hawk (*Buteo swainsoni*)

Federal Status – None

State Status – Threatened

Swainson's hawks are nesting raptors that arrive to their breeding grounds in the Central Valley in early March. Swainson's hawk often nest peripherally to Valley riparian systems and utilize lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut (*Juglans* sp.), and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley (County of Sacramento, 2007). A breeding pair immediately constructs nests and lays eggs from mid- to late-April. The young hatch in mid-May and remain near the nest. The young depend on the adults for approximately four weeks after fledging until they permanently leave the breeding territory. Swainson's hawks nest from February 15 through September 15. Suitable foraging habitat nearby nesting sites is critical for fledgling success (CDFG, 1994).

The CDFG prepared the State Fish and Game Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (Staff Report) (CDFG, 1994). The CDFG considers whether a project will adversely affect suitable foraging habitat within a ten-mile radius of a Swainson's hawk nest that has been active within the last five years. Suitable Swainson's hawk foraging habitat includes alfalfa, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, rice land (when not flooded), and cereal grain crops (including corn after harvest). Projects that occur in urban areas and are less than five acres in size are considered exempt from compensatory mitigation so long as there are no documented nest sites within 0.25 miles of the project site within the last five years.

The trees within and in the vicinity of the project site provide potential nesting habitat for this species. There is no foraging habitat present within or adjacent to the project site as the surrounding area is mostly developed. The approximately 5.1-acre project site is located in an urban area. There are no documented nest sites within a ten-mile radius of the project site. In accordance with the Staff Report, no compensatory mitigation is required. No Swainson's hawks were observed during the 2011 and 2012 biological surveys of the project site. Swainson's hawk is not likely to occur because of the lack of documented occurrences within a ten-mile radius and the lack of foraging habitat in the proximity of the project site.

White-Tailed Kite (*Elanus leucurus*)

Federal Status – None

State Status – Fully Protected

White-tailed kites are year-round residents in coastal and valley lowlands. White-tailed kites forage in open grasslands, meadows, agricultural fields, and emergent wetlands. Nesting occurs in dense stands of oaks, willow, or other deciduous trees from February through October (CDFG, 2003).

The trees within the riparian and blue oak/gray pine woodland provide potential nesting habitat for this species. The vicinity of the project site does not provide foraging habitat for this species. No white-tailed kites were observed during the 2011 and 2012 biological surveys of the project site. This species has the potential to nest within the project site.

Purple Martin (*Progne subis*)

Federal Status – None

State Status – Species of Concern

Purple martins breed in North America and winter in South America. This species is widely distributed throughout the eastern U.S., and patchily distributed throughout the western U.S. In California, the species is locally distributed, with the highest concentration of populations occurring along the western Cascade and Sierra Nevada Ranges, North Coast and northern Central Coast Ranges, and in the extreme southwest California. Purple martins breed in valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, coniferous, and riparian habitats. Purple martins are cavity-nesters that are generally restricted to trees containing woodpecker holes. Breeding season extends from April to August (Brown, 1997; Sibley, 2000).

The trees within the riparian and blue oak/gray pine woodland provides habitat for this species. No purple martins were observed during the 2011 and 2012 biological surveys of the project site. This species has the potential to occur within the project site.

Migratory Birds and Bird of Prey

Fish and Game Code 3503.5 protects all birds in the orders Falconiformes and Strigiformes (collectively known as birds of prey). The Migratory Bird Treaty Act (MBTA) protects migratory birds and other birds of prey, including Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), ferruginous hawk (*Buteo regalis*), merlin (*Falco columbarius*), osprey (*Pandion haliaetus*), and double-crested cormorant (*Phalacrocorax auritus*).

Migratory birds and other birds of prey have the potential to nest within the trees within the riparian, blue oak/gray pine woodland, and ruderal/developed areas and beneath the Natoma Crossing Bridge. No birds were observed nesting within the project site during the 2011 and 2012 biological surveys, however, swallows nests were observed beneath the Lake Natoma Crossing Bridge during the March 2, 2012 biological survey of the project site. Migratory birds and other birds of prey have the potential to nest within the project site.

Mammals

Pallid Bat (*Antrozous pallidus*)

Federal Status – None

State Status – Species of Concern

Pallid bats are found in grasslands, shrublands, woodlands, and forests from sea level up to mixed conifer forests through 2,000 meters. The species commonly occurs in open, dry habitats with rocky areas for roosting. Other roosts include cliffs, abandoned buildings, bird boxes, and under bridges (Harris, 2000). Pallid bats forage over open ground during the dawn and dusk hours. This species establishes daytime roosts in caves, crevices, mines, large hollow trees, and unoccupied buildings. Pallid bats mate from October through February and most young are born from April through July (Harris, 2000). They occur in arid and semi-arid regions across much of the American west, along the coast from Canada and Mexico (Arizona-Sonora Desert Museum, 2006-2009).

Pallid bats have the potential to roost within the trees within the riparian and blue oak/gray pine woodland and beneath the Lake Natoma Crossing Bridge. No pallid bats were observed roosting within the project site during the 2011 and 2012 biological surveys. Pallid bats have the potential to roost within the project site.

3.9.3 Environmental Consequences

No Action

Under the No Action Alternative, no adverse effects would occur to biological resources because the project would not be constructed. Therefore, the Action Area would remain unchanged. Adverse effects to biological resources would not occur and no mitigation is required.

Proposed Action

Special Status Species

The Proposed Action would not adversely affect special status plants because none are known to occur within the project site. Therefore, no mitigation is required.

The project site and/or surrounding vicinity represent potential habitat for the following special status animal species: the federally threatened VELB; the state threatened Swainson's hawk; the state fully protected white-tailed kite; three species of special concern, western pond turtle, purple martin, and pallid bat; and migratory birds and other birds of prey. However, with the implementation of **Mitigation Measures BR-1** through **BR-4**, adverse affects to specials status species resources would be reduced to less than significant levels.

Adverse Affects to Sensitive Biological Communities

The proposed project would remove <1 acre of riparian habitat. Riparian habitat is considered a sensitive natural community. With the implementation of **Mitigation Measure BR-5**, adverse affects to riparian habitat would be reduced to less than significant levels.

Adverse Affects to Potential Waters of the U.S.

With the construction of the ADA accessible path to the water below the ordinary high water mark, the Proposed Project would adversely affect waters of the U.S. Implementation of the Proposed Action would require obtaining a Section 404 permit from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a Streambed Alteration Agreement with the CDFG. Adherence to the conditions of these permits would minimize the potential for impacts to Lake Natoma (**Mitigation Measure BR-6**).

Adverse Affects to Protected Trees

The removal of any protected trees within the project site will have to follow mitigation measures set forth in the Folsom Tree Ordinance per Chapter 12.16 of the Folsom Municipal Code. The Proposed Project would result in the removal of 24 trees within the project area ranging from 6 to 24 inches dbh. With the implementation of **Mitigation Measure BR-7**, adverse affects to protected trees would be reduced to less than significant.

Cumulative Impacts

Potential impacts to biological resources on the project site, including sensitive habitats, potentially jurisdictional waters of the U.S., native trees, riparian habitat, special-status species, and migratory birds will be reduced to a less-than-significant level through mitigation. Any cumulative developments affecting jurisdictional waters of the U.S. or special-status species would be required to mitigate according to the applicable provisions of the CWA and the FESA, and migratory birds would be protected from take subject to the MBTA. Cumulative impacts to native trees would be mitigated by compliance with the City's Tree Ordinance. Owing to the requirement to comply with pertinent local, state and federal regulations, cumulative impacts to biological resources would be less than significant.

3.9.4 Mitigation Measures

BR-1 In areas where construction is proposed within 100-feet of elderberry shrubs, the encroachment must be approved by the USFWS and a minimum setback of 20 feet from the driplines of the elderberry shrubs must be maintained (USFWS, 1999). Project activities that encroach into the 20-foot minimum setback area could adversely affect VELB. Reclamation will initiate informal consultation with the USFWS through the submittal of a VELB Effects Analysis prior to construction. Reclamation will seek concurrence from the USFWS that the proposed project will not adversely affect VELB through implementation of the protective, minimization, and mitigation measures identified within a BA or VELB Effects Analysis. The VELB Effects Analysis will include the results of a biological survey that identifies the number of stems by diameter class, presence of exit holes, and presence of riparian habitat of elderberry shrubs mapped within 100 feet of the project site. At minimum, the VELB Effects Analysis would include the following protective and mitigation measures to avoid and/or minimize adverse affects to VELB:

- High visibility construction fencing will be placed at a 20 feet radius around the driplines of elderberry shrubs and at the edge of the construction footprint in all areas within 100 feet of the elderberry shrubs. The construction fencing will not be removed until the completion of construction activities.
- Signs with the following information will be erected along the high visibility construction fencing: “This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by FESA, as amended. Violators are subject to prosecution, fines, and imprisonment.” The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.
- A biologist will conduct an environmental awareness training to instruct all construction personnel crews about the status of the VELB and the need to protect its elderberry host plant. The training will include identification of special status species, required practices before the start of construction, general measures that are being implemented to conserve these species as they relate to the proposed project, and penalties for noncompliance. Supporting materials containing training information will be prepared and distributed. Upon completion of training, all construction personnel will sign a form stating that they have attended the training and understand all the conservation measures. Training will be conducted in languages other than English, as appropriate. Proof of this instruction will be kept on file with the contractor. The City will provide the USFWS with a copy of the training materials and copies of the signed forms by project staff indicating that training has been completed within 30 days of the completion of the first training session. The biologist will request that a representative volunteer train and provide training materials to any new crew members that were not present at the first environmental awareness training. Copies of signed forms will be submitted monthly as additional training occurs for new employees.
- Staging areas will be located at least 100 feet from the elderberry shrubs. Temporary stockpiling of excavated or imported material will occur only in approved

construction staging areas. Excess excavated soil will be used onsite or disposed of at a regional landfill or other appropriate facility.

- Standard precautions will be employed by the construction contractor to prevent the accidental release of fuel, oil, lubricant, or other hazardous materials.
- A litter control program will be instituted. The contractor will provide closed garbage containers for the disposal of all food-related trash items (e.g., wrappers, cans, bottles, food scraps). All garbage will be removed daily.
- A biologist will monitor all construction activities occurring within 20 feet of any elderberry shrub to ensure that it is not harmed.
- The contractor will ensure that dust control measures (e.g., watering) are implemented in the vicinity of any elderberry shrub within 20 feet of construction activities. To further minimize adverse effects associated with dust accumulation, any elderberry shrub within 20 feet of construction activities will be covered by a protective cloth (i.e., burlap or weed mat). The cloth will be removed daily and immediately after ground-disturbing activities are completed. The cloth will extend from the ground upwards a minimum of six feet along the elderberry shrub.
- No insecticides, herbicides, fertilizers, or other chemicals that might harm VELB or the elderberry shrub will be used within 20 feet of any elderberry shrub.
- The City will provide a written description of how the construction areas are to be restored, protected, and maintained after construction is completed.
- Any disturbed areas will be revegetated and restored to pre-project conditions immediately.

BR-2 The following mitigation measures are required to avoid impacts to nest sites for migratory birds and other birds of prey:

- If any trees are anticipated for removal, they should be removed outside of the nesting season (October 1 to February 1). If trees are anticipated for removal during the nesting season, a qualified biologist shall conduct a preconstruction survey within ten days prior to their removal. If no birds are observed nesting within the trees anticipated for removal, then the biologist would document the results of the preconstruction survey in a letter to the CDFG and the City within 30 days following the survey. If an active nest is observed within a tree anticipated for removal, then the biologist shall contact the City by phone or email within one day following the survey. A 50-foot buffer shall be established around the tree until a biologist determines that the nest is no longer occupied. The biologist should consult with the CDFG if the 50-foot buffer is impractical.
- A preconstruction survey shall be conducted by a qualified biologist for nesting migratory birds and other birds of prey within 14 days prior to commencement of construction activities that occur within the nesting season. The nesting season occurs from February 1 to October 1. The qualified biologist shall document the results of the preconstruction survey in a letter to the CDFG and the City within 30

days following the survey. If no active nests are identified during the preconstruction survey, then no further mitigation is required.

- If any active nests are identified during the preconstruction survey within the project site, a 100-foot buffer zone should be established around the nests. The biologist will delineate the buffer zone with construction tape or pin flags within 50 feet of the active nest and maintain the buffer zone until the end of the breeding season or until the young have fledged. Guidance from the CDFG will be requested for a reduced buffer zone if establishing a 50-foot buffer zone is impractical.

BR-3 The Proposed Project has the potential to impact roosting sites within trees within the riparian and blue oak/gray pine woodland and beneath the Natoma Crossing Bridge. The following mitigation measures should be implemented to avoid project-related impacts to roosting sites for pallid bats:

- A qualified biologist should conduct a preconstruction survey for roosting bats within 14 days prior to commencement of construction activities. The qualified biologist should document the results of the preconstruction survey in a letter to the CDFG and the City within 30 days following the survey. If no active roosts are identified during the preconstruction survey, then no further mitigation is recommended.
- If any bats are found to occur within cavities of any trees proposed to be removed or beneath the Natoma Crossing Bridge, then the trees should not be removed and no construction activities should occur within 25 feet until the biologist can assure that the bats have vacated the structure or cavity.
- If unavoidable impacts to bat roosting sites are identified, these impacts should be mitigated through the installation of roosting boxes on the project site. Five roosting boxes should be created for every roosting structure destroyed. The results should be documented in a letter report to the City and the CDFG within 30 days following the completion of the mitigation.

BR-4 The Proposed Project has the potential to impact western pond turtle and its nesting habitat within riparian woodland. The following mitigation measures should be implemented to avoid project-related impacts to western pond turtle:

- A qualified biologist will conduct a preconstruction survey for western pond turtle less than 14 days prior to initiation of construction activities within the riparian woodland. Any western pond turtle observed will be moved by a qualified biologist to a suitable location outside of the proposed construction area.
- A species sensitivity training program will be established for western pond turtle. The training will be conducted in a similar fashion as the described under **Mitigation Measure BR-1** for VELB. The results of the preconstruction survey and sensitivity training will be documented in a letter report and submitted to the City for its records.
- If the construction crew observes western pond turtle within the construction area, all construction activities will be ceased until the western pond turtle leaves the construction site on its own.

BR-5 The following mitigation measures will be required for any impacts to riparian habitat:

- At minimum, the City shall mitigate for impacts to riparian habitat at a 2:1 ratio. The final mitigation ratios shall be determined upon approval of the Section 1600 Streambed Alteration Agreement. All conditions within the permit shall be adhered to.

BR-6 The following measures shall be implemented to avoid potential short-term adverse effects to waters of the U.S.:

- The City shall obtain a Section 404 CWA permit from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from the CDFG for construction activities within Lake Natoma. All permit conditions shall be implemented. Best Management Practices shall be implemented to ensure that no pollutants will be discharged into jurisdictional waters. Full restoration of the site would mitigate for the temporary impacts of construction.

BR-7 If any trees are proposed for removal or work is proposed beneath the drip line of protected trees, then the following mitigation measure is required:

- The City shall submit an application to the planning director for tree removal prior to commencement of construction activities in accordance with the City's Tree Preservation Ordinance (City Ordinance 12.16). The application shall include an application form, a justification statement, a site map, a preservation program, and an arborist report. The arborist report shall be prepared by a certified arborist. The arborist report shall include the botanical and common names of the trees by tree number; locations of the trees by tree numbers; diameters at breast height (DBH) by tree numbers, identifying whether the trees are single or multitrunked; protected zone radii by tree numbers; and condition of tree numbers based on the excellent, good, fair to good, fair, fair to poor, and poor tree rating system.

3.10 Cultural Resources

3.10.1 Regulatory Setting

Federal

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) as amended, and its implementing regulations found in 36 CFR Part 800, require federal agencies to identify cultural resources that may be affected by actions involving federal lands, funds, or permitting. The significance of the resources must be evaluated using established criteria outlined 36 CFR 60.4, as described below.

If a resource is determined to be a historic property, Section 106 of the NHPA requires that effects of the development on the resource be determined. A historic property is:

...any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property...(NHPA Sec. 301[5])

Section 106 of the NHPA prescribes specific criteria for determining whether an undertaking would adversely affect a historic property, as defined in 36 CFR 800.5. An impact is significant when the following occurs to prehistoric or historic archaeological sites, structures, or objects that are listed, or eligible for listing, in the National Register of Historic Places (NRHP):

- physical destruction of or damage to all or part of the property;
- alteration of a property;
- removal of the property from its historic location;
- change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- neglect of a property that causes its deterioration; and
- transfer, lease, or sale of the property out of federal control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

If development will adversely affect an historic property, then reasonable and prudent measures must be undertaken to avoid or reduce adverse impacts. The State Historic Preservation Officer (SHPO) should be provided with an opportunity to review and comment on these measures prior to project implementation.

National Register of Historic Places

The eligibility of a resource for listing in the NRHP is determined by evaluating the resource using criteria defined in 36 CFR 60.4 as follows: *The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and*

- a) That are associated with events that have made a significant contribution to the broad patterns of our history;
- b) that are associated with the lives of persons significant in our past;
- 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 has yielded, or may be likely to yield, information important to prehistory or history.

Sites younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP.

In addition to meeting at least one of the criteria listed above, the property must also retain enough integrity to enable it to convey its historic significance. The National Register recognizes seven aspects or qualities that, in various combinations, define integrity (NPS, 1990). These seven elements of integrity are location, design, setting, materials, workmanship, feeling, and association. To retain integrity a property will always possess several, and usually most, of these aspects.

While most historic buildings and many historic archaeological properties are significant because of their association with important events, people, or styles (criteria A, B, and C), the significance of most prehistoric and some historic-period archaeological properties is usually assessed under criterion D. This criterion stresses the importance of the information contained in an archaeological site, rather than its intrinsic value as a surviving example of a type or its historical association with an important person or event. It places importance not on physical appearance but rather on information potential.

National Environmental Policy Act

NEPA requires that federal agencies take all practical measures to “preserve important historic, cultural, and natural aspects of our national heritage” (NHPA, Section 800.8(a)). NEPA’s mandate for considering the impacts of a federal project on important historic and cultural resources is similar to that of Section 106 of the NHPA, and the two processes are generally coordinated when applicable. Section 800.8(a) of NHPA’s implementing regulations provides guidance on coordination with NEPA.

State

California Environmental Quality Act

CEQA requires that, for projects financed by, or requiring the discretionary approval of public agencies in California, that the effects that a project has on historical and unique archaeological resources be considered (PRC Section 21083.2). Historical resources are buildings, sites, structures, or objects, each of which may have historical, architectural, archaeological, cultural, or scientific importance (PRC Section 50201). The CEQA Guidelines (Section 15064.5) define three cases in which a property may qualify as a historical resource for the purpose of CEQA review:

- a) The resource appears in, or is determined eligible for the listing, in the California Register of Historical Resources (CRHR). Section 5024.1 defines eligibility requirements and states that a resource may be eligible for inclusion in the CRHR if it:
 - 1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
 - 2) is associated with the lives of persons important in our past;
 - 3) embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of an important creative individual, or possesses high artistic values; or
 - 4) has yielded, or may be likely to yield, information important in prehistory or history.

Sites younger than 45 years, unless of exceptional importance, are not eligible for listing in the CRHR.

As with the NRHP, properties must retain integrity to be eligible for listing on the CRHR. Properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR, and thus are significant historical resources for the purpose of CEQA (PRC section 5024.1(d)(1)).

The resource is included in a local register of historic resources, as defined in section 5020.1(k) of the PRC, or is identified as significant in a historical resources survey that meets the requirements of section 5024.1(g) of the PRC (unless the preponderance of evidence demonstrates that the resource is not historically or culturally significant).

The lead agency determines that the resource may be a historical resource as defined in PRC section 5020.1(j), 5024.1, or significant as supported by substantial evidence in light of the whole record.

Public Resources Code Section 21083.2 governs the treatment of unique archaeological resources, defined as “an archaeological artifact, object, or site about which it can be clearly demonstrated” as meeting any of the following criteria:

Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

Has a special and particular quality such as being the oldest of its type or the best example of its type.

