



COMMUNITY DEVELOPMENT
DEPARTMENT

ENVIRONMENTAL PLANNING
SERVICES

CITY OF SACRAMENTO
CALIFORNIA

300 Richards Boulevard
Third Floor
Sacramento, CA 95811

MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

City of Sacramento Water Treatment Plants Rehabilitation Project (Z14006000) (SCH No. 2011112039)

The proposed project would replace old and unreliable facilities, construct miscellaneous improvements at Sacramento River WTP and construct solids handling and dewatering improvements at Sacramento River WTP and Fairbairn WTP.

E.A. Fairbairn Water Treatment Plant (Fairbairn WTP) is located immediately east of California State University at Sacramento (CSUS). The Sacramento River Water Treatment Plant (Sacramento River WTP) is located east of Interstate 5 near Richards Boulevard. See Attachment 1 for Regional Location, Attachment 2 for Sacramento River WTP Project Location, and Attachment 3 for Fairbairn WTP Project Location.

Assessor Parcel Numbers:

Fairbairn Plant: 005-0010-011, -012

Sacramento River Plant: 001-0210-038, 001-0064-015,
001-0210-024 and 001-0061-025 (SHRA Parcels)

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required.

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14,



Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892), and the Sacramento City Code. The public review period is January 18, 2012 to February 17, 2012. Comments should be submitted to:

Attn: Scott Johnson, Associate Planner
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-5842
srjohnson@cityofsacramento.org

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 from 9:00 a.m. to 4:00 p.m. (or 8:00 a.m. to 5:00 p.m. with prior arrangement). The document is available online at <http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/>

Environmental Services Manager, City of Sacramento,
California, a municipal corporation

By: 

Date: 1/17/2012

**CITY OF SACRAMENTO
WATER TREATMENT PLANTS
REHABILITATION PROJECT (Z14006000)
(SCH #2011112039)**

**INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT
PROJECTS UNDER THE 2030 GENERAL PLAN MASTER EIR**

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 *et seq.*), CEQA Guidelines (Title 14, Section 15000 *et seq.* of the California Code of Regulations) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2030 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

SECTION I - BACKGROUND

Project Name: Sacramento Water Treatment Plants Rehabilitation Project

Project Location: E.A. Fairbairn Water Treatment Plant (Fairbairn WTP) is located immediately east of California State University at Sacramento (CSUS). The Sacramento River Water Treatment Plant (Sacramento River WTP) is located east of Interstate 5 near Richards Boulevard. See Attachment 1 for Regional Location, Attachment 2 for Sacramento River WTP Project Location, and Attachment 3 for Fairbairn WTP Project Location.

Assessor Parcel Numbers:

Fairbairn Plant: 005-0010-011, -012

Sacramento River Plant: 001-0210-038, 001-0064-015,
001-0210-024 and 001-0061-025 (SHRA Parcels)

Project Proponent: City of Sacramento, Department of Utilities

Project Manager: Bill Zehnder, Senior Engineer, Department of Utilities
Telephone: (916) 808-1910;
email: bzehnder@cityofsacramento.org

Environmental Planner: Scott Johnson, Associate Planner
Community Development Department
Telephone: (916) 808-5842;
email: srjohnson@cityofsacramento.org

Date Initial Study Completed:

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 1500 *et seq.*). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2030 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2030 General Plan. See CEQA Guidelines Section 15176 (b) and (d).

The City has prepared the attached Initial Study to (a) review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2030 General Plan

Master EIR to determine their adequacy for the project (see CEQA Guidelines Section 15178(b),(c)) and (b) identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines Section 15177(d)). The Master EIR mitigation measures that are identified as appropriate are set forth in the applicable technical sections below.

This analysis incorporates by reference the general discussion portions of the 2030 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at: www.cityofsacramento.org/dsd/planning/environmental-review/eirs/.

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Due to the time limits mandated by state law, your response must be sent at the earliest possible date, but no later than the 30-day review period ending Friday, February 17, 2012.

Please send written responses to:

Attn: Scott Johnson, Associate Planner
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-5842
[srjohnson@cityofsacramento.org](mailto:sjohnson@cityofsacramento.org)

SECTION II - PROJECT DESCRIPTION

Project Background

The City of Sacramento (City) provides water to more than 132,000 customer accounts servicing approximately 480,000 people. The City's goal is to ensure a safe and reliable water supply to the people.

Approximately eighty-five percent (85%) of Sacramento's drinking water comes from two water treatment plants. One of the treatment plants, E.A. Fairbairn Water Treatment Plant (Fairbairn WTP), is along the American River (adjacent to California State University at Sacramento) and the second, Sacramento River Water Treatment Plant (Sacramento River WTP), is adjacent to the Sacramento River (located on the east side of Interstate 5 just north of the Railyards site). Intake structures located in the rivers pump "raw water" to these plants for treatment. See Attachment 1, Regional Location of Treatment Plants; Attachment 2, Sacramento River WTP Project Location; and Attachment 3, Fairbairn WTP Project Location.

The Sacramento River WTP was originally constructed in the 1920s, with major plant expansions in the 1930s and in 2003. The 2003 project expanded the plant to a design capacity of 160 million gallons per day (mgd), but did not address the aging condition of the existing facilities. The Fairbairn WTP was originally constructed in the 1960s and expanded in 2004.

The facilities at the existing treatment plants, some of which have been in operation for 80 to 90 years, are becoming less reliable and in some cases failing, and therefore are in need of replacement. Because of the inadequacy of these aged facilities, the City is unable to operate either plant to the full design capacity and efficiently maintain the plant. A failure at either of the facilities could present water supply problems, including pressure reduction, and water shortages throughout the City.

In addition to replacing aged infrastructure, there is inadequate space on each of the treatment plant sites to continue the current process of solar drying the solids generated in the treatment process.

CITY'S WATER TREATMENT PROCESS

The City's two treatment plants obtain water from either the American River (Fairbairn WTP) or Sacramento River (Sacramento River WTP). Intake structures located in the river pump "raw water" to the treatment plants using electrically driven pumps. The intake structures have fish screens installed to prevent fish from being drawn into the pumps.

Following diversion from the river, the raw water enters a grit basin, which removes debris and larger suspended sediment. Solid loads are usually low during the non-rainy season, but increase during periods of heavy rain because of sediment runoff into the rivers. Solids removed from the grit basins are discharged to sludge lagoons or hauled off to landfills.

The water then flows to the flocculation / sedimentation basin. Before the water enters the flocculation section of the basin, a coagulant is added. When the water enters into the basin, the coagulant causes sediment in the water to stick together to form "flocs." As more of the sediment combines bigger and heavier flocs are created which ultimately settle out to the bottom of the sedimentation basin.

The particles that settle out of the water to the bottom of the sedimentation basin combine to form what is called "sludge." This sludge is collected mechanically and pumped to sludge lagoons. In these lagoons, which are large holding areas, the sun bakes by the sludge allowing the water to remove. Once dried out sufficiently, the sludge is hauled to a landfill for use as landfill daily cover. The current process requires an extensive amount of land to spread the sludge, as well as, equipment and labor to mix it. Because of the limited land available, unpredictability of the weather, and the labor intensity of the operation, this process is not cost effective or reliable.

After water exits the flocculation/sedimentation basin it enters the filter beds, where it flows through sand and anthracite coal to further remove particles from the water. The filters are backwashed periodically to remove sediment retained in the sand.

Once water has passed through the sand filters, it enters a reservoir that serves as the primary area for providing post-treatment disinfectant (i.e., chlorine) contact (Contact Basin, or CT). Other chemicals, in addition to chlorine, are also added to the water at this location, including, fluoride for preventative dental care and lime for pH adjustment and softening.

After the treated water flows through the Contact Basin its treatment is complete, and it is ready for distribution to customers. Storage reservoirs are utilized to provide capacity to respond to the substantial flow rate changes that occur through the day and for response to emergency conditions.

Pumps then deliver treated water from the reservoirs to the distribution system.

PROJECT DESCRIPTION

The proposed project would replace old and unreliable facilities, construct miscellaneous improvements at Sacramento River WTP and construct solids handling and dewatering improvements at Sacramento River WTP and Fairbairn WTP.

Sacramento River WTP Improvements

Two parcels of land totaling approximately three acres, located on the east side of the Sacramento River WTP would be acquired to provide additional space for treatment facilities.

Existing facilities at Sacramento River WTP are identified in Attachment 4, and proposed facilities are identified in Attachment 5.

- A. The water intake for the Sacramento River WTP is located west of Interstate 5 in the Sacramento River. The project includes upgrade of the electrical service to the intake structure and addition of variable frequency drives on the pumps to improve operation and efficiency. All work would be completed within the footprint of existing facilities. No excavation into new areas would occur.

The project would decommission the flocculation and sedimentation Basin 1 and leave it in place. Existing Basin 2 would be demolished, and a new flocculation and sedimentation basin constructed.

The existing filtration building (West Filter Building) constructed in 1920s and 1930s would be decommissioned and left in place. The rehabilitation project includes construction of a new filtration building to the west of the existing East Filter Building, constructed in 2003.

The existing pump station, which was constructed in the 1920s, would be taken out of service and left in place. The project includes construction of a new pump station and electrical building that would convey the treated water from the plant to the City's water distribution system. To construct the new pump station an existing vacant building on the site, which previously housed the City's 911 Call Center, would be demolished. The existing diesel-powered backup generator, which provides power to the treatment plant in the event of a power outage, would remain onsite, but would be relocated to the location of the new pump station and electrical building.

Because of the lack of land available on the treatment plant site to solar dry the solids generated in the treatment process, this project would construct more effective and reliable solids handling and mechanical dewatering facilities. These facilities include tanks that mix the sludge generated from the filter backwash and sedimentation basins. The mixed sludge would then be pumped to a new building that houses centrifuge equipment which spins the sludge, extracting a significant portion of the water. From there the sludge is transferred to an open area, Sludge Lagoon No. 4, where the sludge is dried and later hauled to a landfill. Sludge Lagoon No. 4 requires expansion to the east to ensure enough area to spread and dry the sludge. The existing filter washwater Basins Nos. 1 and 2 would also be retrofitted with mechanical sludge collection systems to allow regular removal of settled sludge and transfer to the solids handling facility.

The project also includes various electrical and operating system improvements that will achieve greater efficiency and reliability.

Fairbairn WTP Improvements

Attachment 6 shows the existing facilities and Attachment 7 shows the proposed improvements at the Fairbairn WTP site.

The existing filter washwater basins would be retrofitted with mechanical sludge collection systems to allow regular removal of settled sludge and transfer to the solids handling facility. A new dewatering building would be constructed. As with the Sacramento River WTP, the project would include various electrical and operating system improvements that will achieve greater

efficiency and reliability.

Construction

Construction of the proposed project would take approximately three years. The first two years would consist of demolition of obsolete facilities, and construction and installation of new structures and systems. The final year would involve installation of equipment and extensive testing of the facility to ensure proper operation.

Excavation, demolition and construction activities at each of the plant sites would be conducted in compliance with the City noise control provisions as set forth in Chapter 8.68 of the City Code. The City Code provides that such activities are exempt from the provisions of the noise control ordinance during the following periods:

Monday through Saturday: 7:00 a.m. to 6:00 p.m.;

Sunday: 9:00 a.m. to 6:00 p.m.

Because of soil conditions at the Sacramento River WTP site, new buildings foundations would require the use of piles, and pile driving would occur as part of construction. Pile foundations would not be required at the Fairbairn WTP site.

Permits

The City of Sacramento would be required to obtain permits from the following agencies as part of the project:

- U.S. Fish and Wildlife Service (USFWS) Incidental Take Permit Associated with a Habitat Conservation Plan (HCP).
- State of California, Department of Public Health (CDPH).
- Sacramento Metropolitan Air Quality Management District - Rule 902 -removal of Regulated Asbestos Containing Materials (RACM) in renovations and demolitions.

Attachments

Attachment 1	Regional Location of Water Treatment Plants
Attachment 2	Sacramento River WTP Project Location
Attachment 3	Fairbairn WTP Project Location
Attachment 4	Sacramento River WTP Existing Improvements
Attachment 5	Sacramento River WTP Proposed Improvements
Attachment 6	Fairbairn WTP Existing Improvements
Attachment 7	Fairbairn WTP Proposed Improvements
Attachment 8	URBEMIS Modeling Results
Attachment 9a	VELB Survey (Ascent Environmental, Inc., 09/16/11)
Attachment 9b	VELB Recommendations Report (Ascent Environmental, Inc., 12/08/11)
Attachment 10	NOP and Responses

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

2030 GENERAL PLAN AND MASTER ENVIRONMENTAL IMPACT REPORT (MASTER EIR)

The City Council adopted the 2030 General Plan, and certified the Master EIR for the general plan, in March 2009. The 2030 General Plan and Master EIR may be reviewed at www.sacgp.org, and at the offices of the Community Development Department, 300 Richards Boulevard, Sacramento, CA 95814.

The general plan guides development in the City and establishes policy guidance for various aspects of life in the community. The general plan, for example, includes policies relating to transportation (Mobility Element), preservation of historic resources (Historic and Cultural Resources Element) and coordination with other agencies in providing public services (Public Health and Safety Element).

The Master EIR evaluated the potential environmental effects of development and activities that could occur as a result of the adoption of the 2030 General Plan. The Master EIR focused on cumulative effects, growth-inducing effects, and irreversible significant effects on the environment. (CEQA Guidelines section 15175(a))

This Initial Study has been prepared to (a) determine whether the analysis of cumulative impacts, growth inducing impacts and irreversible significant effects in the Master EIR is adequate for the proposed water treatment plan rehabilitation project, (b) identify any significant effects that could result from the project that have not been identified in the Master EIR, and (c) determine whether mitigation can be identified and implemented that would reduce such impacts to a less-than-significant level. (CEQA Guidelines section 15178). If the issues identified in (a) have been adequately analyzed in the Master EIR, the remaining analysis focuses on project-specific impacts that could result from the project.

Cumulative Impacts, Growth Inducing Impacts, Irreversible Significant Effects

The Master EIR identified the conditions existing at the time of the preparation of the Master EIR. For example, the Master EIR indicated that the census figures for 2000 showed a population in the City of 407,018, and estimated that the 2025 population of the City would be 527,990. (Master EIR, Table 5-1). Growth in population would be accompanied by construction of new residential dwellings, as well as a growth in employment.

The 2030 General Plan established categories of land use and development density, and applied these to properties within the City. The exact manner in which any particular parcel would be developed, or when, was unknown. Likewise, the analysis of the particular characteristics of any particular parcel of land (e.g., topography, proximity to roadways) was beyond the scope of the Master EIR. The Master EIR, therefore, focused on the overall development that could occur, and the effects that such development could have on a cumulative basis. The Master EIR considered, as well, the overall impact of such development in terms of irreversible changes in the environment that could occur.

Also considered in the Master EIR were growth inducing effects. In some cases, new development requires the extension of infrastructure (e.g., water lines, sewer lines) to serve new development. In some cases, this infrastructure may extend well beyond existing service areas, and may provide encouragement to others to develop those parcels bypassed by the new development. In such cases, the extension of infrastructure induces new growth, which is a physical effect. New development may also induce growth more generally by increasing employment and economic activity.

Analyzing growth inducement at a project level is difficult, because individual projects, in most cases, are not large enough to have measurable impacts in the economy. The more effective analysis is at the general plan level where the long-term plans for growth and infrastructure development can be better assessed.

Cumulative impacts; irreversible significant effects

The proposed project would rehabilitate the City of Sacramento's water treatment plants on the American River (E.A. Fairbairn Water Treatment Plant) and the Sacramento River (Sacramento River Water Treatment Plant). Water treatment plants are rated at a specified maximum capacity for treatment in millions of gallons per day (mgd). Fairbairn WTP is rated for 200 mgd; Sacramento River WTP is rated for 160 mgd. Each plant operates subject to a permit issued by the State Department of Health Services.

The proposed project would not result in any increase in the rated capacity of either plant. Rather, the project would rehabilitate some treatment facilities on each site that are aged and in need of upgrading or replacement, and install new facilities to better enable the plants to operate efficiently and reliably and to enable each plant to operate at its maximum rated capacity.

Chapter 6.11 of the Master EIR discussed Public Utilities, including Water Supply (Master EIR, page 6.11-2). The discussion included coverage of water treatment, water supply, and other related issues. The City's water rights were viewed as sufficient to meet demand for buildout of the 2030 General Plan (Impact 6.11-1). The Master EIR concluded, however, that water treatment capacity would not be sufficient, and the impact was identified as significant and unavoidable. (Impact 6.11-2). The Master EIR identified and evaluated various options available to the City to increase its treatment capacity, based on the continued available capacity at the two treatment plans that are part of the proposed project.

Because the Master EIR included the output of the Fairbairn WTP and Sacramento River WTP in its assessment of treatment capacity, the proposed project is considered an anticipated subsequent project since it will enable the City to continue to provide water service at the identified level. The Master EIR included output from the two plants as serving new residential, commercial and industrial development that could occur under the 2030 General Plan. The cumulative impacts of providing such service, therefore, have been considered in the Master EIR. The same analysis applies to irreversible significant effects that were identified and considered in the Master EIR.

Growth inducing effects

Growth inducing effects could occur if the City were to extend utilities outside areas that have been planned for development, or if it developed service capacity substantially in excess of that needed to serve planned growth. The 2030 General Plan commits the City of Sacramento to a policy of encouraging development within the City limits, thereby minimizing impacts on agricultural resources and open space. The proposed project would not increase the rated or permitted capacity of either plant, but instead is designed to maintain water quality and improve dependability in the existing system. The project would not have growth inducing effects.

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the project on these resources.

Discussion

Land Use-2030 General Plan

The land use designation identified in the 2030 General Plan for both the existing E.A. Fairbairn and Sacramento River water treatment plants is Public-Quasi-Public. Goal LU 8.1 provides that this designation covers "...governmental, utility, institutional, educational, cultural, religious, and social facilities and services that are located and designed to complement Sacramento's neighborhoods, centers, and corridors and to minimize incompatibility with neighborhoods and other sensitive uses." (2030 General Plan, page 2-113 et seq.) The operation of the respective water treatment plants is consistent with this designation.

The City intends to acquire two parcels on the east boundary of the Sacramento River WTP for use as part of the water treatment facility. These parcels, approximately three acres in size,

have a 2030 General Plan land use designation of Urban Center Low. This designation allows a "...balanced mix of high-density/intensity single-use commercial or residential development or horizontal and vertical mixed-use development that includes the following: ...Compatible public, quasi-public, and special uses." (2030 General Plan, page 2-72)

The Sacramento WTP is bordered on the north by Bannon Street. A motel is located on the south side of Bannon Street at its western terminus and intersection with Bercut Drive. Approximately six single-family residences are located on the south side of Bannon Street; the Union Gospel Mission is located on the south side of Bannon Street northeast of the plant; and an institutional use is located to the west. A drive-through restaurant and an office building are located north of Bannon Street with addresses on Richards Boulevard.

The Fairbairn WTP is bordered on the north by the American River, and on the west by parking facilities for California State University at Sacramento. Apartments are located across Fairbairn Drive to the east. University athletic fields and industrial uses are located south of the plant on the south side of College Town Drive.

The operation of the water treatment plants is consistent with the land use designations. The plants have been in operation for a lengthy period of time, and with the exception of the addition of approximately three acres on the east side of the Sacramento WTP the proposed project would not increase the area occupied by the plants. While construction noise and dust would result in some inconvenience and disruption, this would be temporary and would not result in significant effects, as discussed in this Initial Study. The proposed project would not result in land use conflicts or uses inconsistent with the land use designations.

Agricultural Resources

The Master EIR discussed the potential impact of development under the 2030 General Plan on agricultural resources. See Master EIR, Chapter 6.2. In addition to evaluating the effect of the general plan on sites within the City, the Master EIR noted that to the extent the 2030 General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized. (Master EIR, page 6.2-13) The Master EIR concluded that the impact of the 2030 General Plan on agricultural resources within the City was less than significant.

The project includes rehabilitation activities at the two existing water treatment plants. There are no agricultural activities on any of the parcels affected by the project. The project would result in no impacts on agricultural resources.

Energy

Structures built as part of the project would be subject to Titles 20 and 24 of the California Code of Regulations, which serve to reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2030 General Plan includes policies (see Policies 6.1.10 through 6.1.13) to encourage the spread of energy-efficient technology by offering rebates and other incentives to commercial and residential developers, and recruiting businesses that research and promote energy conservation and efficiency.

Policies 6.1.6 through 6.1.8 focus on promoting the use of renewable resources, which would reduce the cumulative impacts associated with use of non-renewable energy sources. In addition, Policies 6.1.5 and 6.1.12 call for the City to work closely with utility providers and industries to promote new energy conservation technologies.

The Master EIR evaluated the potential impacts on energy and concluded that the effects would be less than significant. (See Impacts 6.11-9 and 6.11-10) The proposed project would not result in any impacts not identified and evaluated in the Master EIR.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<u>1. AIR QUALITY</u>			
<i>Would the proposal:</i>			
A) Result in construction emissions of NO _x above 85 pounds per day?			X
B) Result in operational emissions of NO _x or ROG above 65 pounds per day?			X
C) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X
C) Result in PM ₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?			X
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Result in exposure of sensitive receptors to substantial pollutant concentrations?			X
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Impede the City or state efforts to meet AB32 standards for the reduction of greenhouse gas emissions?			X

ENVIRONMENTAL AND REGULATORY SETTING

In December 2006 the Environmental Protection Agency (EPA) revised the national ambient air quality standard for fine particle pollution to provide increased protection of public health and welfare. The revised standard is 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) for particles less than or equal to 2.5 micrometers in diameter ($\text{PM}_{2.5}$), averaged over 24 hours. In December 2008 the EPA Administrator identified nonattainment areas, and in October 2009 confirmed the designations. Sacramento County is included on this list, along with portions of surrounding counties that contribute to the nonattainment conditions.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts: **Policies ER 6.1.6 thru ER 6.1.13:**

- ER 6.1.6 **New Development.** The City shall review proposed development projects to ensure projects incorporate feasible measures that reduce constructional and operational emissions for reactive organic gases, nitrogen oxides and particulate matter (PM_{10} and $\text{PM}_{2.5}$) through project design.
- ER 6.1.9 **Coordination with SMAQMD.** The City shall coordinate with the Sacramento Metropolitan Air Quality Management District to ensure projects incorporate feasible mitigation measures if not already provided for through project design.
- ER 6.1.10 **Reduced Emissions.** The City shall promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation to for operating departments within the city.
- ER 6.1.11 **Fleet Operations.** The City shall continue to purchase low-emission vehicles for the city's fleet and to use available clean fuel sources for trucks and heavy equipment.
- ER 6.1.12 **Zero-Emission and Low-Emission Vehicle Use.** The City shall encourage the use of zero-emission vehicles, low-emission vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- ER 6.1.13 **Preference for Reduced Emission Equipment.** The City shall give preference to contractors using reduced-emission equipment for city construction projects as well as for city contracts for services (e.g., garbage collection).

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM₁₀ concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM₁₀ ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR addressed the potential effects of the 2030 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthy pollutant concentrations. See Master EIR, Chapter 6.1.

Policies in the 2030 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2030 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards; Policy ER 6.1.12 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2030 General Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.5, requiring consideration of current guidance provided by the Air Resources Board and SMAQMD; requiring development adjacent to stationary or mobile TAC sources to be designed with consideration of such exposure in design, landscaping and filters; as well as Policies ER 6.11.1 and ER 6.11.15.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

Air emissions during construction would occur due to activities consisting of demolition, grading and excavation, paving and the construction of the structures and improvements. Construction

activities may cause the air quality to temporarily degrade due to emissions from heavy construction equipment and ground disturbing activities. Emissions in the demolition, grading and excavation phase of construction are primarily associated with exhaust of heavy equipment and the dust that is generated through grading activities. Construction would last approximately three years with demolition activities occurring over a two-month period, site preparation and grading taking approximately another 9 months and the remaining construction occurring over the following two years. It was also assumed that a maximum of 12 acres of land could be disturbed based upon the areas where work will occur and the existing facilities that will remain undisturbed.

As provided in the Sacramento Metropolitan Air Quality Management District, *Guide to Air Quality Assessment in Sacramento County*, December 2009, Revised May 2011, the SMAQMD has developed screening levels to help analyze NO_x emissions from construction projects in Sacramento County. The NO_x Construction Screening Level Table provided by the SMAQMD does not include a category that Water Treatment Plant Rehabilitation would qualify under, so air emissions from the project were estimated using the URBEMIS 2007, Version 9.2.4 program, and following the guidelines of the SMAQMD. Based upon the URBEMIS modeling, construction related NO_x emissions were estimated to be a maximum of 29.79 lbs/day during the three-year construction period for the Water Treatment Plant Rehabilitation Project. Construction would result in a less-than-significant impact from NO_x emissions.

QUESTION B

Operational emissions of ROG and NO_x have a threshold of 65 lbs/day. Operation emissions are primarily a result of vehicular trips generated by a project. However, the water treatment plant as it exists generates a negligible number of vehicular trips as the site is not labor intensive. The Water Facilities Expansion Project DEIR identified an increase of approximately 20 daily trips with the expansion of both treatment plants. For a conservative estimate for this analysis, a total of 40 new trips were assumed. With this amount of trips involved the operational emissions from the project were estimated to be 0.26 lbs/day of ROG and 0.10 lbs/day of NO_x, well below the significance threshold. Operational emissions resulting from the project would have a less-than-significant impact on air quality.

QUESTION C AND D

The proposed project involves the rehabilitation of the two water treatment plants (Sacramento River WTP and Fairbairn WTP). The two sites total approximately 72 acres, however within the two sites up to approximately 12 acres of ground area may be disturbed. The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Sacramento County is considered a nonattainment area for fine particle pollution. The SMAQMD has indicated that projects that implement Basic Construction Emissions Control Practices and disturb less than 15 acres per day would not exceed the concentration based threshold of significance for PM₁₀ and, therefore PM_{2.5}. The construction area is below the 15 acre criteria. The Basic Construction Emission Control Practices are included as construction specifications to be implemented during project construction to ensure that PM₁₀ and PM_{2.5} emissions would not be significant.

QUESTION E AND F

The relatively small amount of traffic generated by construction and operational employees would not result in significant regional air quality impacts or “hot spots” at nearby intersections. The project would not generate traffic that significantly impacts the air quality at roadway intersections in the area or creates any CO “hot spots.”

QUESTION G

Land uses such as schools, hospitals, residences and convalescent homes are considered to be especially sensitive to poor air quality associated with toxic air contaminants (TAC). The most prominent TAC associated with high volumes of traffic on major roadways is diesel PM. The project site is adjacent to Interstate 5, which is a north-south freeway. It carries approximately 190,000 vehicles per day near the location of the project per the Caltrans’ Traffic Counts website (<http://traffic-counts.dot.ca.gov/2010all/Route5-6.html>). The project does not include any new residential activity, and would not result in an increase in exposure of sensitive receptors to TAC. The Water Treatment Plant Rehabilitation Project will not result in any new impacts related to TACs.

QUESTION H

The proposed project consists of rehabilitating the existing water treatment plants enabling more efficient treatment of the City’s water supply. The allowable intake of water will not be increased by the proposed project. Newer treatment facilities including a Pump Station, sedimentation basin, and electrical upgrades along with new dewatering facilities will allow for a more efficient treatment process. The outdated equipment will be demolished or decommissioned and left in place. The new facilities will be designed following the LEED Silver guidelines with the goal of meeting the requirements. Ongoing operation, maintenance of renovation of utility systems was included in the analysis of greenhouse gas emissions in the Master EIR.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2030 General Plan would be a significant and unavoidable cumulative impact. The discussion of greenhouse gas emissions and climate change in the 2030 General Plan Master EIR are incorporated by reference in this Initial Study. (CEQA Guidelines Section 15150)

The Master EIR identified numerous policies included in the 2030 General Plan that addressed greenhouse gas emissions and climate change. See Draft MEIR, Chapter 8, and pages 8-49 et seq. The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at

<http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/>.

Policies identified in the 2030 General Plan include directives relating to sustainable development patterns and practices, and increasing the viability of pedestrian, bicycle and public transit modes. A complete list of policies addressing climate change is included in the Master EIR in Table 8-5, pages 8-50 et seq.; the Master EIR included additional discussion of greenhouse gas emissions and climate change in response to written comments. See changes to Chapter 8 at Final MEIR pages 2-19 et seq. See also Letter 2 and response.

