



SUPPLEMENTAL INITIAL STUDY
CITY OF SACRAMENTO
LEISURE LANE STORM DRAIN IMPROVEMENTS PROJECT

MARCH 2015

LEAD AGENCY:

City of Sacramento
Environmental Planning Services
300 Richards Blvd
Sacramento, CA 95811



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COMMUNITY DEVELOPMENT
DEPARTMENT

ENVIRONMENTAL PLANNING
SERVICES

300 Richards Boulevard
Third Floor
Sacramento, CA 95811

PROPOSED 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:

Leisure Lane Storm Drain Improvements Project - The Proposed Project is in the North Sacramento Community Plan (NSCP) area, immediately north (Woodlake Detention Basin) and south of California State Route 160 (CA-Hwy 160) and between Royal Oaks Drive and Canterbury Road. It is bordered by a vacant field on the west; Woodlake Elementary School to the north; an office building, apartment complex, and vacant lot to the east; and Leisure Lane to the south. The Proposed Project is also located in City Drainage Basin 151, a nominal 1,000 acre watershed north of and contributory to the American River.

The project consists of constructing a new approximately 10 ft. x 30 ft. outlet weir box north of CA-Hwy 160 between the City's existing 8 inch waterline and 12 inch sewer line in the City's Basin. To build the new outlet weir box, the existing 3 foot by 4 foot box culvert, the 60 inch diameter pipe, and the 34 inch diameter pipe will be extended. The outlet weir box will have a 12 inch diameter pipe at grade that will allow all collected storm water to eventually drain out of the Basin over several days.

South of CA-Hwy 160, a transition manhole will be constructed wherein the flow shape will change from rectangular to round, followed by placement of approximately 145 feet of either 54 inch diameter Reinforced Concrete Pipe (RCP) or 60 inch diameter plastic pipe buried at-grade within the existing ditch. The buried pipe will terminate with a standard flared end section, with concreted cobbled riprap around it (similar to what exists now around the existing 60 inch and 34 inch outlets) to mitigate erosion.

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 pursuant to the Environmental Quality Act of 1970 (Sections 21000, et seq., Public Resources Code of the State of California).

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) adopted by the City of Sacramento, and the Sacramento City Code.

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 also available on the CDD website at: <http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

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1.0 INTRODUCTION

1.1 PURPOSE OF STUDY

Pursuant to the California Environmental Quality Act (CEQA) of 1970 (as amended), this Supplemental Initial Study and Mitigated Negative Declaration (Supplemental IS/MND) was prepared for the City of Sacramento (City). The City is acting as the CEQA lead agency for the proposed Leisure Lane Storm Drain Improvements Project (Proposed Project). The Proposed Project is a modification of the original outlet of the Woodlake Detention Basin for which a previous Initial Study and Mitigated Negative Declaration (original IS/MND) was prepared in 1996 for the construction of the Woodlake Detention Basin (Basin). The Basin is part of the overall program to address drainage as discussed in the April 1996 Drainage Master Plan (DMP) for the area. This study is being prepared as a Supplemental IS/MND and only addresses the impacts from the current Proposed Project that has been designed to better meet the original purpose of the Basin.

The original IS/MND addressed impacts from full construction and operation of the Basin, including impacts to the area of the proposed outlet weir box. The sections addressed therein were: Earth, Air, Water, Plant Life, Animal Life, Noise, Light and Glare, Land Use, Natural Resources, Risk of Upset, Population, Housing, Transportation/Circulation, Public Services, Energy, Utilities, Human Health, Aesthetics, Recreation, Cultural Resources, and Mandatory Findings of Significance. Mitigation measures related to initial construction of the Basin were also presented therein.

Only those areas where the Proposed Project has a potential environmental impact are reviewed and discussed in this Supplemental IS/MND. Those areas are: Air Quality, Biological Resources, Greenhouse Gas Emissions (not addressed in original IS/MND), Hydrology and Water Quality, and Noise. This Supplemental IS/MND was prepared to address the proposed modification of the Basin outlet system on both the north and south sides of CA-Hwy 160. These modifications will: 1) improve Basin operation as a regional water quality facility consistent with the DMP; 2) simplify maintenance, and 3) improve safety.

This Supplemental IS/MND identifies potentially significant impacts and, where applicable, presents mitigation measures that would reduce all identified environmental impacts to less-than-significant levels. Therefore, as discussed in **Section 4.0**, this supplemental IS/MND supports a Mitigated Negative Declaration as defined under CEQA *Guidelines* Section 15070.

1.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The Proposed Project would potentially affect the environmental resource areas “checked” below. Impacts to these resources are evaluated using the CEQA Guidelines checklist in **Section 3.0**. Areas left “unchecked” will not be affected by the Proposed Project.

- | | |
|---------------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Land Use and Planning |
| <input type="checkbox"/> Agriculture and Forestry | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Noise |

- | | |
|-----------------------------------------------------------------|------------------------------------------------------|
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Transportation and Traffic |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Utility and Service Systems |
| <input checked="" type="checkbox"/> Hydrology and Water Quality | |

1.3 EVALUATION TERMINOLOGY

The following terminology is used to describe impact levels of significance for each resource area discussed in **Section 3.0**.

A conclusion of ***no impact*** is used when it is determined the Proposed Project would not adversely impact the resource area under evaluation.

A conclusion of ***less-than-significant impact*** is used when it is determined the Proposed Project's adverse impacts to a resource area would not exceed established thresholds of significance.

A conclusion of ***less-than-significant impact with mitigation*** is used when it is determined that mitigation measures would be required to reduce the Proposed Project's adverse impacts below established thresholds of significance.

1.4 ORGANIZATION OF THE INITIAL STUDY

This document is organized into the following sections:

Section 1.0 – Introduction: Describes the purpose, contents, and organization of the document.

Section 2.0 – Project Description: Includes a detailed description of the Proposed Project.

Section 3.0 – Environmental Analysis: Contains the Environmental Checklist from CEQA *Guidelines* Appendix G with a discussion of potential environmental effects associated with the Proposed Project. Mitigation measures, if necessary, are noted following each impact discussion.

Section 4.0 – Significance Determination: Identifies the determination of whether impacts associated with development of the Proposed Project are significant, and what, if any, additional environmental documentation may be required.

Section 5.0 – List of Preparers

Section 6.0 – References

Appendices – Contains supplemental information pertaining to the document.

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

This section provides a description of the Proposed Project that serves as the basis for the assessment of potential environmental consequences in **Section 3.0**.

2.2 PROJECT LOCATION

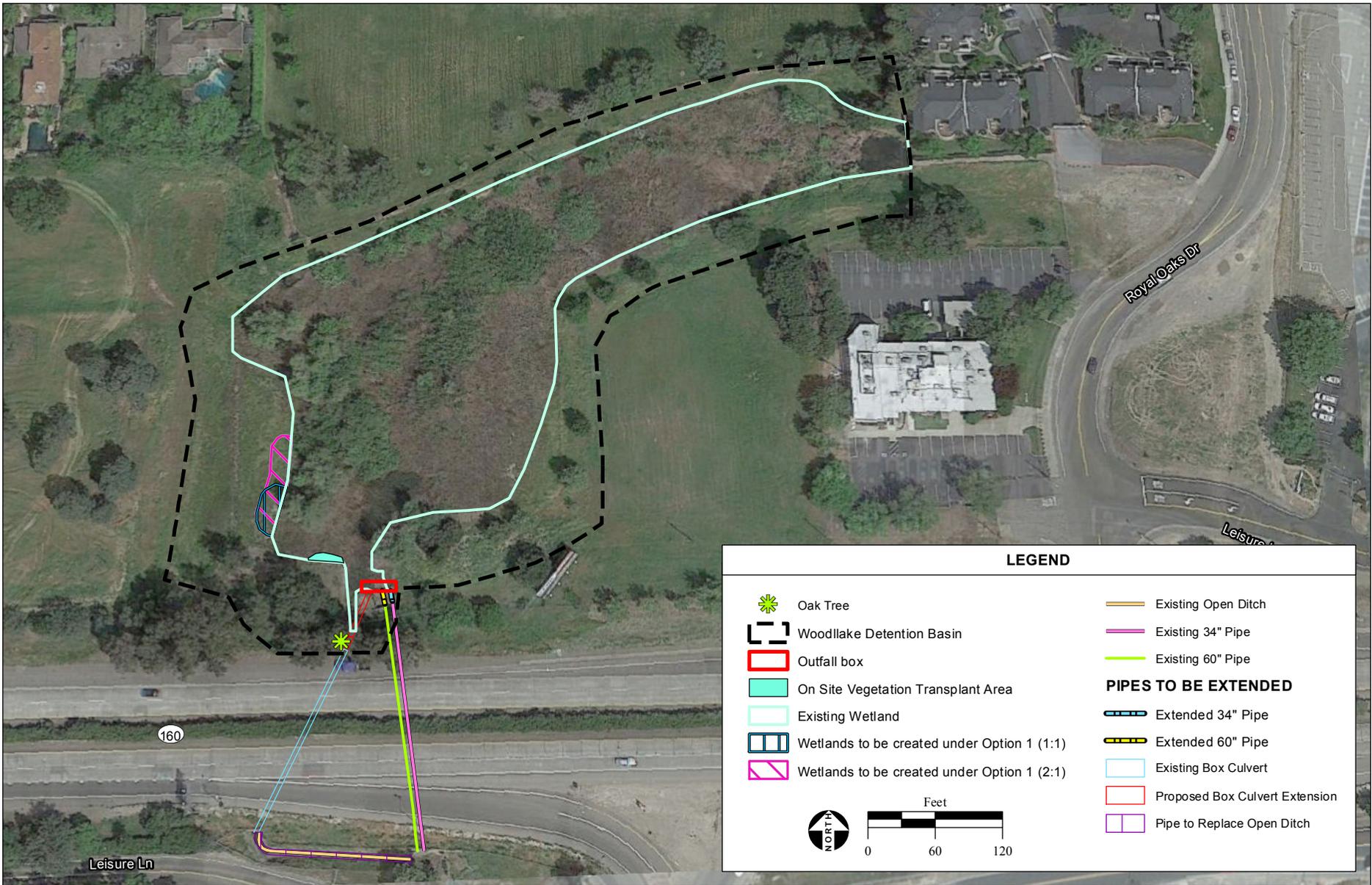
The Proposed Project is in the North Sacramento Community Plan (NSCP) area, immediately north and south of California State Route 160 (CA-Hwy 160) and between Royal Oaks Drive and Canterbury Road. It is bordered by a vacant field on the west; Woodlake Elementary School to the north; an office building, apartment complex, and vacant lot to the east; and Leisure Lane to the south (**Figure 1**). The Proposed Project is located in the United States Geological Survey (USGS) 7.5 minute quadrangle “Sacramento East.”