Is directly associated with a scientifically recognized important prehistoric or historic event or person.

California Public Resources Code

Section 5097.5 of the PRC prohibits “knowing and willful” excavation, removal, destruction, injury, or defacement of paleontological resources on public lands without prior permission from the appropriate agency. Public lands include those “owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.” If paleontological resources are identified within a given project area, the lead agency must consider those resources when evaluating project impacts. The level of consideration may vary with the importance of the resource in question.

Folsom Lake State Recreation Area & Folsom Powerhouse State Historic Park General Plan/Resource Management Plan

Goals relevant to watershed protection contained within the GP/RMP are provided below:

Goal

Protect cultural resources that are eligible or potentially to be placed on the State or National Register of Historic Places from adverse impacts.

Paleontological Resources Regulatory Setting

CEQA provides protection for *unique paleontological resources* and *unique geologic features*, and requires that planners consider impacts to such resources in the project review process. The Act distinguishes between ubiquitous fossils that are of little scientific consequence, and those, which are of some importance by providing protection for the latter. While CEQA does not precisely define *unique paleontological resources*, criteria established by the Society of Vertebrate Paleontology (SVP) provide guidance. The SVP defines a significant paleontological resource as one that meets one or more of the following criteria (SVP, 1995):

- Provides important information shedding light on evolutionary trends and/or helping to relate living organisms to extinct organisms;
- provides important information regarding the development of biological communities;
- demonstrates unusual circumstances in the history of life;
- represents a rare taxon or a rare or unique occurrence, is in short supply and in danger of being destroyed or depleted;
- has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- provides important information used to correlate strata for which it may be difficult to obtain other types of age dates.

CEQA similarly does not define precisely a unique geologic feature. For the purpose of this analysis, a *unique geologic feature* is a resource or formation that:

- Is the best example locally or regionally;
- embodies distinct characteristics of a geologic principal that is exclusive locally or regionally;
- provides a key piece of geologic information important in geology or geologic history;
- is a type locality of a geologic feature;
- contains a mineral not known to occur elsewhere locally or regionally; or is a common teaching tool.

3.10.2 Affected Environment

Ethnographic Context

The project area is located in the ethnographic territory of the Penutian-speaking Nisenan people. Also called the Southern Maidu, the Nisenan people inhabited the Yuba, Bear, and American River drainages, as well as the lower drainages along the Feather River (Beals, 1933; Heizer, 1978:387; Wilson and Towne, 1978; Moratto, 1984:290). Prior to the 19th century, the Nisenan inhabited the Lake Natoma State Recreation Area (SRA) and the descendants of some of the Nisenan still reside in the area. While archaeologists have not clearly defined the northern boundary of the Nisenan, the eastern boundary is the crest of the Sierra, and the southern boundary was near Lake Natoma SRA (Heizer, 1978:387; EDAW, 2003:10). The landscape the Nisenan inhabited varied greatly from east to west from the plains of the Sacramento River near sea level to the 10,000 ft (3048 m) peaks cresting the Sierra Mountains; intermittent and perennial streams bisected both areas. They established permanent settlements on ridges, knolls, or terraces above streams (Motz, 1980:4). In the Folsom area, the Nisenan would have inhabited foothills and oak woodland habitat, as well as grasslands adjacent to the rivers and creeks. The region would have supported abundant game, waterfowl, fish, and plant resources (Heizer, 1978:387).

Historical Context

Much of the project area lies in the historic land grant of Rancho Rio de los Americanos, which consisted of eight leagues or approximately 35,000 acres (14,164 ha) (Thompson and West, 1880:184; Beck and

Haase, 1977:28; Barrows, 1999). Captain Joseph Libbey Folsom founded the town of Granite City in 1855 on the river bluffs above the site of Negro Bar (Thompson and West, 1960:300). During the survey of the township, Folsom died. To honor him, his heirs renamed the city “Folsom” in 1856 (Castaneda *et al.*, 1984:59; Barrows, 1999; Thompson and West, 1894; EDAW, 2003:13).

The City grew with the increased need for supply, freight, and passenger transportation; this was especially true with the discovery of gold at Sutter’s Mill and the opening of the Comstock silver ore mines in Nevada. The City developed four main industries: mining, transportation, correctional facilities, and hydroelectric development (Maniery and Syda, 1991:27). However, the City is most notable for gold discoveries in late 1848, and the placer mining and dredging, which continued in the town until the 1960’s (Wilson, 1992:4).

The project area lies within the “Old Folsom Historic District.” With regard to this project, the Area of Potential Effects (APE) includes the Folsom Powerhouse (State Historic Landmark [SHL] 702), which is also on the National Register of Historic Places (1978:7433), and the Terminal of California’s First Passenger Railroad (State Registered Landmark [SRL] 558), as well as the American River Placer Mining District. The latter is a conceptualized area defined from historic records. It encompasses the general area mined using water taken from the south fork of the American River by the Natoma Water and Mining Company, including thousands of acres of cobble tailings piles generated from the process. In addition to dredging and other forms of mining remnants, it includes mining camps and other occupation areas, Euro-American, African American, and Chinese.

Native American Consultation

In a letter dated June 16, 2011, Reclamation initiated the Native American Heritage Commission (NAHC) Section 106 process seeking concurrence on a finding of “No Adverse Effect” on proposed improvements to the project site. As the City must seek Reclamation’s approval to make the proposed improvements to the Lake Natoma waterfront, Reclamation’s approval and the modification of Federal land constitutes an undertaking pursuant to Section 301(7) of the NHPA (16 U.S.C. 470) as amended. Reclamation consulted with NAHC in accordance to 36 CFR Part 800 implementing Section 106 of the National Historic Preservation Act, and submitted a report entitled *Cultural Resources Inventory and Evaluation for the Proposed Lake Natoma Waterfront and Trail Access Enhancement Project* (**Confidential Appendix C**) to assist in the decision making. The NAHC responded to the request on August 15, 2011, concurring with Reclamation’s finding of “No Adverse Effect”, pursuant to 36 CFR Part 800.5(b).

Records Search and Literature Review

On behalf of Reclamation, Parus Consulting Inc. (PCI) conducted a comprehensive records search and literature review of all available information regarding the project site. In its 2011 report, *Cultural Resources Inventory and Evaluation for the Proposed Lake Natoma Waterfront and Trail Access Enhancement Project*, PCI stated it reviewed reports and maps, conducted a cultural resources records search from the North Central Information Center (NCIC), consulted the NAHC, and completed a reconnaissance survey of the Area of Potential Effect (APE) to identify issues relating to the undertaking’s potential effects. In its report, PCI stated that six previous comprehensive, professional archeological surveys or inventories had been previously completed within the APE. PCI delineated the APE into two categories: direct APE and indirect APE. The direct APE encompasses the construction activities of the Proposed Action. The indirect APE includes cultural resources within a 0.25 mi (0.40 km)

records search area. The background research and field-work identified six cultural resources within the direct APE, and 3 cultural resources located within the indirect APE.

Historic sites in the direct APE include the remains of Folsom Chinatown, a historic mining site, a historic dump, remnants of the Negro Bar Community, a mid-19th century granite quarry, and historic placer mining features. Historic sites in the indirect APE include the Old Folsom Powerhouse, Rainbow Bridge, and the Negro Bar across Lake Natoma.

As part of their research, on February 22, 2011, PCI contacted the NAHC requesting a search of the Sacred Lands File for traditional cultural resources within or near the APE. The reply from the NAHC, dated February 28, 2011, states that the search failed to indicate the presence of Native American sacred lands or traditional cultural properties in the immediate vicinity of the project site. By letter dated March 4, 2011, PCI contacted eight Native American tribes or individuals provided by the NAHC requesting any information regarding sacred lands or other heritage sites that might be impacted by the Proposed Action. The individuals were contacted, and since the publication of the report, five of the eight tribes/individuals responded. Of these five, two tribes expressed concerns: the Shingle Springs Band of Miwok Indians and the United Auburn Indian Community of the Auburn Rancheria. To address these concerns, Reclamation provided copies of the report to the two tribes as well as arranged for a site visit for a representative of the Shingle Springs Band of Miwok Indians who was concerned about the potential presence of traditional cultural properties on the project site. Since these actions, Reclamation has not received further comments or concerns.

Field Survey

On March 14, 2011, PCI archaeologist Cindy Arrington conducted an intensive-level pedestrian survey of the project area. The entire APE was intensively surveyed using transects spaced 10 to 15 feet apart. A concerted effort was made to relocate each of the resources previously recorded within the APE (**Confidential Appendix C**). All undeveloped ground surface areas within the APE were examined for artifacts, soil discoloration that might indicate structures or buildings, or historic-area debris. Ground disturbances (e.g. trail and path clearings, beach areas, picnic areas, etc) were visually inspected. Data collection was accomplished using a Global Positioning System (GPS) unit; photographs, and notes. During the pedestrian survey, no prehistoric/ethnohistoric or historic-area resources were newly identified. Relocated cultural resource sites within the APE are noted within the report (**Confidential Appendix C**).

Paleontological Summary

Geologic reports suggest that paleontologists have found land vertebrate fossils in other locations along the Sierran foothills in fine-grained deposits of the Laguna Formation, and as such, there is the potential for fossils in and around Lake Natoma at the outcrops of the Laguna Formation (Geotechnical Consultants, 2003:G-10). Quaternary Riverbank formations also occur within the lower valley of the American River, downstream of the Folsom Dam. In areas where there are fine-grained deposits, there is the potential for vertebrate fossils (Geotechnical Consultants, 2003: G-10).

Field survey confirmed information provided by the United States Department of Agriculture Natural Resources Conservation Service, and by geologic reports; as such, a low to moderate potential exists for paleontological resources within the project area.

3.10.3 Environmental Consequences

No Action

Under the No Action Alternative, the existing conditions would remain the same. Because the project would not be constructed, there would be no impacts to cultural resources.

Proposed Action

As discussed above, there are a few known cultural resources located within and adjacent to the project site; however, they are outside of the construction area of disturbance. Project implementation would not indirectly or directly affect known cultural resources. The State Historic Preservation Office has concurred with this finding (**Confidential Appendix C**). Project implementation has the potential to affect unknown buried archaeological resources, as archaeological sites may be present with no surface manifestation. However, with the implementation of **Mitigation Measure C-1**, impacts to cultural resources would be reduced to a less than significant level.

Cumulative Impacts

Future projects would be required to conform to the appropriate regulatory frameworks, including local preservation ordinances, CEQA, and/or Section 106 of the National Historic Preservation Act. Adherence to these regulatory frameworks will insure that potential impacts to cultural resources are less than significant with mitigation. The proposed project would also comply with these requirements. Accordingly, no cumulatively significant impacts to cultural resources would occur. With implementation of **Mitigation Measure C-1**, impacts to Cultural Resources would be reduced to less than significant.

3.10.4 Mitigation Measures

- C-1** Impacts to cultural resources in and around the project alignment can be minimized or avoided through monitoring by qualified personnel. Archaeological monitoring will protect recognized cultural resources and those buried, or covered by modern infrastructure. Should monitoring reveal that significant impacts are likely to occur or are occurring, the City shall notify Reclamation and State Parks and consult interested parties as appropriate (local Indian Tribes, SHPO, NAHC, Historic Landmarks Foundation, etc.) and then take either remedial action or cause remedial action to be taken, including requiring that construction of the bikeway be altered or halted.

As there is a moderate to high potential for inadvertent archaeological or historical discoveries, an archaeological monitor shall be present for all ground moving and/or ground penetrating activities. Grading through the site should be performed in approximate 6 inch levels, and monitors will inspect the cut surface after each pass of the grader or other earth-moving equipment. All features and objects identified by the monitor as requiring documentation or recovery will be plotted using GPS units and photographed in situ. The monitors will be authorized to halt work for up to one working day or such longer time as may be agreed upon between monitors and the site manager to record and recover features and objects; recovered material and data will be recorded on State Parks recording forms and curated under 36 CFR 79 or otherwise applicable standards; and monitoring will be terminated when the monitor(s) agree that all cultural

or paleontological deposits have been removed, or when grading has reached the design depth specified in the project plan.

If human remains, paleontological specimens, or previously unknown historic and/or prehistoric artifacts or features are unearthed during project implementation, the construction team shall suspend work immediately within a 50 m (164.04 ft) radius. The suspension of work will allow a Secretary of the Interior qualified archaeologist or a paleontologist to determine whether the cultural constituent or paleontological resource represents a potentially significant discovery. The archaeologist or paleontologist will then make recommendations for measures necessary to protect the find and/or undertake data recovery, excavation, analysis, and curation of materials, as appropriate.

3.11 Indian Trust Assets

Indian trust assets (ITAs) are legal interests in assets that are held in trust by the United States Government for federally recognized Native American tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of federally recognized Indian tribes. “Assets” are anything owned that holds monetary value. “Legal interests” means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. ITA cannot be sold, leased or otherwise alienated without United States’ approval. Trust assets may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Native American reservations, Rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITA reserved by or granted to Native American tribes, or Indian individuals by treaty, statute, or Executive Order.

3.11.1 Affected Environment

The nearest ITA is the Shingle Springs Rancheria located approximately 15 miles northeast of the project site. There are no ITAs reserved or granted to Indian tribes within the project area of effect for the Proposed Action.

3.11.2 Environmental Consequences

No Action

Under the no action alternative, the project site would remain in use as an unpaved trail system for pedestrians and bicyclists. No impacts to ITAs would result under the no action alternative.

Proposed Action

ITAs are not present within the area or adjacent to the Proposed Project site. There would be no impacts to ITAs from the implementation of the Proposed Action.

Cumulative Impacts

With the lack of ITAs in the project region, implementation of the Proposed Action would not result in cumulatively considerable impacts to ITAs.

3.12 Environmental Justice/Socioeconomic Resources**3.12.1 Regulatory Setting*****Federal******Environmental Justice for Minority and Low Income Populations***

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, as amended, which directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority, low-income, and Native American populations to the greatest extent practicable and permitted by law. Low-income is defined based on U.S. Census Bureau established poverty thresholds and is discussed further below.

The following six principles are provided as guidance for the analysis of impacts under NEPA (Council on Environmental Quality [CEQ], 1997:9):

- Agencies should consider the composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action.
- Agencies should consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards.
- Agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action.
- Agencies should, as appropriate, acknowledge and seek to overcome linguistic, cultural, institutional, geographic, and other barriers to meaningful participation, and should incorporate active outreach to affected groups.
- Agencies should assure meaningful community representation in the process.
- Agencies should seek tribal representation in the process.

The EPA's *Final Guidance for Incorporating Environmental Justice Concerns in the EPA's NEPA Compliance Analysis* (April 1998), provides the following guidance for defining and assessing impacts to minority and/or low-income populations:

A minority population may be present if the minority population percentage of the affected area is 'meaningfully greater' than the minority population percentage in the general population or other 'appropriate unit of geographic analysis'.

The NEPA analysis should also make every effort to identify the presence of distinct minority communities residing both within, and in close proximity to, the proposed project, and to identify those minority groups which utilize or are dependent upon natural resources that could be potentially affected by the proposed project.

Pursuant to the CEQ guidance, low-income populations in an affected area (that area in which the proposed project will or may have an effect) should be identified with the statistical poverty thresholds from the U.S. Census Bureau on Income and Poverty.

In identifying low-income populations, agencies may consider as a community a group of individuals living in geographic proximity to one another or set of individuals (such as migrant workers or Native Americans) where either type of group experiences common conditions of environmental exposure.

Local

City General Plan

Relevant goals and policies, contained within the City's General Plan related to environmental justice/socioeconomic resources are provided below.

Policy 4.5: Industrial and office employers should be encouraged to locate in Folsom to provide more job opportunities for Folsom residents.

Policy 18.3: To encourage home builders to use multifamily-designated land for the highest allowed density housing consistent with the City's low- and moderate-income housing needs.

3.12.2 Affected Environment

Demographics, Income, and Poverty Status

Folsom is located in the southeastern Sacramento Valley of Northern California. As of the 2010 census, Folsom City has an estimated population of 72,203; a 39.2 percent increase from 2000 to 2010. Homes in the project area consist mostly of single-family and multi-family residential.

Folsom's median household income is \$94,642, and the City has a 3.7 percent rate of persons living below the poverty level. No low-income populations have been identified in the vicinity of the Proposed Action.

Minority Communities

Races considered minorities under EO 12898 include American Indian or Alaskan Native, Asian or Pacific Islander, Black (not of Hispanic origin), and Hispanic. According to the 2010 census, Folsom City racial composition is described in **Table 3-3**. There is no identified minority population in the vicinity of the project site.

TABLE 3-3
CENSUS 2010 RACIAL COMPOSITION OF
FOLSOM CITY

Race/Ethnicity	Percent (%)
Total Single Race Population	95.8
Caucasian	74.3
African American	5.7
Hispanic	11.2
Native American	0.6
Asian	12.5
Pacific Islander	0.2
Total Multi-Race Population	4.2
SOURCE: U.S. Census Bureau, 2010	

3.12.3 Environmental Consequences

No Action

Under the No Action Alternative, the existing conditions would remain the same. Because the project would not be constructed, there would be no impacts to environmental justice or socioeconomic resources.

Proposed Action

As there will be no changes to land use and there are no minority populations as defined by EO 12898 in the vicinity of the project site, the Proposed Action would not impose disproportionately high or adverse human health or environmental effects on minority populations and/or low-income populations. The improvement of the pedestrian pathway would result in beneficial socioeconomic impacts for Folsom through the encouragement of use from both locals as well as distant visitors using the Lake Natoma portion of the East Lake Natoma Bike Trail.

Cumulative Impacts

The Proposed Action would not impact minorities and/or low-income families; therefore, no impact to environmental justice or socioeconomic resources would occur. It is not anticipated that significant additional build out would occur in the project area. The City would benefit from the Proposed Action due to increased visitation and use from both local and distant users.

3.13 Air Quality

3.13.1 Regulatory

Federal

Section 176 (C) of the Clean Air Act [CAA] (42 U.S.C. 7506 (C)) requires any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the Federal Clean Air Act (42 U.S.C. 7401 (a)) before the action

is otherwise approved. In this context, conformity means that such federal actions must be consistent with SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements would, in fact conform to the applicable SIP before the action is taken.

On November 30, 1993, the Environmental Protection Agency (EPA) promulgated final general conformity regulations at 40 CFR 93 Subpart B for all federal activities except those covered under transportation conformity. The general conformity regulations were revised by the EPA in 2010, one of the many revisions was the removal of the requirement that a federal action's air pollution emissions be less than 10 percent of a region's total emission inventory. The general conformity regulations apply to a proposed federal action in a nonattainment or maintenance area if the total of direct and indirect emissions of the relevant criteria air pollutants (CAPs) and precursor pollutant caused by the Proposed Action equal or exceed certain de minimis amounts thus requiring the federal agency to make a determination of general conformity. Nonattainment occurs when a region or air basin does not meet the NAAQS for a particular CAP as defined by the violation criteria. Maintenance is a transitional phase and occurs when a region or air basin meets the NAAQS for a particular air pollutant but has not been redesignated attainment by the EPA. The EPA has identified six CAPs: carbon monoxide (CO), ozone, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (10 and 2.5 micron in size)(PM₁₀ and PM_{2.5}), and lead. **Table 3-4** shows the NAAQS, violation criteria, and attainment status for the Sacramento Valley Air Basin (SVAB).

Class I Areas

Title 1, Part C of the CAA was established, in part, to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value. The CAA designates all international parks, national wilderness areas, and memorial parks larger than 5,000 acres and national parks larger than 6,000 acres as "Class I areas." The CAA prevents significant deterioration of air quality in Class I areas under the Prevention of Significant Deterioration (PSD) program. The PSD Program protects Class I areas by allowing only a small increment of air quality deterioration in these areas by requiring assessment of potential impacts on air quality related values of Class I areas.