The proposed project includes improvements and upgrades to existing water treatment facilities, with no expansion of capacity. The improvements would result in improved efficiency and negligible increase in energy consumption. There would be no project-specific increase in the emission of greenhouse gases that was not identified and evaluated in the Master EIR, and any impact would be less than significant.

MITIGATION MEASURES

No additional mitigation is required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Air Quality.

	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
Issues:			
2. <u>BIOLOGICAL RESOURCES</u> Would the proposal:			
A) Create a potential health hazard, or use, produce or dispose of materials that would pose a hazard to plant or animal populations in the area affected			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?			X

ENVIRONMENTAL SETTING

ENVIRONMENTAL SETTING

The primary biological resource that could be affected by the proposed project is the Valley Elderberry Longhorn Beetle (VELB). VELB is listed as a threatened species under the federal Endangered Species Act. It is completely dependent on its host plant, elderberry (*Sambucus* sp.). Surveys for elderberry shrubs and evidence of VELB use of the shrubs (i.e., larvae exit holes) were completed by Ascent Environmental (Attachment 9). Results of these surveys identified 21 elderberry shrubs within the project area that are of sufficient size to provide habitat for VELB. Setting for each of the project locations is provided below.

Fairbairn WTP: Much of the Fairbairn WTP site consists of buildings, other facilities, and areas landscaped with ornamental plant species. Barren ground with a few weedy plants species (e.g., *Centaurea solstitialis*) occur in the southern portion of the site, but most of the unpaved portions contain lawn and isolated trees and shrubs, including oleander (*Nerium oleander*), London plane tree (*Platanus acerifolia*), and valley oak (*Quercus lobata*). The City Arborist identified two Heritage trees on southeastern portion the Fairbairn WTP site (London Plane and Cork Oak (*Quercus suber*)) and one Heritage tree located just outside of WTP property along the Plants eastern boundary.

The Fairbairn WTP site provides little wildlife habitat because much of the site is developed or composed of ornamental plant species. A few wildlife species capable of using urban environments occur at the site. Such species include northern mockingbird (*Mimus polyglottos*), western scrub-jay (*Aphelocoma californica*), house finch (*Carpodacus mexicanus*), killdeer (*Charadrius vociferus*), California quail (*Callipepla californica*), and western fence lizard (*Sceloporus occidentalis*).

No wetlands or sensitive natural communities occur on the Fairbairn WTP site. Habitat for VELB is present in three elderberry shrubs. No other special-status species have potential to occur on site because of the absence of natural habitats or undeveloped areas.

Sacramento River WTP: Much of the Sacramento River WTP site consists of buildings, other constructed facilities and landscaped areas of lawn and ornamental trees and shrubs. The sludge lagoons are intermittently flooded and dried, leaving behind a cracked surface of sediment and organic material from the treated water. These sediments are periodically removed and transported to area landfills, and do not support vegetation. Tree species on the site include cottonwood, willow (*Salix* sp.), tree-of-heaven (*Ailanthus altissima*), hybrid walnut (*Juglans* spp.), plane tree, valley oak, cottonwood, and redwood (*Sequoia* spp.). On the undeveloped portion of the site, dense thickets of wild grape (*Vitis californicus*) and blackberry occur in association with elderberry shrubs and mature trees. A large cottonwood tree (approximately 308 inches in circumference) occurs in the southeast corner of the site.

The Sacramento WTP site provides more habitat for wildlife than the Fairbairn WTP site. Vegetation at the Sacramento River WTP site may be used during winter by migratory birds or as breeding grounds for resident species. Large trees provide nesting opportunities for common raptors such as red-shouldered hawk (*Buteo lineatus*) and great horned owl (*Bubo virginianus*), as well as several songbird species typically found in urban environments such as scrub-jays and mockingbirds. Although unlikely due to the surrounding commercial and industrial development and lack of foraging habitat on site, special-status species, Swainson's hawk (*Buteo swainsoni*) and white-tailed kite (*Elanus leucurus*), could nest on the site because the site contains suitable nest trees and suitable foraging habitat is present less than one mile away.

No wetlands or sensitive natural communities occur on the Sacramento River WTP site. Habitat for VELB is present in 18 elderberry plants. No other special-status species have potential to occur on site.

STANDARDS OF SIGNIFICANCE

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or

Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, "special-status" has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or

proposed for listing);

- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Game (CDFG); or
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.3 of the Master EIR evaluated the effects of the 2030 General Plan on biological resources within the general plan policy area. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2030 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2030 General Plan. Policy ER 2.1.5, for example, calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Game, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR concluded that the cumulative effects of development that could occur under the 2030 General Plan would be significant and unavoidable as they related to effects on special-status plant species (Impact 6.3-2), reduction of habitat for special-status invertebrates (Impact 6.3-3), loss of habitat for special-status birds (Impact 6.3-4), loss of habitat for special-status amphibians and reptiles (Impact 6.3-5), loss of habitat for special-status mammals (Impact 6.5-6), special-status fish (Impact 6.3-7) and, in general, loss of riparian habitat, wetlands and sensitive natural communities such as elderberry savannah (Impacts 6.3-8 through 10).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

Mitigation Measure Bio 1: General Plan Policy ER 2.1.10 - Habitat Assessments: The City shall consider the potential impact on sensitive plants and for each project requiring discretionary approval and shall require preconstruction surveys and/or habitat assessments for sensitive plant and wildlife species. If the preconstruction survey and/or habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level or industry recognized (if no protocol has been established) surveys shall be conducted; or (2) presence of the species shall be assumed to occur in suitable habitat on the project site. Survey Reports shall be prepared and submitted to the City and the CDFG or

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

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

The proposed project would demolish some of the existing structures on the water treatment plant site, replacing them with updated facilities, and construct new structures as part of the water treatment facility. Compliance with Rule 902 of the Sacramento Metropolitan Air Quality Management District (SMAQMD) as set forth in the Hazards discussion, below, would ensure that asbestos-containing materials are identified and treated properly to avoid risk to biological resources. Materials encountered during the demolition process would be inert and non-hazardous, and the demolition, excavation and disposal process would not affect sensitive biological resources.

The City uses various chemicals and compounds in the water treatment process, including chlorine. However, the storage, handling, and use of these chemicals and compounds are in accordance with federal, state, and local regulations and would not affect sensitive biological resources.

The proposed project would not create a significant potential health hazard to biological resources or pose a hazard to plant or animal populations. This impact is less than significant.

QUESTIONS B-C

The proposed project would rehabilitate and renovate the existing water treatment plants, and would include demolition of some structures, construction of some new facilities and installation of new equipment and supporting infrastructure. The project would not result in an increase in the design or permitted capacity of either of the plants, and would not result in any increase in diversion of water from the Sacramento or American Rivers that has not been previously identified, permitted and evaluated in the Water Treatment Plant Expansion project EIR, certified by the City Council in 2000. (See References section for citation). The Sacramento WTP renovation would include installation of new pumps and electrical service for the existing water intake structure on the Sacramento River, but no work would be involved that would result in any disturbance to fisheries or habitat on the west side of Interstate 5. The project would have no impact on fisheries or riverine or riparian habitat.

The project includes acquisition of a 3-acre parcel on the east side of the existing Sacramento River WTP. The new land area will include new facilities for the water removal process. The site would be substantially cleared. Elderberry bushes on the site would be managed as explained below (see Valley Elderberry Longhorn Beetle discussion, below). Any heritage trees that are proposed for removal would be subject to the City's heritage tree ordinance, requiring a permit for removal, and the Department of Utilities would comply with the ordinance provisions.

Removal of the trees and vegetation on the 3-acre site to be acquired would not result in a substantial reduction in habitat for migratory birds or sensitive species. Trees and vegetation in the project vicinity would be sufficient to provide similar habitat, and any impacts would be less than significant.

Nesting Birds

Construction of the gravity thickeners, sludge handling pump station, and paved sludge drying area would require removal of approximately 10-15 trees on the undeveloped portion of the Sacramento River WTP. Although the trees to be removed are primarily non-native species (walnut, tree-of-heaven, northern catalpa), they provide potential nesting habitat for hawks, owls, and other birds. The current project is designed to avoid and preserve the large native valley oak near the high pressure pump station. In addition, the two other Heritage Trees identified by the City Arborist on the eastern undeveloped portion will be avoided and preserved based upon the current project design. A small valley oak on the undeveloped portion of the site may be removed to provide road access and installation of a 84-inch pipeline and for construction of the gravity thickeners, respectively. Based on the current project design, no Heritage Trees would be removed as part of the project. If, based upon project design changes, Heritage Trees are proposed for removal, the Department of Utilities would obtain the necessary removal permit following the procedures for removal of Heritage Trees and defined in Sacramento City Code 12.64. The large cottonwood in the southeast corner of the site would be retained. No trees would be removed from the Fairbairn WTP site.

Tree removal during the active nesting season for bird species could result in nest destruction and loss of eggs or young. Swainson's hawk is state-listed as threatened and white-tailed kite is a Fully Protected species under the California Fish and Game Code. Nests of all raptors (i.e., hawks and owls) are protected under Section 3503.5 of the California Fish and Game Code. In addition, nests of most native bird species are protected by the Migratory Bird Treaty Act, which was also codified in Section 3513 of the California Fish and Game Code. This is considered a significant impact. Implementation of mitigation measure Bio-1, set forth below, would ensure that active nesting activities would not be disrupted, and this would reduce the impact to a less-than-significant level.

Valley Elderberry Longhorn Beetle

Out of the 21 elderberry shrubs that were determined to be of sufficient size to provide habitat for VELB, 2 shrubs would be completely avoided during project construction and operation, 6 shrubs could likely be retained with measures to minimize adverse effects, and 13 shrubs would require removal because there is no feasible alternative to project design that would allow the shrubs to be retained in the project footprint (see Attachments 9a&b).

Six shrubs on the developed portion of the Sacramento River WTP site would be removed to construct a pressurized pipeline and access road to the high service pump station, for installation of a 84-inch pipeline, and to construct the new flocculation / sedimentation basin. Seven elderberries would be removed to construct the gravity thickeners, sludge handling pump station, and sludge drying area (Attachment 9b, Exhibit 2).

Exit holes made by VELB larvae were observed in many of these shrubs (Table Bio-1). Removal of elderberry shrubs and other project-related ground-disturbing activities within 100 feet of the shrubs that could affect their health and survival would have adverse impacts on VELB. This is considered a significant impact.

Table Bio-1: Elderberry Stem Count and Exit Hole Survey Results for Water Treatment Plants Rehabilitation Project				
Elderberry Shrub Number ¹	Number of Stems >1" and <3"	Number of Stems >3" and <5"	Number of Stems >5"	Exit Holes Present?
SHRUBS TO BE AVOIDED				
EA8	4	0	0	No
EA9*	0	0	0	No
EA10*	0	0	0	No
EA11*	0	0	0	No
EA12	6	0	0	No
SHRUBS THAT MAY BE RETAINED WITH MINIMIZATION MEASURES				
EA7	3	1	5	Yes
EB1	2	0	0	No
EB3	7	7	2	Yes
EB4	7	2	1	Yes
EB9	2	2	1	No
EB12	3	2	1	No
SHRUBS TO BE REMOVED				
SR1	2	0	1	No
SR2	12	1	0	No
SR3	8	2	0	No
SR4	15	5	1	No
SR5	4	0	2	No
SR6	9	2	2	No
EB2	0	1	0	No
EB5	1	2	0	Yes
EB6	9	0	0	Yes
EB7	2	3	0	No
EB8	3	0	0	No
EB9	2	2	1	No
EB10	1	3	1	No
EB11	5	1	3	Yes
Total Stems on Shrubs to be Removed Without Exit Holes	58	19	8	No

Total Stems on Shrubs to be Removed With Exit Holes	15	3	3	Yes
<p>1EA= E.A. Fairbairn WTP; SR=developed portion of Sacramento River WTP; EB=undeveloped portion of Sacramento River WTP.</p> <p>*Shrub contains no stems greater than 1-inch in diameter and does not provide habitat for VELB.</p>				

MITIGATION MEASURES

BIO-1. The Department of Utilities shall implement the following measures to minimize impacts to nesting special-status birds:

- To the maximum extent possible, trees shall be removed during the non-breeding season for most birds (i.e., September 16 to February 14).
- If construction activity is scheduled to occur during the typical nesting season for Swainson’s hawk and other raptors (i.e., February 15 to September 15), the project applicant shall retain a qualified biologist to conduct preconstruction surveys and to identify active nests within 500 feet of the project site. The surveys shall be conducted within 14 days and no more than 30 days before the beginning of project activity.
- If active nests are found, impacts on nesting special-status birds shall be avoided by establishment of appropriate buffers around the nests. No project activity shall commence within the buffer area until a qualified biologist confirms that any young have fledged and the nest is no longer active. The buffer may be adjusted based on a recommendation from a qualified biologist in consultation with the state Department of Fish and Game, if the construction activities are unlikely to disturb the nest. A biological monitor may be required to ensure that nest abandonment or failure does not occur.
- If no nests are found, no further mitigation is required.

BIO-2A. The Department of Utilities will consult with the US Fish and Wildlife Service (USFWS) regarding impacts to VELB and will obtain approval for removing and transplanting elderberry plants prior to ground-disturbing activities within 100 feet of elderberry plants. A Habitat Conservation Plan shall be prepared that includes the following information:

- the effects of the proposed project on VELB;
- a conservation strategy that describes measures to avoid, minimize and compensate for impacts, including description of the conservation area, relocation plans, replacement plantings, irrigation, and maintenance requirements;
- an implementation plan that describes monitoring requirements, including performance and success criteria; funding for implementation of the HCP; and procedures to deal with unforeseen circumstances;
- a description of alternative actions considered that would not result in take; and

- any additional measures USFWS may require as necessary or appropriate for purposes of the plan.

BIO-2B. For elderberry shrubs that are to remain on the project site, the following mitigation measures shall be implemented in accordance with the USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS, 1999).

- Fence and flag all areas to be avoided during construction activities. A minimum setback of at least 20 feet from the dripline of each elderberry plant with stems greater than 1-inch diameter at ground level shall be maintained to avoid direct impacts. The buffer area shall be fenced with high visibility construction fencing prior to commencement of ground-disturbing activities and shall be maintained for the duration of construction activities.
- Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs shall be clearly readable from a distance of 20 feet, and shall be maintained for the duration of construction.
- Ground disturbing activities on the project site shall not alter the hydrology of the site or otherwise affect the likelihood of vigor or survival of elderberry shrubs. Project activities, such as truck traffic or other use of machinery, shall not create excessive dust on the project site, such that the growth or vigor of elderberry shrubs would be adversely affected.
- Areas that are disturbed temporarily shall be restored to pre-disturbance conditions. Erosion control measures shall be implemented to restore areas disturbed within 100 feet of elderberry shrubs.
- No insecticides, herbicides, fertilizers, or other chemicals shall be used within 100 feet of elderberry shrubs.

BIO-2C. For elderberry plants that cannot be retained in the project area, the following mitigation measures shall be implemented. These measures may be modified based upon the consultation with USFWS.

- If feasible, Elderberry plants that cannot be avoided shall be transplanted. All elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level shall be transplanted to a conservation area consistent with USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle, 1999. The conservation area shall be protected in perpetuity and monitoring shall be conducted to ensure that the success criteria are met. If success criteria are not met, remedial actions shall be required, Consultation with the USFWS will specifically define the replanting plan.
- Additional elderberry seedlings or cuttings and associated native plants shall be planted in a designated conservation area at a ratio consistent with the USFWS's Conservation Guidelines for the Valley Elderberry Longhorn Beetle, 1999 or determined during consultation with USFWS. Each elderberry stem

measuring 1.0 inch or greater in diameter at ground level that is adversely affected (i.e., transplanted or destroyed) shall be replaced in the conservation area, with elderberry seedlings or cuttings at a ratio determined from consultation with USFWS (new plantings to affected stems.). A mix of native plants associated with the elderberry plants at the project site or similar sites shall be planted at a ratio determined from consultation with USFWS). Table Bio-2 estimates the required conservation plantings required for the project. However, additional conservation plantings may be required if a 20-foot buffer cannot be provided around the elderberry shrubs to be retained. The final number of conservation plantings to be provided shall be determined during consultation with USFWS. Alternatively, compensatory credits may be purchased at an USFWS approved conservation bank

**Table Bio-2: Conservation Planting Requirements
for Elderberry Shrubs at the Water Treatment Plants Rehabilitation Project¹**

Stem Size	Exit Holes	Number of Stems	Ratio for Elderberry Seedlings	Number of Elderberry Cuttings or Seedlings to be Planted	Ratio of Native Plants	Number of Native Plants to be Planted
>1" and < 3"	No	58	1:1	58	1:1	58
	Yes	15	2:1	30	2:1	60
>3" and <5"	No	19	2:1	38	1:1	38
	Yes	3	4:1	12	2:1	24
>5"	No	8	3:1	24	1:1	24
	Yes	3	6:1	18	2:1	36
Total Conservation Plantings				180		240

¹Alternatively 42 conservation credits could be purchased at USFWS conservation bank.

FINDINGS

Any additional project-specific environmental effects of the project relating to Biological Resources would be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
3. CULTURAL RESOURCES			
Would the project:			
A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	

JRP Historical Consulting, LLC conducted review of both the Sacramento River WTP and the Fairbairn WTP and prepared a Historic Resources Inventory and Evaluation Report (JRP, 2011). and an Archaeological Survey Report (Far Western, 2012). The information provided in these reports is incorporated in the discussion below. The reports are available online at

ENVIRONMENTAL SETTING

The Sacramento River WTP is at 101 Bercut Avenue, Sacramento, on the east side of Interstate 5 just north of the Sacramento railyards (see Figure 1). It was constructed in the 1920s and expanded in the 1930s and again in 2003. The Fairbairn WTP is on the American River at 7501 College Town Drive, adjacent to California State University at Sacramento. The Fairbairn WTP was built in the 1960s and expanded in 2004. Buildings, structures, and objects that are more than 45 years old are at both locations and are referred to as historic-era resources. The historical overview presented below provides a historic context relevant to the two water treatment plants and the historic-era resources.

Sacramento River WTP

The Sacramento River WTP is on a 40.58-acre parcel near the Sacramento River just north of downtown. There are 25 buildings and structures on the property. Generally speaking, the older buildings are located on the west side of the parcel, and the newer on the east. The original elements of the plant are in the southwestern part of the site. The main entrance has recently been moved from the southwestern corner to the east side (Illustration 18, Cultural Resources Report). The area that comprises the historic buildings and landscape features is shown on Illustration 18.



Illustration 18. SRWTP Site Plan



Photograph 1. Pump Station, facing northeast, 10/27/2011.

The single-story Pump Station (1921) is rectangular in plan, rests on a concrete foundation, has a flat roof, and Neo-Classical details (Photograph 1). The walls are clad in stucco with a wide base course, rusticated quoins at the corners, and a simple entablature along the roofline. The main (southern) façade is symmetrical in plan with a central entry door flanked by four industrial metal windows. The entry features a rusticated door surround, a set of replacement metal glazed doors with sidelights and fixed two-part metal transom, with an additional metal sash transom above.



Photograph 2. Head House, camera facing east, 10/27/2011.

The Neo-Classical style Head House (1924) is a two-story, stucco-clad, octagonal building resting on a concrete foundation and topped by a Spanish tiled truncated octagonal hipped roof, below a conical roof, and crowned by a cupola (Photograph 2). Smooth corner pilasters with decorative capitals are located at each wall junction. The building is accessed through two recessed entries, one on the west side and another on the south side. Fenestration on the building includes a mixture of two sizes of metal framed pivot windows, a large three-part, metal framed replacement window, and replacement glass block windows.



Photograph 3. South side of West Filter Building and Head House in distance, camera facing northeast, 10/27/2011.

The Neo-Classical West Filter Building (1924 & 1928) is a long, rectangular building that rests on a concrete foundation and has a low-pitched gable roof (Photograph 3). The stucco-clad building features a repeating door and window opening pattern consisting of a single window set of metal sash horizontal pivot windows with a three-by-three glass block transom window, followed by group of four sets, then another single set. Between each single set and group of four are single metal glazed personnel doors. Centrally located on the building is the main entrance consisting of a single, metal glazed entry door with glass block sidelights on the south side. To the north and south of the building are a total of 16 water filter structures. The structures are partially below grade chambers largely made of poured concrete and metal supports. The tops of the filters are a grid pattern of poured concrete walkways surrounded by a low concrete wall clad in stucco.



Photograph 4. Coagulant Building, facing southwest, 10/27/2011.

The single-story Coagulant Building (1924) has a rectangular plan set on a concrete foundation and capped by a flat roof (Photograph 4). Its walls are clad in stucco with a modest base course and accentuated cornice. The north facing façade consists of a centrally located double, metal glazed entry door with a transom light and a simple door entablature. Flanking the door are four windows with two-stacked sections of metal sash horizontal pivot windows with rough wire glass lights. The east and west sides of the building each contain three of these windows. The south side of the building features a full-length concrete loading dock with metal railing and concrete stairs on the east and west ends.



Photograph 5. North end of Basin No 1, facing southwest, 10/27/2011.

Basin No. 1 (1924) is a partially below grade, rectangular structure with modest Neo-Classical style details. It is comprised of a sedimentation basin and four coagulation/flocculation tanks on the south end (Photograph 5). The north wall of the basin features a base course, smooth pilasters and a modest cornice. In the middle of the south wall is the Coagulant Control House. This small structure is square in plan, has a hipped Spanish tile roof, corner pilasters, and sits on a raised foundation between the sedimentation basin and tanks. On the south end of Basin No. 1 are four circular concrete coagulation/flocculation tanks about 45 feet in diameter.



Photograph 6. Showing tree line road past Basin No. 1 leading to roundabout and Pump Station, camera facing north, 10/27/2011.

The original landscaping and layout of the Sacramento River WTP was inspired by the City Beautiful movement (Photograph 6). The current layout in the area of the 1920s buildings has a formal symmetry set on a north/south axis with tree-lined streets, a park-like setting and viewsheds focused on monumental buildings. The original entrance on Bercut Drive (now closed) led visitors into the plant past the Coagulant Building on roads by each side of Basin No. 1 which presented a view of either the Pump Station or Head House. Before each of these building is a circular island and between them a courtyard of trees and lawn with sidewalks and a flagpole.



Photograph 7. North end of Basin No. 2, facing southwest, 10/27/2011.

Basin No. 2 (1933) is a rectangular, board-formed concrete structure consisting of three elements: sedimentation basin, clarifiers, and mixing tanks. This structure lacks the Neo-Classical details of other older structures on the property (Photograph 7) and has a different design than Basin No. 1. The sedimentation basins and clarifiers of Basin No. 2 are built in an excavated depression on cylindrical concrete piers with the mixing tanks on the south end. The sedimentation basin portion of the structure consists of four sections separated by concrete walls. The central concrete wall functions as a walkway down the entire length of the structure. The two large clarifiers are roughly square in plan and feature motorized pivot paddles that move along a metal track on the tank's perimeter with a metal catwalk above. At the south end of the basin are three mixing tanks.



Photograph 8. 9.5 mg Clear Water Reservoir, facing northwest, 10/27/2011.

The 9.5 mg Clear Water Reservoir (1937) is a large, board-formed concrete building with rounded corners and is roughly square in plan (Photograph 8). The building has a low-pitched, pressed seamed gable roof with a metal gable roof monitor. Small rectangular openings with screens are located below the roofline around the entire building. Concrete buttresses line the base of the southern wall.



Photograph 9. Machine Shop (1949), camera facing northwest, 10/27/2011.



Photograph 10. Emergency Pump Storage (1959), camera facing southwest, 10/27/2011.

The remaining historic-era buildings at Sacramento River WTP are utilitarian buildings constructed ca. 1949 to 1965. These have flat or low-pitched gable roofs and are clad in either stucco or corrugated metal. Fenestration is metal sash pivot windows, two-part metal sash casement windows, metal personnel doors and metal roll-up or sliding utility doors (Photograph 9 and Photograph 10).

Fairbairn WTP

The Fairbairn WTP parcel is roughly rectangular with the first buildings and structures built in 1963 and 1964 set in the center of the tract with major additions to the plant in 1993 and 2005 built adjacent on all sides of the original buildings and structures (Illustration 19, below).



Illustration 19. FWTP Site Map.

The original buildings at the Fairbairn WTP all have modest International Style characteristics.



Photograph 11. High Service Pump Station, camera facing southwest, 10/27/2011.

The High Service Pump Station (1964) exhibits this style with its flat roof, and exterior separated into vertical sections by blue low-relief columns and courses at the base and roofline framing white, vertically scored concrete panels. The center element of the façade has a metal overhead vehicle door below two bands of five multi-light, aluminum framed windows. Above and between the windows are spandrel panels (Photograph 11). On the east and west sides are rows of awning windows over fixed pane windows above a row of spandrels and vents.



**Photograph 12. Filter Building and filter structures,
camera facing southwest, 10/27/2011.**

The Filter/Lime Feeder Building (1964) is a T-shaped building with filter structures both north and south of the main building wing (Photograph 12). The building faces north and is attached on the north with the Sedimentation Basins. The Filter/Lime Feeder Building's main elevation is one story above ground level, built atop the filter structures and consists of a two-story central element and single story wings, all constructed of poured concrete and topped by a flat roof. The symmetrical façade has its main entry in the two-story central element consisting of double metal full-light entry doors. Above the doors are four large, stacked, fixed aluminum windows that extend to the roofline. The entry is framed by blue low-relief columns and a course along the roofline. The low-relief columns repeat on the flanking single-story wings of the building, framing sets of aluminum sash, fixed pane and hopper windows with blue spandrels.

The framing is completed by a cantilevered roof with a blue fascia. In four of the sets are full-light aluminum personnel doors. Identical sections of windows with spandrels and full-light personnel doors repeat on the other sides of the building. Both north and south of the main wings of the Filter/Lime Feeder Building are the filter structures. These consist of poured concrete chambers with poured concrete walkways above comprising a grid pattern with 16 squares in each quadrant around the wings of the Filter/Lime Feeder Building.



Photograph 13. Sedimentation Basins 1 & 2 showing clarifiers and sludge rakes, camera facing south, 10/27/2011.

Attached to the north of the Filter Building are Sedimentation Basins 1 and 2 (1964). This long rectangular structure is about one story above grade and constructed largely of poured concrete and is attached to the Administration Building on the north (Photograph 13). The exterior walls are tilt-up concrete construction and have similar low relief blue columns as the Filter Building at the north end. The basins are divided into four sections from south to north with a concrete central walkway. The four sections are weirs, sludge rakes, clarifiers, and flocculators. The weirs consist of rows of parallel troughs with metal weirs set on concrete pillars. Next are the sludge rakes: large horizontal rakes pulled by massive chains pulled by motor driven gears. The clarifiers are two large basins each with a two large motor-driven pivot arm attached to paddle rakes. On top of the arms are metal catwalks and railings that extend to the middle of each basin. At the north end of this structure are the flocculators that comprise a maze-like component made of boards set in slotted concrete posts. The boards form channel walls through which the water passes on a zig-zag course through the flocculator. Within the channel are metal paddle wheels rotating on a horizontal axis to agitate the water.



Photograph 14. Administration Building on right, modern Laboratory Building on left, camera facing northeast, 10/27/2011.



Photograph 15. Laboratory Building, camera facing northwest, 10/27/2011.

The Administration Building (1964-formerly known as the Head House) is at the north end of the property and attached the Sedimentation Basins on the south, modern Laboratory Building on the west and Control Building on the east (Photograph 14 and Photograph 15). The three-story building has a rectangular plan and a stepped, flat roof. The main entry to the building is through connecting corridor with the Laboratory Building. This has double glazed metal doors with sidelights on the south and north sides. Sets of metal framed sliding windows framed by projecting surrounds are throughout the building. The remaining windows are three-part, metal framed pivot style. The north side (rear) of the building has a wrap-around loading bay and a metal personnel door accessed by concrete stairs. A cantilevered awning extends from just inside the shortest wall portion and wraps around the northeast corner and down the east side.



Photograph 16. Grit Basin, camera facing northwest, 10/27/2011.

The Grit Basin (1964) is located northwest of the Administration Building and abuts the American River levee. Water from the intake structure flows directly into the Grit Basin, which is square in plan and has plain tilt-up concrete walls (Photograph 16). External concrete stairs with metal railing are on the east side and lead up to a concrete platform that overlooks the square tank. A motorized pivot arm propels a paddle around the tank and a metal catwalk provides access to the motor in the center of the tank. A metal railing rings the top of the tank.