The Proposed Project is also located in City Drainage Basin 151, a nominal 1,000 acre watershed north of and contributory to the American River. Basin 151 drains from north to south through two main pipe/channel systems that come together about 0.5-mile downstream of the Proposed Project. Stormwater in Basin 151 is pumped up and over the levee into the river at City pump station (Sump) 151.

2.3 PROJECT BACKGROUND

Between 1985 and early 1995, several storm events produced significant flooding in many City drainage basins, including Basin 151. These storms highlighted the fact that design criteria and standards in use up to that time did not provide acceptable levels of flood protection. Thus, starting in 1993, the City of Sacramento Department of Utilities began a master planning program to prioritize and study each of the City’s drainage basins, and to determine the least-cost combination of pumping plant, detention facilities, pipelines, and/or control structure modifications needed to meet both short and long range flood protection goals. Basin 151 was one of the first basins studied.

Woodlake Detention Basin (Basin), a nominal 4 acre stormwater detention basin on the East Drain through Basin 151, was constructed circa 1998. It was one of the improvements recommended in the April 1996 Basin 151 Drainage Master Plan (DMP). The Basin was constructed (following the original IS/MND) by lowering the bank area adjacent to an existing drainage swale, thereby creating additional storage volume for stormwater. This detention basin discharges through three different sized outlets under CA-Hwy 160. One of the outlets, a 3 foot by 4 foot wide box culvert, was constructed with the highway, presumably in the late 1950s or early 1960s. The box culvert is aligned to the southwest and the headwall is in the California Department of Transportation (Caltrans) CA-Hwy 160 right-of-way. Circa 1987, a 60 inch and a 34 inch diameter outlet pipes, with a common headwall, were added as part of a Basin 151 east main channel realignment project south of the CA-Hwy 160. The common headwall on the pipes is approximately 35 feet north of and 20 feet east of the box culvert headwall (on City property, not in the Caltrans right-of-way). The added pipes are both aligned to the southeast. Therefore, there is an 8 foot deep ditch that runs roughly parallel to and on the south side of Ca-Hwy 160, that starts at the



box culvert and flows eastward to re-connect with flow from the 34 inch and 60 inch pipes in the re-aligned main channel. Due to space considerations, this unlined channel south of CA-Hwy 160 has very steep sides, is difficult to maintain, and presents a safety hazard to traffic on Leisure Lane where the ditch is very close to the road edge.

Basin development was an interim project that relieved the most onerous flooding conditions. While this detention basin was sized to optimize both flood control and water quality enhancements via retention to remove suspended sediments and attached pollutants, only land purchase and excavation were performed to provide immediate short term flood protection improvements. Modifications have not yet been made to the outlet conduits to increase basin retention times, as was originally contemplated.

In 2013, following several accidents involving cars crashing into the open channel between the box culvert and the re-aligned channel on the south side of CA-Hwy 160 along Leisure Lane, Department of Utilities' staff proposed a buried pipe connection instead of the open ditch. A buried pipe would eliminate the open ditch safety hazard and would be easier to maintain in what is basically an extension of the Basin outlet. In early 2014, upstream development was resuming, which brought attention to the need for a fully operational regional water quality basin at this location. Without a regional facility, all new upstream developments would be responsible to install and maintain their own onsite water quality features, which can be costly when compared to the originally contemplated outlet improvements to Woodlake Detention Basin. These improvements will allow settling of sediments to improve water quality and would allow the basin to function as a regional facility as proposed in the original IS/MND.

In order to increase retention time in the Basin, and thereby also foster more suspended solids settlement for water quality enhancement as envisioned in the 1996 DMP, the three outlets north of the CA-Hwy 160 require a common controlled outlet, i.e., a weir box. This type of structure will allow major storm peak flows to pass quickly and efficiently, with a small orifice to allow the slow ongoing release of the balance of flows out of the basin. Based on geometry, the Proposed Project weir box location is approximately 45 feet north of the box culvert headwall and 10 feet north of the common pipe headwall. This location is within the City-owned Basin parcel between two existing City utility lines, i.e. a buried water main and a buried sewer main. The existing three outlet conduits will be lengthened so as to reach the common weir box location. A computer model was used to analyze hydraulic impacts on the drainage system associated with lengthening the outlets and adding the downstream pipe. That analysis showed that hydraulic impacts could be mitigated by simply adding more hydraulically efficient rounded entrance edges onto the three outlet conduits and thus meet the operational stormwater retention time and water quality objectives of the DMP which led to the creation of the Basin.

2.4 PROJECT OBJECTIVES

The City has identified three objectives for the Proposed Project as follows:

- Improve downstream water quality by increasing retention time in the Basin, thereby also removing more suspended solids and attached pollutants;

- Eliminate the open ditch on the south side of CA-HWY 160 between the box culvert and the main north/south drainage swale, because it is a safety hazard and is also difficult and costly to maintain; and
- Encourage new job growth and businesses to locate in the City by providing an effective regional water quality treatment facility (the Basin).

2.5 PROJECT DESCRIPTION

North of CA-Hwy 160, the new outlet weir box will measure approximately 10 feet by 30 feet, and will be located between the City's existing 8 inch waterline and 12 inch sewerline in the City's Basin (**Figures 2 and 3a**). To build the new outlet weir box, the existing 3 foot by 4 foot box culvert (**Figure 4: Photo 1**), the 60 inch diameter pipe, and the 34 inch diameter pipe (**Figure 4: Photo 2**) will be extended. The outlet weir box will have a 12 inch diameter pipe at grade that will allow all collected storm water to eventually drain out of the Basin over several days. Overall this portion of the Proposed Project will permanently impact a total of 0.068 acres (**Figure 3a**), consisting of largely created wetland habitat within the current detention Basin. This means that there will be 0.015 acres of wetland, 0.049 acres of upland, and 0.003 acres of cement/cobble permanently impacted by the Proposed Project (See **Figure 3a**). Temporary impacts to the Propose Project include the creation of staging areas (0.154 acres), a haul road (0.093 acres), and work buffer zones delineated around the permanent impact zones (called "Maximum Temporary Impact Areas" in **Figures 3a and 3b**). There will be 0.002 acres of wetland, and 0.023 acres of upland temporarily impacted by the Proposed Project on the north side (See **Figure 3a**).

South of CA-Hwy 160, a transition manhole will be constructed wherein the flow shape will change from rectangular to round, followed by placement of approximately 145 feet of either 54 inch diameter Reinforced Concrete Pipe (RCP) or 60 inch diameter plastic pipe buried at-grade within the existing ditch (**Figure 4: Photo 3**).¹ The buried pipe will terminate with a standard flared end section, with concreted cobbled riprap around it (similar to what exists now around the existing 60 inch and 34 inch outlets) to mitigate erosion. There will be 0.018 acres of upland permanently impacted by the Proposed Project, and 0.042 acres of upland temporarily impacted as the work buffer zone (See **Figure 3b**).