Any major source of emissions within 100 kilometers (km) (62.1 miles) from a federal Class I area is required to conduct a pre-construction review of air quality impacts on the area(s). A "major source" for the PSD program is defined as a facility that will emit (from direct stationary sources) 250 tons per year (tpy) of regulated pollutant. For certain industries, these requirements apply to facilities that emit (through direct stationary sources) 100 tpy or more of a regulated pollutant. Mobile sources (i.e. vehicle emissions) are by definition not stationary sources and are therefore not subject to the PSD program.

Federal Hazardous Air Pollutant Program

Title III of the CAA requires the EPA to promulgate National Emissions Standards for Hazardous Air Pollutants (NESHAPs). The NESHAPs may differ between regional sources and area sources of hazardous air pollutants (HAPs). Major sources are defined as stationary sources with potential to emit more than 10 tpy of any HAP or more than 25 tpy of any combination of HAPs; all other sources are considered area sources. The emissions standards were promulgated in two phases. In the first phase

(1992–2000), EPA developed technology-based emission standards designed to produce the maximum emission reduction achievable for major sources. For area sources, the standards were based on generally available control technology. In the second phase (2001–2008), the EPA promulgated health risk-based emissions standards necessary to address risks remaining after implementation of the technology-based NESHAP standards.

TABLE 3-4
SACRAMENT VALLEY AIR BASIN ATTAINMENT STATUS

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8 Hour	0.070 ppm (137 $\mu\text{g}/\text{m}^3$)	Nonattainment (serious)	0.075 ppm	Nonattainment (severe-15)
	1 Hour	0.09 ppm (180 $\mu\text{g}/\text{m}^3$)	Nonattainment (serious)	--	--
CO	8 Hour	9.0 ppm (10 mg/m^3)	Attainment	9.0 ppm (10 mg/m^3)	Attainment
	1 Hour	20.0 ppm (23 mg/m^3)	Unclassified	35.0 ppm (40 mg/m^3)	Unclassified
NO ₂	Annual arithmetic mean	0.030 ppm (56 $\mu\text{g}/\text{m}^3$)	Attainment	0.053 ppm (100 $\mu\text{g}/\text{m}^3$)	Attainment
	1 Hour	0.18 ppm (338 $\mu\text{g}/\text{m}^3$)	Attainment	--	--
SO ₂	Annual average	--	--	0.03 ppm (80 $\mu\text{g}/\text{m}^3$)	Attainment
	24 Hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$)	Attainment	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)	Attainment
	1 Hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$)	Attainment	--	--
PM ₁₀	Annual arithmetic mean	20 $\mu\text{g}/\text{m}^3$	Nonattainment	--	--
	24 Hour	50 $\mu\text{g}/\text{m}^3$	Nonattainment	150 $\mu\text{g}/\text{m}^3$	Unclassified
PM _{2.5}	Annual Arithmetic mean	12 $\mu\text{g}/\text{m}^3$	Nonattainment	15 $\mu\text{g}/\text{m}^3$	Nonattainment
	24 Hour	--	--	35 $\mu\text{g}/\text{m}^3$	Attainment
Lead	30 day average	1.5 $\mu\text{g}/\text{m}^3$	Attainment	--	--
	Rolling-3 month average	--	--	0.15 $\mu\text{g}/\text{m}^3$	Unclassified
Visibility Reducing Particles	8-Hour	EC of 0.23 per km	Attainment	--	--
Sulfates	24-Hour	25 $\mu\text{g}/\text{m}^3$	Attainment	--	--
Hydrogen Sulfide	1-Hour	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	Attainment	--	--
Vinyl Chloride	24-Hour	0.01 ppm (26 $\mu\text{g}/\text{m}^3$)	Attainment	--	--

ppm = parts per million; mg/m^3 = milligram per cubic meter; $\mu\text{g}/\text{m}^3$ = microgram per cubic meter; -- = No standard established; EC = extinction coefficient; km = kilometer
Source: CARB 2012; SJVAPCD 2012.

In addition to standards for stationary sources of HAPs, the CAA also requires the EPA to promulgate vehicle or fuel standards to include reasonable controls for toxic emissions, addressing at a minimum benzene and formaldehyde. Performance criteria were established to limit mobile-source emissions of

toxics, including benzene, formaldehyde, and 1,3-butadiene. In addition, Section 219 of the CAA requires the use of reformulated gasoline in selected U.S. cities (those with the most severe ozone nonattainment conditions) to further reduce mobile-source emissions. NESHAP regulations are also commonly used to ensure the emission of HAPs (such as asbestos) are reduced or eliminated during construction through a permitting process.

California

The California Clean Air Act (CCAA) was first signed into law by the State in 1988 (and amended in 1992), with the purpose of providing additional air quality planning requirements and other standards independent of the CAA. The CCAA delineates California's air quality goals, planning mechanisms, regulatory strategies, and standards of progress. The CCAA requires air districts, such as the Sacramento Municipal Air Quality Management District (SMAQMD), which have jurisdiction to develop and implement plans to attain California Ambient Air Quality Standards (CAAQS) established by the California Air Resource Board (CARB). CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California, for implementing the CCAA, and for implementing much of the CAA within California. In general, the SMAQMD plans must be designed to achieve and maintain CAAQS through emission reductions from stationary and transportation sources by the "earliest practicable date," and must reduce excessive emissions of pollutants by five percent or more per year.

CARB classifies air basins, or portions thereof, within California as unclassified, attainment, or non-attainment, based on whether or not the CAAQS's have been achieved or whether a determination is possible with available data. CARB has established CAAQS for the six NAAQS and four other air pollutants; sulfates, lead, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. **Table 3-4** shows the CAAQS, violation criteria, and attainment status for the Sacramento Valley Air Basin (SVAB).

Toxic Air Contaminates

Currently, there are 244 toxic air contaminants (TACs) listed by CARB. TACs are substances that are known or suspected to be emitted in California and are classified by CARB as having the potential to cause adverse health effects. According to CARB, the estimated health risk from TACs can be primarily attributed to relatively few compounds: diesel particulate matter is one of those compounds. Diesel particulate matter differs from many other TACs in that it is not a single substance, but rather a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are defined as particulate matter, which includes carbon particles or "soot."

Local

The SMAQMD provides the following applicable rules and regulations related to air quality:

Regulation 1

Rule 104 General Conformity – The provisions of 40 CFR Part 51 are made part of the SMAQMD rules.

Regulation 4

Rule 401 Ringelmen Chart/Opacity – The limitation of particulate matter into the atmosphere through visual emissions and opacity.

Rule 402 Nuisance – To protect the public’s health and welfare from the emissions of air contaminants which constitute a nuisance.

Rule 403 Fugitive Dust – To reasonably regulate operations which periodically may cause fugitive dust emissions into the atmosphere.

Rule 404 Particulate Matter – To limit the quantity of particulate matter in the atmosphere through the establishment of an emissions concentration limit.

City of Folsom

Relevant goals and policies, contained within the City’s General Plan related to air quality are provided below.

Policy 31.9: The City should encourage bicycle usage through the development and maintenance of a safe and comprehensive bikeway system which includes:

- The provision of securely anchored bicycle racks.
- Sidewalks in residential development with protective curbs and adequate lighting.

3.13.2 Affected Environment

The Proposed Action is located in Folsom, California in the SVAB, which is under the jurisdiction of the SMAQMD. Climate and geography affect regional air quality. The SVAB has a Mediterranean climate, characterized by hot dry summers and mild rainy winters. Temperatures can range from 20 to 115 degrees Fahrenheit and annual rainfall is approximately 20 inches. The prevailing winds are moderate and generally from the north or south. The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants creating inversion layers.

The SVAB is designated nonattainment for Ozone and $PM_{2.5}$ under the NAAQS and CAAQS and for PM_{10} under the CAAQS. Ozone is not emitted directly into the atmosphere; it is created through the reaction of NO_x and ROG in the presence of sunlight. ROG and NO_x are considered ozone precursors and although these pollutants are not included in the NAAQS and CAAQS they are monitored by CARB and used as a compliance mechanism in the SIP. PM_{10} and $PM_{2.5}$ are generally created by construction activities, such as site grading; however, combustion of fossil fuel also results in the emission of PM_{10} and $PM_{2.5}$.

Table 3-5 provides a three-year summary listing the highest annual concentration observed for pollutants of concern in the SVAB (state 1-hour ozone and federal 8-hour ozone, state and federal 24-hour average PM_{10} , and federal 24-hour $PM_{2.5}$). The monitoring station is located at the Folsom-Natoma Street station for ozone and Sacramento-T Street station for PM_{10} and $PM_{2.5}$. These stations were selected because of their relative proximity to the Proposed Project.

Federal Class I Areas

The only Federal Class I area within 62.1 miles (100 kilometers) of the project site is the Desolation Wilderness located approximately 52 miles southeast of the project site.

TABLE 3-5
FEDERAL AND STATE NAAQS AIR MONITORING DATA

Pollutant	Standard	2008	2009	2010
Ozone State 1-hour:				
Highest	0.09 ppm	0.166	0.120	0.124
Days Exceeded		38	24	12
Ozone Federal (State) 8-hour:				
Highest	0.075 (0.07) ppm	0.123 (0.123)	0.104 (0.104)	0.112 (0.112)
Days Exceeded		50 (65)	35 (47)	19 (26)
PM ₁₀ Federal (State) 24-hour:				
Highest	12 (15) ug/m ³	73.7 (70.9)	47.8 (50.7)	53.5 (53.9)
Days Exceeded		0 (3)	0 (1)	0 (1)
PM _{2.5} Federal (State) 24-hour (annual):				
Highest	50 (150) ug/m ³	66.1 (78.9)	37.7 (50.1)	30.6 (37.0)
Days Exceeded		5 (13)	1 (10)	0 (10)
Source: CARB, 2012.				

Sensitive Receptors

Sensitive receptors are generally defined as land uses that house people who are susceptible to experiencing adverse impacts from air pollution emissions and, as such, should be given special consideration when evaluating air quality impacts from projects. Sensitive receptors include facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants.

The land surrounding the project site is primarily commercial or recreational space with scattered residential use. The nearest sensitive receptors are residences located approximately 150 feet south of the western portion of the project site. The nearest hotel is the Lake Natoma Inn located approximately 125 feet south of the Proposed Project. The nearest school is the Folsom Montessori School located 1,600 feet south of the eastern portion of the Proposed Project. There are no hospitals in the immediate vicinity of the Proposed Project.

3.13.3 Environmental Consequences

Methodology

The Proposed Project has been compared to the SMAQMD's 2011 *CEQA Guide to Assessing Air Quality* construction and operational screening procedures to determine if project-related criteria pollutant emission modeling is warranted. The SMAQMD's screen procedures assume that if a Proposed Project is smaller than the screening levels, then the resulting construction emissions will be less than the SMAQMD threshold for NO_x of 85 pounds per day or 15.5 tons per year. If air quality modeling is warranted the SMAQMD Road Construction Emissions Model, Version 6.3.2 will be used. Operational emission will be qualitatively evaluated consistent with the SMAQMD 2011 *CEQA Guide to Assessing Air Quality*, due to the nature of the Proposed Project.

Thresholds

The general conformity de minimis level of 25 tons per year of ozone precursors NO_x and ROG apply to the construction and operation phases of the federal action. The SMAQMD CEQA construction threshold is 85 pounds per day of NO_x and the operation threshold is 65 tons per day.

No Action

Under the No Action Alternative, no construction or operational-related criteria pollutant or HAPs emissions would occur because the project would not be constructed. The existing air quality condition would remain the same, but no additional impacts would occur.

Proposed Action***Short-Term Construction Impacts***

During construction, the Proposed Project would generate NO_x, ROG and PM_{2.5} from heavy duty construction equipment exhaust and grading activities. Due to the size and scope of construction of the Proposed Project, air quality modeling is not warranted under the SMAQMD's *2011 CEQA Guide to Assessing Air Quality*. The Proposed Project would emit less than 85 pounds per day of NO_x, which is less than the de minimis level of 25 tons per year and a conformity determination is not required (40 CFR Part 51). ROG emissions during construction are generally less than NO_x emissions; therefore, construction of the Proposed Project would result in a minimal impact associated with ozone precursors and regional air quality.

Construction of the proposed project has the potential to cause odor, which may be a nuisance to sensitive receptors. Construction activities will be short term and intermittent and associated odors would not be detectable beyond the boundary of the project site. The nearest sensitive receptor is approximately 150 feet from the project site, and at this distance odor from construction activities would not be detectable. Construction of the Proposed Project would have a negligible odor impact on the environment.

Long-Term Operational Impacts

Vehicles traveling to and from the Proposed Project would emit ROG and NO_x criteria pollutants; however, the Proposed Project falls below the screening criteria provided in SMAQMD's *2011 CEQA Guide to Assessing Air Quality*. Therefore, ROG and NO_x emissions from the operation of the Proposed Project would not exceed the SMAQMD threshold or de minimis level for ozone precursors and a conformity determination is not required (40 CFR Part 51). Operation of the Proposed Project would result in a minimal impact associated with ozone precursors and regional air quality.

Operational activities would not emit odors; therefore, the Proposed Project would have no odor impact on the environment.

Cumulative Impacts

In combination with other projects in the area, operation of the Proposed Project would emit ROG and NO_x criteria pollutants; however, the project falls below the screening criteria for these pollutants. The Proposed Project would not emit criteria pollutants in excess of 65 pounds per day or 25 tons per year; therefore, a conformity determination is not required (40 CFR Part 51). The Proposed Project would have a minimal contribution to the cumulative air quality environment.

Project-related operational activities in combination with other projects in the area would not emit odors; therefore, the Proposed Project would have no odor impact on the environment.

3.14 Climate Change

3.14.1 Regulatory

Federal

Climate change is a global phenomenon that can be attributed to the sum of all human activities and natural processes. On February 10, 2010 the Council on Environmental Quality (CEQ) provided for public comment on its draft *NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions* (NEPA Guidance). The draft NEPA Guidance provides Federal agencies with guidance on how to analyze the environmental impacts of greenhouse gas (GHG) emissions and climate change when evaluating the environmental impacts of a proposed action under NEPA. The draft NEPA Guidance provides practical tools for agency reporting, including a presumptive threshold of 25,000 metric tons (MT) of direct carbon dioxide equivalent emissions from the proposed action to trigger a quantitative analysis, and instructs agencies how to assess the effects of climate change on the proposed action and its design. The draft NEPA Guidance recommends quantification of GHG emissions, assessment of the significance of any impact on climate change, and, identification of mitigation or alternatives that would reduce GHG emissions. It should be noted that the draft NEPA Guidance has not yet been finalized.

The following are the most recent regulatory actions taken by U.S. government agencies related to climate change:

- On July 23, 2009, USEPA published a final “rule which proposes to establish the criteria for including sources or sites in a Registry of Recoverable Waste Energy Sources (Registry),” as required by the Energy Independence and Security Act of 2007. Waste energy can be used to produce clean electricity. The clean electricity produced by waste energy would reduce the need for non-renewable forms of electricity production, thus reducing GHG emissions.
- On September 15, 2009, USEPA and the Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) proposed a new national program that would reduce GHG emissions and improve fuel economy for all new cars and trucks sold in the United States. USEPA proposed the first national GHG emissions standards under the Clean Air Act, and NHTSA proposed an increase in the Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act.
- In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110–161), USEPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. Signed by the Administrator on September 22, 2009, the rule requires that suppliers of fossil fuels and industrial GHGs, manufacturers of vehicles and engines outside of the light duty sector, and facilities that emit 25,000 metric tons or more of GHGs per year to submit annual reports to USEPA. The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change.

- On September 30, 2009, USEPA proposed new thresholds for GHG that define when Clean Air Act permits under the New Source Review and Title V operating permits programs would be required.
- In February, 2010 The CEQ Chair released a memorandum, *Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*. The memorandum provides guidance on how project-related GHG emission should be analyzed in NEPA documents. The Draft Guidance provides that a NEPA climate change analysis shall provide quantification and mitigation to reduce GHG emissions. The guidance also provides that 25,000 metric tons of GHG emissions per year may be a helpful guideline to assist lead agencies in making informed decisions on climate change impacts resulting from a project subject to NEPA. The guidance notes that the 25,000 metric tons is not a threshold for evaluating climate change on the project level.

California

California has been a leader among the states in outlining and aggressively implementing a comprehensive climate change strategy that is designed to result in a substantial reduction in total statewide GHG emissions in the future. California's climate change strategy is multifaceted and involves a number of state agencies implementing a variety of state laws and policies. A brief summary of these laws and policies is provided below.

Assembly Bill 1493 (AB 1493)

Signed by the Governor in 2002, Assembly Bill (AB) 1493 requires that the CARB adopt regulations requiring a reduction in GHG emissions emitted by cars in the state. AB 1493 is intended to apply to 2009 and later vehicles. On June 30, 2009, the USEPA granted a Clean Air Act waiver, which the state needs in order to implement AB 1493.

Executive Order S-3-05 (EO S-3-05)

Executive Order (EO) S-3-05 was signed by the Governor on June 1, 2005. EO S-3-05 established the following statewide emission reduction targets:

- Reduce GHG emissions to 2000 levels by 2010,
- Reduce GHG emissions to 1990 levels by 2020, and
- Reduce GHG emissions to 80 percent below 1990 levels by 2050.

EO S-3-05 created a "Climate Action Team" (CAT) headed by the California Environmental Protection Agency and including several other state agencies. The CAT is tasked by EO S-3-05 with outlining the effects of climate change on California and recommending an adaptation plan. The CAT is also tasked with creating a strategy to meet the emission reduction target required by the EO. In April 2006 the CAT published an initial report that accomplished these two tasks.

Assembly Bill 32 (AB 32)

Signed by the Governor on September 27, 2006, AB 32 codifies a key requirement of EO S-3-05, specifically the requirement to reduce statewide GHG emissions to 1990 levels by 2020. AB 32 tasks CARB with monitoring state sources of GHGs and designing emission reduction measures to comply with the law's emission reduction requirements. However, AB 32 also continues the CAT's efforts to meet the requirements of EO S-3-05 and states that the CAT should coordinate overall state climate policy.

In order to accelerate the implementation of emission reduction strategies, AB 32 requires that CARB identify a list of discrete early action measures that can be implemented relatively quickly. In October 2007, CARB published a list of early action measures that it estimated could be implemented and would serve to meet about a quarter of the required 2020 emissions reductions (CARB, 2007a). In order to assist CARB in identifying early action measures, the CAT published a report in April 2007 that updated their 2006 report and identified strategies for reducing GHG emissions (CAT, 2007). In its October 2007 report, CARB cited the CAT strategies and other existing strategies that may be utilized in achieving the remainder of the emissions reductions. AB 32 requires that CARB prepare a comprehensive "scoping plan" that identifies all strategies necessary to fully achieve the required 2020 emissions reductions. Consequently, in early December 2008 CARB released its scoping plan to the public, which was approved by CARB on December 12, 2008.

The scoping plan calls for an achievable reduction in California's carbon footprint. Reduction of GHG emissions to 1990 levels are proposed, which equates to cutting approximately 30 percent of emissions estimated for 2020, or about 15 percent from today's levels. The scoping plan relies on existing technologies and improving energy efficiency to achieve the 30 percent reduction in GHG emission levels by 2020. The scoping plan provides the following key recommendation to reduce GHG emissions:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a state-wide renewable energy mix of 33 percent;
- Developing a state-wide cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long term commitment to AB 32 implementation.

Executive Order S-01-07 (EO S-01-07)

EO S-01-07 was signed by the Governor on January 18, 2007. It mandates a statewide goal to reduce the carbon intensity of transportation fuels by at least 10 percent by 2020. This target reduction was identified by CARB as one of the AB 32 early action measures identified in their October 2007 report.

Senate Bill 97 (SB 97)

Signed by the governor on August 24, 2007, Senate Bill (SB) 97 requires that the Governor's Office of Planning and Research (OPR) prepare California Environmental Quality Act (CEQA) guidelines for evaluating the effects of GHG emissions and for mitigating such effects. The Natural Resources Agency adopted these guidelines in December 2009.