The remaining historic-era buildings at Fairbairn WTP are relatively small, minor components. They include the Carbon Storage Building, a small brick building and tank with an overhanging flat roof. Fenestration consists of a metal personnel door and fixed metal framed windows. The Metering Vault is a poured concrete structure with stepped walls which abuts the levee. At the south end of the parcel between the Pump Station and Filter House is the Lime Unloading Building. It is a small rectangular concrete block building topped by a flat roof. Openings are a glazed metal personnel door, multi-pane metal sash windows and large metal overhead doors.

Near the Lime Unloading Building is the Lime Storage structure which consists of a raised concrete platform holding two cylindrical metal lime tanks (Photograph 17, below). A metal stairway on the south side leads to metal platforms on top of the tanks. Next to the tanks on the east side is a small concrete block building with a flat roof. Its entire west wall is open and enclosed with two chainlink gates. To the east of these buildings is the Wash Water Tank (Photograph 18). Constructed in 1964, the approximately three-story high cylindrical metal tank has a metal stairway affixed to the northwest side. Vertical ribbing divides the

exterior of the tank into six parts. See the DPR523 form in Appendix B for a complete description and additional photographs of these buildings.



Photograph 17. Lime Unloading Building on left, Lime Storage structure on right, camera facing northwest, 10/27/2011.



Photograph 18: Wash Water Tank, camera facing northwest, 10/27/2011.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

1. Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or
2. Directly or indirectly destroy a unique paleontological resource. Answers to Checklist Questions

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of development under the 2030 General Plan on prehistoric and historic resources. See Chapter 6.4. The Master EIR identified significant and unavoidable effects on historic resources and archaeological resources.

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2 and HCR 2.1.15), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10 and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.13). Demolition of historic resources is deemed a last resort. (Policy HCR 1.1.14)

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A&B

Historical

The historical resources investigation identified fourteen historic-era resources at Sacramento River WTP and eleven at Fairbairn WTP.

The investigation concluded that Fairbairn WTP does not appear to be eligible for listing in the National Register of Historic Places (NRHP, California Register of Historic Places (CRHP) or the Sacramento Register of Historic and Cultural resources (SRHCR because the property does not have historical significance and it also has diminished historic integrity to convey any potential significance.

Sacramento River WTP was previously evaluated in 2000 and 2009 and found to have historical significance and be eligible for the NRHP, CRHR, and SRHCR. Of the fourteen historic-era resources at Sacramento River WTP, seven appear to contribute to the historical significance of the property. As discussed below, Sacramento River WTP is eligible for its architectural and engineering significance under NRHP Criterion C, CRHR Criterion 3, and SRHCR Criterion iii, and the complex retains sufficient historic integrity to convey its significance. Thus, the Sacramento River WTP is a historical resource for the purposes of CEQA and a historic landmark of the City of Sacramento. The historical resource's period of significance is 1924-1928 and its boundary is the Sacramento River WTP property. Detailed evaluations of Sacramento River WTP and Fairbairn WTP are provided on DPR 523 forms in Appendix B of the cultural resources report. The report is available online in conjunction with the Initial Study and Mitigated Negative Declaration at <http://www.cityofsacramento.org/dsd/planning/environmental-review/eirs/> and at the Community Development Department, 300 Richards Boulevard, Sacramento, California.

The cultural resources report concluded that none of the historic-era resources at Sacramento River WTP and Fairbairn WTP are historically significant for their association with the growth of Sacramento or because of their roles in the development of local municipal water works (NRHP Criterion A/CRHR Criterion 1/SRHCR Criterion i). Similarly, none of these buildings appear to be associated with any historically significant individuals (Criterion B/2/ii). In rare instances buildings and structures themselves can serve as sources of important information about historic construction materials or technologies, but these resources at Sacramento River WTP and Fairbairn WTP are otherwise well documented and do not appear to be principal sources of information in this regard (Criterion D/4/iv). In addition, Fairbairn WTP does not appear to be distinctive for its architecture or its engineering design (Criterion C/3/iii). While the original buildings and structures at this plant constructed in 1964 exhibit characteristics of International Style Modernism, they are not distinctive examples of that aesthetic. Furthermore, the design of Fairbairn WTP was standard for water treatment plants at the time and the plant does not employ any new or innovative technology in its operation.

At Sacramento River WTP, a complex of seven buildings and structures are historically significant at the local level illustrating architectural distinction as an important and exceptional example of Neoclassical Revival style design for a public utility set in a City Beautiful inspired landscape. In addition, one of these structures, Sedimentation Basin No. 1, is also distinctive for its engineering design innovations, incorporating important scientific findings

with the addition of the paddle wheel coagulation/flocculation tanks. The new design proved to be so effective that it was adopted at water treatment plants throughout the country and is still being implemented at modern plants. (Criterion C/3/iii).

Basin No. 2 and the 9.5 mg clear water reservoir do not contribute to the historical significance of Sacramento River WTP because they are of a different architectural style than the elements of the property that contribute to its historical significance. The contributing elements derive their historical significance for being examples of Neoclassical Revival buildings and the associated City Beautiful landscape. In the case of Basin No. 1, it also derives historical importance for representing a design innovation in water treatment. Basin No. 2, built in 1933, and the 9.5 mg clear water reservoir, built in 1937, have utilitarian designs, do not illustrate the plant's original Neoclassical Revival design, and are is not important for contributions to municipal water system design development like Basin No. 1.

In addition to the historic-era buildings and structures on the Sacramento River WTP and Fairbairn WTP there are also several buildings and structures less than 45 years old. As such they have been considered for possible historical significance under NRHP Criteria Consideration G, CRHR (special Consideration for properties that may have achieved significance within the past fifty years), and SRHCR Criterion Consideration E. Such properties less than 50 years old must attain a level of exceptional importance, with adequate time passed to gain sufficient historical perspective. None of the modern resources at either plant appear to reach this level of importance. (National Park Service's *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin #15)

Integrity is the ability of a property to convey its significance. The seven aspects of integrity are materials, workmanship, design, setting, location, association and feeling. The integrity of Sacramento River WTP has been diminished somewhat by the replacement of windows and doors on buildings, which affected the integrity materials, workmanship, and design. The property's integrity of setting and feeling have also been diminished by alterations to the original landscape plan and construction of new buildings. New buildings have mostly been built on the east portion of the property and none were constructed within the portion of the property that encompasses the historic 1920s facility. Although changes have occurred to the property, Sacramento River WTP still retains sufficient integrity to convey its significance. The historic integrity of the Fairbairn WTP has been diminished by the construction of the Laboratory Building in 1993, which drastically altered the façade of the Administration Building. Subsequent modern buildings constructed at the plant including buildings that abut historic-era resources have also degraded the historic integrity of the property, specifically of its design, materials, workmanship, setting, and feeling.

The components of the rehabilitation project at Sacramento River WTP consist of:

1. Demolition of the existing 911 Emergency Call Center building in the northwest corner of the property and construction a new High Service Pump Station and small electrical equipment building surrounded by new paving at this location;
2. Demolition of Basin No. 2 and construction of a new sedimentation basin on the eastern portion of that site;
3. Construction of eight new filters east of the West Filter building;
4. Construction of new solids handling facilities at the east edge of the facility and on the vacant parcel adjacent to the east gate, and

5. Decommissioning of the Pump Station, Head House, Basin No. 1, and the West Filter Building and its filters. The Department of Utilities noted that decommissioning entails discontinuing use of these facilities, but no alterations or actions are proposed for these buildings.

Demolition for this project is limited to the 911 Emergency Call Center, constructed in 1985, and Basin No. 2, constructed in 1937. Neither of these facilities contributes to the historical significance of Sacramento River WTP and are not contributing elements of the historical resource. Their removal and replacement with new facilities will not alter the contributing elements of the historical resource and will also not diminish the setting of the historical resource. The 911 Emergency Call Center is several hundred feet north of the contributing elements area of the plant. It will be replaced by the new High Service Pump Station at the same location. The proposed replacement basin will be roughly the same height as Basin No. 2, and its footprint will be approximately half the size of Basin No. 2, constructed 100 feet further away from Basin No. 1 and the landscape components that contribute to the historical resource than the current basin. Thus, demolition of the 911 Emergency Call Center and Basin No. 2 will have neither direct nor indirect impact on the historical resource and thus will not cause a substantial adverse change to the historical resource.

The eight new filters and new solid handlings facilities will be constructed on the east portion of the property. These new facilities will not physically alter the contributing elements of the historical resource at Sacramento River WTP. They also will not diminish the historic integrity of setting that the historical resource possesses. The new filters will be an addition to existing filters built in 2003 and of the same design. These filters will be on the east edge of the contributing elements area, just east of the West Filter Building, separated by a roadway. This addition will have a minimal visual impact because it is only a 136-foot wide addition to a currently existing building and will be only modestly taller than the historic filters. The new solid handling facilities will be in the extreme northeast part of the property far from the contributing elements area and there will be no visual impact. Thus, neither of the new facilities on the east portion of the property will cause a substantial adverse change.

The decommissioning of contributing elements of the historical resource at Sacramento River WTP would not require any alteration to the Pump Station, Head House, or West Filter Building and its filters. The buildings / structures that will; be decommissioned could deteriorate if not subject to appropriate care. This process is known as “mothballing.” Implementation of mitigation measure Cul-1 consists of utilizing appropriate procedures for mothballing historic buildings to prevent the decommissioning of these facilities from causing a substantial adverse change to the historical resource. As discussed below, the mitigation identified in Cul-1 would reduce the potentially significant effect to a less-than-significant level.

The Fairbairn WTP is not a historical resource for the purposes of CEQA and thus the proposed project will have no substantial adverse change to historical resources at that facility.

Archaeological/Paleontological

The potential for buried prehistoric archaeological sites in the project areas was estimated based on the age and distribution of surface sediments combined with the proximity to historic-era stream channels (i.e., distance to water), and the results of previous geoarchaeological studies. The criteria for high buried site sensitivity—Holocene-aged deposits

and proximity to a waterway—is met in the northeast part of the Fairbairn area where the Holocene-age Rossmoor soils are within 200 meters of the American River. Since the Rossmoor soils appear to have been deposited over part of the Late Pleistocene-age floodplain marked by Americanos soils, there is a high potential for prehistoric archaeological materials and deposits to be buried at relatively shallow depths (e.g., three to six feet) in that portion of the project area.

These criteria are also met in the southern part of the Sacramento River WTP area where Historic- era and modern deposits of artificial fill (i.e., Orothents) are within 200 meters of the former American River channel. However, as no buried archaeological materials or moderately or well-developed buried soils were identified at the billboard coring site, located only about 100 meters (328 feet) west of the Sacramento River WTP area, the potential for a buried site to occur within 12.8 meters (42 feet) of the present ground surface appears to be relatively low. It is likely that the alluvium found in the billboard core continues beyond 42 feet in depth. Although there is a small possibility that a few isolated and/or reworked archaeological materials might be present with the underlying alluvium that was deposited within a prehistoric channel, given the history of erosion, deposition, and reworking, any intact deposit is unlikely.

No further archaeological identification efforts are recommended for the Sacramento River WTP project area as it is currently proposed. In the Fairbairn WTP area, however, it is recommended that an exploratory archaeological study be conducted to help insure that any potentially buried deposit is identified and not inadvertently affected. The effort is recommended in the northwest portion of the project area where significant subsurface earth disturbances are proposed, in particular the “return to intake” channel and 54-inch- [4.5 feet-] diameter pipeline. Pre-construction detection of buried archaeological deposits avoids the potential for costly delays after project-related activities have begun. If nothing is found during trenching at the Fairbairn APE, no additional identification efforts would be necessary. Mitigation Measures Cul-2 to Cul-4 implement the required actions, and reduce impacts to a less-than-significant level.

Pedestrian Survey Findings

No archaeological material was observed during field investigations. One historic-period isolated feature was identified at the Sacramento Water Treatment.

Sacramento River WTP Isolate #1

This isolated feature consists of three slabs of quarried and dressed granite lying on the north/south property line between the Sacramento River WTP and the land owned by the SHRA. The southern-most slab is seven feet by one foot by three inches and has quarrying drill marks on its edges. Two more slabs lie 30 meters north of the first. One slab is four feet by one foot by three inches, with no drill marks. The other length of granite is one foot north, is partially buried, and measures approximately three feet by one foot by three inches. These slabs will be retained and used as curbing for new road/driveways on the project site as identified in Mitigation Measure Cul-5 below.

Aerial photographs of this location from 1957 (www.historicaerials.com) show an alley or road along the present property line and residences immediately to the east. The rectangular slabs of granite may be curb stones associated with the former road. The granite slabs would be displaced by construction of the new road, thickener ponds, and pump house in this area. As isolated remnants of a road and a neighborhood that no longer exist, and with no other

associated features, these stones are not eligible for inclusion on the California Register of Historical Resources or the National Register of Historic Places, however they are important artifacts for Sacramento history. Recordation of the stones for this project has exhausted their Register eligibility information potential, but they are important artifacts to Sacramento's history and mitigation to reuse them in the curbing for the new road/driveway as part of the project.

Mothballing

The proposed project would remove some structures from service, and leave them in place. The Pump Station (Illustration 18, No. 1, and Photograph 1), Head House and West Filter Buildings (Illustration 18, Nos. 2 & 3 and Photographs 2 & 3), and Basin 1 (Illustration 18, No. 4, and Photograph 4) would all be decommissioned and left in place.

Closing a building temporarily to protect it from the weather and vandalism, known as mothballing, is a process that is acknowledged as a reasonable, and short-term, approach when the plans and resources to resolve the status of a building on a permanent basis are unavailable. Simply closing a building for an extended period of time may result in damage to the structure from various causes, and in the case of the historic structures on the project site could have a significant effect.

The U.S. Department of the Interior, National Park Service, has published Preservation Brief 31, entitled "Mothballing Historic Buildings." Mothballing a building includes the following steps:

- Document architectural and historical significance of the building.
- Prepare a condition assessment of the building.
- Structural stabilization of the building.
- Control of pests, including termites and rodents.
- Protection of the exterior from moisture penetration.
- Secure the building to protect it from vandalism.
- Provide adequate ventilation to the interior.
- Secure or modify utilities and mechanical systems.
- Develop and implement a maintenance and monitoring plan for protection.

Each of the structures to be decommissioned and left in place is located in the internal area of the Sacramento River WTP. Access is controlled via exterior fencing and monitoring of those entering and leaving, and vandalism and break-ins would not constitute a serious risk.

Basin 1 is a concrete structure that encloses a tank, or pool, in which water was stored. The concrete structure is fully exposed to weather elements, and is subject to normal weathering processes. No actions are required to maintain the integrity of Basin 1 pending decisions with regard to permanent treatment.

The Pump House and Head House/Filter Buildings have been in active use and are in reasonably good condition. All mechanical and internal ventilation systems are in working order. The buildings appear to be in good structural condition.

Mothballing would preserve the integrity and condition of the structures for a limited period of time. In order to protect the resources, a permanent plan for the structures should be developed and implemented. The potential effect of decommissioning is significant, but implementation of Mitigation Measure Cul-1 would reduce the effect to less than significant.

MITIGATION MEASURES

CUL-1. The City (Department of Utilities) shall prepare a Decommissioning Plan (Plan) for the Pump Station, Head House and West Filter Buildings, for approval by the Director of Utilities, prior to decommissioning the structures from active service. The Plan shall include the following provisions:

- Utilize the Technical Report submitted by JRP that documents historical significance;
- Written confirmation of physical condition of the buildings, including any need of structural stabilization, signed by a Registered Structural Engineer and the Plant Superintendent;
- Maintenance of interior ventilation systems in good working order;
- Plan for inspection of the structures on a periodic basis, to address and correct the following:
 - Evidence of, and plan for handling any pest infestation;
 - Moisture penetration to the interior;
 - Adverse condition of the exterior of the building;
 - Failure of the interior ventilation system.

The Department of Utilities shall inspect and maintain the affected structures on a regular basis, and shall maintain written records of such inspections and conditions. Prior to the expiration of five years from the date of decommissioning, the Department shall prepare and present to the Preservation Director a report for the permanent treatment of the decommissioned structures, consistent with the U.S. Department of the Interior standards to the extent feasible.

CUL-2. In advance of construction, an additional identification effort consisting of geoarchaeological trenching shall be conducted at the Fairbairn WTP in the northeast portion of the project area identified to have Rossmoor soils where there is a high potential for buried archaeological resources. If nothing is found during trenching, no additional identification efforts would be necessary. If resources are found proper documentation and removal practices shall be implemented prior to construction activities beginning.

CUL-3. In the northeastern portion of the Sacramento River WTP project area at the location of excavation for the dewatering building and the thickener tanks where there is potential for subsurface features, a qualified historical archaeologist should monitor ground-disturbing activities. In the event test cores are obtained prior to excavation, and reveal no such features, the archaeologist may be utilized on an on-call basis only.

CUL-4. In the event that unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess significance of the find and develop and implement a plan for documentation

and removal of resources. Additional survey will be needed if project limits are extended beyond the present survey limits.

- CUL-5** The historic quarried granite slabs identified on the northeast portion of the Sacramento River WTP project site shall be retained and stored on-site during construction and incorporated into and used as curbing on new road/driveway to be constructed as part of the WTP Rehabilitation Project.

FINDINGS

All additional project-specific environmental effects of the project relating to Cultural Resources would be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><u>4.GEOLOGY AND SOILS</u></p> <p>Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?</p>			X

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the general plan policy area. Implementation of identified policies in the 2030 General Plan reduced all effects to a less-than-significant level. Policies EC 1.1.1 through 1.1.3 require regular review of the City's seismic and geologic safety standards, geotechnical investigations for project sites and retrofit of critical facilities such as hospitals and schools.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

Because no active or potentially active faults are known in the project area, the proposed project would not be subject to hazards due to the rupture of a known earthquake fault. However, the project will be designed for the appropriate seismic event in accordance with the appropriate code.

The Master EIR determined that an earthquake of Intensity VII on the Modified Mercalli Scale is a potential event due to the seismicity of the region. Such an event would cause alarm and moderate structural damage could be expected. People and property on the site could be subject to seismic hazards, such as groundshaking, liquefaction, and settlement, which could result in damage or failure of components of the proposed project. This seismic activity could

disrupt utility service due to damage or destruction of infrastructure, resulting in unsanitary or unhealthful conditions or possible fires or explosion from damaged natural gas lines.

The City is located in Zone 3 of the Uniform Building Code (UBC) Seismic Risk Map. The City requires that all new structures be designed and constructed consistent with the UBC's Zone 3 requirements. Compliance with the California Uniform Building Code (CUBC) (Title 24) would minimize the potential for adverse effects on people and property due to seismic activity by requiring the use of earthquake protection standards in construction.

Table 4-1 identifies various geology and soil conditions at the two sites. Published geologic literature indicates that the WTP sites are underlain primarily by Holocene (less than 11,000 years old) alluvial deposits. Holocene alluvial deposits are expected to consist of silt, sand and gravel deposited by the Sacramento and American Rivers on natural levees and stream banks. The Holocene alluvial deposits are relatively thin deposits (generally less than 30 feet thick) that are underlain by older alluvium. The underlying Riverbank and/or Turlock Lake formations generally consist of semi-consolidated (moderately dense) silt, sand and gravel deposited as alluvial fans by the streams and rivers that drain the Sacramento Valley and Sierra Nevada to the east. The older alluvium associated with the lower member of the Riverbank formation underlying the Fairbairn WTP is expected to extend to depths of more than 100 feet below the surface.

**Table 4-1
Geology and Soils Characteristics of WTP Sites**

Geology Condition or Soil	Fairbairn WTP	Sacramento River WTP
Subsurface Geology	Holocene alluvial deposits and Late Quaternary alluvial deposits of the Riverbank Formation. Underlain by lower member of the Riverbank Formation deposits	Holocene alluvial deposits. Underlain by Riverbank and/or Turlock Lane formations
Soil Type	Silt loam and fine sandy loam	Fill
Soil Depth (approx.)	5 feet	Varies
Erosion Potential	Moderate	Low to moderate
Shrink-Swell Potential	Low	Varies by clay content
Site Elevation (msl)	35 feet	25 feet
Groundwater Elevation (msl)	-8 to -20 feet	-2 to +5 feet
Depth to Groundwater (bgs)	43 to 55 feet	20 to 27 feet

Notes:

Sources: See Water Treatment Plant Expansion Draft EIR, 2000, Table 6.2-1; Helley and Harwood, 1985; Wagner et al., 1981

msl= mean sea level

bgs= below ground surface

The Sacramento River and Fairbairn water treatment plants are both situated on a nearly level floodplain south of the American River. The Fairbairn WTP lies near a prominent bend in the river. Soils of the Americanos-Urban land complex are mapped at the surface in the southwest part of the Fairbairn WTP area, and those of the Rossmoor-Urban land complex are mapped to the north and east. Both are associated with alluvial deposits. The Sacramento River WTP area has Orthents-Urban Land complex soil mapped across the entire surface, except for a small zone in the northeast corner where soils of the Columbia-Urban Land complex are mapped. The Orothent soils are associated with artificial fill deposits in this area. The Columbia soils are very weakly developed and typically found on the surface of the

lowest floodplain in drainages whose upper reaches were hydraulically mined, as was the case with the American River and Sacramento River (Far Western, 2012).

Site grading and construction is regulated at both the state and local level. At the state level, construction is regulated by the Uniform Building Code. Local project oversight would be through the Construction Inspection Division of the City's Community Development Department or their approved designee. In addition to adopting the Uniform Building Code, the City provides standard construction specifications for public facilities and work with public rights-of-way. New structures on the site would be constructed based on applicable codes, and based on engineering specifications that take into account the soil and geologic conditions at the site.

Projects, such as the proposed project, that disturb one or more acres are required to obtain coverage under the General Permit for Storm Water Discharges Associated With Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground such as stockpiling or excavation. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ. (See additional discussion under Hydrology, below).

Projects that involve the discharge of dredged or fill materials in navigable waters or wetlands require a permit pursuant to Section 404 of the Clean Water Act, and in some cases a Water Quality Certification from the Central Valley Water Board. The project does not propose such discharge and would not affect wetlands.

Implementation of applicable regulations, codes, and standard engineering practices would mitigate significant constraints on development of the proposed project site related to groundshaking or secondary seismic hazards.

No additional significant effects would result, and any impacts due to seismic activity would be less than significant and no mitigation is required.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effect on Geology and Soils.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
5. HAZARDS			
Would the project:			
A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?		X	
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

ENVIRONMENTAL AND REGULATORY SETTING

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145).

SMAQMD Rule 902 and Commercial Structures

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 requires that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the AQMD. Surveys have been completed for the former 911 Call Center located in the northwestern corner of the Sacramento River WTP and asbestos containing construction materials (ACCM) were found to occur.

Removal Practices, Removal Plans/Notification and Disposal

If the survey shows that there are asbestos-containing materials present, the SMAQMD recommends leaving it in place.

If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal OSHA and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material. Construction related disturbance of ACCMs are regulated by *California Code of Regulations (CCR) Title 8, Section 1529 Asbestos* (Subchapter 4. Construction Safety Orders, Article 4. Dusts, Fumes, Mists, Vapors, and Gases)

There are specific disposal requirements in Rule 902 for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

STANDARDS OF SIGNIFICANCE

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

- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 6.6. Implementation of the 2030 General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the general plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2030 General Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A-C

Diverted surface water from the American River and Sacramento River is treated with chlorine and other chemicals before it is distributed to the City's service area. The surface water treatment process, including coagulation, flocculation, sedimentation and disinfection requires use of chemicals. The chemicals stored onsite at the water treatment plants and their primary uses are listed below:

- Alum: the primary coagulant;
- Cationic polymer: coagulant aid;
- Anionic / nonanionic polymer: flocculant aid, filter aid, waste washwater recovery aid;
- Caustic soda: pH adjustment and for corrosion control;
- Lime: corrosion control;
- Potassium permanganate: taste and odor control;
- Chlorine: disinfection;
- Fluoride: public health.

Of the chemicals listed above, only chlorine is an acutely hazardous material. (Title 40, Code of federal Regulations, Part 355, Appendix A). Disinfection with the use of chlorine is necessary to destroy all pathogenic bacteria and other harmful organisms that may be present in raw water. After disinfection, water is kept in storage facilities to prevent recontamination.

At the Sacramento River WTP, chlorine is supplied from two 25-ton storage tanks. Chlorine is transferred from the tanks through underground pipes to the building housing the chlorinators, which emit inject measurable amounts of the agent for water treatment. A maximum of four one-ton containers and up to 16 150-pound cylinders are stored at the Sacramento River WTP for use at other water treatment sites. Two 25-ton bulk storage tanks are located at the Sacramento River WTP and are in continuous use as the plant chlorine supply. In an emergency, the one-

ton containers at Sacramento River WTP can be connected, via temporary piping, to the Sacramento River WTP chlorinators in the event chlorine from the 25-ton bulk storage tanks is unavailable. The Fairbairn WETP has a maximum of 15 one-ton chlorine containers onsite for water treatment use. The containers of chlorine are stored in the storage room in the operations buildings. Both the Sacramento River WTP and Fairbairn WTP are equipped with chlorine-detection alarms.

The City has adopted procedures to perform preventive maintenance on chlorine-handling equipment to reduce the risk of accidental exposure. Chlorine handling equipment and safety equipment are inspected and tested regularly by trained and qualified maintenance technicians. In addition, an emergency procedures manual is provided to all employees. (Personal communication, Bill Zehnder, 2012)

General activities at the water treatment plants do not create the potential to cause a release of contaminants into the soil or ground water. The City has procedures to properly handle chemicals at the water treatment plants. Soils at both water treatment plants are not expected to contain existing contaminants as the sites are in a controlled environment on the water treatment plant campuses. The vacant property to the east of the Sacramento River WTP, which was not previously part the WTP but is being purchased for the thickener tanks and expanded sludge drying area (APN 001-0210-024 and 001-0210-025), has had a Phase 1 Environmental Site Assessment prepared. This report identified no recognized environmental conditions or concerns. (City of Sacramento, Dept of General Services, 2011).

Construction activities associated with the project would result in exposure to hazards of the type typically encountered in construction, and controlled through work rules, training and monitoring for safety. Hazards that occur through potential exposure to release of asbestos or lead-based paint are controlled through rules that regulate procedures relating to handling and disposal. The impact relating to hazards during construction is less than significant.

Operation of the facilities would result in some risk of upset related primarily to the use of chlorine, both in terms of transfer and storage. The storage and use of chlorine would not increase substantially with the new project. Existing City safeguards relating to the transfer and storage of chlorine would remain in place. These include proper design, effective safety features, safe operation and maintenance practices, monitoring of process conditions, and detection of deviations from standard operational parameters. Although the risk of accidental escape of chlorine cannot be completely eliminated, continued adherence to the facilities' Risk management and Prevention Programs, and use of onsite operational guides, provides the best available means of minimizing hazards impacts. Existing City procedures would reduce the level of impact to a less-than-significant level.

Asbestos could be encountered during demolition of structures and facilities at the Sacramento River WTP. Asbestos containing construction materials (ACCM) were found in samples taken from the former 911 call center where the new high speed pump station is proposed (Heffernan Environmental, 2011). No lead based paint was detected during the survey of the vacant former 911 Call Center (Heffernan Environmental, 2011). Other structures identified for demolition will be surveyed for efficiency in complying with the requirements of *CCR Title 8, Section 1529* and with SMAQMD Rule 902. Compliance with these requirements as referenced above would help to reduce significant effects relating to hazardous materials. In order to reduce the impacts for asbestos and lead-based paint to a less-than-significant level, Mitigation Measure Haz-1 would be implemented. Residual effects would be less than significant.

MITIGATION MEASURES

HAZ-1. A preliminary site assessment for asbestos and lead-based paint shall be conducted, consisting of records searches, site reconnaissance, and interviews with knowledgeable persons to determine whether such materials exist in any facilities scheduled for demolition or substantial renovation. This assessment may include limited sampling to further assess the potential of encountering such materials. Abatement and remediation shall be implemented as required by state or federal regulations, and appropriate procedures followed for removal and disposal followed.

FINDINGS

All additional project-specific environmental effects relating to Hazards would be reduced to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
6. <u>HYDROLOGY AND WATER QUALITY</u> Would the project:			
A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood ?			X

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policy would avoid or lessen environmental impacts as identified in the Master EIR and is considered a mitigation measure for the following project-level and cumulative impacts.