Collectively, the Proposed Project will have 0.086 acres of permanent impact and a maximum of 0.315 acres of temporary impact including the staging areas, haul road, and work buffer zones.

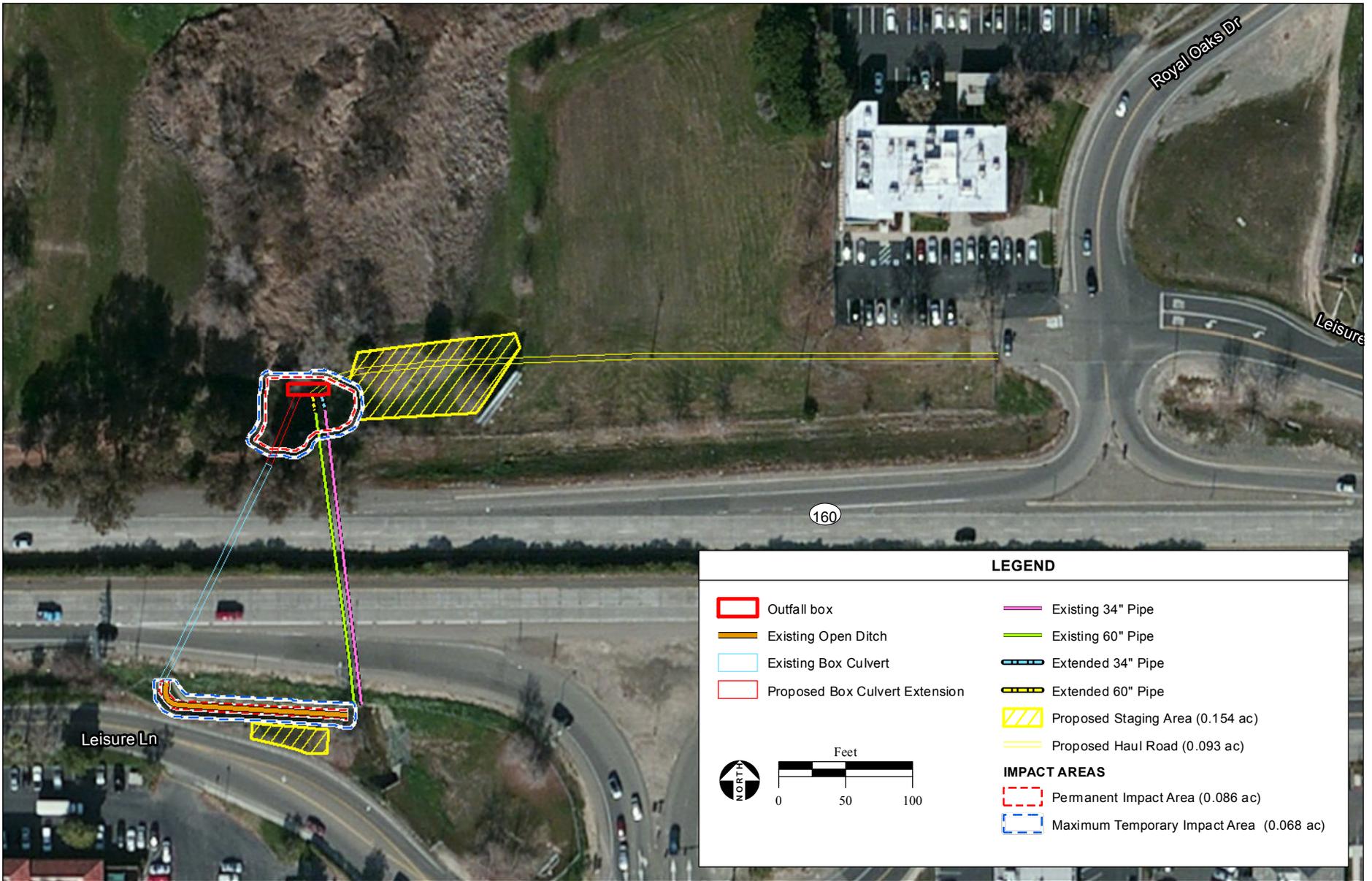
2.6 REGULATORY REQUIREMENTS, PERMITS, AND APPROVALS

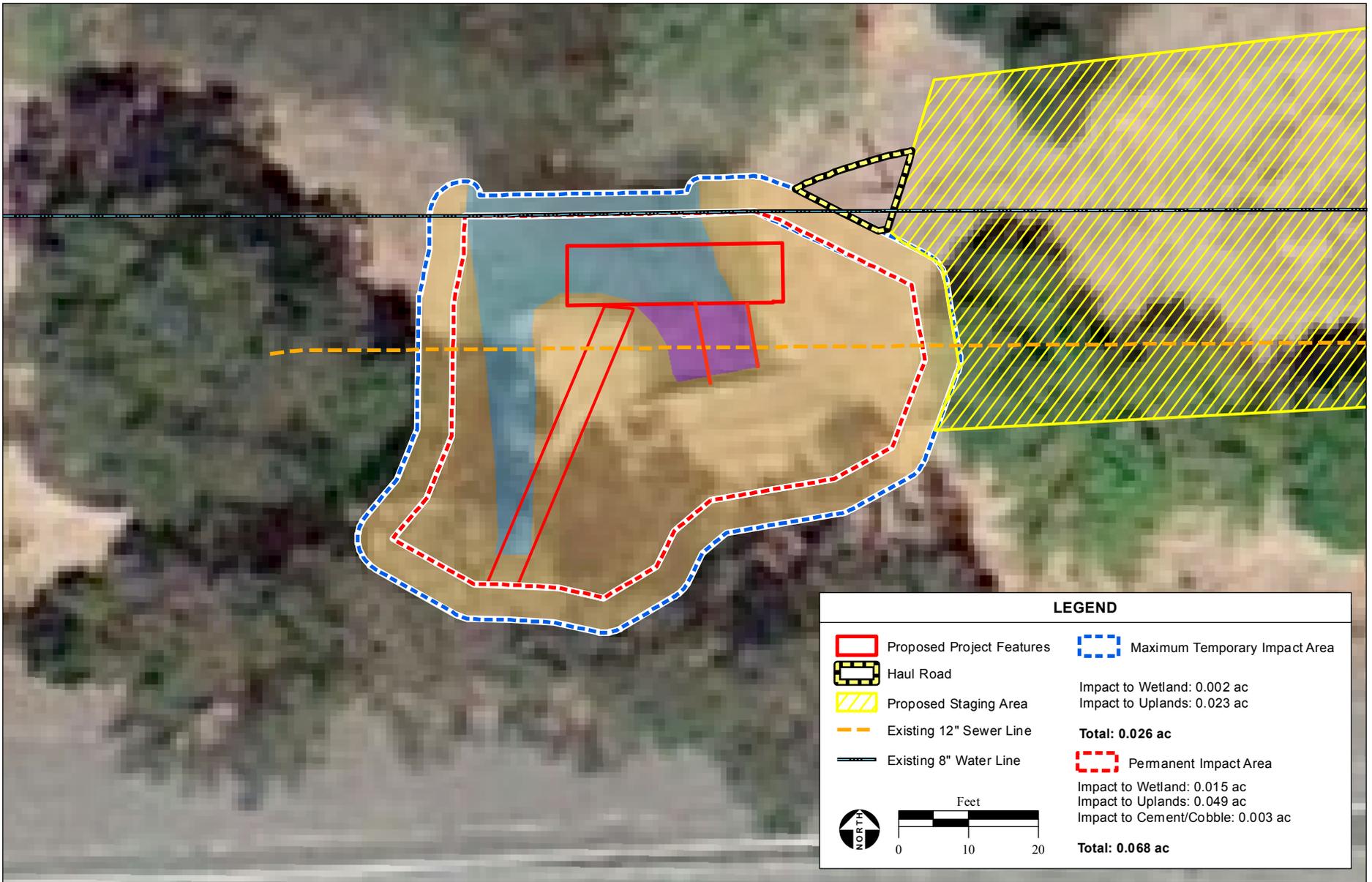
In order to implement the Proposed Project, obtaining the following permits and approvals is anticipated:

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

- RWQCB Clean Water Act (CWA) Section 401 Water Quality Certification.

¹ Hydraulically, 54 inch diameter pipe is sufficient and is available, but competitive plastic pipe is not available in the 54 inch diameter; therefore, 60 inch plastic is also a bid option.