The adopted guidelines provide the following direction for consideration of climate change impacts in a CEQA document:

- The determination of significance of GHG emissions calls for a careful judgment by the lead agency.
- The lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a proposed project.
- A model or methodology shall be used to quantify GHG emissions resulting from a CEQA project.
- Significance may rely on qualitative analysis or performance based standards.
- The lead agency may adopt thresholds of significance previously adopted or recommended by other public agencies or recommended by experts.
- The CEQA document shall discuss regional and/or local GHG reduction plans.
- A CEQA document shall analyze GHG emissions if they are cumulatively considerable.
- A description of the effects of climate change on the environment shall be included in CEQA documents.
- A CEQA document shall contain mitigation measures, which feasibly reduce GHG emissions.
- GHG analysis in a CEQA document may be Tiered or Streamlined.

3.14.2 Affected Environment

An increase in atmospheric GHGs has the potential to change precipitation and storm patterns, runoff timing and volume, sea level rise, reduced snow pack, and changes in the amount of water needed due to intensified evaporation rates. In California these changes may lead to water shortages, more frequent wildfires, and property damage due to more intense storms. The primary source of GHG emissions in the vicinity of the Proposed Project is from vehicles.

3.14.3 Environmental Consequences

No Action

Under the No Action Alternative, no construction or operational-related GHG emissions would occur because the project would not be constructed. The existing climate change conditions would remain the same, but no additional climate change impacts would occur.

Proposed Action

Construction

The Proposed Project would generate GHG emissions below the screening criteria in the SMAQMD 2011 *CEQA Guide to Assessing Air Quality*. Therefore, the Proposed Project would not directly generate GHGs during the construction phase that would conflict with any existing climate action plan, policy, or regulations nor significantly impact the environment. The federal GHG emissions reporting threshold of 25,000 MT is provided by the EPA in the absence of a federal *de minimis* threshold. Given the size and scope of the Proposed Project, GHG emissions would be significantly less than 25,000 MT from construction. Construction of the Proposed Project would have a negligible impact on climate change.

Operation

Operation of the Proposed Project would emit GHGs from vehicles traveling to and from the project site. The Proposed Project falls below the screening criteria provided in SMAQMD's 2011 *CEQA Guide to Assessing Air Quality*; therefore, GHG emissions from the operation of the Proposed Project would not conflict with a climate action plan, policy, or regulations nor significantly impact the environment or exceed the federal GHG emissions reporting threshold of 25,000 MT. Operation of the Proposed Project would have a negligible impact on climate change.

Cumulative Impacts

By its very nature impacts from GHG emissions are cumulative, because individual project-related GHG emissions contribute to global climate change. Given construction and operation of the Proposed Project would not conflict with any existing climate action plan, policy, or regulations nor significantly impact the environment or exceed the federal GHG emissions reporting threshold of 25,000 MT, then cumulative GHG impacts from the Proposed Project have a negligible impact on climate change.

3.15 Noise

3.15.1 Regulatory Setting

Federal

The Federal Highway Administration (FHWA) provides construction noise level thresholds in its *Construction Noise Handbook* (2006) which are provided in **Table 3-6**.

TABLE 3-6
FEDERAL CONSTRUCTION NOISE THRESHOLDS

Noise Receptor Locations and Land-Uses	Daytime (7 am - 6 pm)	Evening (6 pm - 10 pm)	Nighttime (10 pm - 7 am)
	dBA, Leq ¹		
Noise-Sensitive Locations: (residences, Institutions, Hotels, etc.)	78 or Baseline + 5 (whichever is louder)	Baseline + 5	Baseline + 5 (if Baseline < 70) or Baseline + 3 (if Baseline > 70)
Commercial Areas: (Businesses, Offices, Stores, etc.)	83 or Baseline + 5	None	None
Industrial Areas: (factories, Plants, etc.)	88 or Baseline + 5	None	None
Notes: ¹ Leq thresholds were empirically determined (FHWA, 2006). Source: FHWA Construction Noise Handbook, 2006.			

Local

City of Folsom Ordinance

Ordinance 8.42.060 – Noise sources associated with construction, provided such activities do not take place before 7 a.m. or after 6 p.m. on any day except Saturday or Sunday, or before 8 a.m. or after 5 p.m. on Saturday or Sunday.

3.15.2 Affected Environment

Ambient Noise Level

The ambient noise level is defined as the existing range of noise levels from all sources near and far. A similar term is background noise level, which usually refers to the ambient noise level that is present when any intermittent noise sources are absent. Noise exposure contours or noise contours are lines drawn about a noise source representing constant levels of noise exposure. Community Noise Equivalent Level (CNEL) or Day-Night Average Sound Level (Ldn) contours are frequently utilized to graphically portray community noise exposure. The CNEL is calculated from hourly Noise Equivalence Level (Leq) values, after adding a “penalty” to the noise levels measured during the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods. The penalty for evening hours is a factor of 3, which is equivalent to 4.77 decibels (dB). The penalty for nighttime hours is a factor of 10, which is equivalent to 10 dB. To calculate the Ldn, the evening penalty is omitted. The Leq is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. **Table 3-7** shows typical noise level in A-weighted decibels (dBA).

The land surrounding the project site consists of residences, recreation, and commercial land uses. Ambient noise levels in this environment generally range from 45 dBA Ldn at night to 65 dBA Ldn during the day. The current ambient noise environment is dominated by traffic noise generated from vehicles traveling along Folsom Boulevard and Leidesdorff Street. Due to the high volume of traffic on Folsom Boulevard, the ambient noise level in the vicinity of the Proposed Project is conservatively estimated to be 65 dBA, Ldn.

TABLE 3-7
TYPICAL A-WEIGHTED SOUND LEVELS OF COMMON NOISE SOURCES

dBA	Description
120	Jet aircraft take-off at 100 feet.
110	Riveting machine at operator's position.
100	Rail Transit at 50 mph
88	Shop tools
80	Rail Transit At-Grade at 50 mph
76	City Bus Idling
75	Food Blender
73	Lawn Mower
63	Cloth Washer
62	Air Conditioner (outdoor)
55	Air Conditioner (indoor)
48	Refrigerator
40	Background level within a residence.
30	Soft whisper at 2 feet.
20	Interior of recording studio.
Source: Federal Transportation Administration (FTA), 2006.	

Sensitive Receptors

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, and parks and other outdoor recreation areas generally are more sensitive to noise than are commercial and industrial land uses. A sensitive receptor is defined as any living entity or aggregate of entities whose comfort, health, or well being could be impaired or endangered by the existence of noise.

Land use in the project area consists mainly of commercial and recreational uses with some residential development. **Figure 3** shows the alignment of the Proposed Project. Sensitive noise receptors in the vicinity of the Proposed Project consist of the Lake Natoma Inn located to the east of the site and residences located approximately 150 feet to the south. Commercial land uses are not considered sensitive noise receptors. Since the vicinity surrounding the project site is mainly commercial an ambient daytime noise level of 65 dBA is assumed.

3.15.3 Environmental Consequences

No Action

Under the No Action Alternative, there would be no impacts because the project would not be constructed. The existing noise environment would remain the same as no additional impacts are expected.

Proposed Action

Construction Noise

Temporary noise sources on the project site would be limited to construction activities involving vehicles and equipment. **Table 3-8** shows typical noise level of construction equipment that may be used at the project site. The nature of the project involves construction equipment to be continuously in motion and not located in a single stationary setting over the span of the project. Equipment required for grading and paving of the Proposed Project generally does not result in significant levels of groundborne vibration or groundborne noise levels, nor would the project create a substantial increase in ambient noise levels. With implementation of **Mitigation Measures N-1** construction related noise impacts would be less than significant.

TABLE 3-8
TYPICAL NOISE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment Description	Predicted Lmax at 50 ft (dBA)
All Other Equipment > 5 HP	85
Auger Drill Rig	85
Backhoe	80
Boring Jack Power Unit	80
Compactor (ground)	80
Dozer	85
Drill Rig Truck	84
Dump Truck	84
Front End Loader	80
Horizontal Boring Hydro.	80
Paver	85
Roller	85
Source: FHWA Roadway Construction Noise Model, 2006.	

Operation Noise

Operation of the Proposed Project would not introduce any significant new noise or vibration sources, because the operational noise source would be associated with pedestrian use of the trail, which is similar to existing conditions. No effect would occur.

Cumulative Impacts

The Proposed Project would not place a noise source in the vicinity of noise sensitive receptors or substantially increase traffic on nearby roadways. Therefore, the Proposed Project would not contribute to adverse cumulative impacts associated with the ambient noise level.

3.15.4 Mitigation Measures

- N-1** In accordance with the City's Noise Ordinance, construction activities shall be limited to the hours of 7:00 am to 6:00 pm Monday through Friday, and between the hours of 8:00 am to 5:00 pm on Saturday and Sunday.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation and the City intend to concurrently provide the public with an opportunity to comment on the Draft EA, Draft Finding of No Significant Impact, and IS/MND between May 16 and June 14, 2012.

4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The Proposed Action does not involve federal water development projects; therefore, the FWCA does not apply.

4.3 Endangered Species Act (16 U.S.C. § 1531 et seq.)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species. The Proposed Action has the potential to affect the VELB through temporary construction activities within potential habitat. However, with the implementation of **Mitigation Measure BR-1**, adverse affects to VELB would be avoided.

4.4 National Historic Preservation Act (16 U.S.C. § 470 et seq.)

Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places. The process for implementing Section 106 of the NHPA is found at 36 CFR Part 800. Pursuant to 36 CFR § 800.4(d)(1), Reclamation has consulted with and received concurrence from the California State Historic Preservation Officer (SHPO) on a finding of no historic properties affected for the Proposed Action.

4.5 Indian Trust Assets

ITAs are legal interests in property held in trust by the United States for federally-recognized Indian tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITAs can include land, minerals, federally-reserved hunting and fishing rights, federally-reserved water rights, and in-stream flows associated with trust land. Beneficiaries of the Indian trust relationship are federally-recognized Indian tribes with trust land; the United States is the trustee. By definition, ITAs cannot be sold, leased, or otherwise encumbered without approval of the United States. The characterization and application of the United States trust relationship have been defined by case law that interprets Congressional acts, executive orders, and historic treaty provisions.

The Proposed Action would not affect ITAs because there are none located in the Proposed Project area. The nearest ITA is the Shingle Springs Rancheria located approximately 15 miles northeast of the project site.

4.6 Executive Order 13007 – Indian Sacred Sites

Executive Order 13007 requires Federal land managing agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. It also requires agencies to develop procedures for reasonable notification of proposed actions or land management policies that may restrict access to or ceremonial use of, or adversely affect, sacred sites. At this time, no Indian sacred sites have been identified. In addition, the Proposed Action would not impede access to or ceremonial use of Indian sacred sites. If sites are identified in the future, Reclamation would comply with Executive Order 13007.

4.7 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)

The MBTA implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

The Proposed Action has the potential to affect birds protected by the MBTA. However, with the implementation of **Mitigation Measure BR-2**, adverse affects to birds protected by the MBTA would be avoided. The Proposed Action will be in compliance with the MBTA.

4.8 Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The Proposed Action would not affect either concern.

4.9 Clean Air Act (42 U.S.C. § 7506 (C))

Section 176 of the CAA requires that any entity of the Federal government that engages in, supports, or in any way provided financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable SIP required under Section 110 (a) of the CAA (42 U.S.C. § 7401 (a)) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations

of the NAAQS and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements will, in fact conform to the applicable SIP before the action is taken. The Proposed Project would emit less than the de minimis level for ozone precursors and a conformity determination is not required.

4.10 Clean Water Act (16 U.S.C. § 703 et seq.)

Section 401

Section 401 of the Clean Water Act (CWA) (33 U.S.C. § 1311) prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under sections 402 and 404 of the CWA (33 U.S.C. § 1342 and 1344). If new structures (e.g., treatment plants) are proposed, that would discharge effluent into navigable waters, relevant permits under the CWA would be required for the project applicant(s). Section 401 requires any applicant for an individual U. S. Army Corps of Engineers dredge and fill discharge permit to first obtain certification from the state that the activity associated with dredging or filling will comply with applicable state effluent and water quality standards. This certification must be approved or waived prior to the issuance of a permit for dredging and filling.

Section 404

Section 404 of the CWA authorizes the U. S. Army Corps of Engineers to issue permits to regulate the discharge of “dredged or fill materials into waters of the United States” (33 U.S.C. § 1344).

Temporary construction activities below the ordinary high water mark of Lake Natoma would require obtaining a Section 404 permit from the Corps and a Section 401 Water Quality Certification from the RWQCB. Adherence to the conditions of these approvals would minimize the potential for impacts to Lake Natoma.

Section 5 CEQA Environmental Checklist

Pursuant to California Environmental Quality Act (CEQA) *Guidelines* Section 15063, an Initial Study (IS) should provide the lead agency with sufficient information to determine whether to prepare an Environmental Impact Report (EIR) or Negative Declaration (ND) for a proposed project. The CEQA *Guidelines* state that an IS may identify environmental impacts by use of a checklist, matrix, or other method, provided that conclusions are briefly explained and supported by relevant evidence. If it is determined that a particular physical impact to the environment could occur, then the checklist must indicate whether the impact is Potentially Significant, Less Than Significant with Mitigation, or Less Than Significant. Findings of *No impact* for issues that can be demonstrated not to apply to a proposed project do not require further discussion.

5.1 Environmental Checklist and Discussion

<u>AESTHETICS</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock croppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to **Sections 3.2.1** and **3.2.2** regarding California and local aesthetic resources regulations and the affected environment, respectively.

Impact Discussion

Questions A and C – Scenic Vista and Visual Quality

As noted in **Section 3.2.3**, while the paved pathway from the intersection of Gold Lake Drive to Folsom Boulevard would be visible to local businesses and residents, the majority of the Proposed Project would not be visible due to vegetation as well the downgrading nature of the local terrain. The Proposed Project would not alter the current scenic vista and visual quality of the area and would not substantially adversely effect, damage, or degrade the current visual characteristics of the project area. Therefore, a ***less than significant*** impact would occur.

Question B – Scenic Resources

The Proposed Project is not within a vista of a State scenic highway. Therefore, ***no impacts*** to scenic resources within a State scenic highway will result.

Question D – Light and Glare

The Proposed Project would not include the installation of street or pedestrian lighting; therefore, no light or glare would occur with the implementation of the Proposed Project. **No impacts** would occur.

Cumulative Impacts

As noted in **Section 3.2.3**, The Proposed Project would not significantly impact visual resources in the vicinity of the project. It is not anticipated that significant additional build out would occur in the project area. Therefore, the Proposed Project would not result in a cumulatively considerable degradation to the scenic vista or resources or character. Cumulative impacts are therefore **less than significant**.

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

Refer to **Sections 3.4.1** and **3.4.2** regarding local land use regulations and the affected environment, respectively.

Impact Discussion

Questions A, B, and E – Farmland and Agricultural Resources

There are no parcels within the Proposed Project's path that are currently subject to Williamson Act contracts. As discussed above, the land within the Proposed Project area is not designated as Prime Farmland, Unique Farmland, Timber land, or Farmland of Statewide Importance by the FMMP; therefore, ***no impact*** to agricultural resources would occur.

Questions C and D – Forestry Resources

As discussed above, the land within the Proposed Project area is not designated as timber or forestry land; therefore, ***no impact*** to forestry resources would occur.

Cumulative Impacts

Because the vicinity surrounding the Proposed Project is primarily urban or in recreational use with no agricultural land designations, construction of the Proposed Project would not cause conversion of Prime, Important, or Unique farmland or cause other changes in the cumulative environment that would cause conversion of agricultural land to non-agricultural land. Therefore, the Proposed Project would not contribute to cumulative impacts to agricultural resources. ***A less than significant*** cumulative impact would occur.

<u>AIR QUALITY</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Refer to **Sections 3.13.1** and **3.13.2** regarding California and local air quality regulations and the affected environment, respectively.

Impact Discussion

Questions A through E

Refer to the discussion above in **Section 3.14** regarding federal, California, and local regulation, affected environment and environmental impacts to regional air quality. Impacts associated with federal and California criteria air pollutants emissions are *less than significant*.

Cumulative Impacts

In combination with other projects in the area, operation of the Proposed Project would emit ROG and NOx criteria pollutants; however, the project falls below the screening criteria for these pollutants. The Proposed Project would have a minimal contribution to the cumulative air quality environment. Project-related operational activities in combination with other projects in the area would not emit odors; therefore, the Proposed Project would have no odor impact on the environment. Impacts would be *less than significant*.

<u>BIOLOGICAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Refer to **Sections 3.9.1** and **3.9.2** regarding California and local aesthetic resources regulations and the affected environment, respectively.

Impact Discussion

Question A – Special Status Species

The project site and/or surrounding vicinity represent potential habitat for the following special status species: the federally threatened VELB; the state threatened Swainson's hawk; the state fully protected white-tailed kite; three species of special concern, western pond turtle, purple martin, and pallid bat; and migratory birds and other birds of prey. However, with the implementation of **Mitigation Measures BR-1** through **BR-4**, adverse affects to specials status species resources would be reduced to ***less than significant with mitigation incorporated***.

Question B – Sensitive Biological Communities

The Proposed Project would remove <1 acre of riparian habitat. Riparian habitat is a sensitive natural community. With the implementation of **Mitigation Measure BR-5**, adverse affects to specials status species resources would be reduced to ***less than significant with mitigation incorporated***.

Question C – Waters of the U.S.

With the construction of the ADA accessible path to the water below the ordinary high water mark, the Proposed Project would adversely affect potential waters of the U.S. Implementation of the Proposed Action would require obtaining a Section 404 permit from the Corps, a Section 401 Water Quality Certification from the RWQCB, and a Streambed Alternation Agreement with the CDFG. Adherence to the conditions of these permits would minimize the potential for impacts to Lake Natoma (**Mitigation Measure BR-6**). Impacts would be ***less than significant with mitigation incorporated***.

Question D – Wildlife Movement and Migratory Corridors

The Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors or impede the use of native wildlife nursery sites. Impacts would be ***less than significant***.

Question E – Local Policies and Ordinances

The removal of any protected trees within the project site will have to follow mitigation measures set forth in the Folsom Tree Ordinance per Chapter 12.16 of the Folsom Municipal Code. Through the implementation of **Mitigation Measure BR-7**, the Proposed Project would not conflict with any local policies or ordinances protecting biological resources. Impacts would be ***less than significant with mitigation incorporated***.

Question F – Conservation Plans

The Proposed Project is located in Conservation and Preservation land use management zones designated by the Folsom Lake Recreation Area and Folsom Powerhouse State Historic Park. With the

implementation of **Mitigation Measures BR-1** through **BR-7**, the Proposed Project would not conflict with any conservations plans and ***no impact*** would occur (Folsom Lake SRA, 2007).

Cumulative Impacts

Cumulative projects in the vicinity of the project site would not remove significant plant and wildlife resources, and therefore would not impact special-status species and their habitat, nesting and foraging habitat for resident and migratory birds, and/or local policies or ordinances protecting biological resources. Impacts as a result of the Proposed Project do not significantly contribute to a cumulative direct or indirect loss of sensitive or special-status wildlife species and their habitat, loss of migratory birds, or conflict with local plans or policies protecting biological resources. The Proposed Project would not significantly contribute to cumulative impacts to biological resources. Impacts would be ***less than significant***.

<u>CULTURAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Refer to **Sections 3.10.1** and **3.10.2** regarding Federal, California and local cultural resource regulations and the affected environment, respectively.

A comprehensive cultural resources study was prepared for the Proposed Project. Due to its confidential nature, the document appears under a separate cover (PCI, 2011). A summary of the findings of the study appears above in **Section 3.10.2**.

Impact Discussion

Questions A-D – Cultural Resources

Significant impacts to cultural resources typically occur when important sites, features, or artifacts are lost, damaged, or destroyed without appropriate mitigation such as recordation or data recovery. Displacement or destruction of these resources will result in the loss of important information and connections to past events, people and cultures. The City, and in particular, its Historic District and American River Placer Mining District contain extensive cultural resources, including Native American archaeological sites and historical sites associated with early Euro-American, African-American, and Chinese settlements, mining, agriculture, and hydroelectric power.