Impact 6.7-3: Implementation of the 2030 General Plan could increase exposure of people and/or property to risk of injury and damage from a localized 100-year flood.

and

Impact 6.7-6: Implementation of the 2030 General Plan, in addition to other projects in the watershed, could result in increased numbers of residents and structures exposed to a localized 100-year flood event.

Mitigation Measure 6.7-6 - General Plan Policy ER 1.1.5 - No Net Increase: The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100- year storm event.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.7 of the Master EIR evaluates the potential effects of the 2030 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 6.7-1, 6.7-2), and exposure of people to flood risks (Impacts 6.7-3, 6.7-4). Policies included in the 2030 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1, EC 2.1.1), comprehensive flood management (Policy EC 2.1.14), and construction of adequate drainage facilities with new development (Policy U 4.1.1) were identified that reduced all impacts to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A

Under the federal Clean Water Act, the Environmental Protection Agency is charged with the control of urban runoff into bodies of water through the National Pollutant Discharge Elimination System (NPDES) process. At the state and regional levels, implementation of the NPDES process is the responsibility of the State Water Resources Control Board and the Central Valley Regional Water Quality Control Board (RWQCB). This process is designed to provide a regulatory mechanism for the control of non-point pollution generated by construction activities, industrial activities, and general use of urban land, including runoff from streets.

Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity [Construction General Permit Order 2009-0009-DWQ](#). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP contains a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Short term, construction-related, erosion control would be readily available by means of Best Management Practices (BMP's) (e.g., use of erosion control barriers, hydro-seeding). Long term erosion control would be accomplished by establishing vegetation and controlling surface water flow.

The City requires use of the best available technology that is economically achievable and best conventional pollutant control technology to reduce pollutants. The specific features would be discussed in the SWPPP. A monitoring program would be implemented to evaluate the effectiveness of the measures included in the SWPPP. The RWQCB reviews the final drainage plans for the project components.

The City Department of Utilities and project contractor are responsible for compliance with these regulations.

Other water quality procedures

Construction-related sediment and erosion control measures have been established by the Sacramento stormwater co-permittees (i.e., County of Sacramento and the cities of Sacramento, Folsom and Galt) who have a joint NPDES permit overseen by the Central Valley RWQCB. The purpose of the permit is to reduce pollutant loads from storm drainage facilities. The co-permittees have developed standards and specifications for construction-related erosion and sediment control within their jurisdiction. The City of Sacramento's Grading, Erosion and Sediment Control ordinance is set forth in Chapter 15.88 of the City Code. Administrative provisions implement technical procedures, including nest management practices (BMPs) that prevent soil erosion and transport of sediment. Included in the BMPs are hydroseeding and matting for erosion control on slopes, and practices such as the installation of straw barriers and inlet filters, silt fences and sediment traps and basins for sediment control.

The project site is not served by a regional water quality basin but is greater than an acre therefore both source control measures and onsite treatment control measures are required. Improvements plans must include both source control measures and onsite treatment control measures selected for the site as required by the update Table 3-2 Stormwater Quality Control Measure Selection Matrix in the Stormwater Quality Design Manual (May 2007).

Each of the water treatment plant sites is flat, and separated from the respective rivers by levees. The chance of direct discharge to a river is remote. The most likely means of any such discharge would be via the storm drain system. While construction activities, if unregulated, could result in a risk of discharge of sediment to the storm drain system, the City is required to submit a Notice of Intent to the central Valley RWQCB, develop a SWPPP and implement BMPs for the prevention of erosion and control of sediment.

Compliance with all applicable regulatory requirements, designed to maintain and improve water quality from development activities, would ensure that the proposed project would have a less than significant impact on drainage and water quality.

QUESTION B

The Sacramento River WTP is located in flood zones X and Shaded X. These designate land areas outside the 100-year flood zone. The Shaded X zone designates those areas protected by levees. The Fairbairn WTP is located in the Shaded X flood zone. Improvements planned as part of the project would not result in any significant effects related to flooding or exposure of persons or property to flood risk.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<u>7. LIGHT AND GLARE</u> Would the proposal:		X	
A) Create a source of glare that would cause a public hazard or annoyance?		X	
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?		X	

ENVIRONMENTAL SETTING

The existing water treatment plants are developed on large parcels within the City limits in urbanized portions of the community. Exterior lighting for security purposes has been developed throughout the plant sites.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, light and glare impacts may be considered significant if the proposed project would result in one or more of the following:

Glare. Glare is considered to be significant if it would be cast in such a way as to cause public hazard or annoyance for a sustained period of time.

Light. Light is considered significant if it would be cast onto oncoming traffic or residential uses.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR described the existing visual conditions in the general plan policy area, and the potential changes to those conditions that could result from development consistent with the 2030 general Plan. See Master EIR, Chapter 6.13, Urban design and Visual Resources.

The Master EIR identified potential impacts for glare (**Impact 6.13-1**). Mitigation Measure 6.13-1, calling for an amendment to the Zoning Code to regulate building materials and surfaces, was identified to reduce the effect to a less-than-significant level.

The potential for new development to cast light onto oncoming traffic or residential uses was identified as a potential impact (**Impact 6.13-2**). The Master EIR identified Policy LU 6.1.14 (Compatibility with Adjoining Uses) and its requirement that lighting must be shielded and directed downward as reducing the potential effect to a less-than-significant level.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A & B

Development of the project site as proposed would introduce new reflective surfaces (e.g., window glazing and possibly other building materials) and new sources of night lighting, e.g, security lighting. These sources of lighting would, however, be consistent with the existing lighting of surrounding development and would not adversely affect day or nighttime views.

Mitigation Measure 6.13-1 in the Master EIR called for amendment of the Zoning Code to restrict the use of reflective surfaces that could result in glare affecting neighbors or traffic. New construction as part of the project could result in such effects, which could be a significant effect. The Zoning Code has not yet been amended, but Mitigation Measure Light 1, set forth below, would impose the restrictions identified in the Master EIR on the proposed project.

The Sacramento River WTP site is located near the I-5 freeway and is adjacent to residential properties. The Fairbairn WTP site is not located near residences, but is located adjacent to a traveled roadway. At either site, installation of new lighting that causes spill to neighboring properties or roadways would be a significant effect. Mitigation Measure Light 2, which requires avoidance of such effects, would reduce the effect to a less-than-significant level.

MITIGATION MEASURES

LIGHT-1. New buildings or renovated facades of existing buildings in the proposed project shall be prohibited from using:

- 1) reflective glass that exceeds 50 percent of any building surface and on the ground three floors;
- 2) mirrored glass;
- 3) black glass that exceeds 25 percent of any surface of a building; and,
- 4) metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building.

LIGHT-2. Exterior lighting at the project site, and any exterior lighting that may be visible from the exterior, shall comply with the following requirements:

- a. Lighting design shall be such as not to produce hazardous and annoying glare to motorists and building occupants, adjacent residents or the public; and

- b. Lighting shall be oriented away from adjacent properties, shall not produce a glare or reflection or any nuisance, inconvenience or hazardous interference of any kind on adjoining streets or property. In addition, the source of the light shall not be visible from adjacent property or a public street.

FINDINGS

All additional project-specific environmental effects of the project relating to light and glare would be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
8. NOISE Would the project:			
A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?		X	
B) Result in residential interior noise levels of 45 dBA L _{dn} or greater caused by noise level increases due to the project?		X	
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?		X	
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

ENVIRONMENTAL SETTING

Existing noise sources in the vicinity of the Fairbairn WTP include traffic along U.S. Highway 50, College Town Drive and Howe Avenue to the east. Local activity in the nearby apartment parking lot and aircraft overflights are also dominant noise sources. The current operations at the Fairbairn WTP produce no substantial noise. The College Garden Apartments are located to the west of the site, and are the nearest sensitive receptors.

Dominant noise sources in the vicinity of the Sacramento River WTP include traffic noise from Interstate 5 to the west and railroad operations to the south and east. Existing operations at the Sacramento River WTP do not produce substantial noise. Residential dwellings located on the south side of Bannon Street, adjacent to the plant site to the north, are the nearest sensitive receptors.

GENERAL PLAN POLICIES CONSIDERED MITIGATION

The following General Plan policies would avoid or lessen environmental impacts as identified in the Master EIR and are considered mitigation measures for the following project-level and cumulative impacts.

Impact 6.8-4: Implementation of the 2030 General Plan could permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction.

and

Impact 6.8-9: Implementation of the 2030 General Plan could result in cumulative construction vibration levels that exceed the vibration-peak-particle velocities greater than 0.5 inches per second.

General Plan Policy EC 3.1.5 – Interior Vibration Standards: The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Impact 6.8-5: Implementation of the 2030 General Plan could permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

and

Impact 6.8-10: Implementation of the 2030 General Plan could result in cumulative impacts on adjacent residential and commercial areas being exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations.

General Plan Policy EC 3.1.6 – Vibration Screening Distances: The City shall require new residential and commercial projects located adjacent to major freeways, hard rail lines, or light rail lines to follow the Federal Transit Administration (FTA) screening distance criteria.

Impact 6.8-6: Implementation of the 2030 General Plan could permit historic buildings and archeological sites to be exposed to vibration-peak-particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

General Plan Policy EC 3.1.7 – Vibration: The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts

that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential for development under the 2030 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. See Policy EC 3.1.8, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 3.1.9, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 6.8-1) and interior noise levels (Impact 6.8-2), and vibration impacts (Impact 6.8-4) were found to be significant and unavoidable.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTION A-C

Construction:

Construction of the project would include demolition of some structures, grading activities, general construction activities, delivery of materials to the site and traffic associated with construction workers and vehicles. Some of the structures would be constructed using pile driving. These activities would generate noise that would exceed the noise limits generally applicable at the property line.

Construction of the proposed project will take approximately three years. The first two years would consist of demolition of obsolete facilities, and construction and installation of new structures and systems. The final year involves extensive testing of the facility to ensure proper operation.

Construction of some structures at the Sacramento River WTP site would require special construction methods to respond to site-specific soil conditions. This would include pile-driving for the foundation of some structures.

Excavation, demolition and construction activities at each of the plant sites would be conducted in compliance with the City noise control provisions as set forth in Chapter 8.68 of the City Code.

Soil conditions at the Sacramento River WTP site will require the use of pile driving for foundations. Piles will not be required at the Fairbairn WTP site.

The project would result in localized noise increases during project construction. During project construction, operation of heavy equipment at the project site would result in short-term increases in noise. In addition, construction-related truck use would result in temporary noise increases along delivery and haul routes. Construction noise levels would fluctuate, depending on construction phase, equipment type and duration of use, distance between noise source and receptor, and the presence or absence of barriers between noise source and receptor. To estimate probably noise impacts from construction, typical equipment and construction techniques were assumed.

Noise levels range from about 76 to 88 dBA for most types of construction equipment at 50 feet from the source, with slightly higher levels of about 88 to 98 dBA for certain types of earthmoving and impact equipment. Noise levels from pile drivers, which would be used in the construction of some structures at the Sacramento River WTP, can generate noise peaks of approximately 101 dBA at 50 feet. These estimated noise levels represent noise generation while equipment is operating under load (i.e., not idling, but working). Average noise levels over extended periods of time are somewhat lower as equipment cycles through periods of load interspersed with idle periods.

Although such noise peaks could result in temporary disturbance (e.g., speech interference) to persons in nearby buildings, construction noise is exempt from the City of Sacramento Noise Ordinance provisions when construction occurs during normal working hours (7:00 a.m. to 6:00 p.m. on Monday through Saturday; 9:00 a.m. to 6:00 p.m. on Sunday). The proposed project would not require 24-hour construction, and work on the project should occur during the exempt hours. Work outside such hours could result in effects that would be considered significant, and Mitigation Measure Noise 1, which requires compliance with the City's noise restrictions, and requires all construction-related equipment to be equipped with suitable exhaust and intake silencers that in good working order, would reduce such impact to a less-than-significant level. Mitigation Measure Noise 2, which requires signage that identifies the project contact for complaints, would further reduce impacts.

Operation:

The primary sources of operational noise associated with the proposed facilities would be the pumps that are used to move water through the system (i.e., treated water pumps within the plant site), stationary fans and blowers, heating and air conditioning equipment (HVAC) and earth-moving equipment and trucks removing sludge for transfer off-site. The level of noise generated by pumps and other stationary equipment depends on four major variables: (1) characteristics of the noise source (such as technology type, rated horsepower, revolutions per minute, presence or

absence of pure tones, directional characteristics of the noise source, presence or absence of acoustical features); (2) number of noise sources clustered together; (3) type and effectiveness of building enclosure as noise mitigation; and (4) operational characteristics (24-hour operation, intermittent operation, variable settings at different times).

Other potential noise associated with operations includes emergency generators and traffic noise. Noise that could be generated by emergency generators depends on location, size and type of generator, and design of noise shield enclosure. The City noise ordinance provides for an exemption from noise standards for any "...mechanical device, apparatus or equipment related to or connected with emergency activities or emergency work..." (City Code section 8.68.080C) The back-up generators would be operated only for testing and during periods when the electrical power to the water treatment facility was disrupted. Testing would be for short periods only, would be conducted during normal operating hours, and would result in a less-than-significant effect. Operation during periods of power outages for purpose of providing water supply to the City's residents would clearly be an emergency and would be exempt from the noise ordinance. The impact of generator testing and operation could affect sensitive receptors, however, and could be significant. The mitigation in Mitigation Measure Noise 3, which calls for locating such generators in an area that takes advantage of noise barriers (such as buildings) on the site, would reduce the impact to a less-than-significant level.

The proposed project would replace some equipment at each of the facilities, construct some new buildings and revise and expand sludge drying facilities. The project would not increase the rated capacity of the facilities, and none of the new equipment or facilities would generate noise greater than that generated by current operations.

QUESTIONS D, E, F

Installation of new buildings and infrastructure would be required to comply with the Uniform Building Code and City building requirements. Shoring for excavations and trenches would be required to comply with regulations enforced by the Occupational Safety and Health Administration (OSHA).

Soil conditions at the Sacramento River WTP site would require the use of piles in foundations for new structures. The driving of piles creates vibration that could affect historic structures on the site and neighboring residences. Mitigation Measure Noise-4 would reduce this impact to a less-than-significant level.

Excavation and construction would occur in the general vicinity of historic buildings on the project site. Activities within fairly close proximity to historic buildings include the new filters and filter building located approximately 60 feet to the east of the old filters and filter building and the new floc/sed basin approximately 90 feet to the south of these historic facilities. Slumping of materials in the excavation walls could undercut ground support for the historic structures. Dewatering to install utilities could be required due to groundwater depth. Dewatering could cause settlement, which could crack foundations, walls or floor slabs of existing buildings. Construction of new buildings on the site could result in temporary instability in the soil surrounding the historic structures. Likewise, the weight of new buildings could result in settlement that could extend into soils around the existing buildings. This is a significant effect.

Mitigation identified in mitigation measure Noise 4 would reduce these effects to a less-than-significant level.

MITIGATION MEASURES

NOISE-1. All construction activity on the project sites shall comply with the provisions of City Code Chapter 8.68 relating to noise, including the following:

All noise-producing activity on the project sites will be conducted during these hours:

Monday through Saturday: 7:00 a.m. to 6:00 p.m.;
Sunday: 9:00 a.m. to 6:00 p.m.

Equipment on the project site shall be equipped with suitable exhaust and intake silencers that are in good working order.

NOISE-2. During all periods of construction, the City shall appoint a project manager for each project site, and shall post a conspicuous sign on each project site that identifies the project manager and a telephone number for contacting the individual. The project manager shall have the authority to receive and resolve complaints regarding construction noise.

NOISE-3. Back-up generators that supply emergency electrical power to the facility shall be located, to the extent feasible, in a location that takes advantage of noise barriers, such as buildings on the site, that would shield neighboring properties from direct noise transmission and thus serve to reduce the noise at the property line.

NOISE-4 The following actions shall be taken to reduce impacts to historic structures:

- (A) To the extent feasible, the historic buildings shall be stabilized and reinforced prior to construction activities adjacent to such buildings.
- (B) The contractor shall take reasonable precautions to protect historic structures from damage, such as settlement and/or cracking, caused by excavation, trenching, dewatering or other construction activities adjacent to buildings that could affect the integrity of the buildings.
- (C) Measures shall be taken to reduce or eliminate potential ground settlement of the areas surrounding the historic buildings due to dewatering, excavation or adjacent construction. A pre-excavation settlement-damage survey shall be prepared that shall include, at a minimum, visual inspection of existing vulnerable structures for cracks and other settlement defects, and establishment of horizontal and vertical control points on the buildings. A monitoring program of surveying such horizontal and vertical control points shall be followed to determine the effects of dewatering, excavation and construction. If it is determined by the project engineer that the existing buildings could be subject to damage, work shall cease until appropriate remedies to prevent damage are identified.

FINDINGS

All additional project-specific environmental effects of the project relating to Noise would be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
<p><u>9. PUBLIC SERVICES</u></p> <p>Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan?</p>			X

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2030 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the potential effects of the 2030 General Plan on various public services. These include parks (Chapter 6.9) and police, fire protection, schools, libraries and emergency services (Chapter 6.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.5 that encourages joint-use development of facilities) reduced impacts on schools to a less-than-significant level. Impacts on library facilities were also considered less than significant (Impact 6.10-8).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None required.

ANSWERS TO CHECKLIST QUESTIONS

The project would rehabilitate the water treatment plants for the purpose of continued compliance with water quality regulations and maintaining service reliability. No additional service demands for police, fire or other services would result. No additional significant effects

would result.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Public Services.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
10. <u>RECREATION</u> Would the project:			
A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan?			X

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2030 General Plan.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Chapter 6.9 of the Master EIR considered the effects of the 2030 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The general plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities. (Policy ERC 2.2.4) Impacts were considered less than significant after application of the applicable policies. (Impacts 6.9-1 and 6.9-2)

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None required.

ANSWERS TO CHECKLIST QUESTIONS

The project would rehabilitate existing water treatment facilities. New employment would result from construction activities, but permanent employment at the plants would not increase. The project would not substantially increase demand for recreational services, and would not adversely affect recreational services in the community. No additional significant effects would result, and any impacts from the project would be less than significant.

MITIGATION MEASURES

None required.

FINDINGS

The project would have no additional project-specific environmental effects relating to Recreation.

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
11. <u>TRANSPORTATION AND CIRCULATION</u>			
Would the project:			
A) Roadway segments: degrade peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.			X
B) Intersections: degrade peak period level of service from A, B, C or D (without project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.?			X
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			X
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?			X
E) Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?			X
F) Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?			X

ENVIRONMENTAL SETTING

The Fairbairn WTP is located in the north east corner of College Town Drive and State University Drive. The primary access to the project site is via College Town Drive. College Town Drive is an important access road to California State University at Sacramento (CSUS).

The entrance to the Fairbairn WTP is via College Town Drive.

The Sacramento River WTP is located at the western terminus of Water Street. Water Street connects to Bannon Street, which connects to Richards Boulevard to the north, Bercut Drive to the west, and 12th Street to the east. Construction traffic would use the Interstate 5/Richards Boulevard interchange for access to local streets.

STANDARDS OF SIGNIFICANCE

For purposes of this Initial Study, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

Roadway Segments

- A) the traffic generated by a project degrades peak period Level of Service (LOS) from A,B,C or D (without the project) to E or F (with project) or
- B) the LOS (without project) is E or F, and project generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.

Intersections

- the traffic generated by a project degrades peak period level of service from A, B, C or D (without project) to E or F (with project) or
- the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts.

- off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- the expected ramp queue is greater than the storage capacity.

Transit

- adversely affect public transit operations or
- fail to adequately provide for access to public transit.

Bicycle Facilities

- adversely affect bicycle travel, bicycle paths or

- fail to adequately provide for access by bicycle.

Pedestrian Circulation

- adversely affect pedestrian travel, pedestrian paths or
- fail to adequately provide for access by pedestrians.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

Transportation and circulation were discussed in the Master EIR in Chapter 6.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2030 General Plan on the public transportation system. Provisions of the 2030 General Plan that provide substantial guidance include Goal Mobility 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), development of a fair share funding system for Caltrans facilities (Policy M 1.5.6) and development of complete streets (Goal M 4.2).

While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 6.12-1, 6.12-8 (roadway segments in the City), Impacts 6.12-2, 6.12-9 (roadway segments in neighboring jurisdictions), and Impacts 6.12-3, 6.12-10 (freeway segments).

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A-F

The Fairbairn WTP is accessed via State Highway 50, Hornet Drive, Howe Avenue and College Town drive. The primary access is via College Town Drive. College Town Drive is a primary access road to California State University at Sacramento (CSUS). The entrance to the Fairbairn WTP is via College Town Drive.

The Sacramento River WTP is located at the western terminus of Water Street. Water Street connects to Bannon Street, which connects to Richards Boulevard to the north, Bercut Drive to the west, and 12th Street to the east. Construction traffic would use the Interstate 5/Richards Boulevard interchange for access to local streets.

Construction:

Construction activities at each of the sites would include demolition of some of the existing facilities, removal of materials via semi-trucks and trailers, grading and construction. Materials and equipment would be delivered and removed. Some heavy equipment would be utilized as part of construction activities. It is estimated that project construction would take approximately

two years, and an additional year of testing and bringing new processes on line would occur. Major activities during the first two years would include demolition, grading and construction. The primary effect on local roadways during the final year would involve the arrival and departure of the additional workers on the site. While there is some access to public transportation in the project areas, it is expected that employees would utilize private automobiles for transportation.

Although the project would not contribute to a substantial increase in traffic volume, construction could potentially conflict with bicycle and pedestrian traffic on College Town Drive, which provides access to CSUS. These conflicts are potentially significant. The Traffic Control Plan, as required in Mitigation Measure Trans-1, below, would reduce any impacts to a less-than-significant level.

Because the construction of the two projects would occur over a period of two years, there would be no significant effect on the freeway system due to the additional trips resulting from project construction.

Mitigation Measure Trans-1, set forth below, would reduce the impacts resulting from construction traffic to a less-than-significant level.

Operations:

Upon completion of the project, there would be no substantial increase in traffic at either of the water treatment plants. No substantial increase in employment would occur, and the renovated facilities would not require additional materials or service that would result in increased traffic. Operations would not, therefore, result in any significant effect.

MITIGATION MEASURES

TRANS-1 Prior to the start of the construction phase at either treatment plant facility, the project applicant shall prepare and submit a Traffic Control Plan to the City of Sacramento, Department of Transportation for review and approval. At a minimum, the plan shall include the following information:

- The number of truck trips, time, and day of street closures
- Time of day of arrival and departure of trucks
- Limitations on the size and type of trucks; provision of a staging area with a limitation on the number of trucks that can be waiting
- Provision of a truck circulation pattern
- Safe and efficient access routes for emergency vehicles
- Efficient and convenient transit routes
- Manual traffic control when necessary
- Proper advance warning and posted signage concerning street closures
- Provisions for bicycle and pedestrian safety, especially in the CSUS area

FINDINGS

All additional significant environmental effects of the project relating to Transportation and Circulation can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated to less than significant	No additional significant environmental effect
12. UTILITIES AND SERVICE SYSTEMS			
Would the project:			
A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

ENVIRONMENTAL SETTING

Sanitary Sewer Service

Wastewater collection in the City is provided by both the City and the County, depending on location. The City provides wastewater collection to about two-thirds of the area within the city limits. Within the city, there are two distinct areas: areas served by a separate sewer system and an area served by a combined sewer system.

The City of Sacramento is served by the Sacramento Regional County Sanitation District (SRCSD). The SRCSD is responsible for the operation of all regional interceptors and wastewater treatment plants. The Sacramento Regional Wastewater Treatment Plant (SRWTP) is a high purity oxygen activated sludge facility, and is permitted to treat an average dry weather flow (ADWF) of 181 mgd and a daily peak wet weather flow of 392 mgd.

The older portion of the City (bounded by the Sacramento and American rivers, 65th Street, and Sutterville Road) is served by a combined sewer and stormwater system. The combined system normally discharges to the SRWTP like other sewer systems in the region, but high flows during storm events can exceed the capacity of the system, infrequently resulting in discharge into the Sacramento River. Before such a discharge, combined system flows would receive advanced primary treatment at the City's Combined Wastewater Treatment Plant at 35th Avenue, or limited treatment during extreme storm events at the City's Pioneer Reservoir, located near Front and U Streets. As a result of Clean Water Act requirements, the City has implemented a long-term program to improve the capacity of the combined system and eliminate or minimize discharges into the river. The City is required to comply with the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems. The purpose of the Order is to require agencies to prepare a plan and schedule for measures to be implemented to reduce combined sewer overflows (CSOs), as well as measures to effectively clean-up and report CSOs

At the WTPs under normal operations, wastewater from the treatment process is dried and treated onsite; no wastewater is discharged into the SRCSD system other than from normal sources (such as restrooms). However, with the decommissioning of facilities discharges will be made to the sewer. Permits will be obtained from the SRCSD. With the plant rehabs including a dewatering and centrifuge system, the decant water may be discharged to the sewer, which would require a permit from the SRCSD. Estimated discharges of approximately 0.057 mgd (0.169 mgd peak) at Sacramento River WTP and approximately 0.020 mgd (0.084 mgd peak) at the Fairbairn WTP (Carollo, Project Memorandum, 2012).

Water Service

The City owns and operates the potable water distribution system that supplies potable water throughout the city. There are 18 high lift service pumps at the Sacramento River Water Treatment Plant (Sacramento River WTP) and the E.A. Fairbairn Water Treatment Plant (Fairbairn WTP). The City also maintains pumping facilities at nine of the city's storage reservoirs. These pump stations are of varying sizes and capacities.

The City separates water mains into two distinct categories: distribution mains and transmission mains. Water distribution mains are typically four inches to 12 inches in diameter and used to supply water for domestic use, fire suppression, and for fire hydrants. As a policy, the City requires new commercial areas install 12 inch mains in order to maintain fire flow capacity. Transmission mains are 18 inches and larger and are used to convey large volumes of water from the treatment plants to selected points throughout the distribution system. They are also used to transfer water to and from the storage reservoirs to meet fluctuating daily and seasonal demands. The City determines placement of new water distribution facilities as development plans are formulated.

The Fairbairn WTP and the Sacramento River WTP divert water from the American and Sacramento rivers. In 2003, the City finished an expansion of the Sacramento River WTP increasing its maximum capacity from 110 million gallons per day (mgd) to 160 mgd. The expansion also included the construction of a new intake structure on the Sacramento River to comply with current fish screen requirements. Expansion of the Fairbairn WTP completed in 2005 increased the maximum capacity of the Fairbairn WTP from 90 mgd to 200 mgd.

The city's water supply comes from the American and Sacramento rivers and groundwater pumped from the North and South American Subbasins. Groundwater has consisted of 20 percent of the city's supply between 1999 and 2006.

Storm Drainage

The City's separate storm drainage system includes conveyance of untreated storm water and dry weather urban runoff to the adjacent creeks and rivers. The separate drainage system consists of street drains, conveyance systems, and usually a pump station to discharge into the Sacramento or American River. These discharges are regulated for water quality by the Regional Water Quality Control Board NPDES permit.

The Sacramento design standards for project drainage include capturing the 10-year design storm without street flooding and preventing water from the 100-year storm from reaching within one foot of any building pad. These flows are then conveyed into open channels, which are designed to hold the 100-year design storm. Projects that may cause the conveyance system to exceed their

100-year design capacity are required to detain their flows on-site or otherwise mitigate the potential flow exceedence.

Solid Waste Services

Solid waste in the city of Sacramento is collected by City and permitted private haulers. The City offers both commercial and residential solid waste collection services. Construction and demolition waste is collected by private companies. Commercial solid waste collected by the City is transported to one of two transfer stations for processing: the Sacramento Recycling and Transfer Station owned by BLT Enterprises, which is permitted for a maximum daily disposal of 2,500 tons (CalRecycle, 2011); and the North Area Transfer Station, owned by the County of Sacramento Public Works Department, which accepts a maximum of 2,400 tons per day of construction/demolition, industrial, and green materials, tires, wood waste, and mixed municipal waste (CalRecycle, 2011). City waste transported from the City's transfer stations is then transported to the Lockwood Regional Landfill located in Sparks, Nevada. The Lockwood Landfill is a Class I landfill that currently accepts an average of 7,700 tons of solid waste per day, 800 tons of which come from the city of Sacramento. The Lockwood Landfill does not have maximum daily disposal limits, and it has a remaining capacity of 32.5 million tons. The landfill currently operates on a 550-acre site. Waste removed by private haulers can be disposed of at one of several landfills in the region depending upon which company hauls it and where it is processed.