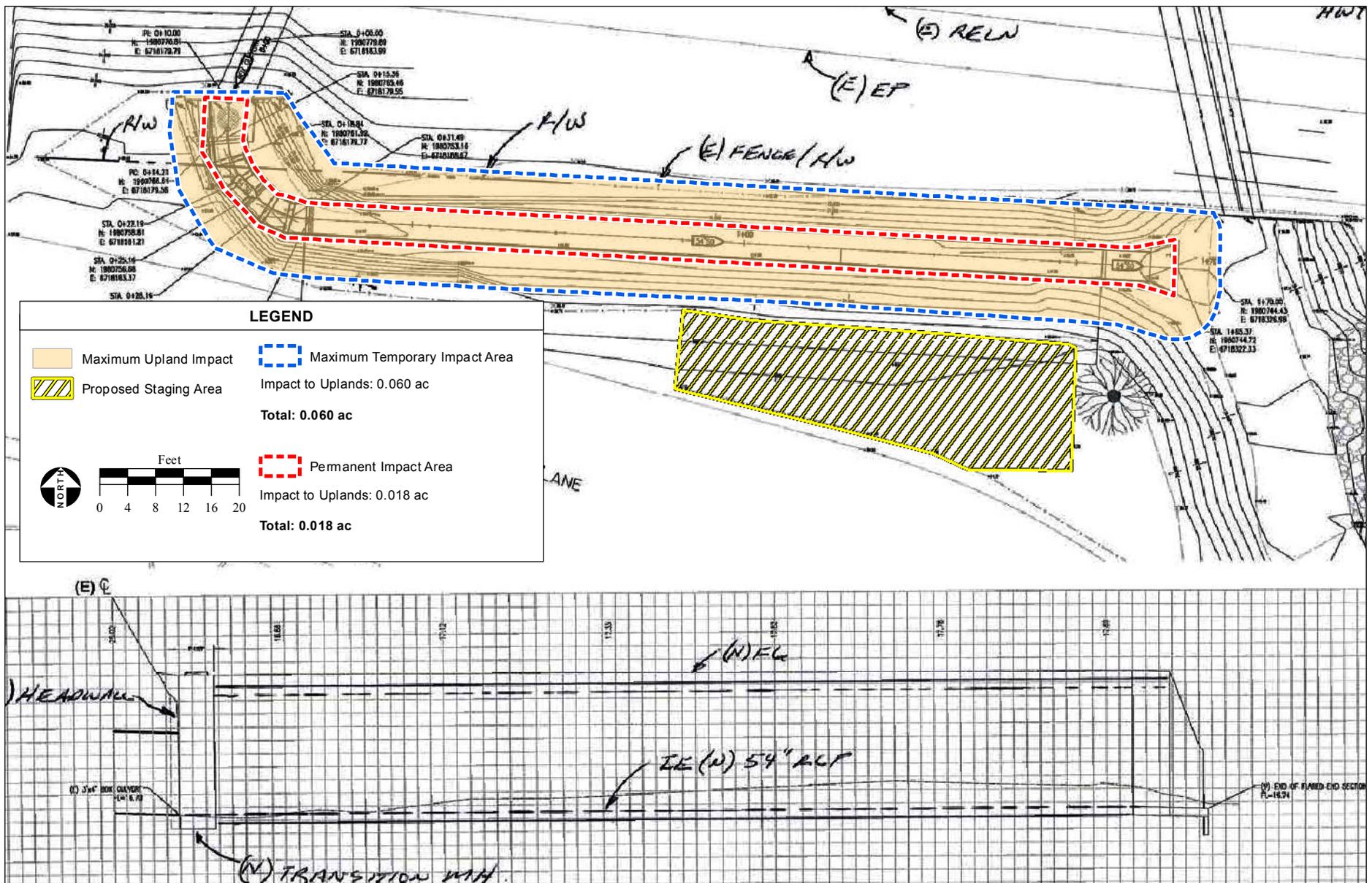


Figure 3b
South Side Site Plan



PHOTO 1: Existing 60" diameter pipe, and the 34" diameter pipe (January, 2015).



PHOTO 2: Existing 3' x 4' box culvert (January, 2015).



PHOTO 3: Existing condition of the south side ditch (December, 2013).

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

- Issuance of a Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code.

UNITED STATES ARMY CORP OF ENGINEERS

- Issuance of a permit pursuant to CWA Section 404

3.0 ENVIRONMENTAL ANALYSIS (CHECKLIST)

3.1 INTRODUCTION TO ENVIRONMENTAL ANALYSIS

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

As noted above, this Proposed Project is the completion and modification of the outlet system for the Woodlake Detention Basin (Basin) the construction and operation of which were discussed in the 1996 IS/MND (original IS/MND). Only those areas not previously addressed (such as Greenhouse Gases) or which might have impacts as a result of this Proposed Project are addressed further in this Supplemental IS/MND. The CEQA checklist and matrix are used to guide this evaluation.

3.2 AIR QUALITY

3.2.1 SETTING

The project site is located in the Sacramento Valley Air Basin (SVAB). Summer months are often characterized by high temperatures, approximately 90 degrees Fahrenheit (°F) with little to no rainfall. Winter months are mild with temperatures in the mid-50 °F. During the winter, there is an average of 17 inches of precipitation (WRCC, 2014). The SVAB is continually influenced by outside meteorology due to the unique topography of the air basin in relationship to the San Francisco Bay Area Air Basin and the San Joaquin Valley Air Basin.

The project site is located within the Sacramento Municipal Air Quality Management District (SMAQMD) boundaries. The SMAQMD has jurisdiction over air quality in Sacramento County in accordance with the Clean Air Act (CAA) and under the delegation of the California Air Resource Board (CARB) and the U.S. Environmental Protection Agency (EPA). The SMAQMD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities.

Ambient Air Quality Standards

Under the CAA, the EPA establishes maximum ambient concentrations for the six criteria air pollutants (CAPs), known as the National Ambient Air Quality Standards (NAAQS). The six CAPs are ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), lead (Pb), and particulate matter 10 and 2.5 microns in size (PM₁₀ and PM_{2.5}). Concentrations above these time-averaged limits are anticipated to cause adverse health effects to sensitive receptors. The EPA has established violation

criteria for each CAP. For example, in order to constitute a violation, the NAAQS for ozone must be exceeded on more than three days in three consecutive years. On the other hand, if the NAAQS for carbon monoxide is exceeded on more than one day in any given year, a violation has occurred.

The California CAA establishes maximum concentrations for the six CAPs, as well as four additional air pollutants in California (visibility reducing particles, sulfates (SO₄), hydrogen sulfide (H₂S), and vinyl chloride). These maximum concentrations for the State are known as the California Ambient Air Quality Standards (CAAQS). Concentrations above these time-averaged limits are anticipated to cause adverse health effects to sensitive receptors. The CARB is part of the California Environmental Protection Agency (CalEPA) and has jurisdiction over local air districts, and has established its own standards and violation criteria for each CAP under the CAAQS.

Refer to **Table 3-1** for the standards and attainment status for the various averaging times for criteria pollutants of concern in the SVAB under the NAAQS and CAAQS. As shown in **Table 3-1**, SVAB is in nonattainment for 8-hour ozone, PM₁₀ (24-hour), and PM_{2.5} (24-hour) under the NAAQS; and 1- and 8-hour ozone, PM₁₀ (annual), and PM_{2.5} (annual) under the CAAQS.

TABLE 3-1
NAAQS AND CAAQS AND ATTAINMENT STATUS IN THE SVAB

Pollutant	Standard		Status	
	California	Federal	California	Federal
Ozone (1-hour)	0.09 ppm	-	Nonattainment	N/A
Ozone (8-hour)	0.07 ppm	0.075 ppm	Nonattainment	Nonattainment
PM ₁₀ (24-hour)	50 µg/m ³	150 µg/m ³	Attainment	Nonattainment
PM ₁₀ (annual)	20 µg/m ³	-	Nonattainment	N/A
PM _{2.5} (24-hour)	-	35 µg/m ³	N/A	Nonattainment
PM _{2.5} (annual)	12 µg/m ³	12 µg/m ³	Nonattainment	Unclassified
Carbon Monoxide (8-hour)	9.0 ppm	9.0 ppm	Attainment	Attainment
Nitrogen Dioxide (annual)	0.030 ppm	0.053 ppm	Attainment	Attainment
Nitrogen Dioxide (1-hour)	0.18 ppm	0.100 ppm	Attainment	Attainment
Lead (30 day average)	1.5 µg/m ³	-	Attainment	Attainment
Sulfur Dioxide (24-hour)	0.04 ppm	0.14 ppm	Attainment	Attainment
Visibility Reducing Particles	-	N/A	Attainment	N/A
Sulfates	25 µg/m ³	N/A	Attainment	N/A
Vinyl Chloride	0.01 µg/m ³	N/A	Attainment	N/A
Hydrogen Sulfide	0.03 ppm	N/A	Attainment	N/A
Source: CARB, 2014a				

Sensitive Receptors

Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirm are more susceptible to respiratory distress and other air quality related health problems. Residential areas are considered sensitive to poor air quality, because people usually stay home for extended periods of time, increasing the potential exposure to ambient air

quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system.