There are a few known cultural resources located within and adjacent to the project site; however, they are outside of the construction area of disturbance. Project implementation would not indirectly or directly affect known cultural resources. The State Historic Preservation Office has concurred with this finding (**Confidential Appendix C**). Project implementation has the potential to affect unknown buried archaeological resources, as archaeological sites may be present with no surface manifestation. However, with the implementation of **Mitigation Measure C-1**, impacts to cultural resources would be *less than significant with mitigation incorporated*.

<u>GEOLOGY & SOILS</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known Fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to **Sections 3.5.1** and **3.5.2** regarding Federal, California and local geological resource regulations and the affected environment, respectively.

Impact Discussion

Questions A-D, and F-G – Seismic Shaking and Expansiveness

Please refer to the discussion above in **Section 3.5.3** regarding these issues. Impacts associated with seismicity, liquefaction, and expansive soils are ***less than significant***.

Question E – Erosion

Please refer to the discussion above in **Section 3.5.3** regarding this issue. With the incorporation of the provisions of the NPDES and the CVRWQCB requirements and **Mitigation Measure LR-1** in **Section 3.5.4**, impacts from the construction of the Proposed Project on soil erosion would be ***less than significant with mitigation incorporated***.

Question H – Wastewater Treatment

The Proposed Project does not include development of septic facilities or alternative wastewater treatment options. ***No impact*** to soils would occur.

Cumulative Impacts

As noted above in **Section 3.5.3**, the Proposed Project has a low probability of exposing people and structures to seismic related hazards. With the implementation of **Mitigation Measure LR-1** above in **Section 3.5.4**, the Proposed Project's impact on soils would be reduced to less than significant. Therefore, the cumulative impacts are ***less than significant***.

<u>GREENHOUSE GAS EMISSIONS</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Refer to **Sections 3.14.1** and **3.14.2** regarding California and local GHG emissions regulations and the affected environment, respectively.

Impact Discussion

Questions A and B

Refer to the discussion above in **Section 3.14** regarding federal, California, and local regulation, affected environment and environmental impacts. Impacts associated with GHG emissions are ***less than significant***.

Cumulative Impacts

By its very nature impacts from GHG emissions are cumulative, because individual project-related GHG emissions contribute to global climate change. Given construction and operation of the Proposed Project

would not conflict with any existing climate action plan, policy, or regulations nor significantly impact the environment or exceed the federal GHG emissions reporting threshold of 25,000 MT, then cumulative GHG impacts from the Proposed Project have a negligible impact on climate change and would be *less than significant*.

<u>HAZARDS & HAZARDOUS MATERIALS</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working within the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Refer to **Sections 3.6.1** and **3.6.2** regarding Federal and state hazards and hazardous materials regulations and the affected environment, respectively.

Impact Discussion

Questions A and B – Hazardous Materials

As noted above in **Sections 3.6.2** and **3.6.3**, grading and construction it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, and hydraulic fluid, would be brought and stored on-site. As with any liquid and solid, during handling and transfer from one container to another, the potential for an accidental release exists. The accidental release could pose both a hazard to construction employees as well as the environment. No hazardous materials are associated with operation of the Proposed Project. With the implementation of **Mitigation Measures HM-1** through **HM-5** in **Section 3.6.4** above, impacts associated with hazardous materials handling during construction would be *less than significant with mitigation incorporated*.

Question C – Proximity to Schools

The project would be located within one-quarter mile of the Folsom Montessori School (0.20 miles) and the American River Montessori School (0.25 miles). With the implementation of **Mitigation Measures HM-1** through **HM-5** in **Section 3.6.4** above, the Proposed Project's impact on schools located within one-quarter mile of the project site would be *less than significant with mitigation incorporated*.

Question D – Hazardous Materials Site

The Proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, *no impacts* would occur that would create a significant hazard to the public or the environment.

Questions E and F – Airport Hazards

The nearest airport to the project site is the McClellan Airfield, located approximately 12 miles southwest from the City. As such, *no impacts* would occur that would result in safety hazards for people residing or working in the project area.

Question G – Emergency Response Plans

Construction activity may cause temporary delays in traffic accessing the Lake Natoma Inn from Gold Lake Drive. Such delays would be typical for a construction project of this nature and would not interfere with an adopted emergency response plan or emergency evacuation plan. As such, *no impacts* would occur. Potential traffic impacts are discussed further in the Traffic/Transportation section.

Question H - Wildfires

Equipment used during grading and construction activities may create sparks, which could ignite dry vegetation on the project site. The Proposed Project is bordered by a developed area within the City and is within the vicinity of grassland and woodland. This risk, similar to that found at other construction sites, is considered potentially significant. **Mitigation Measures HM-4** and **HM-5** listed in **Section 3.6.4** above will reduce impacts associated with fire hazards to *less than significant with mitigation incorporated*.

Cumulative Impacts

As noted above in **Section 3.6.3**, construction of the project in combination with other similar projects has the potential to increase the risk for accidental release of hazardous materials onto the roadway. However, each project would be required to follow local, state, and federal laws pertaining to hazards and

hazardous materials. Through compliance with these laws, cumulative projects would minimize future cumulative impacts. Therefore, through full compliance with local, state, and federal laws pertaining to hazardous materials, cumulative impacts would be *less than significant*, and no mitigation is required.

<u>HYDROLOGY & WATER QUALITY</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Refer to **Sections 3.3.1** and **3.3.2** regarding Federal, California, and local water resource regulations and the affected environment, respectively.

Impact Discussion

Questions A and F – Water Quality

As noted in **Section 3.3.3**, construction equipment and materials have the potential to leak, thereby discharging pollutants into stormwater. Because grading and earth moving activities associated with the components of the Proposed Project have the potential to result in soil erosion, siltation, and contamination of stormwater, this is considered a potentially significant impact.

As stated above, to comply with the State’s NPDES General Permit, a Notice of Intent will be filed with the CVRWQCB, and a SWPPP will be prepared prior to construction. A copy of the SWPPP must be current and remain on the project site. As required by **Mitigation Measure LR-1** in the **Geology and Soils Section (3.5.4)**, the SWPPP shall identify the best management practices (BMPs) that will be used to reduce the potential for surface water contamination from construction activities. Impacts would be *less than significant with mitigation incorporated*.

Additionally, installation of the retaining walls along steep slopes and paving of the unpaved pathways would reduce erosion and sedimentation loading into the American River compared to existing conditions, thereby reducing impacts to water quality.

Question B – Groundwater

As stated in **Section 3.3.3** above, the minimal increase in impermeable surface area resulting from the construction of a paved pedestrian trail would not impact groundwater re-charge rates. *No impact* would occur.

Question C, D, and E – Drainage and Stormwater

The existing drainage pattern of the site and area would remain the same and there would not be a substantial increase in the impermeable surface area that would result in substantial erosion or siltation on- or off-site. Anticipated runoff from the proposed trail and parking areas would drain to Lake Natoma but would not result in a substantial source of polluted runoff. With the implementation of **Mitigation Measure LR-1**, impacts would be *less than significant with mitigation incorporated*.

Questions G, H, and I – Flood Hazards

As noted in **Section 3.3.4**, the Proposed Project does not involve construction of any habitable structures and would not impede or redirect flood flows nor would it expose people or structures to a significant risk of loss, injury, or death involving flooding. *No impact* would occur.

Question J – Inundation

The project is not located in an area with the potential for seiches, tsunamis, or mudflow. Therefore, impacts are *less than significant*.

Cumulative Impacts

As discussed above, the Proposed Project includes project features which reduce potential impacts associated with water quality, drainage, and flooding. With the implementation of **Mitigation Measure LR-1**, the Proposed Project’s contribution to cumulative impacts related to water quality and hydrology are would be *less than significant*.

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

Refer to **Sections 3.4.1** and **3.4.2** for local land use and planning regulations and a description of the affected environment, respectively.

Impact Discussion

Question A – Physically Divide a Community

As noted in **Section 3.4.3**, the Proposed Project would be bounded by the Folsom Historic District to the south and Lake Natoma and the American River to the north. As such, the Proposed Project would not physically divide an established community. **No impact** would occur.

Question B – Consistency with Land Use Plans

As stated in **Section 3.4.3**, the Proposed Project would be generally consistent with all applicable FLSRA General Plan policies. The Proposed Project would enhance recreational facilities adjacent to the American River, Lake Natoma, and Folsom Lake, which is consistent with the General Plan. In addition, the Proposed Project would be consistent with the City's General Plan Policy 1.6 which promotes the enhancement and maintenance of the Historic District and the 2002 Master Bikeway Plan. The project is also consistent with the recreation designation of the project area in the Parks and Recreation Master Plan. Therefore, the Proposed Project would not conflict with any applicable or adjacent land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **No impact** would occur.

Question C – Habitat and Natural Community Conservation Plans

The Proposed Project is consistent with the goals of the Folsom Lake State Recreation Area and Folsom Powerhouse State Historic Park General Plan/Resource Management Plan (Plan) which designates the project site as a management area for "conservation", or "areas whose natural and cultural resource values will be protected and restored while accommodating lower intensity recreation and interpretation that is compatible with and dependant on the resource values... resource management in conservation areas emphasizes protecting and restoring natural processes with only minor modification of non-sensitive resources permitted to accommodate additional visitor use as appropriate." Impacts to the project site would be **less than significant** and in accordance with the Plan's conservation and recreational goals.

Cumulative Impacts

Because the Proposed Project would not result in land use conflicts or inconsistencies with adopted land use plans, the project would not contribute to significant cumulative land use impacts. **No impact** would occur.

<u>MINERAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting***State***

The California Surface Mining and Reclamation Act (SMARA) is part of the California PRC, Division 2, Chapter 9, Sections 2710, et seq. SMARA requires classification and designation of land into Mineral Resource Zones (MRZs) according to the mineral potential of that area. Sections 2761 (a) and (b) and 2790 of SMARA provides a framework for classification designations that are administered by the California Division of Mines and Geology (CDMG), and the State Mining and Geology Board. Natural resources can include geologic deposits of valuable minerals used in various manufacturing processes and the production of construction materials. SMARA was enacted to limit new development in areas with significant mineral deposits and requires the state geologist to classify lands within California based on mineral resource availability. The classifications are categorized by MRZs, according to the presence or absence of significant mineral resources. The classification process disregards the existing land use or land ownership and is based solely on subsurface geology. The primary goal of classifying MRZs is to ensure local governments recognize the mineral potential of the land before making land use decisions that preclude mining of the geological resource.

Local***City General Plan***

Relevant goals and policies, contained within the City's General Plan related to mineral resources are provided below.

Policy 28.5: Where feasible, the City shall protect existing or future mining and/or gravel extraction sites from encroachment of non-compatible uses through phasing of development and performance standards. The City recognizes that, as a practical matter, the prospects for mining and/or gravel extraction are extremely unlikely in view of the restrictions upon the issuance of surface mining permits imposed by Ordinance No. 613 adopted in response to an initiative measure.

Environmental Setting

The City of Folsom includes areas mapped as closed gold mines by the State of California under the Surface Mining and Reclamation Act (SMRA). The purpose of the mapping program under SMRA is to ensure that significant mineral resources can be protected from premature and/or incompatible development and will be available for extraction. Within the project area, there are no mineral resource zones (SBCWD & WRASBC, 2004b).

Impact Discussion

Questions A and B

Construction of the Proposed Project would consist of minimal grading activities within a previously disturbed area. The Proposed Project would not result in the loss of the availability of a known mineral resource that would be of local or regional value. **No impacts** to mineral resources would occur.

Cumulative Impacts

The Proposed Project would not impact mineral resources; therefore, the project would not contribute to cumulative impacts to mineral resources. **No impact** would occur.

<u>NOISE</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to the discussion above in **Sections 3.15.1** and **3.15.2** regarding federal and local noise regulation and the affected noise environment, respectively.

Impact Discussion

Questions A, B, C, and D – Ambient Noise and Vibration

Refer to the discussion above in **Section 3.15** regarding exposure of persons to or generation of noise levels or vibration noise levels in excess of standards, a substantial temporary or periodic or permanent increase in the ambient noise level. Impacts would be ***less than significant with mitigation incorporated***.

Questions E and F – Airport Noise

The Proposed Project is not located in the vicinity of a public airport or private airstrip. ***No impacts*** would occur.

Cumulative Impacts

The Proposed Project would not place a noise source in the vicinity of noise sensitive receptors or substantially increase traffic on nearby roadways. Therefore, the Proposed Project would not contribute to adverse cumulative impacts associated with the ambient noise level.

<u>POPULATION</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to **Section 3.12.2** above for information regarding population statistics within the affected environment.

Impact Discussion

Question A – Population Growth

The Proposed Project would not provide new housing or additional infrastructure that could induce substantial population growth within the area. ***No impact*** would occur.

Questions B and C – Population Displacement

Implementation of the Proposed Project would not displace existing housing or people. ***No impacts*** would occur.

Cumulative Impacts

The Proposed Project would not induce population growth or displace existing housing or people; therefore, the project would not contribute to cumulative impacts associated with population growth. ***No impact*** would occur.

<u>PUBLIC SERVICES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to **Section 3.8.1 and 3.8.2** above for local public services regulations and a description of the affected environment, respectively.

Impact Discussion***Questions A-E – Public Services***

As stated in **Section 3.8.3**, implementation of the project would not alter or restrict public service routes. The project may attract additional public use and will include new recreation facilities which may result in some increased need for public services. However any increased demand for public services would be a less than significant impact. Reclamation, the City and State Parks will develop an operation and maintenance agreement which will address some of the above public service needs. ***A less than significant*** impact would occur.

Cumulative Impacts

As stated above, Proposed Project would not impact the public services along the project corridor in the cumulative condition; therefore, ***no impact*** would occur.

<u>RECREATION</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Refer to **Section 3.8.1 and 3.8.2** above for local public services regulations, including recreation goals and policies, and a description of the affected environment, respectively.

Impact Discussion

Questions A and B - Recreational Facilities

The Proposed Project would not result in population growth that would increase the use of regional parks and other recreational facilities. The environmental effects of project-related construction activities are identified within other sections of this document. The Proposed Project would enhance recreational activities and facilities in the project area and would not have an adverse physical effect on the recreational environment. *A less than significant* impact would occur.

Cumulative Impacts

The Proposed Project is a recreation facility and would not cause an increase in demand for regional parks or other recreational facilities so as to cause substantial physical deterioration or adverse physical effect on the environment when considered in the cumulative context. No cumulative impact would occur.

<u>TRANSPORTATION/TRAFFIC</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to the discussion above in **Section 3.14** regarding federal and local regulation and the affected environment transportation/traffic .

Impact Discussion

Questions A, B, E, and F – Conflict with Plan, Emergency Access, and Alternative Transportation

Refer to the discussion above in **Section 3.14** regarding consistency of the Proposed Project with applicable plans, ordinances, policies, congestion management programs, emergency access, and alternative transportation. A *less than significant* impact would occur.

Question C – Air Traffic Patterns

The Proposed Project would have *no impact* on air traffic patterns.

Question D – Traffic Hazards

Construction of the Proposed Project would not alter existing roadways or traffic stop control in the vicinity of the project; therefore, *no impact* would occur.

<u>UTILITIES & SERVICE SYSTEMS</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Refer to **Section 3.8.2** above for information regarding utilities and service systems within the affected environment.

Impact Discussion

Questions A – G – Utilities and Services

The Proposed Project would not generate significant quantities of solid waste. The Proposed Project would not result in a significant increase in potable water demand or wastewater generation. Construction of the Proposed Project would not require additional storm water drainage facilities or the expansion of existing facilities. **No impact** would occur.

Cumulative Impacts

The Proposed Project would not create growth in the area which would cause a need for additional water, wastewater, solid waste or utilities; therefore, **no cumulative impact** would occur.

<u>MANDATORY FINDINGS OF SIGNIFICANCE</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probably future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environment effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Questions A and C

As discussed in the previous sections, the Proposed Project would not degrade the quality of the environment, substantially reduce habitats or species, or eliminate important examples of the major cultural periods of the State. In addition, the Proposed Project would not contribute environmental effects that have substantial adverse effects on human beings. When appropriate, mitigation measures have been provided to reduce all potential impacts to a ***less than significant*** level.

Question B

Cumulative impacts and indirect effects for each resource area have been considered within the analysis of each resource area. When appropriate, mitigation measures have been provided to reduce all potential impacts to a ***less than significant*** level.

Mitigation Measures

See Mitigation Measures BR-1 through BR-7, LR-1, HM-1 through HM-5, C-1, and N-1.

5.2 Significance Determination

On the basis of the environmental evaluation presented in **Sections 3.0 and 5.0**:

- ☐ 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 to the project design and project-specific mitigation measures described in **Sections 3.0 and 5.1** have been agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION is recommended to be adopted.
- ☐ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.


Signature

David Miller
Printed Name

5/15/12
Date

City of Folsom
Lead Agency

Section 6 List of Preparers and Reviewers

6.1 Bureau of Reclamation – Lead Agency

Matthew See, Natural Resource Specialist
Chelsea Stewart, Natural Resource Specialist
Melissa Vignau, Natural Resource Manager
Peggi Brooks, Recreation Resources Manager
Dan Holsapple, Outdoor Recreation Planner

6.2 State Parks – Trustee Agency

Jim Micheals, Project Manager

6.3 City of Folsom – Lead Agency

Jim Konopka, Trail Development Coordinator

6.4 Environmental Consultants

ANALYTICAL ENVIRONMENTAL SERVICES

Principal:	David Zweig
Project Manager:	Trent Wilson
Technical Staff:	Erin Evan, Tobin Rodmin, Erin Quinn
Graphics/GIS:	Dana Hirschberg Glenn Mayfield

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APPENDICES

APPENDIX A

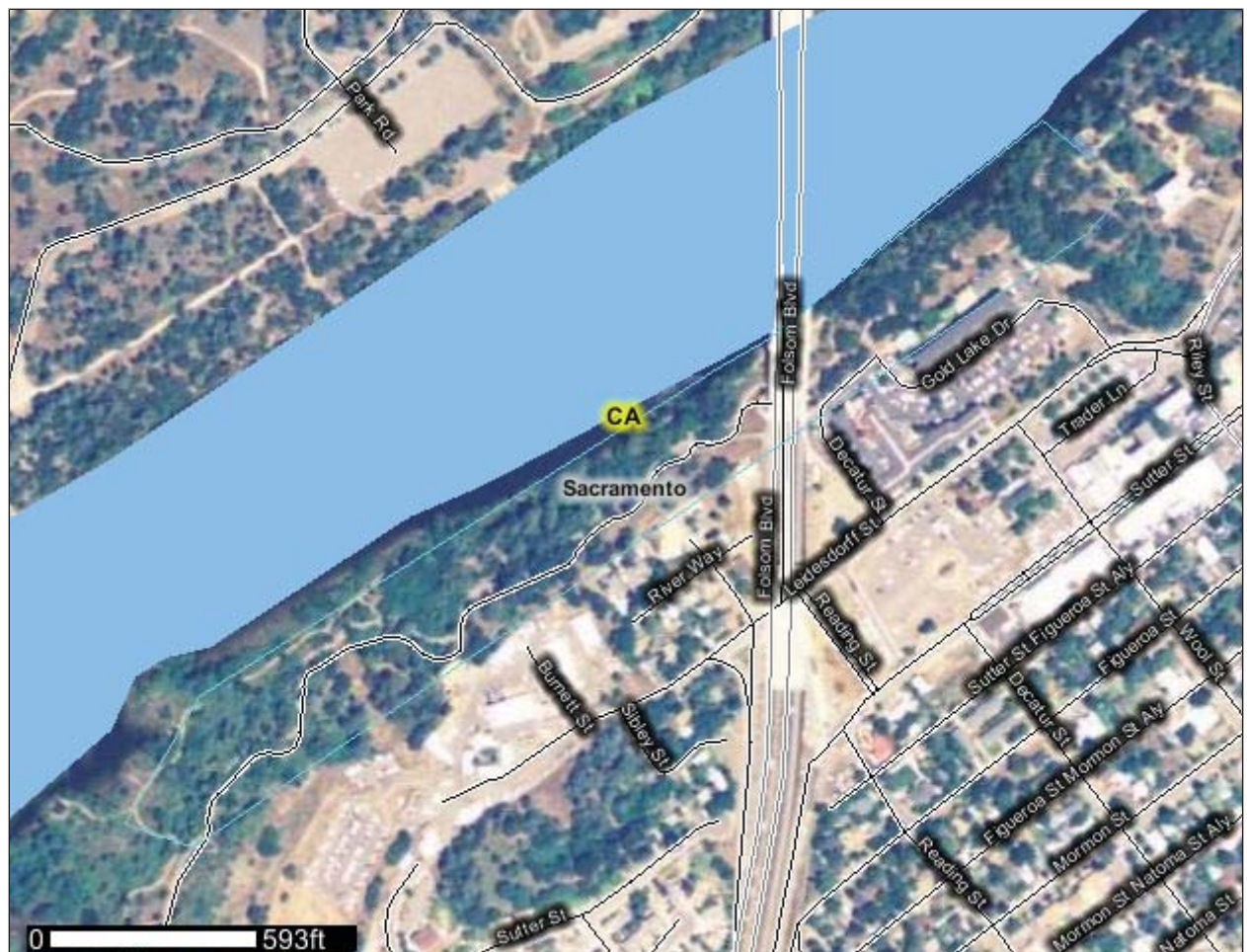
SOILS REPORT



Natural
Resources
Conservation
Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sacramento County, California