If residential and municipal solid waste is taken to the NATS/County Facility for processing the waste is then transported to the Sacramento County (Kiefer) Landfill, operated by the County's Solid Waste Management and Recycling Department (the primary solid waste disposal facility in Sacramento County). Kiefer Landfill, categorized as a Class III facility, also accepts waste from the general public, businesses, and private waste haulers. More specifically, wastes accepted include: construction/demolition, mixed municipal, and sludge (biosolids). The facility is on a 1,084-acre site near the intersection of Kiefer Boulevard and Grantline Road. The permitted capacity for the landfill is 117,400,000 cubic yards (10,815 tons/day) and, as of 2000, the landfill had a remaining capacity of 86,163,462 cubic yards (73 percent). The landfill has an estimated closure date of 2064.

Construction and demolition waste and commercial waste that is collected by both the City's fleet as well as private companies is disposed at a variety of facilities, including the Sacramento County Kiefer Landfill, the Yolo County Landfill, Forward Landfill, and L and D Landfill. Private haulers can deliver waste to the landfill of their choice and base the decision on market conditions and capacity.

Hazardous wastes are collected by private haulers and are transported outside of Sacramento County to Class I disposal sites or to the American Environmental Management Corporation hazardous waste transfer station in the east area of Sacramento County. The City Fire Department also operates a household hazardous waste collection center.

The treatment of water for municipal purposes generates waste products that result from the mixing of coagulating chemicals with the untreated water. At both the Sacramento River WTP and Fairbairn WTP, this sludge is typically processed to reduce its volume and is stored onsite. The sludge product is sometimes put to use by the City for a variety of purposes (for example, as fill material).

STANDARDS OF SIGNIFICANCE

For the purposes of this Initial Study, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, or school facilities beyond what was anticipated in the 2030 General Plan:

- result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments or
- require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

SUMMARY OF ANALYSIS UNDER THE 2030 GENERAL PLAN MASTER EIR, INCLUDING CUMULATIVE IMPACTS, GROWTH INDUCING IMPACTS, AND IRREVERSIBLE SIGNIFICANT EFFECTS

The Master EIR evaluated the effects of development under the 2030 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 6.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2030 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 6.11-1) but the need for new water supply facilities results in a significant and unavoidable effect (Impact 6.11-2). The potential need for expansion of wastewater treatment facilities was identified as having a significant and unavoidable effect (Impacts 6.11-4, 6.11-5). Impacts on solid waste facilities were less than significant (Impacts 6.11-7, 6.11-8). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

MITIGATION MEASURES FROM 2030 GENERAL PLAN MASTER EIR THAT APPLY TO THE PROJECT

None available.

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A&B

The proposed project would rehabilitate the Fairbairn WTP and the Sacramento River WTP as part of the City's ongoing maintenance and oversight of its water supply system. The project would not increase water demand or require the construction of other water treatment facilities.

The water treatment plants to be renovated process most of the water supplied for municipal and industrial users by the City of Sacramento. Maintenance of the plants, and replacement of aged, worn and undependable equipment, are integral parts of the City's utility services. The proposed project ensures that the City is able to continue to provide adequate service to customers.

Any impact would be less than significant.

MITIGATION MEASURES

FINDINGS

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect remains significant with all identified mitigation	Effect can be mitigated to less than significant	No additional significant environmental effect
13. MANDATORY FINDINGS OF SIGNIFICANCE			
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?			X
B.) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

ANSWERS TO CHECKLIST QUESTIONS

QUESTIONS A THROUGH C

QUESTION A

The project would result in the removal of elderberry plants on portions of the Sacramento River WTP site. Mitigation Measure Bio-2(a-c) requires the City to cooperate with the U.S. Fish and Wildlife Service to prepare and have approval of a relocation plan, including a habitat conservation plan as required, to mitigate the effects of such removal.

QUESTION B

The project is an anticipated subsequent project in the 2030 General Plan, consistent with the general plan's policies and goals that call for continued public services at an appropriate and safe level. The proposed project would rehabilitate existing water treatment facilities to ensure that the City has the ability to provide water service to customers. Any cumulative effects have been discussed and considered in the Master EIR.

QUESTION C

As discussed in the Initial Study, the project would result in some effects that could be potentially significant. Mitigation implemented as part of the project would reduce all such effects to a less-than-significant level, and no substantial adverse effects on human beings would result.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

	Air Quality	X	Hazards
X	Biological Resources	X	Noise
X	Cultural Resources		Public Services
	Energy and Mineral Resources		Recreation
	Geology and Soils	X	Transportation/Circulation
	Hydrology and Water Quality		Utilities and Service Systems
X	Light and Glare		

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2030 General Plan Master EIR; (b) the proposed project is consistent with the 2030 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

Signature

Date

Printed Name

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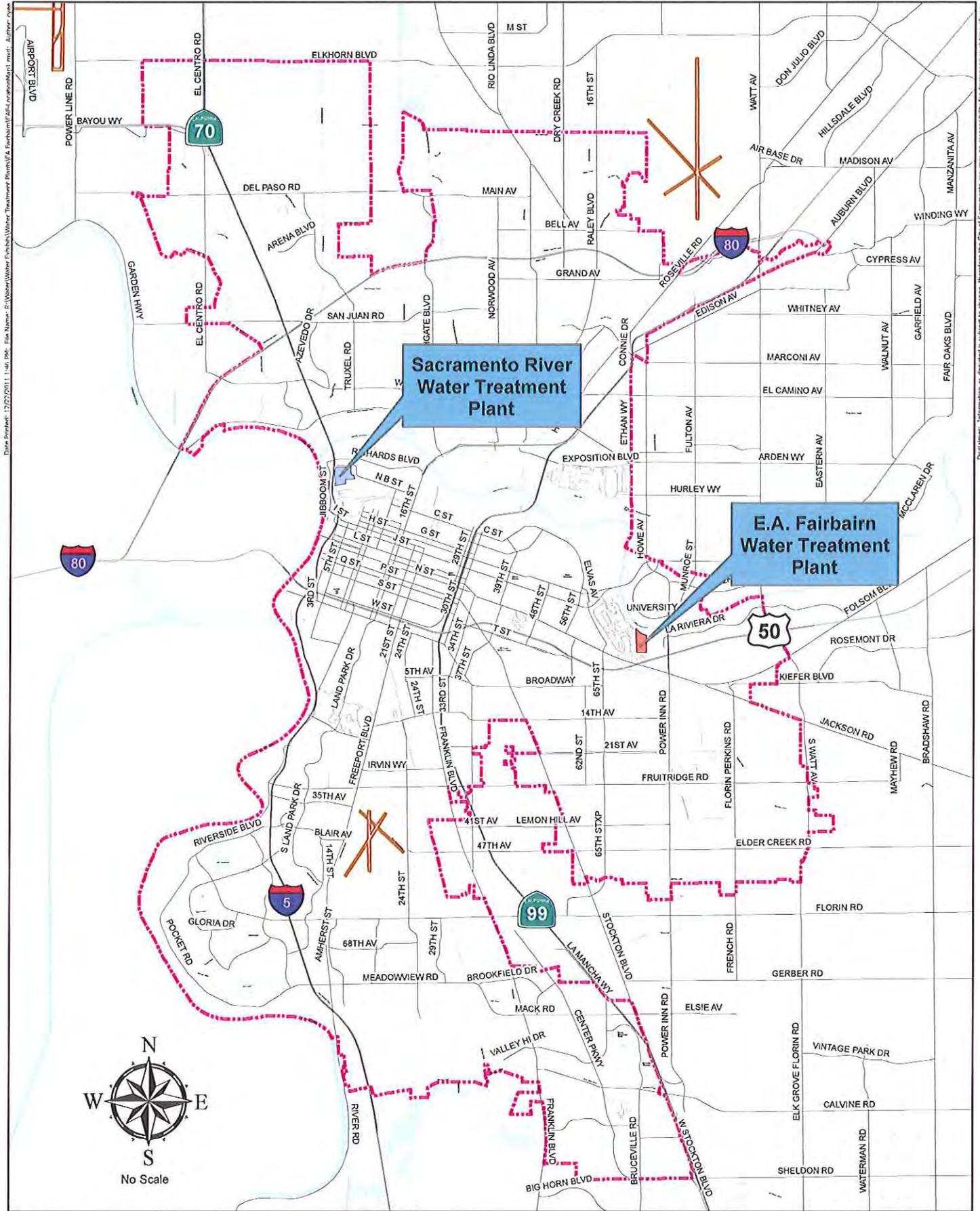
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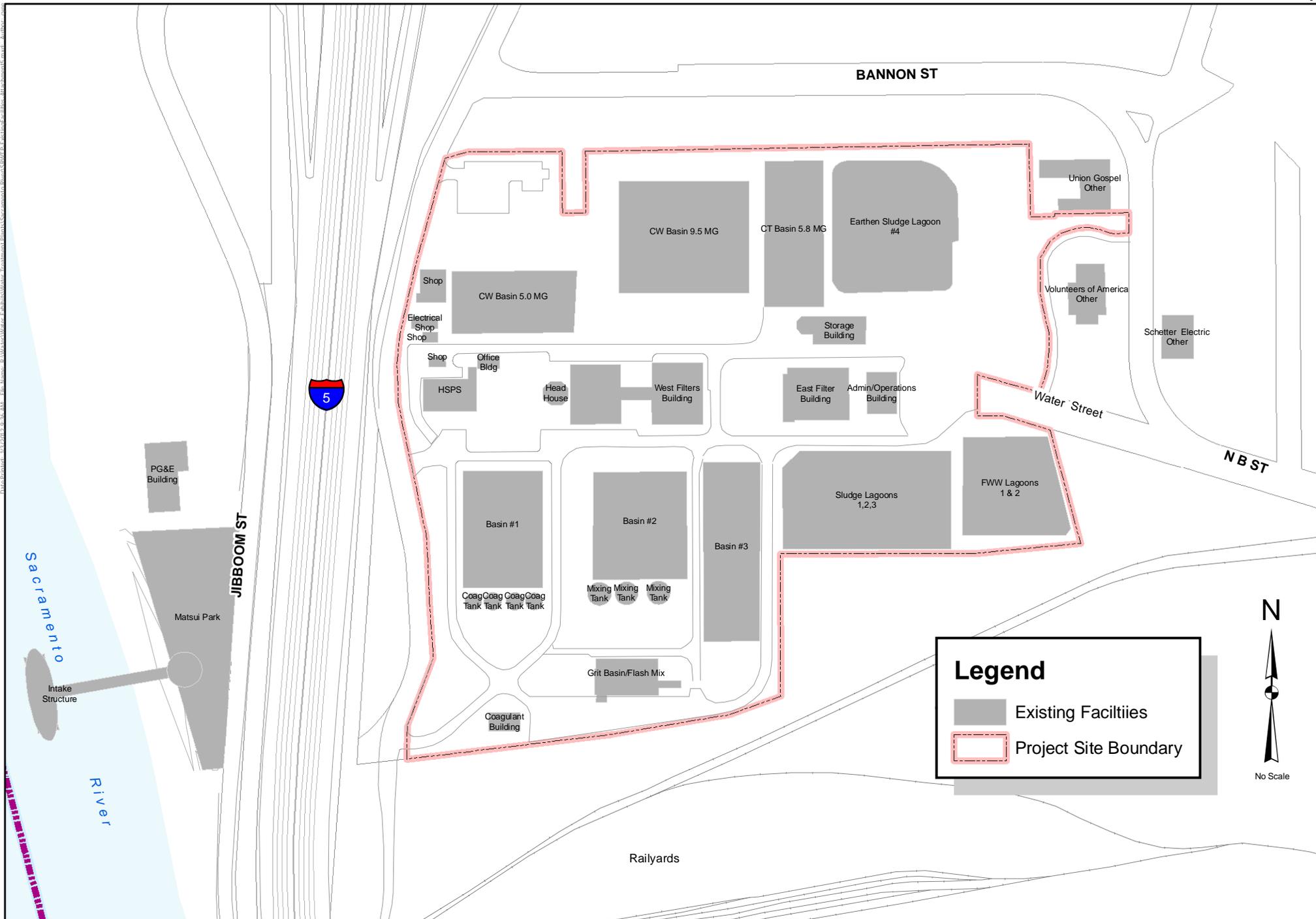
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Drawn: 1/27/2011 1:46:00 PM File Name: E:\Water\Water Facilities\Water Treatment Plants\7. Sacramento\7.1 Regional Map.mxd Author: oca

Disclaimer: Information as depicted is subject to change, therefore the City of Sacramento assumes no responsibility for discrepancies at time of use.

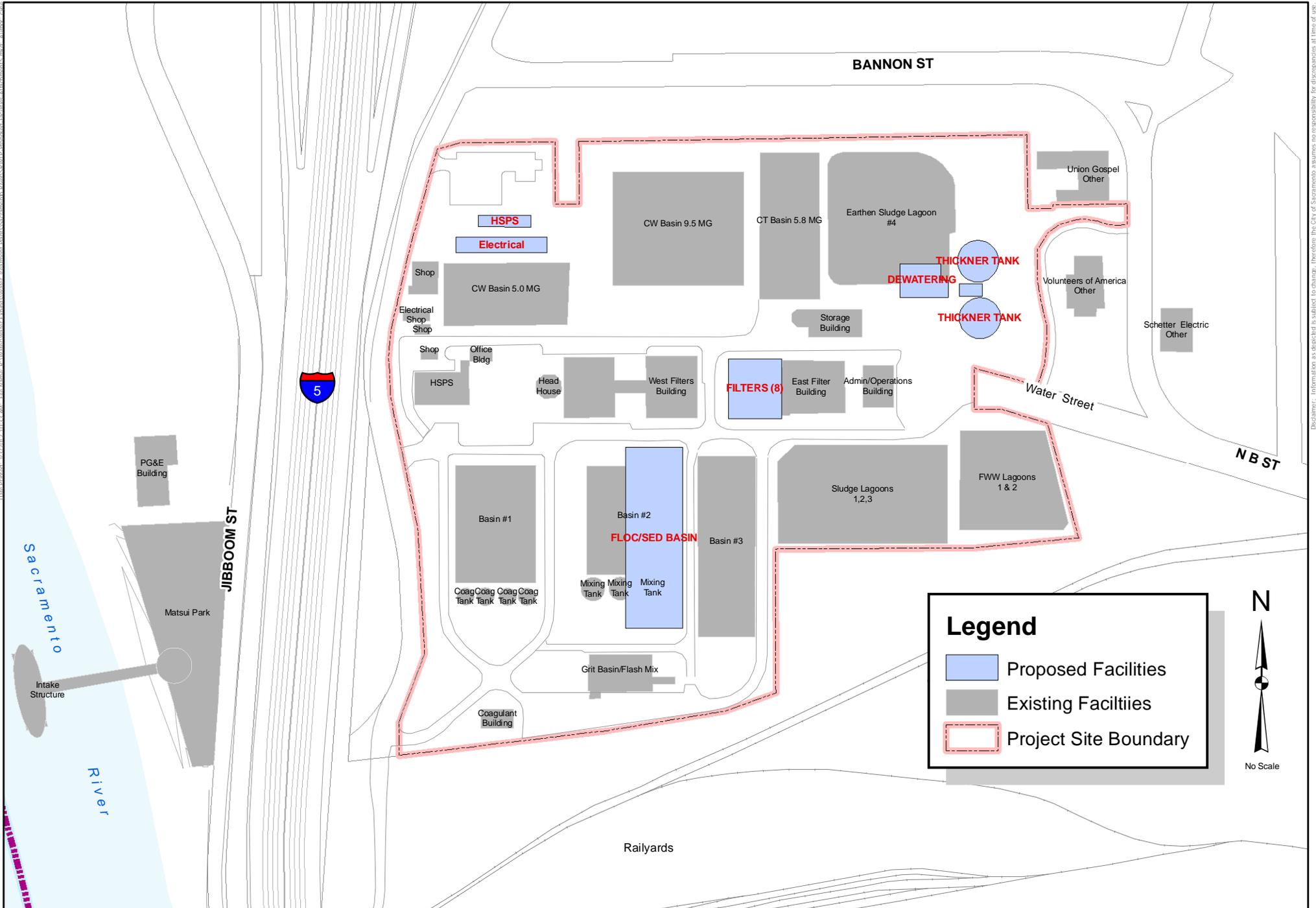
Regional Location Map of Water Treatment Plants



Sacramento River Water Treatment Plant Existing Facilities

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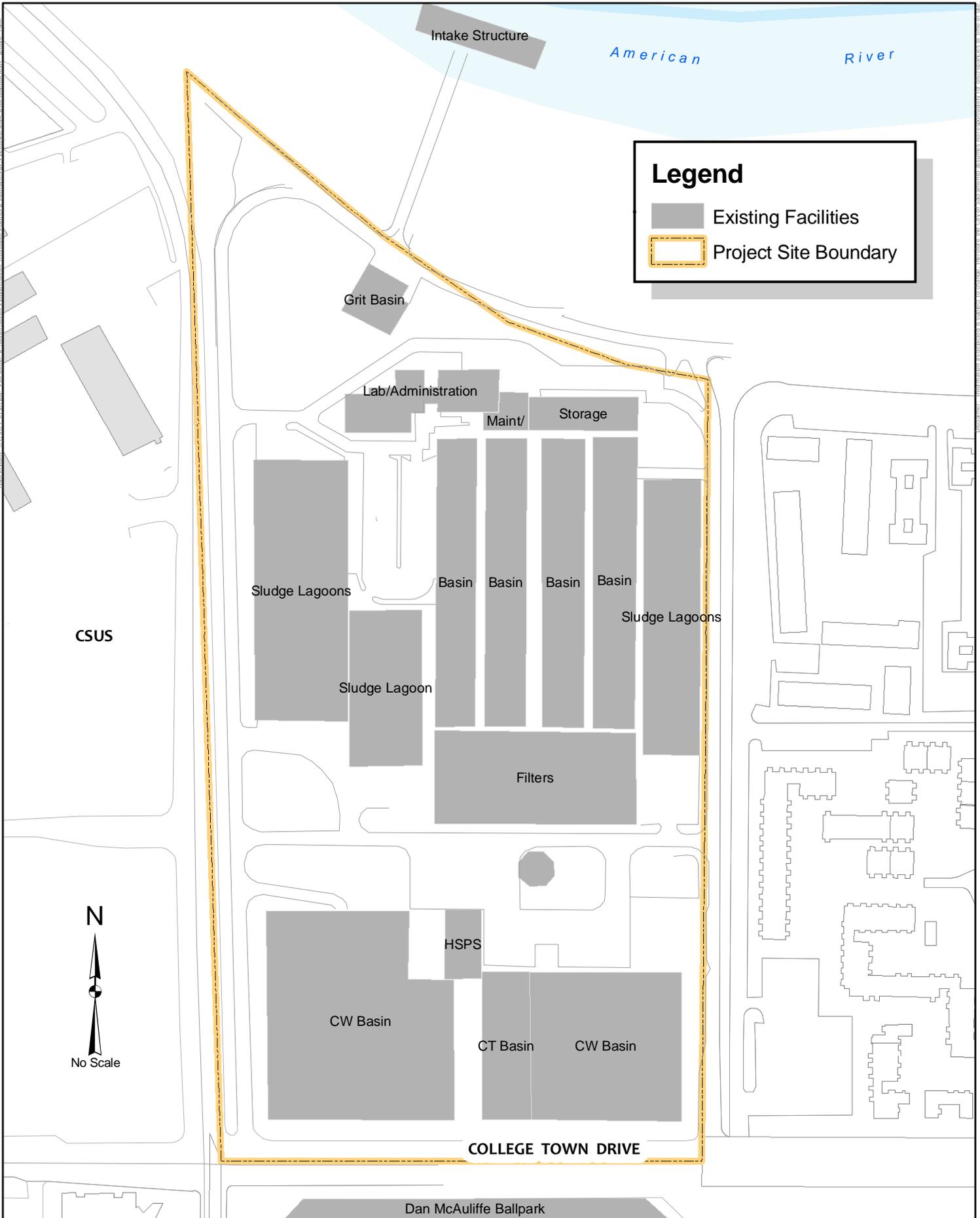
Disclaimer: Information as depicted is subject to change, therefore the City of Sacramento assumes no responsibility for discrepancies at time of use.



Sacramento River Water Treatment Plant Proposed Facilities

Data provided: 1/10/2012 10:33 AM - File Name: D:\Water\Water Facilities\Treatment_Plant\Sacramento_River\SRWTP_Rev02\Map_Book\Sacramento_Attachment5.mxd, Author: c...

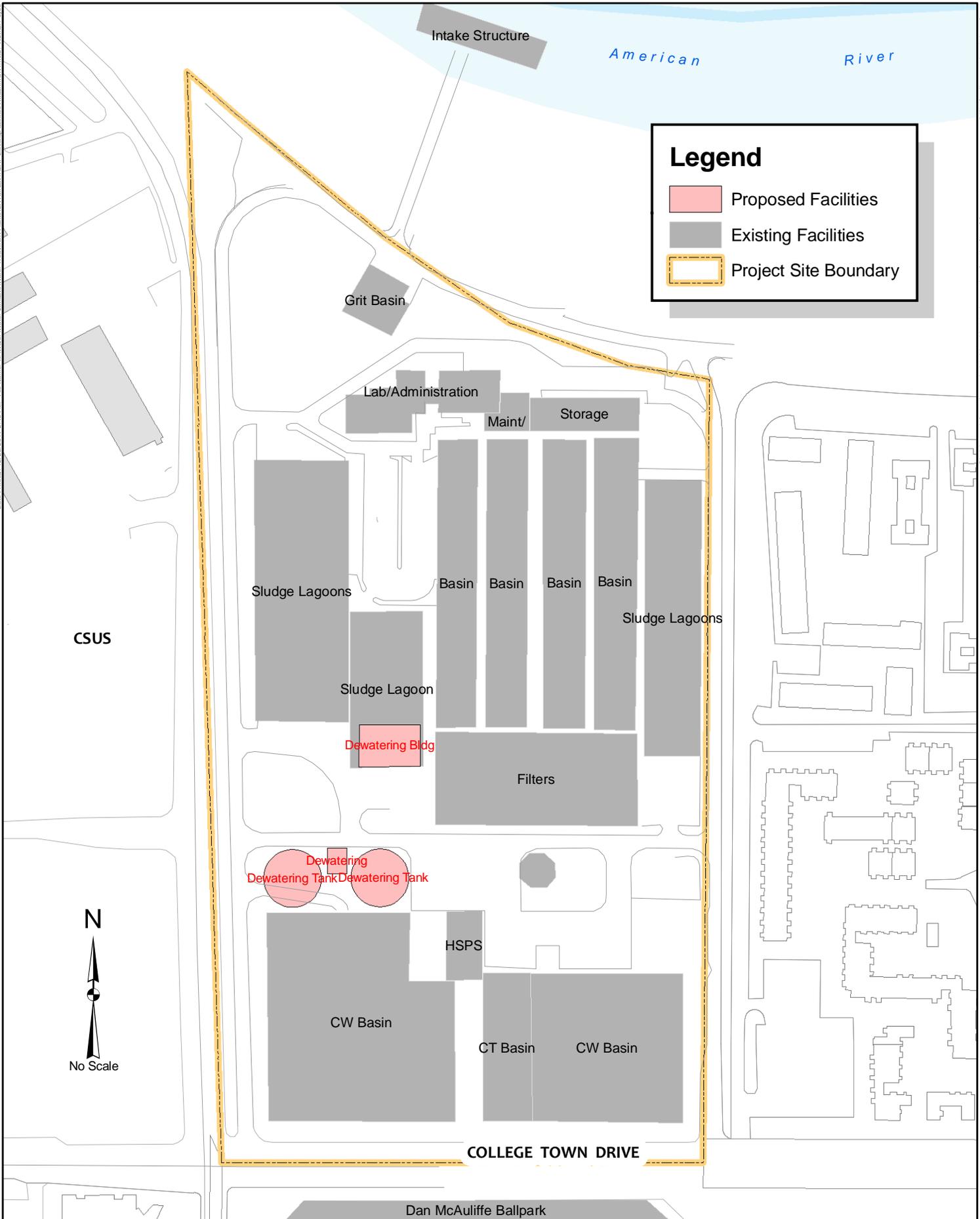
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E.A. Fairbairn Water Treatment Plant

Existing Facilities

Date Printed: 12/28/2011 2:16:04 PM - File Name: P:\Water\Water Exhibit\Water Treatment Plants\EA Exhibits\EA Facilities\Attachments\mxd - Author: cba



Disclaimer - Information as depicted is subject to change. Therefore the City of Sacramento assumes no responsibility for discrepancies at time of use.