The Basin is bordered by a vacant field on the west; Woodlake Elementary School to the north (approximately 333 ft from the north side impact area to the southwest corner of the school yard); an office building (approximately 392 ft from the north side impact area), apartment complex (approximately 633 ft from the north side impact area), and vacant lot to the east; and Leisure Lane to the south. However, the Proposed Project is situated at the south end of the Basin, and in the Ditch south of CA-Hwy 160 where it is surrounded by CA-Hwy 160 and Leisure Lane. The closest sensitive receptor is Woodlake Elementary School, followed by the apartment complex.

Regulatory Context

The SMAQMD revised *Guide to Air Quality Assessment in Sacramento County* (SMAQMD CEQA Guide) provides significance thresholds for assessment of project-level impacts to air quality (SMAQMD, 2014). The ozone precursors nitrogen oxides (NO_x) and reactive organic gases (ROGs) have significance thresholds as shown in **Table 3-2**. The significance thresholds for all other CAPs is equal to the CAAQS, meaning a project’s impact to air quality is only significant should it by itself cause an exceedance of the regional CAAQS.

TABLE 3-2
SMAQMD SIGNIFICANCE THRESHOLDS

Pollutant	Construction	Operation
Ozone Precursor – NO _x	85 pounds/day	65 pounds/day
Ozone Precursor – ROG	None	65 pounds/day
Source: SMAQMD, 2014		

3.2.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

<u>AIR QUALITY</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Where applicable, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Questions A, B, and C

Construction

Proposed Project emissions, calculated based on anticipated equipment and other factors, are shown in relationship to SMAQMD thresholds of significance in **Table 3-3**. The anticipated Project emissions do not exceed any applicable thresholds. Therefore, the Proposed Project would not conflict with or obstruct implementation of any applicable air quality plans. The Proposed Project would not violate any air quality standards, nor contribute substantially to an existing or projected air quality violation. The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under any applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

TABLE 3-3
ESTIMATION OF PROJECT RELATED CONSTRUCTION EMISSIONS

Construction Equipment ¹	Construction Emission					
	CO	ROG	NO ₂	SO ₂	PM ₁₀	PM _{2.5}
	pounds per day					
2 Air Compressors	0.20	0.06	0.61	0.00	0.02	0.02
5 Other Material Handling Equipment	17.27	3.22	27.52	0.02	2.34	2.15
1 Genset	1.14	0.21	1.56	0.00	0.11	0.11
2 Other Construction Equipment	8.77	1.44	16.15	0.01	0.85	0.78
1 Excavator	4.89	0.92	6.42	0.01	0.50	0.50
1 Concrete Mixer	0.51	0.10	0.62	0.00	0.03	0.03
1 Tractors/Loaders/Backhoes	2.30	0.34	3.26	0.00	0.25	0.23
1 Compactor	0.63	0.20	0.58	0.00	0.05	0.05
Employee Trips	4.75	0.19	0.31	0.00	0.01	0.01
Fugitive Dust					0.0764	0.02139
Total Emissions	40.47	6.68	57.02	0.05	4.23	3.90
Thresholds of Significance	<i>N/A</i>	<i>N/A</i>	85	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Exceed Threshold	<i>N/A</i>	<i>N/A</i>	No	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
¹ Based on 20 workers per day traveling 20 miles per day.						
Source: CalEEMod Emission and Load Factors, 2010						

Project construction will require some surface grading, trenching, and filling that could potential generate fugitive dust emissions. Per **Mitigation Measure AQ-1**, measures suggested by SMAQMD to reduce dust emissions will voluntarily be included in the project requirements to reduce this potential impact. **Less than Significant with Mitigation.**

Operation

Operation of the new weir box outlet structure and the newly covered ditch will be minimal and not beyond what is occurring today in the environmental baseline. **No Impact.**

Question D

The shortest distance between the project site (north side impact area) and its nearest sensitive receptor is approximately 333 feet to the furthest southwest corner of the Woodlake Elementary schoolyard (refer to **Section 3.4.1**). Heavy construction equipment emissions would be the main source of pollutants near sensitive receptors and would only occur for approximately six weeks in the vicinity to this receptor. Heavy construction equipment anticipated for use on the Proposed Project are as follows:

- Excavator
- Front-end loader
- Concrete truck

Given the limited duration of heavy equipment use, construction activities would not expose sensitive receptors to substantial pollutant concentrations. Construction of the Proposed Project would have a less-than-significant impact on sensitive receptors. **Less than Significant.**

Question E

As discussed above, heavy equipment would be used for approximately six weeks during construction, and therefore odor created during the construction phase would not affect a substantial number of people and would be temporary in nature. Operation of the Proposed Project would not emit objectionable odors. Therefore, construction and operation of the Proposed Project would have a less-than-significant impact associated with odors. **Less than Significant.**

Cumulative Impacts

Air quality is cumulative in nature. NAAQS and CAAQS are predicated on past, present, and future emissions; therefore, if project-related emission are found to have a less-than-significant impact in the near-term conditions, then cumulative impacts would also typically be less-than-significant. Project-related air quality impacts were found to be less-than-significant in the near-term conditions. The Proposed Project will ensure that the Basin functions as originally intended to meet the objective of the Drainage Master Plan (DMP). By doing so some, as yet not fully defined, build out infill projects will occur in the Basin to decrease water quality impacts. These possible projects will proceed with or without the completion of this Proposed Project but the overall water quality goals of the DMP will be better met through this centralized and complete drainage feature. Since any other proposed projects will proceed with or without this project no additional cumulative impacts are anticipated to air quality. Therefore, air quality impacts in the cumulative condition are also less-than-significant. **Less than Significant.**

3.2.3 MITIGATION MEASURES

AQ-1 The following BMPs shall be implemented by the project applicant:

- Exposed graded surfaces shall be watered twice a day or as needed to control dust during construction.
- All material excavated, stockpiled, or graded should be sufficiently watered to prevent fugitive dust from leaving property boundaries.
- Grading activity shall be suspended when winds (instantaneous gusts) exceed 25 miles per hour.

3.3 BIOLOGICAL RESOURCES

3.3.1 SETTING

Regulatory Context

Wetlands and Waters

The U.S. Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern Waters of the U.S., under Section 404 of the Clean Water Act (CWA). Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the U.S. The USACE

requires that a permit be obtained if a project proposes the placement of structures within, over, or under navigable waters and/or discharging dredged or fill material into waters below the ordinary high water mark (OHWM). The USACE has established a series of nationwide permits (NWP) that authorize certain activities in waters of the U.S.

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

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

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

Federal Endangered Species Act

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

Migratory Bird Treaty Act

Under the Migratory Bird Treaty Act of 1918 (16 USC Subsection 703-712), migratory bird species, their nests, and their eggs are protected from injury or death, and any project-related disturbances during the nesting cycle. As such, project-related disturbances must be reduced or eliminated during the nesting cycle.

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the take of State-listed threatened and endangered species. Under the CESA, State agencies are required to consult with the California Department of Fish and Wildlife (CDFW) when preparing CEQA documents. Under the CESA, the CDFW is responsible for maintaining a list of rare, threatened, and endangered species designated under State law (California Fish and Game Code 2070-2079). Project-related impacts to species on the CESA's rare, threatened, and endangered list would be considered potentially significant and require mitigation. The CDFW can authorize take if an incidental take permit is issued by the Secretary of the Interior, or if the director of the CDFW issues a permit under Section 2080 in those cases where it is demonstrated that the impacts are minimized and mitigated.

CEQA Guidelines Section 15380

The CEQA *Guidelines* Article 20, Section 15380 provides that a species not listed on the federal or State list of protected species may be considered rare, threatened, or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions of endangered, rare, or threatened provided in the FESA and the CESA. This section of the Guidelines provides public agencies with the ability to protect a species from any potential impacts of proposed projects until the respective government agency has the opportunity to designate (list) that species as protected, if warranted. The California Native Plant Society (CNPS) maintains an extensive list of plant species that it considers to be rare, threatened, or endangered, but have no designated status or protection under federal or State endangered species legislation. Impacts to CNPS listed species (e.g., CNPS lists 1A, 1B, and 2) are considered pursuant during CEQA environmental review under CEQA Guidelines Section 15380. CDFW also maintains a database of special-status species called the California Natural Diversity Database (CNDDDB).