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

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Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	7
Soil Map.....	8
Legend.....	9
Map Unit Legend.....	10
Map Unit Descriptions.....	10
Sacramento County, California.....	12
194—Red Bluff-Urban land complex, 0 to 5 percent slopes.....	12
243—Xerolls, 30 to 70 percent slopes.....	13
245—Xerorthents, dredge tailings, 2 to 50 percent slopes.....	14
247—Water.....	15
Soil Information for All Uses	16
Soil Reports.....	16
Water Features.....	16
Water Features.....	16
References	20

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report
Soil Map



Custom Soil Resource Report

MAP LEGEND






















Area of Interest (AOI)




 Area of Interest (AOI)

Soils




 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

-  Very Stony Spot
-  Wet Spot
-  Other


Special Line Features

-  Gully
-  Short Steep Slope
-  Other






Political Features

-  Cities

Water Features

-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:5,200 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sacramento County, California
Survey Area Data: Version 11, Mar 19, 2012

Date(s) aerial images were photographed: 6/29/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Sacramento County, California (CA067)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
194	Red Bluff-Urban land complex, 0 to 5 percent slopes	0.0	0.1%
243	Xerolls, 30 to 70 percent slopes	15.1	67.2%
245	Xerorthents, dredge tailings, 2 to 50 percent slopes	6.7	29.8%
247	Water	0.7	3.0%
Totals for Area of Interest		22.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If

intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sacramento County, California

194—Red Bluff-Urban land complex, 0 to 5 percent slopes

Map Unit Setting

Elevation: 200 to 800 feet

Mean annual precipitation: 30 inches

Mean annual air temperature: 63 degrees F

Frost-free period: 250 to 280 days

Map Unit Composition

Red bluff and similar soils: 50 percent

Urban land: 35 percent

Minor components: 15 percent

Description of Red Bluff

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Moderate (about 7.9 inches)

Interpretive groups

Land capability (nonirrigated): 3e

Typical profile

0 to 8 inches: Loam

8 to 25 inches: Clay loam

25 to 43 inches: Clay loam

43 to 68 inches: Gravelly clay loam

Description of Urban Land

Interpretive groups

Land capability (nonirrigated): 8

Typical profile

0 to 6 inches: Variable

Minor Components

Hicksville

Percent of map unit: 4 percent

Redding

Percent of map unit: 4 percent

Xerorthents

Percent of map unit: 4 percent

Unnamed

Percent of map unit: 1 percent

Landform: Depressions

Hardpan below 40 inches

Percent of map unit: 1 percent

Steeper slopes, unnamed

Percent of map unit: 1 percent

243—Xerolls, 30 to 70 percent slopes

Map Unit Setting

Elevation: 500 to 2,500 feet

Mean annual precipitation: 18 to 20 inches

Mean annual air temperature: 61 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Xerolls and similar soils: 90 percent

Minor components: 10 percent

Description of Xerolls

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Riser

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Colluvium derived from granite

Properties and qualities

Slope: 30 to 70 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 0.0 inches)

Interpretive groups

Land capability (nonirrigated): 7e

Typical profile

0 to 60 inches: Variable

Minor Components

Andregg

Percent of map unit: 2 percent

Auburn

Percent of map unit: 2 percent

Fiddymment

Percent of map unit: 2 percent

Kaseberg

Percent of map unit: 2 percent

Red bluff

Percent of map unit: 1 percent

Gentler slopes,, unnamed

Percent of map unit: 1 percent

245—Xerorthents, dredge tailings, 2 to 50 percent slopes

Map Unit Setting

Elevation: 80 to 400 feet

Mean annual precipitation: 18 to 20 inches

Mean annual air temperature: 61 degrees F

Frost-free period: 250 to 300 days

Map Unit Composition

Xerorthents, dredge tailings, and similar soils: 90 percent

Minor components: 10 percent

Description of Xerorthents, Dredge Tailings

Setting

Parent material: Mine spoil or earthy fill

Properties and qualities

Slope: 2 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.2 inches)

Interpretive groups

Land capability (nonirrigated): 8s

Typical profile

0 to 60 inches: Fragmental material

Minor Components

Natomas

Percent of map unit: 2 percent

Red bluff

Percent of map unit: 2 percent

Rossmoor

Percent of map unit: 2 percent

Riverwash

Percent of map unit: 1 percent

Landform: Channels

Slickens

Percent of map unit: 1 percent

Landform: Depressions

Xerofluvents

Percent of map unit: 1 percent

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Redding

Percent of map unit: 1 percent

247—Water

Map Unit Composition

Water: 100 percent

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Water Features

This folder contains tabular reports that present soil hydrology information. The reports (tables) include all selected map units and components for each map unit. Water Features include ponding frequency, flooding frequency, and depth to water table.

Water Features

This table gives estimates of various soil water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Surface runoff refers to the loss of water from an area by flow over the land surface. Surface runoff classes are based on slope, climate, and vegetative cover. The concept indicates relative runoff for very specific conditions. It is assumed that the surface of the soil is bare and that the retention of surface water resulting from irregularities in the ground surface is minimal. The classes are negligible, very low, low, medium, high, and very high.

The *months* in the table indicate the portion of the year in which a water table, ponding, and/or flooding is most likely to be a concern.

Water table refers to a saturated zone in the soil. The water features table indicates, by month, depth to the top (*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. The table indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

Custom Soil Resource Report

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Custom Soil Resource Report

Water Features— Sacramento County, California										
Map unit symbol and soil name	Hydrologic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface depth	Duration	Frequency	Duration	Frequency
				<i>Ft</i>	<i>Ft</i>	<i>Ft</i>				
194—Red Bluff-Urban land complex, 0 to 5 percent slopes										
Red bluff	C	Medium	Jan-Dec	—	—	—	—	None	—	—
Urban land	—	—	Jan-Dec	—	—	—	—	None	—	—
243—Xerolls, 30 to 70 percent slopes										
Xerolls	—	—	Jan-Dec	—	—	—	—	None	—	—
245—Xerorthents, dredge tailings, 2 to 50 percent slopes										
Xerorthents, dredge tailings	A	Low	Jan-Dec	—	—	—	—	None	—	—
247—Water										
Water	—	Very high	Jan-Dec	—	—	—	—	None	—	—

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APPENDIX B

BIOLOGICAL ASSESSMENT



Lake Natoma Waterfront and Trail Access Enhancement Project

Biological Resources Assessment

Prepared for:

City of Folsom
Parks and Recreation Department
50 Natoma Street
Folsom, CA 95630

June 28, 2011

Prepared by:

Parus Consulting
1508 Eureka Road, Suite 170
Roseville, California 95661
916.782.5818

TABLE OF CONTENTS

INTRODUCTION.....	1
Project Location and Description	1
Purpose and Scope	1
Regulatory Setting	2
Special-status Species Regulations	2
Jurisdictional Water Resources	3
Local Ordinances, Regulations, and Statutes	4
ENVIRONMENTAL SETTING	4
METHODOLOGY	5
Preliminary Data Gathering and Research	5
Field Survey.....	5
Mapping and Other Analysis.....	6
RESULTS	6
Inventory of Flora and Fauna from Field Surveys.....	6
Vegetation Communities and Habitat Types	6
Developed/Ruderal	6
Blue Oak/Gray Pine Woodland and Mixed-Oak Woodland.....	7
Riparian Woodland	7
Special-status Habitats	7
SPECIAL-STATUS SPECIES.....	7
Historical Special-status Species' Occurrences	7
Special-status Species Observed During Field Survey	8
Analyses of Likelihood of Occurrence of Special-status Species	8
Potentially Jurisdictional Water Resources	9
IMPACT ANALYSES AND MITIGATION MEASURES	10
Impact Significance Criteria	10
Impact Analysis.....	10
Potential Impact #1 – Impacts to Special-status Habitats	11
Potential Impact #2 – Impacts to Oak Trees	11
Potential Impact #3 – Impacts to Special-status Species	12
Potential Impact # 4 – Direct/Indirect Adverse Effects on Nesting Birds (and Bats)	14
Potential Impact # 5 – Impacts to Jurisdictional Water Resources.....	14

SUMMARY	15
REFERENCES.....	18
QUALIFICATIONS OF BIOLOGIST	20

FIGURES

Figure 1. Location of Study Area	21
Figure 2. Study Area and Proposed Trails on Aerial Photo Background	22
Figure 3. Habitats/Vegetation Communities in the Study Area	23
Figure 4. Location of Elderberry Shrubs plus a 100-ft Buffer.....	25
Figure 5. Historic Occurrences of Special Status Species	26
Figure 6. Water Features within the Study Area.....	27

TABLES

Table 1. List of Plants Seen During Field Surveys within Study Area.....	28
Table 2. List of Animals Seen During Field Surveys within Study Area.....	32
Table 3. Summary of Likelihood for Special-status Species to Occur in Study Area.....	33

APPENDICES

APPENDIX A: Botanical Survey

INTRODUCTION

PROJECT LOCATION AND DESCRIPTION

Parus Consulting, Inc. was retained by the City of Folsom Parks and Recreation Department to conduct a biological resources assessment for the Lake Natoma Waterfront and Trail Access Enhancement Project in the City of Folsom, Sacramento County, California (Figure 1). The 9.5-acre project Study Area is located on federal lands administered by the United States Bureau of Reclamation and is adjacent to Lake Natoma at the Natoma Crossing Bridge, the Lake Natoma Inn, and the City of Folsom's Historic District and corporation yard (Figure 2).

The project is proposed by the City of Folsom in partnership with the California Department of Parks and Recreation and the United States Bureau of Reclamation. The proposed project would entail construction of a paved multi-use trail along the Lake Natoma shoreline, native plant restoration, scenic overlooks, interpretive kiosks and signs, and a lighted walkway that extends from the existing Natoma Crossing Bridge on Folsom Boulevard to a scenic overlook below the bridge and is compliant with the Americans with Disabilities Act (ADA) of 1990. The new trail will replace an approximately 3,100-foot (944-meter) existing dirt trail and connect at its western extent to the existing multi-use, paved American River Parkway Trail. Current plans call for a concrete walking surface of 6 feet (1.8 meters) in width. The lighted walkway will descend from the Natoma Crossing Bridge to the level of the existing dirt path on the lower terrace above the lakeshore.

PURPOSE AND SCOPE

In support of the environmental review process, Parus Consulting, Inc. has prepared this assessment to provide information on biological resources within the Study Area. This assessment identifies the biological resources within the Study Area, the regulatory environment affecting such resources, any potential project-related impacts upon these resources, and identifies mitigation measures to reduce these impacts. The specific scope of services performed for this Biological Resources Assessment consisted of the following tasks:

- Compile all readily-available historical biological resource information about the Study Area;
- Spatially query state and federal databases for any historical occurrences of special-status species or habitats within the Study Area and vicinity;
- Perform a reconnaissance-level field survey of the Study Area, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present within the Study Area, including any potentially-jurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

The scope of services is limited to those outlined above, and does not include other services, such as focused or protocol-level surveys for special-status species.

REGULATORY SETTING

The following section summarizes applicable regulations of biological resources on real property in California.

Special-status Species Regulations

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service implement the Federal Endangered Species Act of 1973 (FESA) (16 United States Code [USC] §1531 *et seq.*). Threatened and endangered species on the federal list (50 Code of Federal Regulations [CFR] §17.11, 17.12) are protected from ~~take~~ (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however, USFWS advises that a candidate species could be elevated to listed status at any time, and therefore applicants should regard these species with special consideration.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code §2050 *et seq.*, and California Code of Regulations [CCR] Title 14, §670.2, 670.51) prohibits ~~take~~ (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, the California Department of Fish and Game (CDFG) has the responsibility for maintaining a list of threatened and endangered species designated under state law (California Fish and Game Code §2070). CDFG also maintains lists of species of special concern, which serve as ~~wake~~ lists.” Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present in the Study Area and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

California Fish and Game Code sections 4700, 5050, and 5515 designate certain mammal, amphibian, and reptile species ~~fully protected~~,” making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (California Fish and Game Code §1900 *et seq.*) requires CDFG to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFG at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. California Fish and Game Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. Fish and Game Code Section 3511 designates certain bird species —fullyprotected,” making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or trade in parts of these species.

California Environmental Quality Act (CEQA) (Public Resources Code §15380) defines —are” in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFG can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect and provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing (§15380). Plant species on the California Native Plant Society (CNPS) Lists 1A, 1B, or 2 are typically considered rare under CEQA. California —Species of Special Concern” is a category conferred by CDFG on those species that are indicators of regional habitat changes or may be protected species in the future. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.

Jurisdictional Water Resources

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into —waters of the United States.” Waters of the United States includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the United States, especially wetlands. The permitting program is designed to minimize impacts to waters of the United States, and when impacts cannot be avoided, requires compensatory mitigation. The United States Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the

proposed activity will comply with State water quality standards. The California State Water Resources Control Board is responsible for administering CWA Section 401 regulations. Any construction project that disturbs at least one acre of land requires enrollment in the state's general permitting program under the National Pollutant Discharge Elimination System and implementation of a storm water pollution prevention plan.

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable waters of the United States, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601-1607) protects fishery resources by regulating *any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.*" CDFG requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of *waters of the State.*" The limit of CDFG jurisdiction is subject to the judgment of CDFG; currently, this jurisdiction is interpreted to be the *stream zone,*" defined as *that portion of the stream channel that restricts lateral movement of water*" and delineated at *the top of the bank or the outer edge of any riparian vegetation, whichever is more landward.*" CDFG reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFG and the applicant is the Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

Local Ordinances, Regulations, and Statutes

No applicable local ordinances, regulations, or statutes were identified that would apply to the Study Area; the Study Area is on federal land.

ENVIRONMENTAL SETTING

The Study Area is located at the boundary between the Sacramento Valley geographic subregion and the Sierra Nevada Foothills geographic subregion, both of which are contained within the larger California Floristic Province (Hickman, 1993). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately-cold winters with occasional frosts.

The project is located along the Lake Natoma shoreline, and adjacent to the Natoma Crossing Bridge, the Lake Natoma Inn, and the City of Folsom's Historic District. The Study Area is located in an unsectioned portion of Township 10 North, Range 7 East on the 1980 Folsom USGS 7.5-minute topographic map (Mount Diablo Base); the elevation ranges from approximately 140 feet to 160 feet above mean sea level. The Study Area is divided into two terraces rising above Lake Natoma and sloping downward from south to north with slopes ranging from 5 to 65 degrees. There is an existing paved multi-use trail (American River Parkway Trail) that sits on the upper terrace and numerous dirt trails along the lower terrace. At present, a stepped walkway made of railroad-ties descends from the upper terrace to the dirt trail on the lower terrace, and there is a series of six wooden bike/pedestrian bridges along the dirt trail.

The surrounding land uses are as follows: to the south, residential areas and the Historic Folsom commercial district; to the west, the city's Corporation Yard and residential areas; to the north, Lake Natoma, Negro Bar State Recreation Area, and residential and commercial districts; and to east, Folsom Powerhouse State Park and residential areas.

METHODOLOGY

PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Study Area or vicinity;
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Study Area and vicinity;
- Aerial photography of the Study Area; and
- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription to CDFG.

FIELD SURVEY

Numerous reconnaissance-level field surveys were conducted. On February 3 and 12, 2011, Dr. G.O. Graening and Allison Ferkovich (both with California State University, Sacramento, Department of Biological Sciences) conducted the first site surveys. Dr. Graening also performed site surveys on March 14, and April 18, 2011. A focused botanical survey was performed on April 15, 2011, by Dr. Mike Baad and Jim Alford (both with California State University, Sacramento, Department of Biological Sciences), with Dr. Graening assisting and performing a concurrent wildlife survey. A follow-up botanical survey was performed on April 17 and May 2, 2011, by Jim Alford, to identify to species those plants with later blooming periods, such as *Clarkia*.

The site surveys were complete coverage, variable-intensity pedestrian surveys. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Binoculars and field lenses were used as needed. Survey efforts emphasized the search for any special-status species that had documented occurrences in the CNDDB within the vicinity of the Study Area. When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Taxonomic determinations were facilitated by referencing museum specimens or by various texts, including the following: Powell and Hogue (1979); Pavlik (1991); Hickman (1993); Brenzel (2001); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Calflora (2007); CDFG (2007b,c); NatureServe 2007; and University of California at Berkeley (2007a,b).

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system receiver. Habitat types occurring in the Study Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Study Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats.

MAPPING AND OTHER ANALYSIS

Locations of species' occurrences and habitat boundaries within the Study Area were recorded on color aerial photographs, and then digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Study Area were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 9.3, ESRI, Inc.). Vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). Wetlands and other aquatic habitats were classified using USFWS National Wetlands Inventory Classification System for Wetland and Deepwater Habitats, or "Cowardin class" (Cowardin et al. 1979; USFWS 2007). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the USACE Wetlands Delineation Manual (Environmental Laboratory 1987). Wildlife habitats were classified according to the CDFG's California Wildlife Habitat Relationships System (CDFG 2007c). Species' habitat requirements and life histories were identified using the following sources: Hickman (1993); CNPS (2009), Calflora (2009); CDFG (2009a,b,c); and University of California at Berkeley (2009a,b).

RESULTS

INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEYS

All plants and animals sighted during the reconnaissance-level field surveys of the Study Area are listed in Table 1 and Table 2, respectively. Note that the dates of field surveys may not coincide with every blooming period of regionally-occurring special-status plant species. Secretive wildlife species that require long observation periods to detect may not have been observed due to the limited survey time and constant movement of the survey team. In addition, nocturnal species were not observed because the survey was conducted during daylight hours.

VEGETATION COMMUNITIES AND HABITAT TYPES

The Study Area contains three primary vegetation communities and corresponding habitat types: ruderal/developed; blue oak/gray pine woodland; and riparian woodland. These habitat types are discussed in detail in the following text and are delineated in Figure 3A and Figure 3B.

Developed/Ruderal

Vegetation within this habitat type consists primarily of nonnative weedy or invasive ruderal species or agricultural/ornamental plants lacking a consistent community structure. This habitat is classified as Holland vegetation type "Urban- 11100," and "Urban and Barren" wildlife habitat types by the California Wildlife Habitat Relationships classification scheme. This habitat type provides limited resources for wildlife and is utilized primarily by species tolerant of human activities. The disturbed and altered condition of these lands greatly reduces their habitat value and ability to sustain rare plants or diverse wildlife assemblages. However, common, disturbance-tolerant species do occur in these lands. Small patches of annual grassland are also present, and consist of non-native pasture grasses such as barley (*Hordeum* sp.), bromes (*Bromus* spp.), oats (*Avena* spp.), and fescue (*Festuca* sp.) and forbs such as filaree (*Erodium botrys*) and

turkey mullein (*Eremocarpus setigerus*). Numerous wildlife species use grasslands for foraging and breeding.