E.A. Fairbairn Water Treatment Plant Proposed Facilities

Urbanis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: S:\Environmental\Projects\DOU SRWTP\URBEMIS Run 120511.urb924

Project Name: WTPs Rehabilitation

Project Location: Sacramento County AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2013 TOTALS (lbs/day unmitigated)	2.70	20.57	13.76	0.01	180.02	1.20	181.21	37.60	1.10	38.70	2,730.25
2014 TOTALS (lbs/day unmitigated)	5.75	29.79	26.08	0.01	180.02	1.98	181.06	37.60	1.82	38.56	4,600.41
2015 TOTALS (lbs/day unmitigated)	2.62	13.72	13.89	0.01	0.04	0.84	0.88	0.01	0.77	0.78	2,636.69
2016 TOTALS (lbs/day unmitigated)	38.89	12.69	13.36	0.01	0.04	0.74	0.78	0.01	0.68	0.69	2,636.75

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.37	0.02	1.55	0.00	0.01	0.01	2.81

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.04	0.01	0.08	0.00	0.01	0.00	8.75

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.41	0.03	1.63	0.00	0.02	0.01	11.56

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

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	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 4/9/2013-6/7/2013 Active Days: 44	1.43	11.94	7.90	0.01	7.25	0.68	7.93	1.51	0.62	2.14	1,972.33
Demolition 04/09/2013-06/09/2013	1.43	11.94	7.90	0.01	7.25	0.68	7.93	1.51	0.62	2.14	1,972.33
Fugitive Dust	0.00	0.00	0.00	0.00	7.21	0.00	7.21	1.50	0.00	1.50	0.00
Demo Off Road Diesel	1.09	7.65	5.71	0.00	0.00	0.51	0.51	0.00	0.47	0.47	927.96
Demo On Road Diesel	0.32	4.27	1.57	0.01	0.03	0.17	0.20	0.01	0.15	0.16	960.49
Demo Worker Trips	0.02	0.03	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	83.88
Time Slice 6/10/2013-12/31/2013 Active Days: 147	2.70	20.57	13.76	0.00	180.02	1.20	181.21	37.60	1.10	38.70	2,730.25
Fine Grading 06/10/2013-02/10/2014	2.70	20.57	13.76	0.00	180.02	1.20	181.21	37.60	1.10	38.70	2,730.25
Fine Grading Dust	0.00	0.00	0.00	0.00	180.00	0.00	180.00	37.59	0.00	37.59	0.00
Fine Grading Off Road Diesel	2.58	19.28	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,308.97
Fine Grading On Road Diesel	0.09	1.25	0.46	0.00	0.01	0.05	0.06	0.00	0.05	0.05	281.48
Fine Grading Worker Trips	0.03	0.04	1.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	139.80
Time Slice 1/1/2014-2/10/2014 Active Days: 29	2.53	18.97	13.54	0.00	180.02	1.05	181.06	37.60	0.96	38.56	2,730.31
Fine Grading 06/10/2013-02/10/2014	2.53	18.97	13.54	0.00	180.02	1.05	181.06	37.60	0.96	38.56	2,730.31
Fine Grading Dust	0.00	0.00	0.00	0.00	180.00	0.00	180.00	37.59	0.00	37.59	0.00
Fine Grading Off Road Diesel	2.42	17.84	12.17	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,308.97
Fine Grading On Road Diesel	0.09	1.10	0.41	0.00	0.01	0.04	0.05	0.00	0.04	0.04	281.48
Fine Grading Worker Trips	0.03	0.04	0.96	0.00	0.01	0.00	0.01	0.00	0.00	0.00	139.86

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Time Slice 2/1/2014-4/3/2014	5.75	29.79	26.08	0.01	0.06	1.98	2.04	0.02	1.82	1.84	4,600.41
Active Days: 38											
Asphalt 02/1/2014-04/03/2014	2.88	14.90	11.56	0.00	0.02	1.07	1.09	0.01	0.98	0.99	1,963.92
Paving Off-Gas	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.13	13.75	9.62	0.00	0.00	1.02	1.02	0.00	0.94	0.94	1,459.40
Paving On Road Diesel	0.08	1.09	0.41	0.00	0.01	0.04	0.05	0.00	0.04	0.04	280.75
Paving Worker Trips	0.04	0.06	1.53	0.00	0.01	0.00	0.01	0.00	0.00	0.01	223.77
Building 02/1/2014-04/1/2016	2.87	14.88	14.51	0.01	0.04	0.91	0.95	0.01	0.83	0.85	2,636.49
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	0.17	1.79	1.82	0.01	0.02	0.07	0.09	0.01	0.07	0.07	605.90
Building Worker Trips	0.07	0.12	2.80	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.40
Time Slice 4/4/2014-12/31/2014	2.87	14.88	14.51	0.01	0.04	0.91	0.95	0.01	0.83	0.85	2,636.49
Active Days: 194											
Building 02/1/2014-04/1/2016	2.87	14.88	14.51	0.01	0.04	0.91	0.95	0.01	0.83	0.85	2,636.49
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	0.17	1.79	1.82	0.01	0.02	0.07	0.09	0.01	0.07	0.07	605.90
Building Worker Trips	0.07	0.12	2.80	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.40
Time Slice 1/1/2015-12/31/2015	2.62	13.72	13.89	0.01	0.04	0.84	0.88	0.01	0.77	0.78	2,636.69
Active Days: 261											
Building 02/1/2014-04/1/2016	2.62	13.72	13.89	0.01	0.04	0.84	0.88	0.01	0.77	0.78	2,636.69
Building Off Road Diesel	2.40	12.04	9.62	0.00	0.00	0.76	0.76	0.00	0.70	0.70	1,621.20
Building Vendor Trips	0.15	1.58	1.69	0.01	0.02	0.06	0.09	0.01	0.06	0.07	605.98
Building Worker Trips	0.07	0.10	2.58	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.51

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Time Slice 1/1/2016-4/1/2016	2.39	<u>12.69</u>	<u>13.36</u>	<u>0.01</u>	<u>0.04</u>	<u>0.74</u>	<u>0.78</u>	<u>0.01</u>	<u>0.68</u>	<u>0.69</u>	<u>2,636.75</u>
Active Days: 72											
Building 02/11/2014-04/1/2016	2.39	12.69	13.36	0.01	0.04	0.74	0.78	0.01	0.68	0.69	2,636.75
Building Off Road Diesel	2.19	11.19	9.40	0.00	0.00	0.67	0.67	0.00	0.62	0.62	1,621.20
Building Vendor Trips	0.14	1.40	1.58	0.01	0.02	0.06	0.08	0.01	0.05	0.06	606.04
Building Worker Trips	0.06	0.10	2.39	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.52
Time Slice 4/1/2016-5/1/3/2016	<u>38.89</u>	<u>0.01</u>	<u>0.30</u>	<u>0.00</u>	<u>50.78</u>						
Active Days: 24											
Coating 04/1/2016-05/1/3/2016	38.89	0.01	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.78
Architectural Coating	38.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.78

Phase Assumptions

Phase: Demolition 4/9/2013 - 6/9/2013 - Demolition of former 911 building and concrete basin 2

Demolition

Building Volume Total (cubic feet): 755366.3

Building Volume Daily (cubic feet): 17177.16

On Road Truck Travel (VMT): 238.57

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Fine Grading 6/10/2013 - 2/10/2014 - Default Fine Site Grading Description

Total Acres Disturbed: 12.9

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 69.91

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Off-Road Equipment:

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 2/11/2014 - 4/3/2014 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 2/11/2014 - 4/11/2016 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/12/2016 - 5/13/2016 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.25						
TOTALS (lbs/day, unmitigated)	0.37	0.02	1.55	0.00	0.01	0.01	2.81

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000	0.04	0.01	0.08	0.00	0.01	0.00	8.75
TOTALS (lbs/day, unmitigated)	0.04	0.01	0.08	0.00	0.01	0.00	8.75

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 95 Season: Summer

Summary of Land Uses

Land Use Type	Acraage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)		0.55	acres	2.00	1.10	8.11
					1.10	8.11

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.5	0.6	99.2	0.2
Light Truck < 3750 lbs	10.0	2.0	93.0	5.0
Light Truck 3751-5750 lbs	22.6	0.4	99.2	0.4
Med Truck 5751-8500 lbs	10.2	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	76.2	23.8
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	1.6	0.0	18.8	81.2
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.5	54.3	45.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	10.8	7.3	7.3
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)	2.0	1.0	97.0			
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Urbanis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: S:\Environmental\Projects\DOU SRWTP\URBEMIS Run 120511.urb924

Project Name: WTPs Rehabilitation

Project Location: Sacramento County AQMD

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

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2013 TOTALS (lbs/day unmitigated)	2.70	20.57	13.76	0.01	180.02	1.20	181.21	37.60	1.10	38.70	2,730.25
2014 TOTALS (lbs/day unmitigated)	5.75	29.79	26.08	0.01	180.02	1.98	181.06	37.60	1.82	38.56	4,600.41
2015 TOTALS (lbs/day unmitigated)	2.62	13.72	13.89	0.01	0.04	0.84	0.88	0.01	0.77	0.78	2,636.69
2016 TOTALS (lbs/day unmitigated)	38.89	12.69	13.36	0.01	0.04	0.74	0.78	0.01	0.68	0.69	2,636.75

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.25	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.01	0.01	0.07	0.00	0.01	0.00	7.03

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.26	0.01	0.07	0.00	0.01	0.00	7.03

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

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	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 4/9/2013-6/7/2013 Active Days: 44	1.43	11.94	7.90	0.01	7.25	0.68	7.93	1.51	0.62	2.14	1,972.33
Demolition 04/09/2013-06/09/2013	1.43	11.94	7.90	0.01	7.25	0.68	7.93	1.51	0.62	2.14	1,972.33
Fugitive Dust	0.00	0.00	0.00	0.00	7.21	0.00	7.21	1.50	0.00	1.50	0.00
Demo Off Road Diesel	1.09	7.65	5.71	0.00	0.00	0.51	0.51	0.00	0.47	0.47	927.96
Demo On Road Diesel	0.32	4.27	1.57	0.01	0.03	0.17	0.20	0.01	0.15	0.16	960.49
Demo Worker Trips	0.02	0.03	0.63	0.00	0.00	0.00	0.01	0.00	0.00	0.00	83.88
Time Slice 6/10/2013-12/31/2013 Active Days: 147	2.70	20.57	13.76	0.00	180.02	1.20	181.21	37.60	1.10	38.70	2,730.25
Fine Grading 06/10/2013-02/10/2014	2.70	20.57	13.76	0.00	180.02	1.20	181.21	37.60	1.10	38.70	2,730.25
Fine Grading Dust	0.00	0.00	0.00	0.00	180.00	0.00	180.00	37.59	0.00	37.59	0.00
Fine Grading Off Road Diesel	2.58	19.28	12.26	0.00	0.00	1.14	1.14	0.00	1.05	1.05	2,308.97
Fine Grading On Road Diesel	0.09	1.25	0.46	0.00	0.01	0.05	0.06	0.00	0.05	0.05	281.48
Fine Grading Worker Trips	0.03	0.04	1.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	139.80
Time Slice 1/1/2014-2/10/2014 Active Days: 29	2.53	18.97	13.54	0.00	180.02	1.05	181.06	37.60	0.96	38.56	2,730.31
Fine Grading 06/10/2013-02/10/2014	2.53	18.97	13.54	0.00	180.02	1.05	181.06	37.60	0.96	38.56	2,730.31
Fine Grading Dust	0.00	0.00	0.00	0.00	180.00	0.00	180.00	37.59	0.00	37.59	0.00
Fine Grading Off Road Diesel	2.42	17.84	12.17	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,308.97
Fine Grading On Road Diesel	0.09	1.10	0.41	0.00	0.01	0.04	0.05	0.00	0.04	0.04	281.48
Fine Grading Worker Trips	0.03	0.04	0.96	0.00	0.01	0.00	0.01	0.00	0.00	0.00	139.86

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Time Slice 2/1/2014-4/3/2014	<u>5.75</u>	<u>29.79</u>	<u>26.08</u>	<u>0.01</u>	0.06	<u>1.98</u>	2.04	0.02	<u>1.82</u>	1.84	<u>4600.41</u>
Active Days: 38											
Asphalt 02/11/2014-04/03/2014	2.88	14.90	11.56	0.00	0.02	1.07	1.09	0.01	0.98	0.99	1,963.92
Paving Off-Gas	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.13	13.75	9.62	0.00	0.00	1.02	1.02	0.00	0.94	0.94	1,459.40
Paving On Road Diesel	0.08	1.09	0.41	0.00	0.01	0.04	0.05	0.00	0.04	0.04	280.75
Paving Worker Trips	0.04	0.06	1.53	0.00	0.01	0.00	0.01	0.00	0.00	0.01	223.77
Building 02/11/2014-04/1/2016	2.87	14.88	14.51	0.01	0.04	0.91	0.95	0.01	0.83	0.85	2,636.49
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	0.17	1.79	1.82	0.01	0.02	0.07	0.09	0.01	0.07	0.07	605.90
Building Worker Trips	0.07	0.12	2.80	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.40
Time Slice 4/4/2014-12/31/2014	2.87	14.88	14.51	0.01	0.04	0.91	0.95	0.01	0.83	0.85	2,636.49
Active Days: 194											
Building 02/11/2014-04/1/2016	2.87	14.88	14.51	0.01	0.04	0.91	0.95	0.01	0.83	0.85	2,636.49
Building Off Road Diesel	2.63	12.97	9.89	0.00	0.00	0.82	0.82	0.00	0.76	0.76	1,621.20
Building Vendor Trips	0.17	1.79	1.82	0.01	0.02	0.07	0.09	0.01	0.07	0.07	605.90
Building Worker Trips	0.07	0.12	2.80	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.40
Time Slice 1/1/2015-12/31/2015	<u>2.62</u>	<u>13.72</u>	<u>13.89</u>	<u>0.01</u>	<u>0.04</u>	<u>0.84</u>	<u>0.88</u>	<u>0.01</u>	<u>0.77</u>	<u>0.78</u>	<u>2,636.69</u>
Active Days: 261											
Building 02/11/2014-04/1/2016	2.62	13.72	13.89	0.01	0.04	0.84	0.88	0.01	0.77	0.78	2,636.69
Building Off Road Diesel	2.40	12.04	9.62	0.00	0.00	0.76	0.76	0.00	0.70	0.70	1,621.20
Building Vendor Trips	0.15	1.58	1.69	0.01	0.02	0.06	0.09	0.01	0.06	0.07	605.98
Building Worker Trips	0.07	0.10	2.58	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.51

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Time Slice 1/1/2016-4/1/2016	2.39	<u>12.69</u>	<u>13.36</u>	<u>0.01</u>	<u>0.04</u>	<u>0.74</u>	<u>0.78</u>	<u>0.01</u>	<u>0.68</u>	<u>0.69</u>	<u>2,636.75</u>
Active Days: 72											
Building 02/1/2014-04/1/2016	2.39	12.69	13.36	0.01	0.04	0.74	0.78	0.01	0.68	0.69	2,636.75
Building Off Road Diesel	2.19	11.19	9.40	0.00	0.00	0.67	0.67	0.00	0.62	0.62	1,621.20
Building Vendor Trips	0.14	1.40	1.58	0.01	0.02	0.06	0.08	0.01	0.05	0.06	606.04
Building Worker Trips	0.06	0.10	2.39	0.00	0.02	0.01	0.03	0.01	0.01	0.01	409.52
Time Slice 4/1/2/2016-5/13/2016											
Active Days: 24											
Coating 04/12/2016-05/13/2016	38.89	0.01	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.78
Architectural Coating	38.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.78

Phase Assumptions

Phase: Demolition 4/9/2013 - 6/9/2013 - Demolition of former 911 building and concrete basin 2
 Demolition
 Building Volume Total (cubic feet): 755366.3
 Building Volume Daily (cubic feet): 17177.16
 On Road Truck Travel (VMT): 238.57
 Off-Road Equipment:
 1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Fine Grading 6/10/2013 - 2/10/2014 - Default Fine Site Grading Description
 Total Acres Disturbed: 12.9
 Maximum Daily Acreage Disturbed: 9
 Fugitive Dust Level of Detail: Default
 20 lbs per acre-day
 On Road Truck Travel (VMT): 69.91

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Off-Road Equipment:

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 2/11/2014 - 4/3/2014 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 2/11/2014 - 4/11/2016 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/12/2016 - 5/13/2016 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.25						
TOTALS (lbs/day, unmitigated)	0.25	0.00	0.00	0.00	0.00	0.00	0.00

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)	0.01	0.01	0.07	0.00	0.01	0.00	7.03
TOTALS (lbs/day, unmitigated)	0.01	0.01	0.07	0.00	0.01	0.00	7.03

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 50 Season: Winter

Summary of Land Uses

Land Use Type	Acreage	Tip Rate	Unit Type	No. Units	Total Trips	Total VMT
Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)		0.55	acres	2.00	1.10	8.11
					1.10	8.11

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.5	0.6	99.2	0.2
Light Truck < 3750 lbs	10.0	2.0	93.0	5.0
Light Truck 3751-5750 lbs	22.6	0.4	99.2	0.4
Med Truck 5751-8500 lbs	10.2	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	76.2	23.8
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	1.6	0.0	18.8	81.2
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.5	54.3	45.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commuter	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	10.8	7.3	7.3
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)	2.0	1.0	97.0			
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Urbanis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: S:\Environmental\Projects\DOU SRWTP\URBEMIS Run 120511.urb924

Project Name: WTPs Rehabilitation

Project Location: Sacramento County AQMD

On-Road Vehicle Emissions Based on: Version : Emtac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOX	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2013 TOTALS (tons/year unmitigated)	0.23	1.77	1.19	0.00	13.39	0.10	13.49	2.80	0.09	2.89	244.06
2014 TOTALS (tons/year unmitigated)	0.42	2.28	2.10	0.00	2.62	0.14	2.76	0.55	0.13	0.68	382.74
2015 TOTALS (tons/year unmitigated)	0.34	1.79	1.81	0.00	0.01	0.11	0.11	0.00	0.10	0.10	344.09
2016 TOTALS (tons/year unmitigated)	0.55	0.46	0.48	0.00	0.00	0.03	0.03	0.00	0.02	0.02	95.53

AREA SOURCE EMISSION ESTIMATES

	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.06	0.00	0.14	0.00	0.00	0.00	0.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.00	0.00	0.01	0.00	0.00	0.00	1.49

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.06	0.00	0.15	0.00	0.00	0.00	1.74

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

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2016	0.55	0.46	0.48	0.00	0.00	0.03	0.03	0.00	0.02	0.02	95.53
Building 02/11/2014-04/11/2016	0.09	0.46	0.48	0.00	0.00	0.03	0.03	0.00	0.02	0.02	94.92
Building Off Road Diesel	0.08	0.40	0.34	0.00	0.00	0.02	0.02	0.00	0.02	0.02	58.36
Building Vendor Trips	0.01	0.05	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.82
Building Worker Trips	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.74
Coating 04/12/2016-05/13/2016	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Architectural Coating	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61

Phase Assumptions

Phase: Demolition 4/9/2013 - 6/9/2013 - Demolition of former 911 building and concrete basin 2

Demolition

Building Volume Total (cubic feet): 755366.3

Building Volume Daily (cubic feet): 17177.16

On Road Truck Travel (VMT): 238.57

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Fine Grading 6/10/2013 - 2/10/2014 - Default Fine Site Grading Description

Total Acres Disturbed: 12.9

Maximum Daily Acreage Disturbed: 9

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 69.91

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

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- 1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
- 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 2/11/2014 - 4/3/2014 - Default Paving Description

Acres to be Paved: 9

Off-Road Equipment:

- 4 Cement and Mortar Mixers (110 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

Phase: Building Construction 2/11/2014 - 4/11/2016 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 4/12/2016 - 5/13/2016 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth							
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.05						
TOTALS (tons/year, unmitigated)	0.06	0.00	0.14	0.00	0.00	0.00	0.25

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)	0.00	0.00	0.01	0.00	0.00	0.00	1.49
TOTALS (tons/year, unmitigated)	0.00	0.00	0.01	0.00	0.00	0.00	1.49

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)		0.55	acres	2.00	1.10	8.11
					1.10	8.11

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	47.5	0.6	99.2	0.2
Light Truck < 3750 lbs	10.0	2.0	93.0	5.0
Light Truck 3751-5750 lbs	22.6	0.4	99.2	0.4
Med Truck 5751-8500 lbs	10.2	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	2.1	0.0	76.2	23.8
Lite-Heavy Truck 10,001-14,000 lbs	0.9	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	1.6	0.0	18.8	81.2
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	3.5	54.3	45.7	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	10.8	7.3	7.3
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Water Treatment Plant (20 additional trips per Water Facilities Expansion Project DEIR, 2000)	2.0	1.0	97.0			
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September 16, 2011

Chris Cleveland
Carollo Engineers
2880 Gateway Oaks Drive, Suite 300
Sacramento, CA 95833

Subject: Elderberry Shrub Survey at the Sacramento River Water Treatment Plant, three private parcels adjacent to the Sacramento River Water Treatment Plant, and a portion of the E.A. Fairbairn Water Treatment Plant

Dear Chris,

This letter report presents the results of an elderberry shrub survey of the 42-acre Sacramento River Water Treatment Plant (SRWTP), three private parcels (approximately 1-acre; APN 001-0040-014-0000, APN 001-0040-015-0000, APN 001-0040-039-0000) adjacent to the SRTWTP, and an approximately 15-acre portion of the E.A. Fairbairn Water Treatment Plant (EAFWTP). We understand that the City of Sacramento needs to assess the extent of elderberry shrubs to determine the feasibility of constructing new facilities.

SITE DESCRIPTION

Historically, these sites and surrounding areas were likely riparian woodlands associated with the Sacramento and American Rivers. However, these sites no longer exhibit characteristics of riparian habitat. Surrounding land uses are developed and have resulted in disturbance to native vegetation. The sites are isolated and are no longer hydrologically connected to their associated rivers.

SACRAMENTO RIVER WATER TREATMENT PLANT

The 42-acre SRWTP is located between North B Street and Bannon Street, immediately east of Interstate 5, within the City of Sacramento (Exhibit 1). The land uses in the vicinity include industrial and commercial developments with a few private residences to the north of the site. The SRWTP was constructed in the 1920's and consists of developed and landscaped land. Trees on the site include tree-of-heaven (*Ailanthus altissima*), hybrid walnut (*Juglans* sp.), plane tree (*Platanus* sp.), valley oak (*Quercus lobata*), and redwood (*Sequoia* sp.).

E.A. FAIRBAIRN WATER TREATMENT PLANT

EAFWTP is located south of the American River between State University Drive East and College Town Drive, along the eastern edge of Sacramento State University, within the City of Sacramento (Exhibit 2). The EAFWTP was originally constructed in the 1960's and consists of developed and landscaped land. Surrounding land uses consist of residential, recreation, and university development. Species observed on the site include oleander (*Nerium oleander*), plane tree, and valley oak.

BANNON STREET PARCELS ADJACENT TO SRWTP

This three parcel site is located directly south of Bannan Street, along the northern edge of the SRWTP, within the City of Sacramento (Exhibit 3). The land uses in the vicinity include industrial and commercial developments with a few private residences to the east of the site. The parcels are securely fenced with a single building located on the eastern parcel. The western parcel is paved and lined with trees, including cedar (*Chamaecyparis* spp.) and hybrid walnut trees. The middle and eastern parcels consist of disturbed bare ground and mowed grass with several trees, including hybrid walnut.

METHODS

The SRWTP was visited on August 25, 2011 and September 6, 2011. The Bannan Street parcels were visited on August 25, 2011 and the EAFWTP on August 26, 2011 and September 2, 2011. An Ascent biologist surveyed the sites by foot to locate elderberry shrubs. Elderberry shrubs were surveyed for exit holes. Elderberry stems were classified into size classes following the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999). Non-sensitive vegetation was trimmed using hand shears and loppers by Ascent biologists in order to gain access to some elderberry shrubs that were otherwise inaccessible.

RESULTS

VALLEY ELDERBERRY LONGHORN BEETLE

Elderberry shrubs are potential habitat for the federally listed valley elderberry longhorn beetle. In 2006, the U.S. Fish and Wildlife Service (USFWS) recommended delisting the species, but until they formally propose to delist it, the status of species remains “threatened” and it receives full protection under the Endangered Species Act. In April 2011, a coalition of Central California farm bureaus, flood-control agencies, and reclamation districts filed a lawsuit to have USFWS delist the species. In August 2011, USFWS began a comprehensive study, known as a 12-month review, to determine whether or not to propose the beetle for delisting. Until USFWS issues a final ruling, the beetle continues to be formally protected under the ESA.

Valley elderberry longhorn beetle is endemic to the Central Valley of California and is only found in association with its host plant, elderberry (*Sambucus* spp.). The beetle spends most of its life in the larval stage, living within the stems of an elderberry plant, and feeding on pith. Frequently, the only exterior evidence of the elderberry’s use by the beetle is an exit hole created by the larva just prior to the pupal stage. The life cycle takes one or two years to complete. Adult emergence is from late March through June, about the same time the elderberry produces flowers.

The results of these surveys are acceptable to USFWS for 2 years. After that period, surveys would need to be conducted again to get an accurate count of the number of shrubs, stems, and exit holes.

SACRAMENTO RIVER WATER TREATMENT PLANT

Six elderberry shrubs were identified on the SRWTP site (Exhibit 1). Table 1 presents the results of the stem count and exit hole survey. None of the shrubs contained exit holes.

Table 1: Elderberry Stem Count and Exit Hole Survey Results for the Sacramento River Water Treatment Plant				
Elderberry Shrub Number	Number of Stems >1" and <3"	Number of Stems >3" and <5"	Number of Stems >5"	Exit Holes Present?
SR1	2	0	1	No
SR2	12	1	0	No
SR3	8	2	0	No
SR4	15	5	1	No
SR5	4	0	2	No
SR6	9	2	2	No
Total Stems on Shrubs without Exit Holes	50	10	6	No
Total Stems on Shrubs with Exit Holes	0	0	0	Yes

E.A. FAIRBAIRN WATER TREATMENT PLANT

Six elderberry shrubs were identified on the EAFWTP site (Exhibit 2). Table 2 presents the results of the stem count and exit hole survey. One elderberry shrub (EA7) contained exit holes, indicating the presence of valley elderberry longhorn beetles. Three elderberry shrubs (EA9, EA10, and EA11) have no stems greater than 1 inch in diameter at ground level and are unlikely to be habitat for valley elderberry longhorn beetle.

Table 2: Elderberry Stem Count and Exit Hole Survey Results for the E.A. Fairbairn Water Treatment Plant				
Elderberry Shrub Number	Number of Stems >1" and <3"	Number of Stems >3" and <5"	Number of Stems >5"	Exit Holes Present?
EA7	3	1	5	Yes
EA8	4	0	0	No
EA9	0	0	0	No
EA10	0	0	0	No
EA11	0	0	0	No
EA12	6	0	0	No
Total Stems on Shrubs without Exit Holes	10	0	0	No
Total Stems on Shrubs with Exit Holes	3	1	5	Yes

BANNON STREET PARCELS ADJACENT TO SRWTP

No elderberry shrubs were identified on the three private parcels adjacent to the SRWTP. It should be noted that approximately three elderberry shrubs were observed on the parcel to the east of the site (Exhibit 3). The owner did not provide right-of-entry, therefore a stem count and exit hole survey was not conducted.

RECOMMENDATIONS

The following recommendations are provided to avoid and minimize impacts to valley elderberry longhorn beetle.

VALLEY ELDERBERRY LONGHORN BEETLE

The *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999) advise that to completely avoid adverse effects to valley elderberry longhorn beetle, a buffer of 100-feet should be established around the dripline of each elderberry shrub with stems greater than 1-inch diameter. If it is not feasible to completely avoid impacts, then project activities may occur up to 20 feet within the dripline of the elderberry shrub if precautions are implemented to minimize the potential for indirect impacts. Specifically, these minimization measures include:

- ▲ A minimum setback of at least 20 feet from the dripline of each elderberry plant with stems greater than 1-inch diameter at ground level should be maintained to avoid direct impacts. The buffer area should be fenced with high visibility construction fencing prior to commencement of ground-disturbing activities and should be maintained for the duration of construction activities.
- ▲ Ground disturbing activities on the project site should not alter the hydrology of the site or otherwise affect the likelihood of vigor or survival of elderberry shrubs.
- ▲ Project activities, such as truck traffic or other use of machinery, should not create excessive dust on the project site, such that the growth or vigor of elderberry shrubs is adversely affected.
- ▲ Areas that are disturbed temporarily should be restored to pre-disturbance conditions. Erosion control measures should be implemented to restore areas disturbed within 100 feet of elderberry shrubs.
- ▲ No insecticides, herbicides, fertilizers, or other chemicals should be used within 100 feet of elderberry shrubs.
- ▲ If new permanent development is to occur within the 100-foot buffer (but outside the 20-foot buffer), the potential for indirect effects shall be evaluated by a qualified biologist. If indirect effects are likely to occur, then consultation with USFWS may be necessary to determine the appropriate conservation measures. If indirect effects are not likely to occur, then no additional minimization measures would be required.

If future development plans of the site preclude avoiding impacts to habitat for valley elderberry longhorn beetles, then USFWS must be consulted under the Endangered Species Act. The following conservation measures are required for elderberry shrubs that cannot be avoided:

- ▲ The existing elderberry shrubs on site must be transplanted to a conservation area;
- ▲ Elderberry seedlings or cuttings must be planted in the conservation area; and
- ▲ Additional associated native species be must be planted in the conservation area.

At USFWS's discretion, an elderberry shrub that is unlikely to survive transplantation because of poor condition or location, or a shrub that would be extremely difficult to move because of access problems, may be exempted from transplantation, but the ratio of conservation plantings may be increased. Transplantation should occur when elderberry shrubs are dormant, approximately November to the first two weeks of February.

In addition to transplanting, USFWS requires that for each stem measuring 1 inch or greater that would be adversely affected, replacement seedlings or cuttings be planted along with associated native plants

(conservation plantings). The ratio of conservation plantings varies by stem size, the presence of exit holes, and the location of the elderberry shrubs in riparian habitat. There is no minimum container size for conservation plantings, but the stock of either seedlings or cuttings should be obtained from local sources.

A mix of native plants associated with the elderberry plants at the project site or similar reference site should be planted. Stocks of saplings, cuttings, and seedlings should be obtained from local sources for the conservation area. If the parent stock is obtained from a distance greater than one mile from the conservation area, approval by USFWS of the native plant donor sites must be obtained prior to initiation of the revegetation work. Examples of native riparian plants include walnut (*Juglans californica*), cottonwood (*Populus fremontii*), willow (*Salix gooddingii* and *S. laevigata*), box elder (*Acer negundo californica*), white alder (*Alnus rhombifolia*), wild grape (*Vitis californica*), and poison oak (*Toxicodendron divesilobum*). The appropriate native conservation plants for the proposed project should be determined once the conservation area is identified.

The conservation area must provide at least 1,800 square feet for each transplanted elderberry shrub. As many as five elderberry cuttings or seedlings plus five associated native plants (for a total of 10 conservation plantings) may be planted within this area. The conservation area must be protected in perpetuity and monitored over time to ensure that success criteria for survival of planting is achieved.

Because elderberry shrub stem counts and exit hole survey results are only valid for two years, the conservation requirements may need to be updated in the future.

SACRAMENTO RIVER WATER TREATMENT PLANT

Table 3 presents the maximum conservation planting requirements per USFWS Conservation Guidelines, assuming no shrubs could be avoided (i.e., the worst-case scenario). If development plans can avoid directly affecting some of the shrubs (i.e., provide a minimum of 20-foot buffer, not alter hydrology or other factors which may adversely influence the long-term survival of the shrub), then the required compensation could be less.