California Fish and Game Code, Sections 3503, 3503.5, 3511, and 3800

California Fish and Game Code Sections 3503 and 3503.5 prohibit the take or needless destruction of bird nests or eggs; and prohibit the take, possession, and destruction of birds-of-prey (birds of the orders Strigiformes and Falconiformes; owls, falcons, and hawks). California Fish and Game Code Section 3511 lists birds that are "fully protected," which may not be taken or possessed except under specific permit. Depending on the presence of special status species or nesting raptors during periods of project construction, consultation with the CDFW may be necessary. California Fish and Game Code Section 3800 prohibit the take of nongame birds. Nongame birds are defined as, "all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds."

Sacramento City General Plan Policies

- ER 1.1.1** Conservation of Open Space Areas. The City shall conserve and where feasible create or restore areas that provide important water quality benefits such as riparian corridors, buffer zones, wetlands, undeveloped open space areas, levees, and drainage canals for the purpose of protecting water resources in the City's watershed, creeks, and the Sacramento and American rivers.
- ER 1.1.2** Regional Planning. The City shall continue to work with local, State, and Federal agencies and private watershed organizations to improve water quality.
- ER 1.1.3** Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City's National Pollution Discharge Elimination System (NPDES) Permit.
- ER 2.1.1** Resource Preservation. The City shall encourage new development to preserve on-site natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character.
- ER 2.1.4** Retain Habitat Areas. The City shall retain plant and wildlife habitat areas where there are known sensitive resources (e.g., sensitive habitats, special-status, threatened, endangered, candidate species, and species of concern). Particular attention shall be focused on retaining habitat areas that are contiguous with other existing natural areas and/or wildlife movement corridors.
- ER 2.1.6** Wetland Protection. The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetlands, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City shall require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-net loss of value and/or function.
- ER 2.1.8** Oak Woodlands. The City shall preserve and protect oak woodlands, and/or significant stands of oak trees in the city that provide habitat for common native, and special status wildlife species. If not feasible, the mitigation of all adverse impacts on oak woodlands shall comply with the standards of the *Oak Woodlands Conservation Act*.
- ER 2.1.10** Habitat Assessments. The City shall consider the potential impact on sensitive plants 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 California Department of Fish and Game (CDFG) or the USFWS (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law.

ER 2.1.11 Agency Coordination. The City shall coordinate with State and Federal resource agencies (e.g., CDFW, U.S. Army Corps of Engineers, and USFWS) to protect areas containing rare or endangered species of plants and animals.

Methodology

Database Searches

Information on regionally occurring special-status species was compiled based on the USFWS list (USFWS, 2014), the CNDDDB query (CDFW, 2014a), the CNPS inventory (CNPS, 2014), and the CNDDDB map of documented species occurrences within five miles of the project site (provided in **Appendix A**). The potential for each of the regionally occurring special-status species was subsequently evaluated based on the results of the biological surveys. A discussion of the distribution and habitat requirements for each species, an evaluation of the potential for the species to occur in the project site, and a discussion of CNDDDB occurrences mapped within the project sites are included in **Appendix A**. The name, regulatory status, habitat requirements, and period of identification for these potentially occurring special-status species are identified in **Appendix A**. Species that have no potential to occur in the project site are not discussed further in this document. One special status plant species was determined to have the potential to occur within the project site: Sanford's arrowhead (*Sagittaria sanfordii*).

Biological Surveys

AES biologist Shay Richardson conducted a biological resources survey throughout the proposed areas of construction on May 14, 2014. The goal of the survey was to identify and evaluate the existing habitat types, including jurisdictional wetland habitat, and to assess the potential for the occurrence of state and federally listed species and/or their habitats within the project site during the evident and identifiable blooming period for Sanford's arrowhead. Prior to the biological resources survey, Ms. Richardson visited a reference site with known occurrences of Sanford's arrowhead (CNDDDB Occurrence #27) on May 13, 2014 to observe phenology and assist in identification of this species within the Leisure Lane project site.

Following phone and email correspondence with Stu Williams, the City Department of Utilities Project Engineer, to determine the locations of upcoming construction work areas, Ms. Richardson conducted a reconnaissance level biological resources survey throughout the project site. The survey consisted of pedestrian level observations comprised of walking through the proposed areas of impact and documenting any occurrences of jurisdictional wetland habitat and state and/or federally listed species and/or their habitat observed within the Proposed Project footprints.

An informal wetland delineation was performed by Ms. Richardson during the May 14, 2014 survey. A follow up biological resources survey was done on January 16, 2015 by AES biologists Katelyn Peterson and Marc Beccio, along with Stu Williams of the Department of Utilities (see **Figure 3a** for wetland locations). This follow up survey confirmed the wetland findings of the survey conducted the previous spring. The impact area on the north side of CA-Hwy 160 was delineated within the Basin. This included the area which is proposed for the location of the weir box and pipe extensions (**Figure 4: Photos 1-2**), as well as the balance of the Basin (**Figure 1**) and determined to be a potentially jurisdictional wetland during the January survey. The ditch on the south side of CA-Hwy 160, (**Figure 4: Photo 3**), was determined during these surveys to likely be non jurisdictional due to its manmade construction combined with a preponderance of upland vegetation (**Figure 5: Photos 1-2**). Further, the manmade ditch did appear to primarily transport the water through the stretch proposed for being placed in a pipe, and not hold it for a sustained period of time.

Environmental Setting

Habitat Types Within and Adjacent to the Project Site

The impact area contains one type of terrestrial and one type of aquatic habitat. The terrestrial habitat type identified within the impact area is non-native annual grassland habitat. The aquatic habitat type within the impact area is wetland habitat.

The Basin was one of two sites approved in 1997 by the USACE, USFWS, and California Department of Fish and Game (now CDFW) for a mitigation plan to re-establish Sanford's arrowhead (*Sagittaria sanfordii*) plants. That mitigation plan was developed as a permit condition to offset the loss of these plants that would occur during construction of the Basin Project north of CA-Hwy 160 and the site near Elkhorn Blvd and East Levee Rd., and plants from the Costco site were transplanted into the Basin. Only those transplants in the Basin succeeded. The mitigation plant targeted at least 0.035 acres of recreated Sanford's arrowhead coverage. After four years, Sanford's arrowhead plant coverage in the Basin was over 0.3 acres.

Terrestrial Habitats

Non-native Annual Grassland

The non-native annual grasslands within the impact area occur on the edges and banks of the Basin as well as in the manmade ditch. Dominant vegetation in the area included: upland perennial non-native grasses, and some umbrella sedge (*Syperus eragrostis*) and curly dock (*Rumex crispus*). There was also one oak tree located near the box culvert north of CA-Hwy160. This oak will not be impacted by the Proposed Project but may be trimmed slightly to allow equipment to reach the box culvert.



PHOTO 1: Ditch on south side of CA-Hwy 160 (May, 2014).



PHOTO 2: Ditch on south side of CA-Hwy 160 (May, 2014).



PHOTO 3: Wetland on north side of CA-Hwy 160 (May 2014).



PHOTO 4: Wetland on north side of CA-Hwy 160 (May 2014).



PHOTO 5: Wetland on north side of CA-Hwy 160 (May, 2014).



PHOTO 6: Wetland on north side of CA-Hwy 160 (May, 2014).



PHOTO 7: Sanford's arrowhead present north of CA-Hwy 160 during the bloom period survey (May, 2014).



PHOTO 8: Sanford's arrowhead present north of CA-Hwy 160 during the bloom period survey (May, 2014).



PHOTO 9: Sanford's arrowhead present on the north side of CA-Hwy 160 during the January, 2015 survey (January, 2015).



PHOTO 10: Sanford's arrowhead present on the north side of CA-Hwy 160 during the January, 2015 survey (January, 2015).



PHOTO 11: Area proposed to transplant Sanford's arrowhead near the outlet box to be added (January, 2015).



PHOTO 12: Wetland to be created left of existing wetland by removing soil (January, 2015).

Aquatic Habitats

Wetland

Wetland habitat has formed in the detention Basin where the weir box and the extended outlet culverts are proposed. The wetland habitat supports hydrophytic vegetation including Sanford's arrowhead. Dominant vegetation included: Sanford's arrowhead (*Sagittaria sanfordii*), umbrella sedge (*Cyperus eragrostis*), and broadleaf cattail (*Typha latifolia*) (**Figure 5: Photo 3-6**). A map of the wetland habitat is provided in **Figures 1 and 3a**. Visual inspection of the soil showed hydric soil characteristics within the identified wetland boundaries. Generally, wetland soils displayed soil colors of Gley1-- 4/N with mottles of 10Y-- 4/1; soil depth within the wetland was 4.5 inches. Upland soils displayed soil colors of 7.5YR -- 4/N and were very dry. The vegetation within the upland habitat consisted primarily of perennial non-native grasses. By comparison of the wetland and upland soils and the plant species in both habitats, it was determined that the wetland habitat may be classified as a jurisdictional wetland and subject to USACE jurisdiction under the CWA.