Blue Oak/Gray Pine Woodland and Mixed-Oak Woodland

In oak-pine woodland habitat, the dominant canopy trees are usually interior live oak (*Quercus wislizenii*), blue oak (*Q. douglasii*), and gray pine (*Pinus sabiniana*). Other prominent vegetation included Himalayan blackberry (*Rubus discolor*), poison oak (*Toxicodendron diversilobum*), blue elderberry (*Sambucus mexicanus*), toyon (*Heteromeles arbutifolia*), and wild grape (*Vitis californica*). This habitat provides important refuge and foraging areas for wildlife.

Riparian Woodland

Riparian woodland is found along the shores of Lake Natoma on the lower terrace of the Study Area. The overstory tree species were cottonwood (*Populus fremontii*), willows (*Salix* spp.), box elder (*Acer negundo*), white alder (*Alnus rhombifolia*), and some oaks (*Quercus* spp.). The primary understory vegetation is wild grape and Himalayan blackberry. This habitat provides important resources for wildlife.

Special-status Habitats

No special-status habitats were detected within the Study Area other than elderberry shrubs (Figure 4). The following special-status habitats were reported by CNDDDB (CDFG 2011) within the surrounding quadrangles: Alkali Meadow, Alkali Seep, Northern Hardpan Vernal Pool, Northern Volcanic Mud Flow Vernal Pool, and Valley Needlegrass Grassland (Figure 5).

The Study Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

SPECIAL-STATUS SPECIES

For the purposes of this assessment, —special status” is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under FESA;
- Listed as endangered, threatened, rare, or proposed for listing, under CESA of 1970;
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFG; or
- Plants listed as rare under the California Native Plant Protection Act.

Historical Special-status Species’ Occurrences

A list of special-status plant and animal species that historically occurred within the Study Area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Study Area;
- Informal consultation with USFWS by generating an electronic Species List (available on the applicable Field Office website); and
- A spatial query of the CNDDDB.

To determine which special-status plant species have been reported in the vicinity of the Study Area, CDFG's CNDDDB was spatially queried using geographic information system software for the USGS 7.5 degree-minute topographic quadrangle of the Study Area—Folsom—and the surrounding 8 quadrangles: Roseville, Rocklin, Pilot Hill, Citrus Heights, Clarksville, Carmichael, Buffalo Creek, and Folsom SE. All reported occurrences of special-status species were plotted in relation to the Study Area boundary (Figure 5). The combined species list is presented in Table 3.

Special-status Species Observed During Field Survey

During the field surveys in February, March, and April 2011, no special-status species were observed within the Study Area. The botanical survey report by Dr. Baad and J. Alford (2011) made the following conclusions and recommendations:

—No rare species were detected during these botanical surveys. It is our opinion that no further botanical surveys need to be performed for rare or protected plants.”

However, on April 4, 2011, a valley elderberry longhorn beetle (VELB; *Desmocerus californicus dimorphus*) was sighted and photographed on an elderberry shrub in the Study Area (on the paved bike path junction just west of the Natoma Crossing Bridge) by the project's architectural staff—Erik Smith and Joy Reinsch (both with Callander Associates)—their photo is presented below. Ten blue elderberry shrubs exist within the Study Area (Figure 4).



Analyses of Likelihood of Occurrence of Special-status Species

The special-status species identified through records review were further assessed for their likelihood to occur within the Study Area based upon previously documented occurrences, field surveys, their habitat requirements, and the quality and extent of any suitable habitat within the Study Area. Each species was ranked for its likelihood to occur within the Study Area: a “high” rank was given for species where current field surveys have positively identified the species within the Study Area, where there have been previously documented occurrences within the Study Area, and/or where essential habitat elements exist within the Study Area; a “moderate” rank was given for species that were not detected during current field surveys, but where there have been previously documented occurrences within the Study Area or vicinity, and where preferred habitat elements exist within the Study Area; a “low” rank was given for species with

no known observations within the Study Area or vicinity, as well as where habitat elements exist within the Study Area or vicinity, but the quality of that habitat is degraded or of poor quality, and/or where Study Area conditions and land uses deter use of the Study Area; and an “unlikely” rank was given for species with no known observations within the Study Area or vicinity, and where no suitable habitat exists within the Study Area. The results of these analyses are summarized in Table 3.

The following special-status species were determined to have a moderate or high likelihood of occurrence within the Study Area: Cooper's hawk (*Accipiter cooperii*), northwestern pond turtle (*Actinemys marmorata marmorata*), tricolored blackbird (*Agelaius tricolor*), great egret (*Ardea alba*), great blue heron (*A. herodias*), Swainson's hawk (*Buteo swainsoni*), Brandegee's clarkia (*Clarkia biloba brandegeae*), VELB, white-tailed kite (*Elanus leucurus*), merlin (*Falco columbarius*), bald eagle (*Haliaeetus leucocephalus*), silver-haired bat (*Lasionycteris noctivagans*), California black rail (*Laterallus jamaicensis coturniculus*), double-crested cormorant (*Phalacrocorax auritus*), California red-legged frog (CRLF; *Rana draytonii*), and bank swallow (*Riparia riparia*).

POTENTIALLY JURISDICTIONAL WATER RESOURCES

An informal assessment for the presence of potentially-jurisdictional water resources within the Study Area was also conducted during the field surveys. The various water resources detected within the Study Area are mapped in Figure 6 and consist of the following:

- Lacustrine wetlands occur along the entire shoreline of Lake Natoma within the Study Area. The boundary consists of the lower and upper pool heights of Lake Natoma, depending upon releases from Nimbus Dam. Dominant hydrophytes include diffuse rush, iris leafed rush, horsetail, common reed, and cattail. Where the lacustrine wetlands end, the riparian gallery forest begins. These features are anticipated to be jurisdictional under federal and state law.
- A freshwater marsh is located on the western end of the Study Area, and is an extension of the lacustrine wetlands. This low area is probably a depression formed from historical placer dredge mining. Brambles (Himalayan and California blackberry [*Rubus ursinus*]) are the dominant vegetation; willows are also common. This feature is anticipated to be jurisdictional under federal and state law.
- At least three springs discharge perched groundwater that apparently originates within fractured bedrock and placer mining tailings. This groundwater does not appear to be connected to the city's municipal stormwater system, according to Betty Marchbanks (Engineering Technician, City of Folsom Public Works Department), who provided utility maps of their municipal stormwater system. These features are anticipated to be jurisdictional under federal and state law.
- An intermittent stream is located on the eastern boundary of the Study Area. The city's municipal stormwater system does discharge stormwater via corrugated metal pipes into the intermittent stream on the eastern boundary of the Study Area, apparently at three different outfalls. This feature is anticipated to be jurisdictional under federal and state law.
- Municipal Stormwater System. The City's municipal stormwater system discharges stormwater via corrugated metal pipes into the intermittent stream on the eastern boundary of the Study Area, as well as another location at the Light Rail Station parking

lot just west of the Natoma Crossing Bridge. Stormwater is also discharged to a detention pond under the Natoma Crossing Bridge at the south abutments. Stormwater features are not expected to be jurisdictional under federal or state law.

No vernal pools or other isolated wetlands were identified within the Study Area.

Note that Lake Natoma has previously been determined to be a navigable waterbody as defined by the CWA and subject to the jurisdiction of USACE. Lake Natoma is also a water of the state, and is protected under the Porter-Cologne Act, and the stream zone (to the outer limit of riparian vegetation) is protected under Section 1600 of the Fish and Game Code.

IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, analyzes potential project-related impacts upon the known biological resources within the Study Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from project-related impacts. As defined by CEQA, the project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a special-status species in local or regional plans, policies, or regulations, or by USFWS or CDFG;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by USFWS or CDFG;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- Conflict with any county or municipal policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved governmental habitat conservation plan.

IMPACT ANALYSIS

The final designs for the bike/pedestrian trail and the ADA-compliant walkway are currently underway. This impact analysis evaluates the general potential for project implementation to adversely affect biological resources based on the criteria set forth above. Two development scenarios were analyzed: 1) no construction or development activities would occur within, or create a disturbance to, waters of the United States or waters of the State; and 2) construction and

development activities would require in-stream work, such as the placement of culverts at stream crossings or the installation of a boat ramp.

Potential Impact #1 – Impacts to Special-status Habitats

No special-status habitats were detected within the Study Area other than elderberry shrubs (Figure 4) and riparian habitat. Potential impacts to valley elderberry longhorn beetle are discussed in the special-status species impact category. The Study Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Lake Natoma and its tributary channels are waters of the United States, and the channels and banks (up to the ordinary high water mark) are protected under the CWA. Project construction may require the modification of channels or the lakeshore, or require the placement of fill, all of which are potentially significant impacts.

Lake Natoma and its tributary channels are also waters of the State, and their riparian habitats are protected under Section 1600 et seq. of the Fish and Game Code. This regulation protects the “Stream Zone,” which is defined as the habitat from the edge of the waterbody to the outer edge of its riparian vegetation. Project construction may require the destruction of riparian vegetation, which is a potentially significant impact.

Recommended Mitigation Measures For Impact #1

Project design and implementation would ideally avoid all water resources and riparian vegetation. Construction or development activities that occur with the ordinary high water mark of channels and reservoirs will require a CWA 404 Section Permit and CWA Section 401 Water Quality Certification. A formal delineation report of jurisdictional waters should be performed to demarcate and enumerate the exact boundaries of channels and lake levels. Impacts to channels and banks should be calculated, and mitigation proposed according to USACE guidelines.

Any significant destruction of riparian vegetation within the stream zone will require permission from CDFG. A formal delineation report of jurisdictional waters should be performed to demarcate and enumerate the exact boundaries of channels and stream zones. Impacts to channels and stream zones should be calculated, and mitigation proposed. When the project proponent and CDFG agree upon the conditions of the permit, the conditions are formalized into a Streambed Alteration Agreement.

Implementation of the avoidance, minimization, and compensatory mitigation measures specified in the Streambed Alteration Agreement and/or CWA permits will reduce impacts to riparian habitats and stream zones to a less than significant level.

Potential Impact #2 – Impacts to Oak Trees

Preparation of the Study Area for trail development will involve site grading and other ground disturbances that may require removal of existing trees, pruning of tree limbs, trenching of tree roots, or soil compaction within the drip zone of trees. This is a potentially significant impact.

The United States Bureau of Reclamation typically requires mitigation for native oak trees, but does not have a standard policy for defining impacts and mitigation; instead, local tree ordinances are often used. Therefore, the City of Folsom’s Tree Preservation Ordinance (Folsom Municipal Code 12.16 et seq.)(City of Folsom, 2007) was applied as the impact and mitigation criteria. The city’s Tree Preservation Ordinance protects the following tree resources:

- "Heritage tree" - a native oak tree over 19 inches in diameter at breast height (DBH) or a multi-trunked native oak tree having an aggregate diameter of 38 inches or more DBH;

- "Landmark tree" - a tree or group of trees determined by the City Council to be a significant community benefit;
- "Native oak tree" - any oak tree over 6 inches DBH of the species valley oak (*Quercus lobata*), blue oak, interior live oak, or hybrids thereof, or a multi-trunked native oak tree having an aggregate diameter of 20 inches DBH or more; or
- "Street tree" - any tree growing within the City's tree maintenance strip and contained on the master tree list.

Removal of protected trees or ground disturbance within a protected tree's protected zone (defined as the protected tree's dripline plus 1 additional radial foot) would be considered a significant impact under this ordinance.

Recommended Mitigation Measures For Impact #2

Project implementation may require removal of protected trees or ground disturbance their protected zones. Such activities require a City Tree Permit and compensatory mitigation for loss of tree resources. Compensatory mitigation off-site consists of one of the following mitigation measures:

- Payment into the Tree Planting and Replacement Fund of an inch-for-diameter-inch replacement in-lieu fee, as set by city council resolution;
- Dedication of property for the purpose of planting trees based on the following ratio: 1 diameter inch = .004 acres of land (175 square feet) - the minimum area of dedication for such property shall be 5 acres of land, unless the property is contiguous to existing or planned open space, in which case the minimum dedication is 1 acre of land; off-site mitigation of this type must be approved by the city council; or
- Planting of trees on either public property, property with a conservation easement, or on property with an irrevocable offer of dedication to the city, pursuant to the ratios set forth in the Tree Ordinance.

Obtaining a City Tree Permit and implementing compensatory mitigation will reduce adverse impacts upon oak tree resources to a less than significant level.

Potential Impact #3 – Impacts to Special-status Species

The following special-status species were determined to have a moderate or high likelihood of occurrence within the Study Area: VELB, Cooper's hawk, northwestern pond turtle, tricolored blackbird, great egret, great blue heron, Swainson's hawk, Brandegee's clarkia, white-tailed kite, merlin, bald eagle, silver-haired bat, California black rail, double-crested cormorant, CRLF, and bank swallow. Although most of these species were not detected in field surveys, they could be present at the time of construction and may result in take (harassment, injury, or mortality) by construction activities. This is a potentially significant impact.

Impacts to Federally Threatened Special-status Species

VELB is federally listed as threatened. Its obligate host plants are a species of elderberry shrub, and suitable habitat is considered to be any stems greater than 1 inch on these multi-stemmed plants. The CNDDDB reported several historical VELB occurrences within 2 miles of the Study Area, and ten blue elderberry shrubs exist within the Study Area (Figure 4). One VELB was spotted on an elderberry shrub on the paved bikepath junction just west of the Natoma Crossing Bridge. Ground-disturbing activities may be necessary for project implementation within 100 feet of an elderberry shrub, which is the threshold distance that USFWS has determined might

result in take (harassment, injury, or mortality) of this listed species. This is a potentially significant impact.

CRLF is federally listed as threatened. Suitable habitat (marshes; slow-moving water; areas with plant cover such as willows and cattails) exists with the Study Area. Project construction areas are adjacent to suitable habitat, and project construction areas may function as dispersal corridors. Proposed trails cross three intermittent/ephemeral streams. Ground disturbance and other construction areas could result in take of CRLFs or disturb suitable habitat; this is a potentially significant impact.

Recommended Mitigation Measures For Impact #3

A pre-construction survey for special-status species is recommended to ensure that the construction footprint is clear of protected species.

USFWS (1999) guidelines state that consultation with the USFWS is necessary if construction-related disturbance will occur within 100 feet of elderberry shrubs. This consultation process should begin with correspondence with the USFWS to develop a habitat conservation plan that minimizes the project's direct and indirect impacts to VELB and compensates for any project-related loss of habitat. USFWS (1999) established mitigation requirements for the loss of VELB habitat. The guidelines specify, in the following order, avoidance, protection, transplantation, and compensatory mitigation, as measures to mitigate for impacts to VELB. An incidental take permit is typically not required as long as ground disturbance activities occur outside of the VELB emergence and mating period (March 15 – June 15) and the disturbance remains at least 20 feet from the shrub, and avoidance and protection measures are implemented, including the installation of exclusionary fencing and signage around the shrub and performing worker awareness training. Implementation of these USFWS-approved mitigation measures will reduce any adverse impacts upon VELB to a less than significant level. With implementation of these mitigation measures, the recommended USFWS consultation determination is “No Effect” upon VELB.

To ensure that no CRLFs are present in the study area when construction begins, a preconstruction survey should be conducted within the area to be disturbed, including under all construction vehicles that have been on the site overnight. If any CRLFs are found during pre-construction surveys or during construction, all construction activities should cease and USFWS should be notified. To prevent CRLFs from moving through the project site during construction, temporary exclusion fencing should be placed around all defined work areas two days prior to the start of construction activities and immediately after the pre-construction survey, under the supervision of a qualified biologist. The fence should be made of a material that does not allow CRLFs to pass through, and the bottom should be buried to a depth of 2 inches so that this species cannot crawl under the fence. To avoid potential entanglement, the use of plastic monofilament netting should be prohibited. Any frogs found along and outside the fence should be closely monitored until they move away from the construction area. Biologists handling the species must be in possession of appropriate federal and state permits to move the species. Implementation of these mitigation measures will reduce any adverse impacts upon CRLFs to a less than significant level. With implementation of these mitigation measures, the recommended ESA consultation determination is “No Effect” upon CRLF for a project description that has no in-stream work and requires no jurisdictional waters permits. If the project description has in-stream work and requires jurisdictional waters permits, the recommended ESA consultation

determination is —NotLikely To Adversely Effect” with implementation of these mitigation measures.

Potential Impact # 4 – Direct/Indirect Adverse Effects on Nesting Birds (and Bats)

Special-status bird and bat species were reported by the CNDDB or USFWS in the vicinity of the Study Area, including Cooper's hawk, tricolored blackbird, great egret, great blue heron, Swainson's hawk, white-tailed kite, merlin, bald eagle, California black rail, double-crested cormorant, and bank swallow, as well as silver-haired bat.

The Study Area contains suitable nesting habitat for many bird species (and some bat species) because of the presence of trees, poles, mature oak/pine forest, and riparian canopy. Previously-used/abandoned nests were sighted within the Study Area; no active nests were observed during field surveys. If construction activities are conducted during the nesting season, nesting birds (or bats) could be directly impacted by removal of trees, and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, project construction is considered a potentially significant adverse impact.

Recommended Mitigation Measures For Impact # 4

If construction activities occur during the nesting season (usually March to September), pre-construction surveys for the presence of special-status bird or bat species, or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFG should be consulted to develop measures to avoid “take” of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

Potential Impact # 5 – Impacts to Jurisdictional Water Resources

The informal assessment of the Study Area identified several potentially-jurisdictional water features in the Study Area:

- Lacustrine wetlands occur along the entire shoreline of Lake Natoma within the Study Area; a freshwater marsh is located on the western end of this shoreline.
- Three springs discharge groundwater and feed ephemeral or intermittent streams that flow to Lake Natoma.
- An intermittent stream is located on the eastern boundary of the Study Area and flows to Lake Natoma.

Note that Lake Natoma has previously been determined to be a navigable waterbody as defined by the CWA and subject to the jurisdiction of USACE. Lake Natoma is also a water of the State, and is protected under the Porter-Cologne Act, and the stream zone (to the outer limit of riparian vegetation) is protected under Section 1600 et seq. of the Fish and Game Code.

Project construction areas are adjacent to potentially jurisdictional water resources as well as Lake Natoma, which is subject to federal and state jurisdiction and protection. Proposed trails cross three intermittent/ephemeral channels that are potentially jurisdictional water resources. Unless project design and implementation can completely avoid the water resources in the Study Area, the project may result in the alteration of channels and/or the discharge of fill material into potentially jurisdictional waters (intermittent/ephemeral channels), which would be a significant adverse impact.

During construction of the proposed project, surface water or ground water quality has the potential to be degraded due to storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potentially significant impact.

However, because the proposed project's construction footprint is larger than 1 acre in area, such construction is regulated by the State Water Resources Control Board's National Pollutant Discharge Elimination System General Permit For Storm Water Discharges Associated With Construction And Land Disturbance Activities (Order No. 2009-0009-DWQ). The city and its general contractor must file a Notice of Intent to enroll under the permit prior to the initiation of construction. In conjunction with enrollment under this permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures will reduce potential construction-related impacts to water quality to a less than significant level. No mitigation is necessary.

Recommended Mitigation Measures For Impact # 5

Project design and implementation would ideally avoid all water resources. Bridges that span the intermittent or ephemeral drainages could be designed and installed to avoid the channels entirely. This would entail building abutments in uplands beyond the high water mark and spanning the channels with pre-formed or pre-cast bridges.