Table 3: Conservation Planting Requirements for Elderberry Shrubs at the Sacramento River Water Treatment Plant ¹						
Stem Size	Exit Holes	Number of Stems	Ratio for Elderberry Seedlings	Number of Elderberry Cuttings or Seedlings to be Planted	Ratio of Native Plants	Number of Native Plants to be Planted
>1" and < 3"	No	50	1:1	50	1:1	50
	Yes	0	2:1	0	2:1	0
>3" and <5"	No	10	2:1	20	1:1	20
	Yes	0	4:1	0	2:1	0
>5"	No	6	3:1	18	1:1	18
	Yes	0	6:1	0	2:1	0
Total Conservation Plantings				88		88

¹Assumes that all shrubs are not located within riparian habitat and that none can be avoided.

For a total of 88 elderberry cuttings or seedlings and 88 associated native species plantings (176 conservation plantings), plus a maximum of six transplanted shrubs, the conservation area must be 32,400 square feet (0.74 acres) for the SRWTP. The conservation area must be protected in perpetuity and monitored over time to ensure that success criteria for survival of planting is achieved.

USFWS has approved several conservation banks for valley elderberry longhorn beetle. A conservation bank would be the recipient of the elderberry shrubs from the site to be transplanted and would be responsible for planting the additional conservation plantings. They would be responsible for developing the conservation and planting plan and the long-term maintenance and preservation of the conservation site. Under the worst-case scenario in which all shrubs would be removed from the site, 18 conservation credits for valley elderberry longhorn beetle would be required for SRWTP. Currently, the cost of credits for valley elderberry longhorn beetle ranges from \$3,500 to \$4,500 per credit. Some conservation banks in the area no longer have many credits available in anticipation of the species being delisted. In addition, there would be transplantation costs for the elderberry shrubs. Based on this estimate, conservation credits for valley elderberry longhorn beetle on the SRWTP could cost approximately \$63,000 to \$81,000, not including cost of transplanting elderberry shrubs from the site and permitting and consultation with USFWS.

E.A. FAIRBAIRN WATER TREATMENT PLANT

Table 4 presents the maximum conservation planting requirements per USFWS Conservation Guidelines, assuming no shrubs could be avoided (i.e., the worst-case scenario). If development plans can avoid directly affecting some of the shrubs (i.e., provide a minimum of 20-foot buffer, not alter hydrology or other factors which may adversely influence the long-term survival of the shrub), then the required compensation could be less. Elderberry shrubs with no stems 1 inch or greater in diameter are unlikely to be habitat for valley elderberry longhorn beetle. Therefore, no conservation measures are required for removal of elderberry shrubs with stems measuring less than 1 inch in diameter.

**Table 4:
 Conservation Planting Requirements for Elderberry Shrubs at the E.A. Fairbairn Water Treatment Plant¹**

Stem Size	Exit Holes	Number of Stems	Ratio for Elderberry Seedlings	Number of Elderberry Cuttings or Seedlings to be Planted	Ratio of Native Plants	Number of Native Plants to be Planted
>1" and < 3"	No	10	1:1	10	1:1	10
	Yes	3	2:1	6	2:1	12
>3" and <5"	No	0	2:1	0	1:1	0
	Yes	1	4:1	4	2:1	8
>5"	No	0	3:1	0	1:1	0
	Yes	5	6:1	30	2:1	60
Total Conservation Plantings				50		90

¹Assumes that all shrubs are not located within riparian habitat and that none can be avoided.

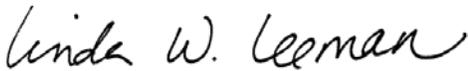
For a total of 50 elderberry cuttings or seedlings and 90 associated native species plantings (140 conservation plantings), plus a maximum of three transplanted shrubs, the conservation area must be 25,200 square feet (0.58 acres) for the EAFWTP. The conservation area must be protected in perpetuity and monitored over time to ensure that success criteria for survival of planting is achieved. Alternatively, the conservation measures for the EAFWTP could be achieved by purchasing 14 credits for valley elderberry longhorn beetle at a conservation bank. Currently, the cost of credits for valley elderberry longhorn beetle ranges from \$3,500 to \$4,500 per credit. Some conservation banks in the area no longer have many credits available in anticipation of the species being delisted. In addition, there would be transplantation costs for the elderberry shrub. Based on this estimate, conservation credits for valley elderberry longhorn beetle on the EAFWTP could cost approximately \$49,000 to \$63,000, not including costs of transplanting elderberry shrubs and permitting and consultation with USFWS.

BANNON STREET PARCELS ADJACENT TO SRWTP

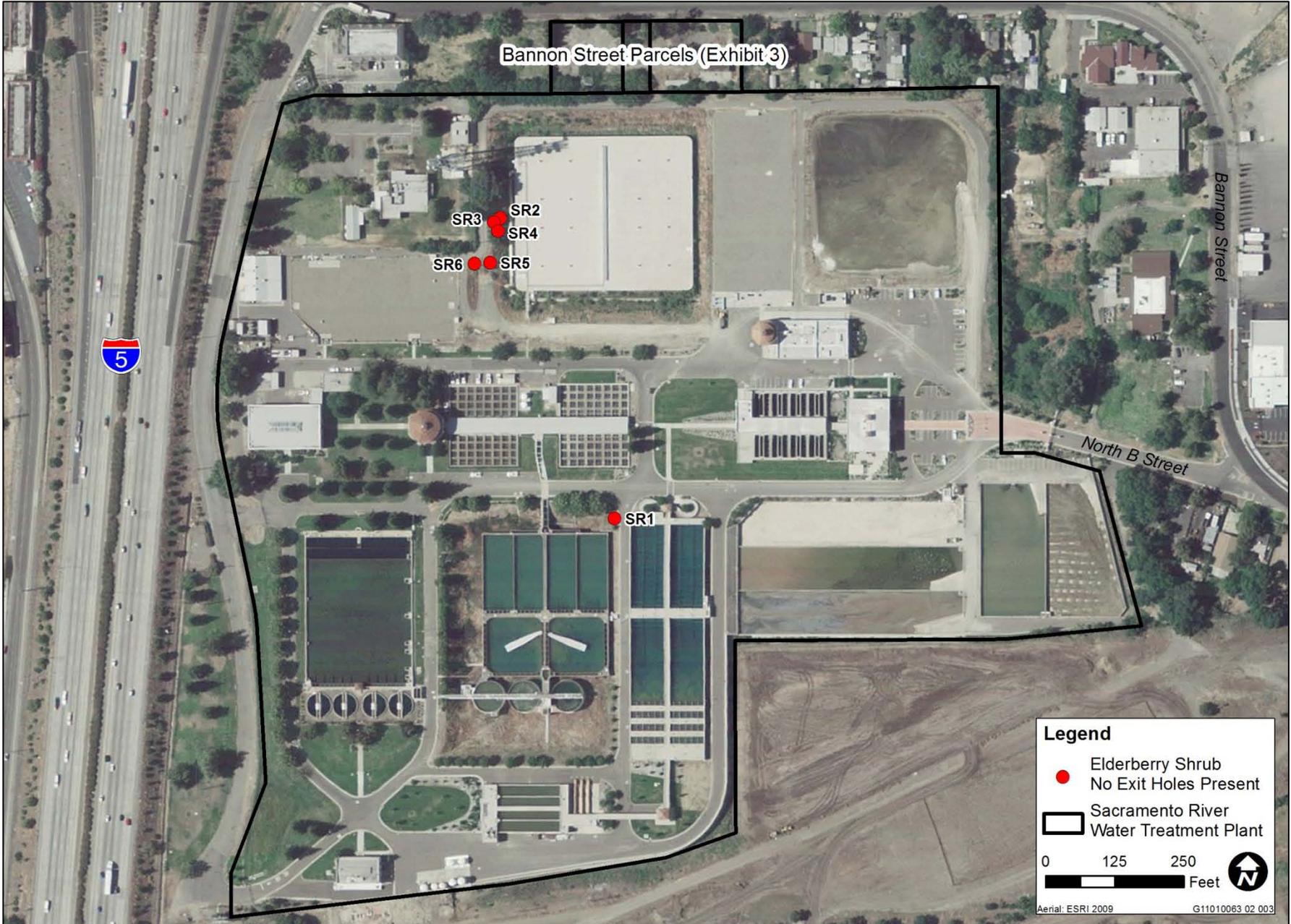
Although no elderberry shrubs were located on the site, three shrubs were observed on an adjacent site near the property boundary (Exhibit 3). Project activities on the Bannan Street Parcels would require implementing minimization measures to reduce potential indirect effects to these off-site shrubs.

Thank you for the opportunity to assist you with this project. Please contact us if you have further questions or need additional assistance.

Sincerely,


Linda W. Leeman
Senior Biologist


Mike Parker, AICP
Project Manager

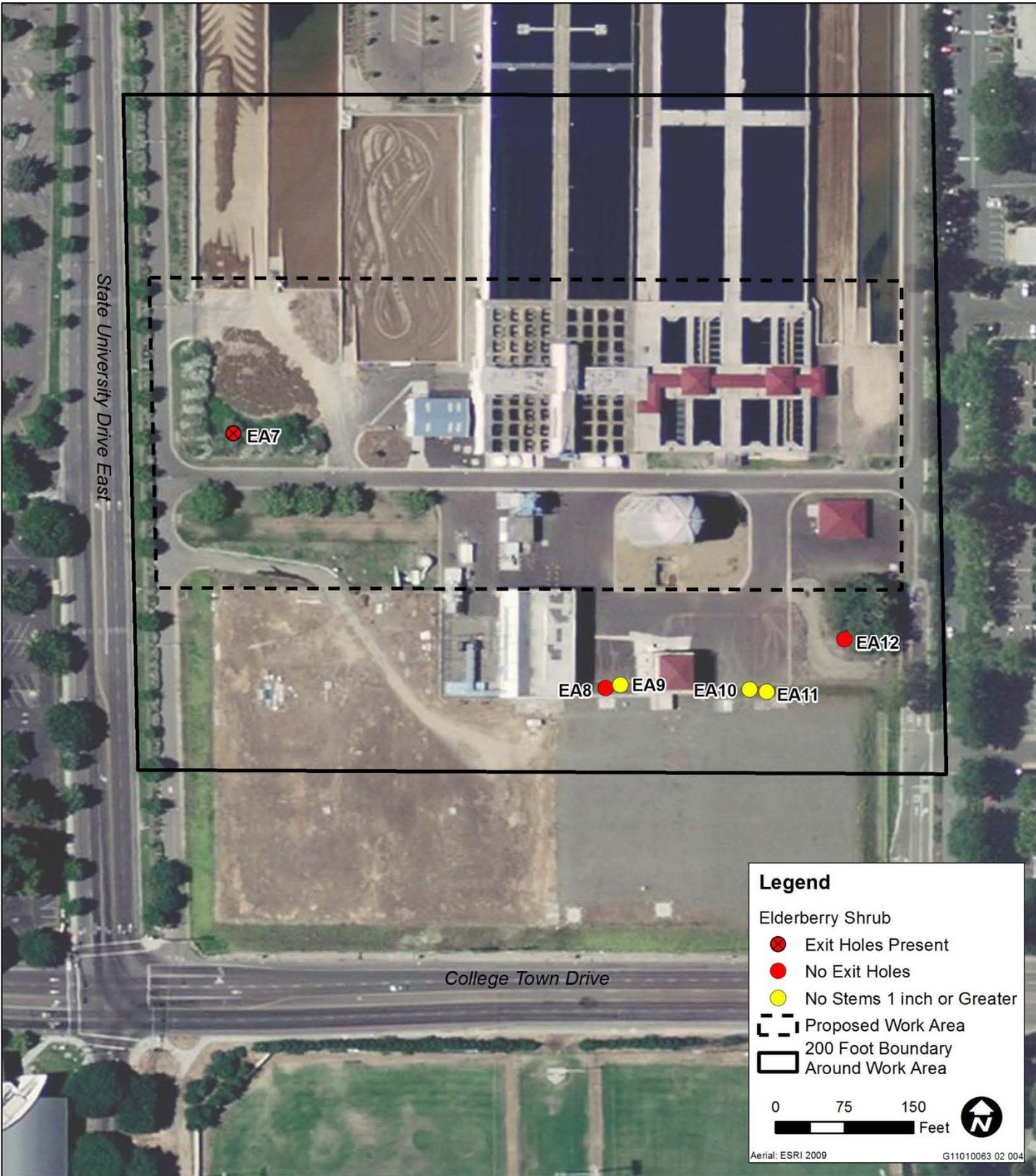


Source: Ascent 2011

Exhibit 1

Elderberry Shrub Survey - Sacramento River Water Treatment Plant





Source: Ascent 2011

Exhibit 2

Elderberry Shrub Survey - E.A. Fairbairn Water Treatment Plant



Aerial: ESRI 2009 G11010063 02 004



Source: Ascent 2011

Exhibit 3

Elderberry Shrub Survey- Bannon Street Parcels





December 8, 2011

Chris Cleveland
Carollo Engineers
2880 Gateway Oaks Drive, Suite 300
Sacramento, CA 95833

Subject: Recommendations to Minimize Impacts to Valley Elderberry Longhorn Beetle for the City of Sacramento Water Treatment Plants Rehabilitation Project

Dear Chris,

Ascent Environmental is assisting Carollo Engineers with design recommendations for the proposed City of Sacramento Water Treatment Plants Rehabilitation Project to minimize impacts to valley elderberry longhorn beetle (VELB). This letter report summarizes the evaluation of potential impacts to VELB from the preliminary project design at three sites that comprise the project area, the Sacramento River Water Treatment Plant (SRWTP), the Sacramento Housing and Redevelopment Agency (SHRA) site, and the E.A. Fairbairn Water Treatment Plant (EAFWTP), and provides recommendations to minimize impacts to VELB for consideration by project engineers.

VELB is listed as a threatened species under the federal Endangered Species Act. The U.S. Fish and Wildlife Service (USFWS) has issued Conservation Guidelines for VELB (USFWS 1999) that recommend establishing a 100-foot buffer around elderberry shrubs to avoid direct and indirect impacts to VELB. If complete avoidance of elderberry shrubs is not feasible, measures to minimize the adverse effects are recommended, including establishing a 20-foot minimum buffer from the dripline of the shrub, but USFWS should be consulted in such cases, and other protective measures should be implemented during construction such as a worker environmental awareness training. The Guidelines also include requirements for transplanting shrubs that cannot be avoided and ratios for compensation plantings. A permit under the Endangered Species Act is required for removal of any elderberry shrub that is potential habitat for VELB.

Ascent has reviewed the 30% design plans that were presented during a review workshop on November 15, 2011 and a follow-up meeting with Carollo Engineers and the City of Sacramento on November 21, 2011. Carollo also provided an electronic version of the design plans, which includes the point location of the elderberry shrubs. The analysis included in this report assumes that the lines shown on the design plans represent the limits of disturbance and that additional ground-disturbing activity or construction-related staging or stockpiling would not occur near elderberry shrubs. The survey results for elderberry shrubs in the project area, including stem counts and evaluation for VELB exit holes, were documented in reports prepared previously by Ascent (dated September 16, 2011). The existing canopy (i.e., dripline) of elderberry shrubs that may be possible to retain in the project area was mapped using aerial photography and was field verified on November 29, 2011 to establish a more accurate calculation of the 20-foot minimum buffer from the dripline than from the point location.

Based on discussion with project engineers and review of the site plans, we determined that out of 21 elderberry shrubs in the project area that are of sufficient size to provide habitat for VELB (Table 1):

- ▲ 12 would require removal because there is no feasible alternative to project design that would allow the shrubs to be retained in the project footprint,
- ▲ 4 could likely be retained with protection measures but would require compensation because a 20-foot buffer from construction activities would not be provided,
- ▲ 4 could be avoided completely or protected with 20-foot buffer and other minimization measures during construction and would not likely require compensation, and
- ▲ 1 requires additional evaluation to determine if an alternative project design is feasible to retain the shrub and provide a 20-foot buffer.

Table 1: Evaluation of Potential Avoidance or Minimization of Impacts to Elderberry Shrubs			
Shrub ID	Evaluation	Project Activity	Comments
Sacramento River Water Treatment Plant			
SR-1	Removal, transplantation, and compensation required	Construction of new flocculation/sedimentation basin	No feasible alternative location for project activity
SR-2	Removal, transplantation, and compensation required	Installation of 84" pipeline	No feasible alternative location for project activity
SR-3	Removal, transplantation, and compensation required	Installation of 84" pipeline	No feasible alternative location for project activity
SR-4	Removal, transplantation, and compensation required	Installation of 84" pipeline	No feasible alternative location for project activity
SR-5	Removal, transplantation, and compensation required	Installation of pressurized pipeline, roadway access to high service pump station	No feasible alternative location for project activity
SR-6	Removal, transplantation, and compensation required	Installation of pressurized pipeline, roadway access to high service pump station	No feasible alternative location for project activity
Sacramento Housing and Redevelopment Agency Site			
EB-1	May be possible to retain with protection measures; provide compensation; evaluate further	Paved sludge drying area	Project footprint is within approximately 15 feet of dripline
EB-2	Removal, transplantation, and compensation required	Paved sludge drying area	Located in center of sludge drying area, not feasible to avoid or minimize
EB-3	May be possible to retain with protection measures; provide compensation; evaluate further	Paved sludge drying area	Project footprint is within approximately 17 feet of dripline
EB-4	May be possible to retain with protection measures; provide compensation; evaluate further	Paved sludge drying area	Project footprint is within approximately 8 feet of dripline
EB-5	Removal, transplantation,	Paved sludge drying area	Determine if it is feasible to reduce

Table 1: Evaluation of Potential Avoidance or Minimization of Impacts to Elderberry Shrubs			
Shrub ID	Evaluation	Project Activity	Comments
	compensation required under current design; if project redesigned, may be possible to retain; evaluate further		size of drying area to retain shrub
EB-6	Removal, transplantation, and compensation required	Construction of gravity thickeners	No feasible alternative location for project activity
EB-7	Removal, transplantation, and compensation required	Construction of gravity thickeners	No feasible alternative location for project activity
EB-8	Removal, transplantation, and compensation required	Construction of access road to gravity thickeners and sludge handling pump station	No feasible alternative location for project activity
EB-9	May be possible to retain with protection measures; provide compensation; evaluate further	Construction of access road to gravity thickeners and sludge handling pump station	Project footprint is within approximately 4 feet of dripline
EB-10	Removal, transplantation, and compensation required	Construction of gravity thickeners	No feasible alternative location for project activity
EB-11	Removal, transplantation, and compensation required	Construction of gravity thickeners	No feasible alternative location for project activity
EB-12	Retain with protection measures; may not require compensation; evaluate further	Construction of access road to gravity thickeners and sludge handling pump station	Project footprint is approximately 25 feet from dripline
E.A. Fairbairn Water Treatment Plant			
EA-7*	Retain with protection measures; may not require compensation; evaluate further	Road widening on south side of existing roadway	Existing edge of pavement is approximately 19.5 feet from dripline, proposed activities more than 20 feet away from dripline.
EA-8	Avoid impacts during construction	No project activities within 100 feet shown on plans	Should be fenced during construction to avoid accidental disturbance.
EA-12	Avoid impacts during construction	No project activities within 100 feet shown on plans	Should be fenced during construction to avoid accidental disturbance.
*Numbering at EAFWTP starts at EA-7 and ends at EA-12 (continuing sequentially from SRWTP because the survey results were presented in the same report). EA-9, EA-10, EA-11 do not provide habitat for VELB as they contain no stems 1-inch or greater. The survey at SHRA was conducted and reported separately.			

The six elderberry shrubs on the SRWTP site cannot be avoided by the proposed project (Exhibit 1). The site is currently developed and proposed upgrades are constrained by existing facilities and design requirements. Elderberry shrub SR-1 will need to be removed to install the new flocculation/sedimentation basin, which will require pile driving, extensive use of heavy machinery, and grading. Elderberry shrubs SR-2 through SR-6 will need to be removed for construction of the high service pump station, including installation of an 84-inch pipeline, other conveyance pipes, and road improvements to improve access to the facilities.

At the SHRA site, adjacent to the SRWTP site, shrubs EB-6, EB-7, EB-8, EB-10, and EB-11 cannot feasibly be avoided (Exhibit 2). These shrubs are located within the footprint of the proposed gravity thickeners and access road. No alternative location is feasible for this component of the project due to the existing structures on the SRWTP site and the constraint of avoiding a heritage tree on the south end of the SHRA site. The heritage tree is a Fremont cottonwood (*Populus fremontii*) with a circumference of 308 inches. In addition, shrubs EB-2 and EB-5 are located within the footprint of the proposed sludge drying area, which would be graded and paved. Shrubs EB-1, EB-3, EB-4 could likely be retained because they are not shown within the project footprint but the current design does not provide for a 20-foot buffer from their driplines to minimize the potential for adverse affects to VELB. As such, USFWS is likely to require compensation for the shrubs at the ratios in the Conservation Guidelines based the number and size of stems and presence of exit holes on the shrubs.

At EAFWTP, three elderberry shrubs are of sufficient size to provide potential habitat for VELB (stems greater than 1-inch in diameter)(Exhibit 3). No project activities are shown on the design plans within 100-feet of the dripline of two of the shrubs, and thus, no impacts to those shrubs are expected to occur. However, to avoid unintended impacts, installing projective fencing around the shrubs along the edge of the existing roadways during construction is recommended to clearly identify the environmentally sensitive areas. The third shrub, EA-7, can be retained and a 20-foot buffer can be established during construction activities. The north edge of the existing roadway is approximately 19.6 feet from the dripline of shrub. Road widening and improvements are planned on the southern edge of the roadway, more than 20 feet away from the dripline.

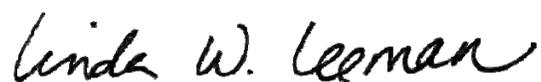
RECOMMENDATIONS

The proposed project is largely constrained by the requirements to upgrade and rehabilitate existing structures and construct new structures that will be integrated with the existing facilities within developed sites, with limited amount of available space.

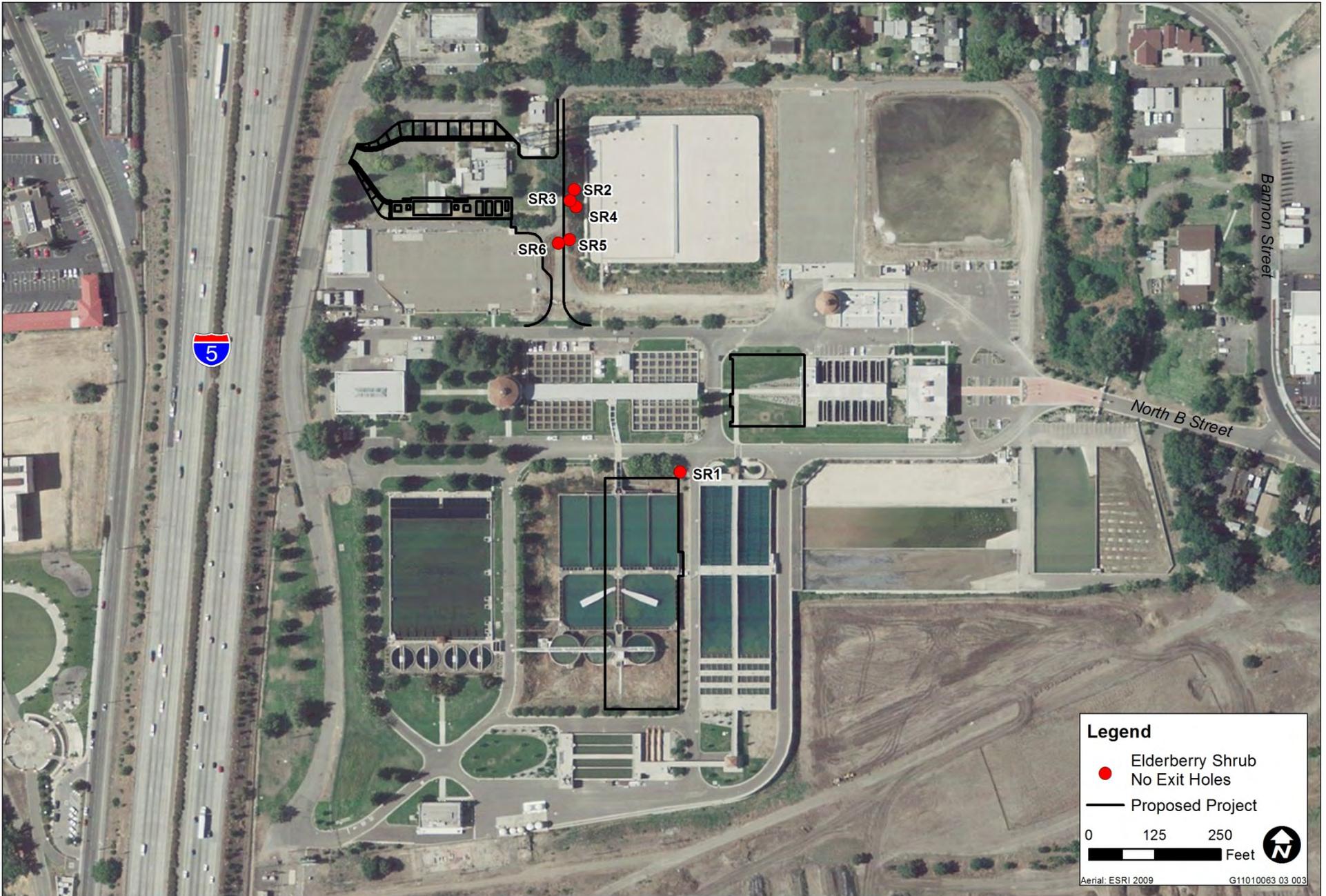
Although the plans for the SHRA site cannot be shifted southerly to avoid the heritage tree, project engineers should consider if it would be feasible to reduce the size of the sludge drying area and still meet project objectives. If the northern portion of the sludge drying area was reduced in size, an additional shrub, EB-5, possibly could be retained and the protective buffers for shrubs EB-1, EB-3, and EB-4 could be increased to at least 20 feet from the dripline of the shrubs. Impacts to these shrubs could be minimized by curving the northwestern boundary of the project footprint from the proposed western access road to provide a 20-foot buffer around the dripline of EB-4 and EB-5. In addition, the boundary could be adjusted along the northeastern and eastern edges to provide a 20-foot buffer for shrubs EB-3 and EB-1, respectively. Retaining shrub EB-5, which contains VELB exit holes and requires higher ratios of compensation, as well as minimizing impacts to shrubs EB-1 (no exit holes), and EB-3 and EB-4, which both contain exit holes, would reduce the compensation requirements for the project.

Please let us know if you like to set up a meeting to discuss this recommendation or if you have any questions. Thank you for the opportunity to assist Carollo with the City of Sacramento Water Treatment Plants Rehabilitation project.