Special Status Species

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

- Listed as endangered or threatened under the FESA (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the CESA (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (§1901);
- Designated as fully protected, pursuant to California Fish and Game Code (§3511, §4700, or §5050);
- Designated as species of concern to the CDFW; or
- Defined as rare or endangered under the CEQA Guidelines Sec. 15380.

There was only one special-status plant species found to have the potential to occur within the project site, as described below. (See **Appendix A** for full species table including this species: Sanford's arrowhead.)

Special-Status Plants

Sanford's arrowhead (*Sagittaria sanfordii*)

Federal Status – None

State Status – None

Other – CNPS 1B.2

Sanford's arrowhead is an aquatic perennial (up to 4.3 feet tall) that is normally found in shallow, standing fresh water growing from rhizomes and spherical tubers with its leaves submerged. Unlike other *Sagittaria* species that have the characteristic arrow-shaped leaf, Sanford's arrowhead has leaves (5.5 to 10 inches long) that are linear and narrowly ovate. When it blooms, this monoecious plant has white inflorescences located well below the leaf ends. Sanford's arrowhead looks similar to *Alisma* species except that its pistils and fruits are arranged in a spheric cluster rather than one whorl. It is identifiable during its bloom period which goes from May until October. This rare endemic Californian plant has been found in Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta,

San Joaquin, Tehama, and Ventura counties, including inside the project site. Sanford's arrowhead is listed as a California Rare Plant Rank (CRPR) 1B.2 because its aquatic habitat is being lost to human activity.

Special-Status Wildlife

No state and/or federally listed or protected wildlife species were observed during the May 14, 2014 or the January 16, 2015 surveys. These findings, in addition to the database search results found in **Appendix A**, indicate that no other listed species are anticipated to occur on site and thus should not be impacted by this Proposed Project.

Migratory Birds and Other Birds of Prey

Migratory birds and other birds of prey protected under 50 CFR 10 of the Migratory Bird Treaty Act and California Fish and Game Code § 3503, 3503.5, 3511, and 3800 have the potential to nest in the trees in or adjacent to the Proposed Project. While no nests have been identified in the project area, preconstruction surveys will be completed to ensure any potential nesting birds will not be affected.

Wetlands and Waters of the U.S.

The Proposed Project occurs within an area which is likely a jurisdictional wetland and therefore subject to USACE regulation under Section 404 of the CWA.

3.3.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

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

Question A

Special-Status Plants

The impact area provides habitat for one special status plant species, Sanford's arrowhead. The biological survey conducted on May 14, 2014 was within the evident and identifiable blooming period for this plant and confirmed that it is still present in the impact area on the north side of Ca-Hwy160 (**Figure 5: Photos 7-8**) as was the case when the Basin was originally constructed in the late 1990s. The January

16, 2015 survey, although outside of the evident and identifiable blooming period for this plant, still showed evidence of Sanford's arrowhead within the impact area (**Figure 5: Photo 9-10**).

The plants that occur in the project site will be impacted; however, **Mitigation Measure BR-1** will ensure that this impact is reduced to less-than-significant levels through the development and implementation of a salvage and relocation plan based on the successful program approved in 1997 for the PriceCostco project. This plan will ensure that all affected Sanford's arrowhead plants will be transplanted to other suitable habitat elsewhere within the Basin. It is anticipated that the plants present in the impact area can be transplanted to other areas on site (**Figure 1** and **Figure 5: Photo 11**). When the plants are removed, **Mitigation Measure BR-1** designates that as much top soil as possible remain intact around the roots to prevent root damage during transit, which will improve the likelihood for success when replanted. The plants will be kept wet during transit, and when they are transplanted, the soil should be placed over the roots to the base of the leaves. This mitigation measure is patterned after mitigation performed for the City of Sacramento's Norwood Avenue Bridge Project.

To ensure the Proposed Project will not impact other special status plant species, **Mitigation Measure BR-2** requires that a second year bloom period survey be completed in the first week of May 2015. This will likely confirm that the only special-status species present is the Sanford's arrowhead; however, should other listed species be observed, they will be documented and addressed at that time. There was also one oak tree located near the box culvert north of CA-Hwy 160. This oak will not be impacted by the Proposed Project but may be trimmed slightly to allow equipment to reach the box culvert.

Mitigation Measure BR-3 precludes excessive trimming of this oak so that its canopy is maintained. **Less than Significant with Mitigation.**

Special-Status Wildlife

No state and/or federally listed or protected wildlife species were observed during the May 14, 2014 or January 16, 2015 surveys. This finding, in addition to the database search results found in **Appendix A**, indicates that no other listed species are anticipated to occur on site and thus should not be impacted by this Proposed Project. This includes any migratory birds and other birds of prey. While no special-status wildlife has been identified in the project site, **Mitigation Measure BR-4** requires that a preconstruction nesting bird survey will be completed within 14 days prior to construction. This will ensure that there are no special status-species in the project site and that any potential nesting birds will not be impacted. **Less than Significant with Mitigation.**

Question B

The Proposed Project and associated impact areas do not include any riparian habitat or any areas that are designated sensitive natural communities with the exception of the wetland addressed in Question C below; therefore, the Proposed Project will not adversely affect these areas. **No Impact.**

Question C

The Proposed Project includes impacts to areas both north and south of CA-Hwy 160. There are no wetlands in the area south of CA-Hwy 160 so there will be no impact of wetlands due to that portion of the Proposed Project. However, the Proposed Project north of CA-Hwy 160 occurs almost entirely within an existing wetland. **Mitigation Measure BR-5** ensures the full offset to wetlands by outlining two

options for mitigating the loss of 0.017 acres (0.015 acres of permanent impact, and 0.002 acres of temporary impact, see **Figure 3a**) of wetland habitat. The City will also prepare all necessary permits in accordance with **Mitigation Measure BR-6**. With the implementation of these mitigation measures, the impacts to wetlands will be **Less than Significant with Mitigation**.

Question D

The Proposed Project will not interfere with the movement of any native resident of migratory fish because the Basin and the Ditch do not provide habitat for these species. While the site may provide potential habitat for migratory birds, **Mitigation Measure BR-4** will ensure that if any nesting birds are found in and around the project site, they will not be affected. **Less than Significant with Mitigation**.

Question E

The Sacramento City General Plan provides numerous policies, goals, and action items designed to protect and enhance sensitive habitats, sensitive species, and riparian corridors within their respective jurisdictions. The goals and objectives of the Proposed Project, as stated in **Section 2.4**, are consistent with the conservation goals of the General Plan. **Mitigation Measures BR-2** and **BR-4** require preconstruction surveys for sensitive species and are consistent with Sacramento County General Plan policies ER 2.1.1, and 2.1.10. Implementation of **Mitigation Measure BR-5** will ensure no net loss of wetland habitat by mitigating the 0.017 acre loss either on site or off-site at a suitable location. This is consistent with policies ER 1.1.1, 2.1.4, and 2.1.6. **Mitigation Measure BR-3** will ensure that only minimal trimming will be done to the one oak present near the impact area. This allows the Proposed Project to remain consistent with policy ER 2.1.8. Finally, **Mitigation Measure BR-6** requires the coordination with State and federal resource agencies through the preparation and approval of permits in accordance with policy ER 2.1.11. After implementation of the mitigation measures listed in **Section 3.3.3**, the Proposed Project will not interfere with local policies or ordinances protecting biological resources. **Less than Significant with Mitigation**.

Question F

There are no local Habitat Conservation Plans (HCPs) or natural community conservation plans applicable to the project site or impact area. **No Impact**.

Cumulative Impacts

There are no other projects proposed in the area that will affect biological resources at this site. **No Impact**.

3.3.3 MITIGATION MEASURES

BR-1 The City of Sacramento shall develop a salvage and relocation plan approved by the California Department of Fish and Wildlife for all affected Sanford's arrowhead (*Sagittaria sanfordii*) plants to be transplanted to other suitable habitat on site (see **Figure 1** for proposed transplant site). A qualified botanist shall be present on site to manage the transplant process and to ensure the plants are handled and transplanted properly. When the plants are removed, as much top soil as possible shall remain intact around the roots to prevent root damage during transit, which will

decrease the likelihood for success. The plants shall be kept wet during transit, and when they are transplanted, the soil should be placed over the roots to the base of the leaves.