Any alteration or degradation of a streambank or the placement of fill within the ordinary high water mark, will require permits from the USACE. A formal delineation report of jurisdictional waters should be performed to demarcate and enumerate the exact boundaries of channels and stream zones. The jurisdictional water delineation should be verified by USACE. Impacts to channels and stream zones should be calculated, and mitigation proposed according to USACE guidelines.

A CWA 404 permit must be obtained (Nationwide Permit or Individual Permit) before construction begins. CWA 401 water quality certification by the SWRCB will also be necessary if a federal permit is to be issued. A Streambed Alteration Agreement will also be needed if channels or stream zones are impacted. Mitigation measures must ensure that project impacts are minimized, and that compensatory mitigation results in no net loss of jurisdictional waters. Implementation of the mitigation measures required for permit issuance will reduce impacts to channels and stream zones to a less than significant level.

SUMMARY

Parus Consulting, Inc. has prepared a biological resources assessment for the proposed Lake Natoma Waterfront and Trail Access Enhancement Project, which involves construction of a paved multi-use trail along the Lake Natoma shoreline, native plant restoration, scenic overlooks, interpretive kiosks and signs, and an ADA-compliant walkway. The Study Area is approximately 9.5-acres, and is located along the Lake Natoma shoreline adjacent to the Natoma Crossing Bridge, the Lake Natoma Inn, and the City of Folsom's Historic District, in Sacramento County, California. Field surveys were conducted by Dr. G.O. Graening on February 3 and 12, March 14, and April 18, 2011. A focused botanical survey was performed on April 15 and 17, 2011, by Dr. Mike Baad and Jim Alford.

It should be noted that the project's architectural design was not available at the time that this assessment of biological resources was conducted. Therefore, the impact analysis evaluates the general potential for project implementation to adversely affect biological resources. Additional study of the special-status habitats identified in the Study Area (elderberry shrubs and wetland features) is recommended, as well as a pre-construction survey for special-status species.

Habitat types occurring on the property were mapped and consist primarily of ruderal/developed, blue oak/gray pine woodland, and riparian woodland. Preparation of the Study Area for trail development will involve site grading and other ground disturbances that may impact native oak trees; this is a potentially significant impact. It is anticipated that a City Tree Permit and compensatory mitigation will be required for removal or other impacts to oak tree resources.

A list of 55 regionally occurring special-status plant and animal species was compiled based on a review of pertinent literature, informal consultation with the USFWS, and database queries. Habitat requirements were assessed for each species and compared to the habitats occurring within the property and surrounding vicinity. This analysis determined that the Study Area contains a moderate to high potential for 15 special-status species to occur, primarily bird species.

During field assessments, no special-status plant species were detected, and no additional botanical surveys were recommended by the consulting botanists. Additionally, with the exception of one VELB that was sighted on an elderberry shrub in the Study Area (on the paved bikepath junction just west of the Natoma Crossing Bridge), no special-status animal species were detected. However, the various special-status species determined to have a moderate or high likelihood of occurrence within the Study Area that were not detected in field surveys could still be present at the time of construction. This is a potentially significant impact. A pre-construction survey for special-status species is recommended to ensure that the construction footprint is clear of protected species.

Based upon significance criteria and available data, VELB and CRLF were determined to be potentially adversely impacted by the proposed project. Ground-disturbing activities within 100 feet of an elderberry shrub may be necessary for project implementation, which is the threshold distance that USFWS has determined might result take of this listed species. This is a potentially significant impact. USFWS should be consulted; implementation USFWS-approved mitigation measures will reduce any adverse impacts upon VELB to a less than significant level.

Project construction areas are adjacent to suitable CRLF habitat and may function as dispersal corridors. Construction, including ground disturbance, could result in take of CRLF or disturbance of suitable habitat; this is a potentially significant impact. To ensure that no CRLF are present in the study area when construction begins, a preconstruction survey should be conducted. To prevent CRLF from moving through the project site during construction, temporary exclusion fencing should be installed and biological monitoring employed. Implementation of these mitigation measures will reduce any adverse impacts upon CRLF to a less than significant level.

The Study Area contains suitable nesting habitat for many bird species (and one bat species). Previously-used/abandoned nests were sighted within the Study Area; no active nests were observed during field surveys. If construction activities are conducted during the nesting season, nesting birds (or bats) could be directly impacted by removal of trees, and indirectly impacted by noise, vibration, and other construction-related disturbance. Pre-construction surveys for the presence of special-status bird or bat species, or any nesting bird species, should be conducted by

a qualified biologist. If active nests are identified, CDFG should be consulted to develop measures to avoid “take” of active nests prior to the initiation of any construction activities.

An informal assessment for the presence of potentially-jurisdictional water resources identified several potentially jurisdictional water features in the Study Area: lacustrine wetlands and one marsh occur along the entire shoreline of Lake Natoma within the Study Area; three springs discharge groundwater and feed ephemeral or intermittent streams that flow to Lake Natoma; and an intermittent stream is located on the eastern boundary of the Study Area and flows to Lake Natoma. Riparian habitats are protected under state law, and project construction may require the destruction of riparian vegetation, which is a potentially significant impact. Project design and implementation would ideally avoid all water resources and riparian vegetation. Any significant destruction of riparian vegetation within the stream zone will require a Streambed Alteration Agreement with CDFG and mitigation measures. A formal delineation report of jurisdictional waters should be performed, as well as a CWA 404 Section Permit and Section 401 Water Quality Certification. Implementation of the mitigation measures specified in the agreement (and any other permits) will reduce impacts to riparian habitats and stream zones to a less than significant level.

Further, unless project design and implementation can completely avoid the water resources in the Study Area, the project may result in the alteration of channels and/or the discharge of fill material into potentially jurisdictional waters (intermittent/ephemeral channels), which would be a significant adverse impact. Bridges that span the intermittent or ephemeral drainages could be designed and installed to avoid the channels entirely. This would entail building abutments in uplands beyond the high water mark and spanning the channels with pre-formed or pre-cast bridges.

Any alteration or degradation of a streambank, or the placement of fill within the ordinary high water mark, will require permits from regulatory agencies. As discussed above, a formal delineation report of jurisdictional waters should be performed and verified by USACE, and a CWA 404 permit must be obtained (Nationwide Permit or Individual Permit) before construction begins. CWA 401 water quality certification by the SWRCB will also be necessary if a federal permit is to be issued. A Streambed Alteration Agreement with CDFG will be needed if channels or stream zones are impacted. Mitigation measures must ensure that project impacts are minimized, and that compensatory mitigation results in no net loss of jurisdictional waters. Implementation of the mitigation measures required for permit issuance will reduce impacts to channels and stream zones to a less than significant level.

During construction of the proposed project, surface water or ground water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potentially significant impact. However, because the proposed project’s construction footprint is larger than 1 acre in area, such construction is regulated by the State Water Resources Control Board’s General Permit for Storm Water Discharges Associated with Construction (Order No. 2009-0009-DWQ). The City and its general contractor must enroll under this permit, and create and implement a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures will reduce potential construction-related impacts to water quality to a less than significant level.

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Figure 1. Location of Study Area

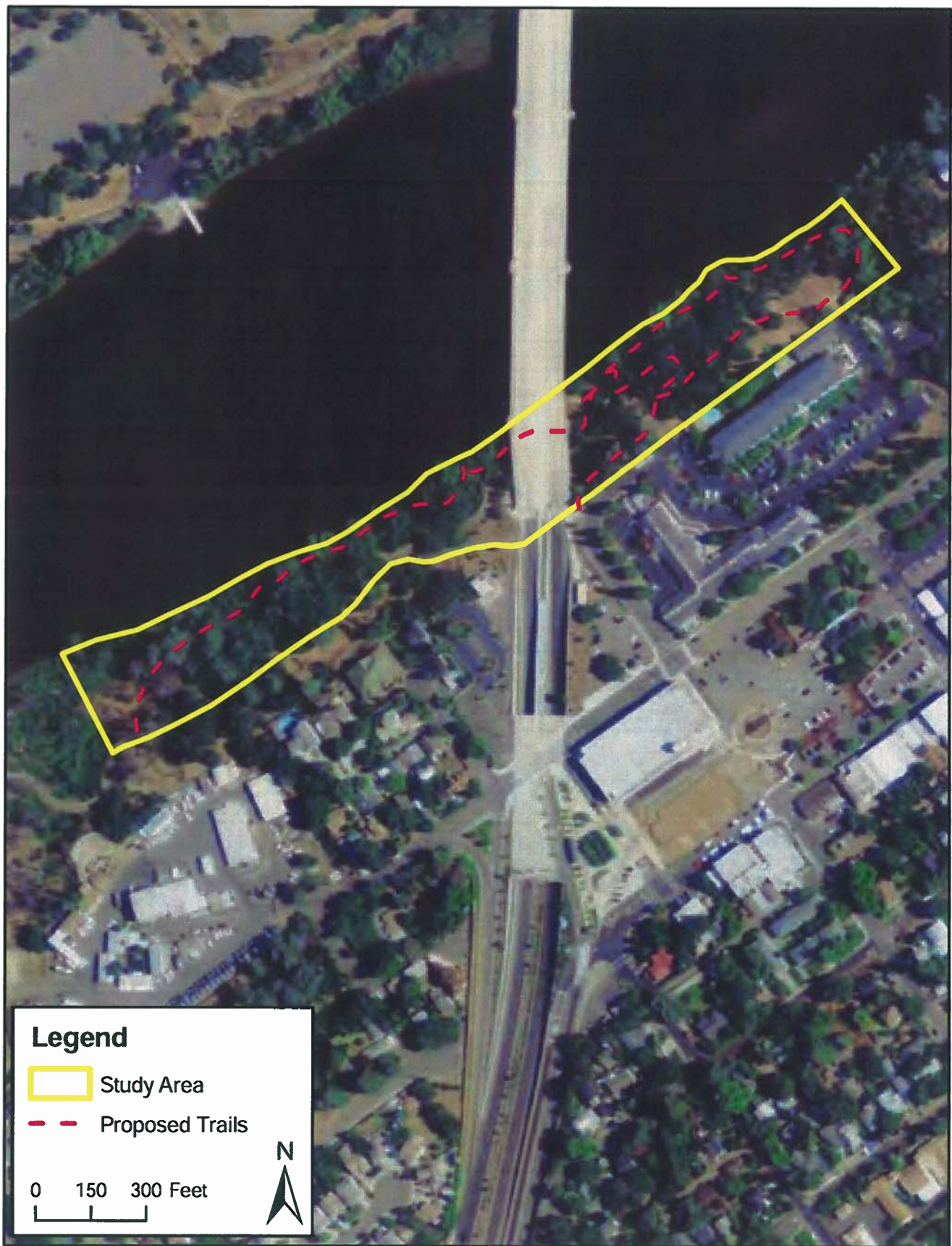


Figure 2. Study Area and Proposed Trails on Aerial Photo Background

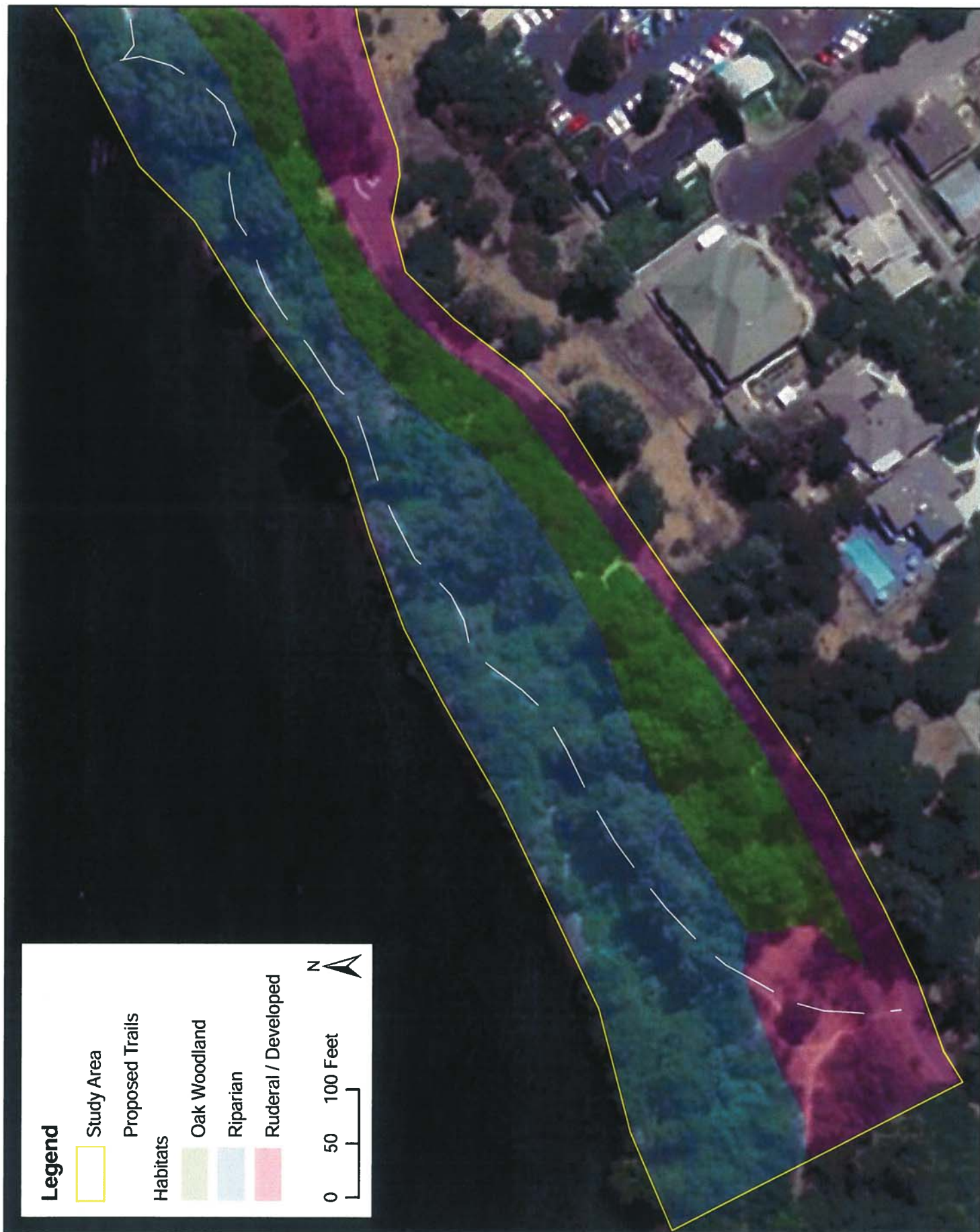


Exhibit 3a. Habitats / Vegetation Communities in Study Area, West Half

APPENDIX C

***CONFIDENTIAL CULTURAL RESOURCE EVALUATION/STATE
HISTORIC PRESERVATION OFFICE CONCURRENCE LETTER***

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED		
AUG 17 2011		
CODE	ACTION	SURNAME & DATE
150	✓	Aug 8/18/2011



August 15, 2011

Reply in Reference To: BUR110617A

Anastasia Leigh - Acting Regional Environmental Officer
United States Department of the Interior
Bureau of Reclamation, Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

Re: MP-153, ENV-3.00; Proposed Improvements to the *Lake Natoma Waterfront Trail near downtown Folsom, Folsom, California* (Project No. 11-CCAO-071)

Dear Ms. Leigh:

Thank you for consulting pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA). The Bureau of Reclamation (BUR) is the lead Federal agency for the current undertaking and is seeking concurrence on (1) the delineation of the Area of Potential Effect (APE), (2) resource identification efforts, (3) concurrence on the ineligibility of historic sites P-34-1388 and -2256, and (4) concurrence on a finding of "No Adverse Effect" pursuant to 36 CFR Part 800.5(b) for the above undertaking.

Your report titled *Cultural Resources Inventory and Evaluation for the Proposed Lake Natoma Waterfront Trail Access Project, City of Folsom Parks and Recreation Department, Sacramento County, California* prepared by Sikes and Arrington (2011) documents cultural resource management work completed for the above referenced undertaking. As proposed, the undertaking is adjacent the south shore of Lake Natoma and involves upgrading recreation facilities to ADA specification by asphalt paving 0.6-of a mile of existing trail, installing an unspecified number of scenic overlooks and interpretive kiosks, and planting native plant species.

The current undertaking is divided into direct and indirect APEs with the former encompassing the above mentioned construction activities and the latter comprising an additional 0.25-of a mile radius of land. Resource identification efforts involved historic and prehistoric research; searches of pertinent records on file at the North Central Information Center; a Native American Heritage Commission (NAHC) search for sacred-lands and contacts; consultation with the (eight) NAHC identified tribes; field-survey; site record updates; and, National Register evaluations. Background research and field-work identified the following nine previously recorded historic sites:

Direct APE

- Ca-Sac-426H The remains of Folsom China Town
- Ca-Sac-308H A historic mining site
- P-34-1388 A historic dump
- P-34-2256 Remnants of the Negro Bar Community
- P-34-2267 A mid-19th century granite quarry
- P-34-2271 Historic placer mining features

Indirect APE

- Ca-Sac-429H Old Folsom Powerhouse
- P-34-2434 Rainbow Bridge
- PHI-798 Negro Bar California

Class	PHI No. 798
Project	214
Control No.	11064349
Field I.D.	1141982-1
Date Input & Initials	8/15/2011

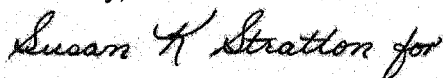
After reviewing the aforementioned report, I have the following comments:

1. Pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d), I find the Area of Potential Effect (APE) for the current undertaking properly determined and documented.

2. Pursuant to 36 CFR Part 800.4(b)(1), I find the *Level of Effort* discussed above appropriate for identifying historic properties in the APE.
3. I find the undertaking will not affect historic sites P-34-2256 and -2271 as field-survey could not relocate their archaeological remains and concluded the sites had been obliterated by a combination of historic and contemporary activities.
4. I **concur** with the ineligibility of historic sites P-34-1388 and -2267 as the BUR applied the *Criteria for Evaluation* found at 36 CFR Part 60.4 and found the sites ineligible due to their limited data potentials. Site P-34-1388 is a relatively small (2710.0-m²) historic dump associated with the city of Folsom that dates between the late 1800s and 1940. Field-survey indicated the site had been heavily looted and largely contains machine made bottles and jars, and sanitary cans. Site P-34-2267 consists only of two granite boulders (one split and both exhibiting drill holes) that might be the sole remains of the mid-19th century quarry.
5. I find the undertaking will not impact the consensus determined eligibility of Ca-Sac-308H as a search of pertinent OHP files indicated the singular locus affected by proposed work (Locus-5) was previously determined ineligible with SHPO concurrence under BUR090237. Please be advised the BUR will have additional future responsibilities for the undertaking if the project is redesigned to involve other loci of the site.
6. As I understand, the proposed undertaking will avoid site components of Ca-Sac-426H and archaeological monitoring will be implemented during project work. As such, I find the undertaking will not affect the properties contributing to the site's eligibility. Please be advised the BUR will have additional future responsibilities for the undertaking if the project is redesigned to involve components (features, artifacts, etc.) of the site and/or monitoring results in post-review discoveries of archaeological remains.
7. Historic resources Ca-Sac-429H, P-34-2434 and PHI-798 located in the indirect APE will not have their National Register values affected by the undertaking's activities.
8. Please be advised the BUR may have additional responsibilities for compliance with 36 CFR Part 800 should the current project design change in methodological and/or geographical scope from that described in the current submittal.
9. Based on the above comments, I **concur** with the BUR's finding of "*No Adverse Effect*", pursuant to 36 CFR Part 800.5(b), for the current undertaking.
10. Please be advised that whenever a submittal states a property has been previously determined eligible or ineligible, it should always include copies of the SHPO review letter as verification of consensus determination.

Thank you for considering historic properties as part of your project planning. Please contact Tristan Tozer at (916) 445-7027 or by email at ttozer@parks.ca.gov, or Jeff Brooke at (916) 445-7003 or by email at jbrooke@parks.ca.gov of my staff if you have any questions or concerns.

Sincerely,



Milford Wayne Donaldson, FAIA
State Historic Preservation Officer