Sincerely,



Linda W. Leeman
Senior Biologist

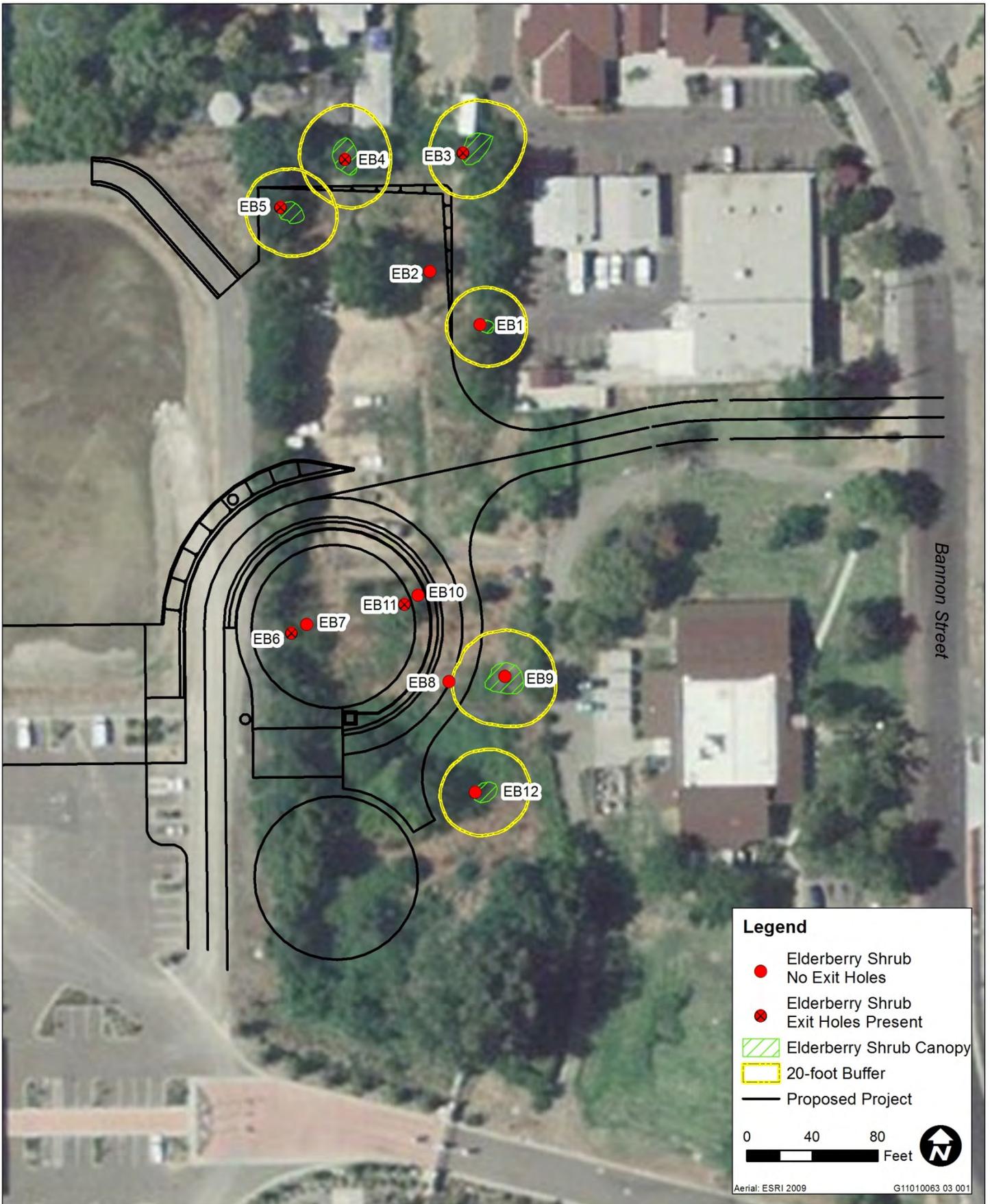


Source: Ascent 2011

Exhibit 1

Sacramento River Water Treatment Plant



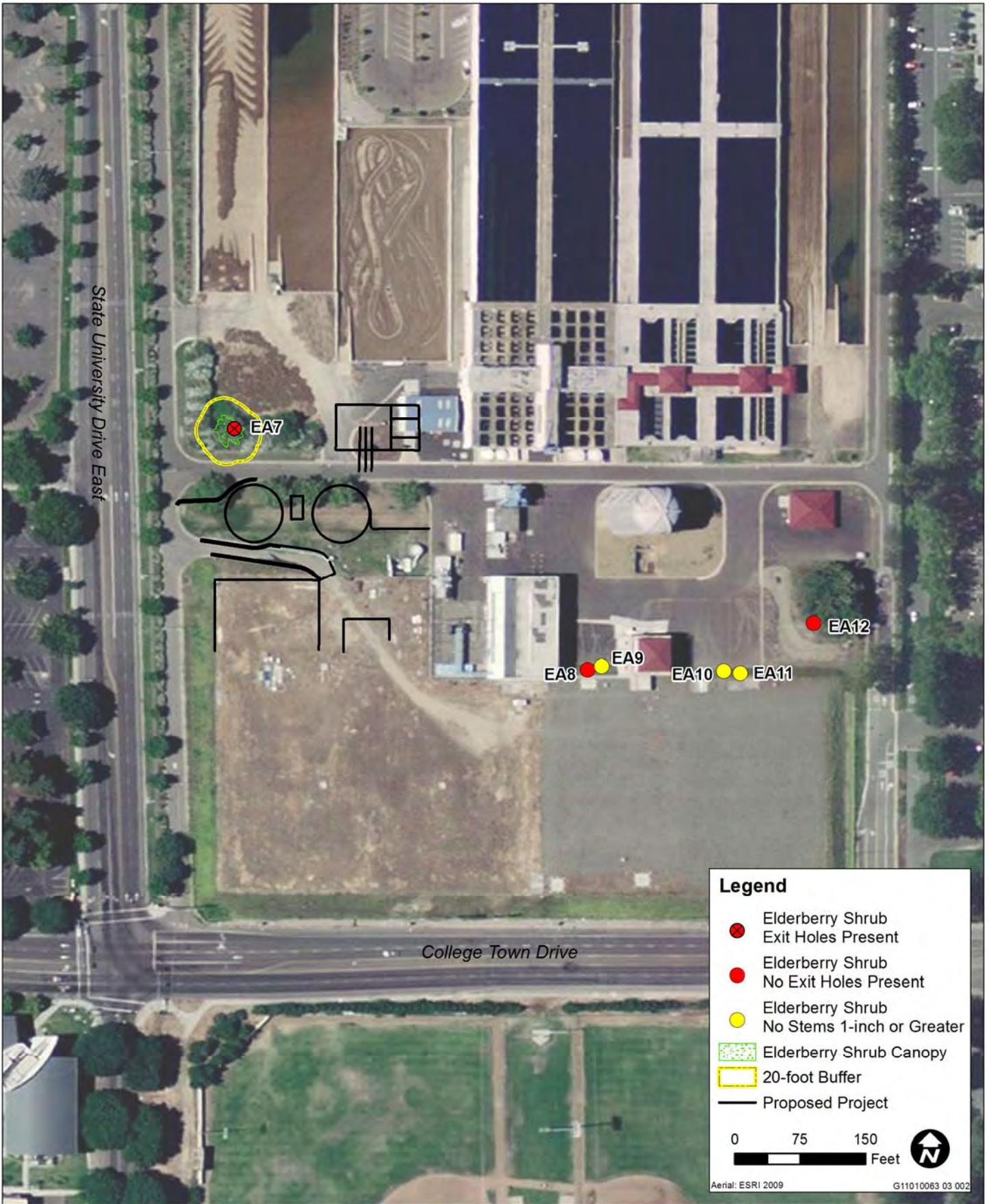


Source: Ascent 2011

Exhibit 2

Sacramento Housing and Redevelopment Agency Site





Source: Ascent 2011



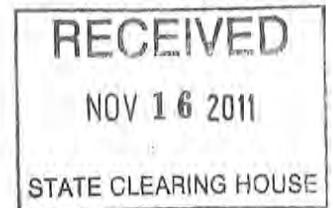
CITY OF SACRAMENTO

CALIFORNIA

COMMUNITY DEVELOPMENT
DEPARTMENT

300 RICHARDS BLVD. 3RD FLR
SACRAMENTO, CA 95811

DATE: November 14, 2011
TO: Interested Persons
FROM: Scott Johnson, Associate Planner
Community Development Department
RE: **NOTICE OF PREPARATION OF A MITIGATED NEGATIVE DECLARATION
FOR THE CITY OF SACRAMENTO WATER TREATMENT PLANTS
REHABILITATION PROJECT**



COMMENT PERIOD

November 16, 2011 to December 16, 2011

INTRODUCTION

The City of Sacramento ("City") is the Lead Agency for preparation of environmental review pursuant to the guidelines of the California Environmental Quality Act (CEQA) for the Water Treatment Plant Rehabilitation project (Project). The environmental review to be prepared by the City will evaluate potential significant environmental effects of the Water Treatment Plant Rehabilitation at the Sacramento River Water Treatment Plant (SRWTP) and E.A. Fairbairn Water Treatment Plant (EAFWTP) sites. At this time the City does not anticipate the Project will either directly or indirectly lead to significant impacts that cannot be mitigated to a less than significant level.

The proposed Water Treatment Plant Rehabilitation project consists of replacing existing outdated equipment and facilities, constructing miscellaneous improvements at SRWTP and constructing solids handling improvements at SRWTP and EAFWTP. The project does not increase the capacity of either the SRWTP or the EAFWTP.

The initial study/mitigated negative declaration to be prepared for the Water Treatment Plant Rehabilitation Project is being prepared for the project in compliance with the California Environmental Quality Act (CEQA). The City as the Lead Agency is issuing a Notice of Preparation (NOP) to inform all responsible agencies of that decision. The purpose of the NOP

is to provide information describing the project and its potential environmental effects and to seek input from responsible agencies as defined by CEQA (California Public Resources Code 21069). Agencies should comment on such information as it relates to their statutory responsibilities in connection with the project.

SUBMITTING COMMENTS

Comments and suggestions as to the appropriate scope of analysis and responsible agencies are invited from all interested parties. Written comments or questions concerning the proposed project should be directed to the environmental project manager at the following address by 5:00 p.m. on December 5, 2011. Please include the contact person's full name and address in order for staff to respond appropriately:

Scott Johnson, Associate Planner,
City of Sacramento Community Development Department,
300 Richards Blvd., Third Floor, Sacramento, CA 95811.
Tele (916) 808-5842
E-mail: [srjohnson@cityofsacramento.org](mailto:sjohnson@cityofsacramento.org)



PROJECT LOCATION/SETTING

E.A. Fairbairn Water Treatment Plant (EAFWTP) is located east of California State University at Sacramento (CSUS) and south of the American River and consists of Assessor's Parcel Numbers (APN): 005-0010-011, -012. The Sacramento River Water Treatment Plan (SRWTP) is located east of Interstate 5 and the Sacramento River near Richards Boulevard and consists of APNs: 001-0210-038, 001-0064-015, 001-0210-024, and 001-0061-025 (See Figure 1 Vicinity Map; Figure 2, SRWTP Project Location; Figure 3, EAFWTP Project Location Map).

PROJECT DESCRIPTION

The proposed Water Treatment Plant Rehabilitation project consists of replacing existing outdated equipment and facilities, constructing miscellaneous improvements at SRWTP and constructing solids handling improvements at SRWTP and EAFWTP. The project does not increase the capacity of either the SRWTP or the EAFWTP.

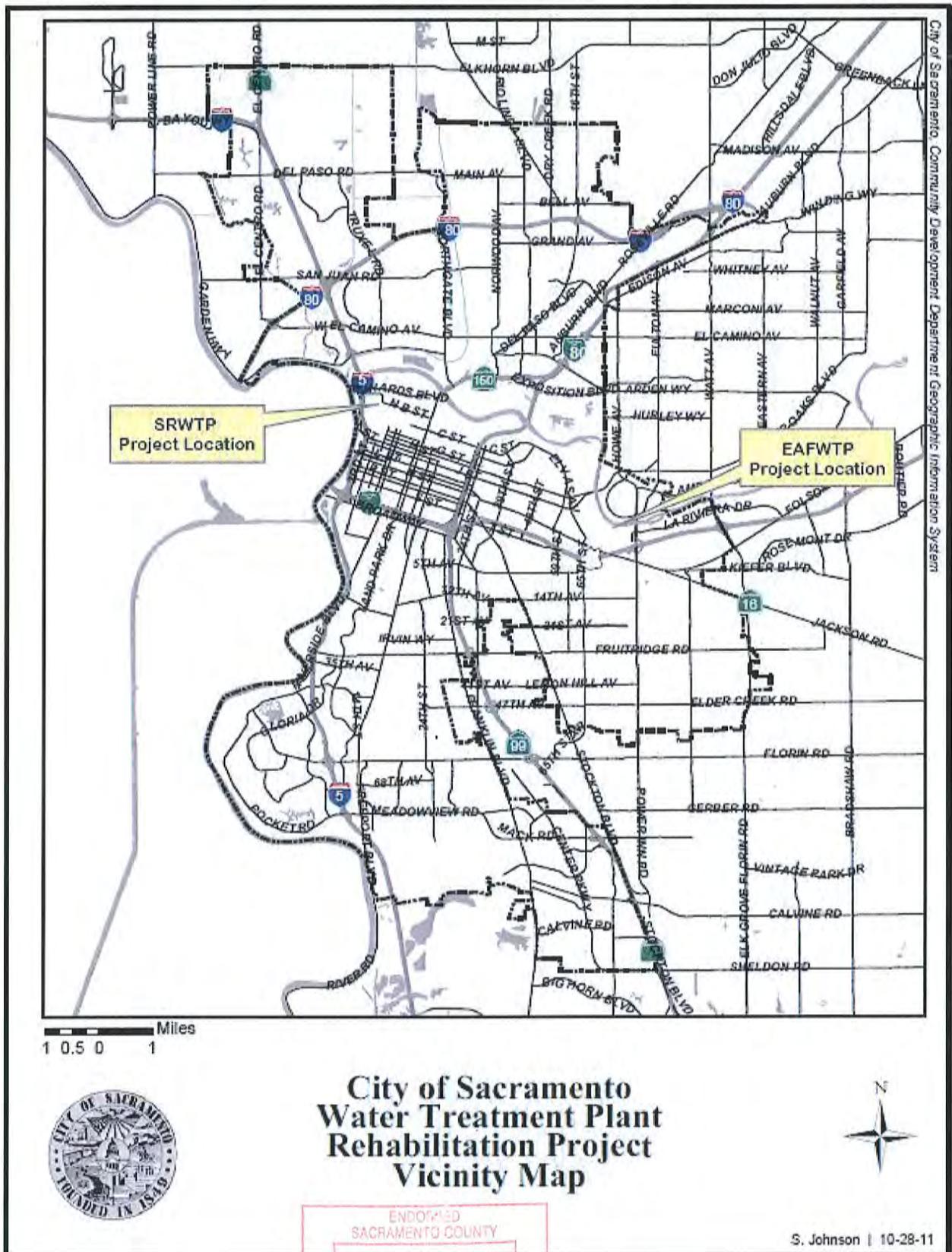
At SRWTP, the existing flocculation and sedimentation Basins 1 and 2, old filters 1 through 16 and pump station will be replaced with new facilities. To construct these new facilities, Basin 2 and the former 911 Call Center building north of the plant will be demolished. Basin 1, pump station and old filters 1 through 16 will be decommissioned, but not demolished. As part of these proposed improvements there are associated improvements including, miscellaneous asphalt concrete roads and parking areas and pipelines. In addition, new solids handling improvements and miscellaneous electrical/process improvements will be installed to improve plant efficiency.

At EAFWTP, the existing FWW basins will be retrofitted with mechanical sludge collection systems to allow regular removal of settled sludge and transfer to the solids handling facility. A new dewatering building will be constructed and fitted with equipment to dewater solids. The existing chlorine system will be expanded and other improvements to the electrical and operating system will be installed as required.

Construction of the proposed project will take approximately three years.



Figure 1, Regional Location Map



ENDORSED
SACRAMENTO COUNTY
NOV 16 2011
CRAIG A. KRAMER, CLERK RECORDER
BY: *[Signature]* DEPUTY

Figure 2, SRWTP Location Map



0 570 1,140 Feet

Sacramento Water Treatment Plant Location Map



S. Johnson | 10-28-11

Figure 3, SRWTP Location Map





Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

Notice of Preparation

November 16, 2011

To: Reviewing Agencies
Re: Water Treatment Plants Rehabilitation Project
SCH# 2011112039

Attached for your review and comment is the Notice of Preparation (NOP) for the Water Treatment Plants Rehabilitation Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Scott Johnson
City of Sacramento
300 Richards Boulevard
Sacramento, CA 95811

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2011112039
Project Title Water Treatment Plants Rehabilitation Project
Lead Agency Sacramento, City of

Type NOP Notice of Preparation

Description The proposed Water Treatment Plant Rehabilitation project consists of replacing existing outdated equipment and facilities, constructing miscellaneous improvements at SRWTP and constructing solids handling improvements at SRWTP and EAFWTP. The project does not increase the capacity of either the SRWTP or the EAFWTP. Construction of the proposed project will take approximately three years. At SRWTP, the existing flocculation and sedimentation Basins 1 and 2, old filters 1 through 16 and pump station will be replaced with new facilities. To construct these new facilities, Basin 2 and the former 911 Call Center building north of the plant will be demolished. Basin 1, pump station and old filters 1 through 16 will be decommissioned, but not demolished. As part of these proposed improvements there are associated improvements including, miscellaneous asphalt concrete roads and parking areas and pipelines. In addition, new solids handling improvements and miscellaneous electrical/process improvements will be installed to improve plant efficiency. At EAFWTP, the existing FWW basins will be retrofitted with mechanical sludge collection systems to allow regular removal of settled sludge and transfer to the solids handling facility. A new dewatering building will be constructed and fitted with equipment to dewater solids. The existing chlorine system will be expanded and other improvements to the electrical and operating system will be installed as required.

Lead Agency Contact

Name Scott Johnson
Agency City of Sacramento
Phone 916 808 5842 **Fax**
email
Address 300 Richards Boulevard
City Sacramento **State** CA **Zip** 95811

Project Location

County Sacramento
City Sacramento
Region
Cross Streets Bannon & North B Streets (SRWTP) and College Town Dr & State University Drive (EAFWTP)
Lat / Long
Parcel No. 005-0010-011, -012 and 001-0210-038, 001-0064-015, 001-0210-024, 001-0061-025
Township **Range** **Section** **Base**

Proximity to:

Highways I-5 and US 50
Airports
Railways
Waterways Sacramento and American rivers
Schools Cal State Sacramento
Land Use Water Treatment Plants / Light Industrial and Residential / Public Quasi-Public

Project Issues

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 2; CA Department of Public Health; Native American Heritage Commission; California Highway Patrol; Caltrans, District 3; State Water Resources Control Board, Division of Financial Assistance; Department of Toxic Substances Control; Regional Water Quality Control Bd., Region 5 (Sacramento)

Document Details Report
State Clearinghouse Data Base

Date Received 11/16/2011 *Start of Review* 11/16/2011 *End of Review* 12/15/2011

NOP Distribution List

Resources Agency
 Nadell Gayou
 Dept. of Boating & Waterways
 Nicole Wong
 California Coastal Commission
 Elizabeth A. Fuchs
 Colorado River Board
 Gerald R. Zimmerman
 Dept. of Conservation
 Elizabeth Carpenter
 California Energy Commission
 Eric Knight
 Cal Fire
 Allen Robertson
 Central Valley Flood Protection Board
 James Herola
 Office of Historic Preservation
 Ron Parsons
 Dept of Parks & Recreation
 Environmental Stewardship Section
 California Department of Resources, Recycling & Recovery
 Sue O'Leary
 S.F. Bay Conservation & Dev't. Comm.
 Steve McAdam
 Dept. of Water Resources
 Agency
 Nadell Gayou

Fish & Game Region 1E
 Laurie Hamsberger
 Fish & Game Region 2
 Jeff Drongenesen
 Fish & Game Region 3
 Charles Arnor
 Fish & Game Region 4
 Julie Vance
 Fish & Game Region 5
 Leslie Newton-Reed
 Fish & Game Region 6
 Gabriela Gatchel
 Fish & Game Region 6 I/M
 Brad Henderson
 Dept. of Fish & Game M
 George Isaac
 Marine Region

Native American Heritage Comm.
 Debbie Treadway
 Public Utilities Commission
 Leo Wong
 Santa Monica Bay Restoration
 Guangyu Wang
 State Lands Commission
 Jennifer Deleong
 Tahoe Regional Planning Agency (TRPA)
 Cherry Jacques

Business, Trans & Housing
 Caltrans - Division of Aeronautics
 Philip Crimmins
 Caltrans - Planning
 Terri Pencovic
 California Highway Patrol
 Suzann Ikeuchi
 Housing & Community Development
 CEQA Coordinator
 Housing Policy Division

Other Departments
 Food & Agriculture
 Sandra Schubert
 Dept. of General Services
 Public School Construction
 Dept. of General Services
 Anna Garbeff
 Dept. of Public Health
 Bridgette Binning
 Delta Stewardship Council
 Terry Macaulay
Independent Commissions, Boards
 Delta Protection Commission
 Linda Flack
 Cal EMA (Emergency Management Agency)
 Dennis Castrillo

Regional Water Quality Control Board (RWQCB)
 RWQCB 1
 Cathleen Hudson
 North Coast Region (1)
 RWQCB 2
 Environmental Document Coordinator
 San Francisco Bay Region (2)
 RWQCB 3
 Central Coast Region (3)
 RWQCB 4
 Teresa Rodgers
 Los Angeles Region (4)
 RWQCB 5S
 Central Valley Region (5)
 RWQCB 5F
 Central Valley Region (5)
 Fresno Branch Office
 RWQCB 5R
 Central Valley Region (5)
 Redding Branch Office
 RWQCB 6
 Lahontan Region (6)
 RWQCB 6V
 Lahontan Region (6)
 Victorville Branch Office
 RWQCB 7
 Colorado River Basin Region (7)
 RWQCB 8
 Santa Ana Region (8)
 RWQCB 9
 San Diego Region (9)
 Other

 Conservancy



**California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair**



Matthew Rodriguez,
*Secretary for
Environmental Protection*

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
<http://www.waterboards.ca.gov/centralvalley>

Edmund G. Brown Jr.,
Governor

30 November 2011

Scott Johnson, Associate Planner
City of Sacramento
Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

CERTIFIED MAIL
7010 3090 0000 5045 2644

**COMMENTS TO NOTICE OF PREPARATION OF A MITIGATED NEGATIVE
DECLARATION, CITY OF SACRAMENTO WATER TREATMENT PLANTS
REHABILITATION PROJECT, SCH NO. 2011112039, SACRAMENTO COUNTY**

Pursuant to the State Clearinghouse's 16 November 2011 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Notice of Preparation for a Mitigated Negative Declaration* for the City of Sacramento Water Treatment Plants Rehabilitation Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres 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, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed for the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit, or any other federal permit, is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

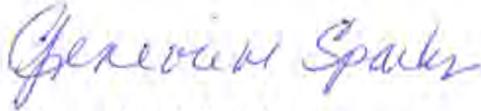
Waste Discharge Requirements

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

If you have questions regarding these comments, please contact me at (916) 464-4745 or gsparks@waterboards.ca.gov.



Genevieve (Gen) Sparks
Environmental Scientist
401 Water Quality Certification Program

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax



December 5, 2011

Scott Johnson
City of Sacramento
300 Richards Boulevard
Sacramento, CA 95811

RE: SCH# 2011112039 Water Treatment Plants Rehabilitation Project; Sacramento County.

Dear Mr. Johnson:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Preparation (NOP) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
 - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
 - If any known cultural resources have already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
 - A Sacred Lands File Check. **USGS 7.5 minute quadrangle name, township, range and section required.**
 - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
 - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
 - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
 - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

A handwritten signature in blue ink that reads "Katy Sanchez".

Katy Sanchez
Program Analyst
(916) 653-4040

cc: State Clearinghouse

Native American Contact List

Sacramento County
December 5, 2011

Shingle Springs Band of Miwok Indians
John Tayaba, Vice Chairperson
P.O. Box 1340
Shingle Springs, CA 95682
(530) 676-8010
(530) 676-8033 Fax

Miwok
Maidu

lone Band of Miwok Indians
Yvonne Miller, Chairperson
PO Box 699
Plymouth, CA 95669
(209) 274-6753
(209) 274-6636 Fax

Miwok

Rose Enos
15310 Bancroft Road
Auburn, CA 95603
(530) 878-2378

Maidu
Washoe

Wilton Rancheria
Leland Daniels, Cultural Resources Rep
7531 Maple Leaf Lane
Sacramento, CA 95828
(916) 689-7330

Miwok

Wilton Rancheria
Mary Daniels-Tarango, Chairperson
7916 Farnell Way
Sacramento, CA 95823
wiltonrancheria@frontier.
(916) 427-2909 Home

Miwok

Randy Yonemura
4305 - 39th Avenue
Sacramento, CA 95824
honortraditions@mail.com
(916) 421-1600

Miwok

United Auburn Indian Community of the Auburn Rancheria
David Keyser, Chairperson
10720 Indian Hill Road
Auburn, CA 95603
530-883-2390
530-883-2380 - Fax

Maidu
Miwok

Buena Vista Rancheria
Rhonda Morningstar Pope, Chairperson
PO Box 162283
Sacramento, CA 95816
rhonda@buenavistatribe.
916 491-0011
916 491-0012 - fax

Me-Wuk / Miwok

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

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2011112039 Water Treatment Plants Rehabilitation Project; Sacramento County.

Native American Contact List

Sacramento County

December 5, 2011

El Dorado Miwok Tribe
PO Box 711
El Dorado , CA 95623
916-996-0384
Miwok

Shingle Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340
Shingle Springs, CA 95682
nfonseca@ssband.org
Miwok
Maidu
(530) 676-8010
(530) 676-8033 Fax

T si-Akim Maidu
Eileen Moon, Vice Chairperson
1239 East Main St.
Grass Valley , CA 95945
(530) 477-0711
Maidu

Nashville-El Dorado Miwok
Cosme Valdez, Interim Chief Executive Officer
PO Box 580986
Elk Grove , CA 95758
valdezcom@comcast.net
Miwok
916-429-8047 voice
916-429-8047 fax

Ione Band of Miwok Indians
Pamela Baumgartner, Tribal Administrator
PO Box 699
Plymouth , CA 95669
pam@ionemiwok.org
Miwok
(209) 274-6753
(209) 274-6636 Fax

Ione Band of Miwok Indians Cultural Committee
Ms Billie Blue, Chairperson
604 Pringle Ave, #42
Galt , CA 95632
bebluesky@softcom.net
Miwok
(209) 745-7112

Ione Band of Miwok Indians
Tina Reynolds, Executive Secretary
PO Box 699
Plymouth , CA 95669
tina@ionemiwok.org
Miwok
(209) 274-6753
(209) 274-6636 Fax

United Auburn Indian Community of the Auburn Rancheria
Marcos Guerrero, Tribal Preservation Committee
10720 Indian Hill Road
Auburn , CA 95603
mguerrero@auburnrancheria.com
Maidu
Miwok
530-883-2364
530-883-2320 - Fax

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

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2011112039 Water Treatment Plants Rehabilitation Project; Sacramento County.

Native American Contact List
Sacramento County
December 5, 2011

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

Nisenan - So Maidu
Konkow
Washoe

United Auburn Indian Community of the Auburn Rancheria
Gregory S. Baker, Tribal Administrator
10720 Indian Hill Road
Auburn, CA 95603
gbaker@auburnrancheria.
530-883-2390
530-883-2380 - Fax

Maidu
Miwok

Shingle Springs Band of Miwok Indians
Daniel Fonseca
P.O. Box 1340
Shingle Springs, CA 95682
(530) 676-8010
(530) 676-8033 Fax

Miwok
Maidu

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

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 2011112039 Water Treatment Plants Rehabilitation Project; Sacramento County.

CENTRAL VALLEY FLOOD PROTECTION BOARD

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



December 7, 2011

Mr. Scott Johnson
City of Sacramento
300 Richards Boulevard
Sacramento, California 95811

Subject: Water Treatment Plans Rehabilitation Project SCH Number: 2011112039 Draft EIR

Dear Mr. Johnson:

Staff for the Central Valley Flood Protection Board has reviewed the subject document and provides the following comments:

The proposed project is located within the jurisdiction of the Central Valley Flood Protection Board. The Board is required to enforce standards for the construction, maintenance, and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);
- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);
- Vegetation plantings that will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be utilized within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection and flood fight procedures (Title 23, California Code of Regulations CCR Section 131).

In accordance with CEQA Guidelines Section 15130 "Discussion of Cumulative Impacts. (a) An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead

December 7, 2011
Mr. Scott Johnson
Page 2 of 2

agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.”

Vegetation requirements in accordance with Title 23, Section 131(c) states, “Vegetation must not interfere with the integrity of the adopted plan of flood control, or interfere with maintenance, inspection, and flood fight procedures.”

The accumulation and establishment of woody vegetation that is not managed has a negative impact on channel capacity and increases the potential for levee over-topping and flooding. When a channel develops vegetation that then becomes habitat for wildlife, maintenance to initial baseline conditions becomes more difficult as the removal of vegetative growth is subject to federal and state agency requirements for on-site mitigation within the floodway.

Hydraulic impacts – Hydraulic impacts due to encroachments could impede flows, reroute flood flows, and/or increase sediment accumulation. The Draft EIR should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. Off-site mitigation outside of the State Plan of Flood Control should be used when mitigating for vegetation removed within the project location.

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board’s website at <http://www.cvfpb.ca.gov/>. Contact your local, federal and state agencies, as other permits may apply.

Should you have any further questions, please contact me by phone at (916) 574-0651, or via email at jherota@water.ca.gov.

Sincerely,



James Herota
Staff Environmental Scientist
Floodway Projects Improvement Branch

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