- BR-2** A second year bloom period survey shall be completed in the first week of May 2015. No other special-status species are anticipated to be present, however, should other special status species be found, they will be documented and the appropriate agencies shall be consulted. In the unlikely event any are found, the Stanford's arrowhead relocation plan shall be amended to include these plants. In the unlikely event a listed plant is identified, an Incidental Take Permit (ITP) or Biological Opinion (BO) will be obtained from CDFW and/or USFWS and all terms and conditions shall be followed.
- BR-3** Only minimally trimming shall occur on the oak tree near the box culvert. An arborist shall be present on-site at the time of trimming to supervise and ensure that the full canopy is maintained. Should minimal trimming be deemed insufficient to allow access for equipment, the arborist will designate that the impacted oak tree shall be mitigated with a replanting ratio of no less than 3:1 with seedlings to be replanted in the vicinity of the existing oak tree outside the Basin capacity.
- BR-4** A preconstruction nesting bird survey shall be completed by a qualified biologist within 14 days prior to start of construction, which will ensure that there are no special status-birds in the project site and that any potential nesting birds will not be affected. If surveys show that there is no evidence of nests, then no additional mitigation will be required. If, however, any active nests of migratory birds are located within the vicinity of the impact area, a no-disturbance buffer zone shall be established around the nests to avoid disturbance or destruction of the nest. The distance around the no-disturbance buffer shall be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of noise or construction activity, the level of ambient noise in the vicinity of the nest, and line-of-sight between the nest and disturbance. The biologist shall delimit the buffer zone with construction tape or pin flags. The no-disturbance buffer will remain in place until after the nesting season (to be lifted August to September) or until the biologist determines that the young birds have fledged. A report shall be prepared and submitted to the City, USFWS, and CDFW following the fledging of the nestlings to document the results.
- BR-5** To fully offset the impacts to wetlands, the City shall implement one of the following two options:
- **Option 1:** The Proposed Project shall be designed to be fully self mitigating by the creation of wetlands, at no less than a 1:1 ratio. This shall be accomplished by modifying the upland sides of the basin along the western bank area (see **Figure 1** and **Figure 5: Photo 12**) to fully offset the impacts of the proposed work.
 - **Option 2:** The City shall purchase off-site wetland mitigation credits at a mitigation ratio of no less than a 1:1 ratio consistent with the terms of the required permits.
- BR-6** The City must notify the CDFW and prepare a Streambed Alteration Agreement because work is scheduled to occur within the bed, bank, and/or channel of the Basin. The City shall also obtain a USACE CWA Section 404 permit and a CWA Section 401 water quality certification from the CVRWQCB.

3.4 GREENHOUSE GAS EMISSIONS

3.4.1 SETTING

Climate Change

Global climate change is a change in the average temperature of the Earth, which can be measured by wind patterns, storms, precipitation, and temperature. It is exacerbated by greenhouse gases (GHGs), which trap heat in the atmosphere (thus the “greenhouse” effect). GHGs include carbon dioxide, methane, and nitrous oxide, and are emitted by natural processes and human activities.

Scientific evidence suggests that emissions from human activities, such as electricity production and vehicle emissions, have elevated the concentration of these gases in the atmosphere, and are increasing the rate and magnitude of climate change to a degree that could present hazardous conditions. Climate change has the potential to reduce the quality and supply of water to the state from the Sierra snowpack, cause the sea level to rise, and increase the intensity of wildfires and storms (IPCC, 2014).

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, city, and virtually every individual on Earth. A project’s GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Regulatory Background

State

The following regulatory background gives context to the issues of climate change and importance to reducing GHG in California:

Assembly Bill 32

Signed by the California State Governor on September 27, 2006, Assembly Bill (AB) 32 codifies a key requirement of Executive Order (EO) S-3-05, specifically the requirement to reduce statewide GHG emissions to year 1990 levels by the year 2020. AB 32 tasks CARB with monitoring State sources of GHGs and designing emission reduction measures to comply with the law’s emission reduction requirements.

AB 32 required that CARB prepare a comprehensive “scoping plan” that identifies all strategies necessary to fully achieve the required 2020 emissions reductions. In early December 2008, CARB released its scoping plan to the public and on December 12, 2008, the CARB approved the scoping plan.

The scoping plan calls for an achievable reduction in California’s carbon footprint. Reduction of GHGs emissions to 1990 levels are proposed, which equates to cutting approximately 30 percent from estimated GHG emission levels projected in 2020, or about 15 percent from today’s levels. The scoping plan relies

on existing technologies and improving energy efficiency to achieve the 30 percent reduction in GHG emission levels by 2020. The scoping plan provides the following key recommendation to reduce GHG emissions:

- Expand and strengthen existing energy efficiency programs as well as building and appliance standards;
- Achieve a statewide renewable energy mix of 33 percent;
- Develop a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establish targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopt and implement measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.

In March 2014, CARB published the "First Update to the Climate Change Scoping Plan" (Update), which builds upon the initial Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments (CARB, 2014b).

CEQA Guidelines

January 2010 amendments to the CEQA Guidelines provide the following direction for consideration of climate change impacts in a CEQA document:

- The determination of significance of GHG emissions calls for a careful judgment by the lead agency;
- A model or methodology shall be used to quantify GHG emissions resulting from a CEQA project;
- Significance may rely on qualitative analysis or performance based standards;
- The CEQA document shall discuss regional and/or local GHG reduction plans;
- A CEQA document shall analyze GHG emissions if they are cumulatively considerable;
- A description of the effects of climate change on the environment shall be included in CEQA documents;
- A CEQA document shall contain mitigation measures, which feasibly reduce GHG emissions.
- GHG analysis in a CEQA document may be Tiered or Streamlined;
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long term commitment to AB 32 implementation.

Local

The Proposed Project is located within the SMAQMD, which provides guidance for analyzing project-related GHG emissions and significance thresholds for construction and operation in its 2009 Guide to Air Quality Assessment in Sacramento County (Guide) (SMAQMD, 2014). The 2009 Guide was updated in November 2014 to include the GHG threshold. The SMAQMD recommends that CEQA analyses

addressing the potential impacts of project-generated GHG emissions include the following applicable elements:

- A summary of the current state of the science with respect to GHGs and climate change (IPCC and the U.S. Global Change Research Program provide good resources.);
- A description of the existing environmental conditions or setting, without the project, which constitutes the baseline physical conditions for determining the project’s impact;
- A discussion of the existing regulatory environment pertaining to GHGs;
- Identification of the thresholds of significance applicable to the proposed project. The District provides recommended thresholds for agencies without adopted GHG reduction plans (climate action plans) or their own adopted thresholds;
- A discussion of the GHG emission sources associated with the project’s construction and operational activities;
- Identification of the earliest year in which operational emissions of GHGs are anticipated to commence;
- A quantification of the annual and finite mass emissions of GHGs that will be generated by project construction, and the input parameters and assumptions used to estimate these values;
- A discussion of whether project construction- and operations-related GHG emissions will exceed the established significance threshold and the resulting determination of whether the construction and operational GHG emissions, without mitigation, will represent a cumulatively considerable contribution to the significant cumulative impact; and
- A discussion of feasible construction and operational mitigation necessary to reduce impacts and make a determination whether the mitigation will be sufficient to reduce the project’s GHG contribution to the significant cumulative impact to a less-than-considerable level.

3.4.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

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

Questions A and B

Construction

Construction of the Proposed Project would emit GHG from the combustion of diesel fuel in heavy equipment during construction only. While the City’s Climate Action Plan provides some GHG

significance threshold values, it does not cover infrastructure projects of this nature as it mostly applies to development projects. Thus for this project, the SMAQMD provides better guidance and designates a construction GHG significance threshold of 1,100 metric tons per year. Emissions are expressed in annual metric tons of CO₂ equivalent (MTCO₂e), based on the global warming potential of the individual pollutants. Construction of the Proposed Project would occur over a six week period. Anticipated construction equipment to be used is shown in **Table 3-4**. In reality, not all of the construction equipment is anticipated to be used for a full eight hours per day which was the base assumption herein; therefore, the construction GHG emissions estimate is conservative.

As shown in **Table 3-4**, GHG emissions associated with construction of the Proposed Project are estimated to be 320 MTCO₂e. Construction GHG emissions are a one-time release and are typically considered separate from operational emissions, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis.

TABLE 3-4
ESTIMATION OF CONSTRUCTION RELATED GHG EMISSIONS

Construction Equipment	Hours Used (hours/day)	Horse Power	Load Factor	CO ₂ Emission Factors (g/bhp/hr)	CO ₂ e Emission (metric tons/year)
2 Air Compressors	8	120	0.48	536.20	5
5 Other Material Handling Equipment	8	25	0.4	536.30	136
1 Genset	8	175	0.74	536.00	10
2 Other Construction Equipment	8	200	0.42	536.20	83
1 Excavator	8	15	0.38	529.70	43
1 Concrete Mixer	8	92	0.56	530.20	5
1 Tractors/Loaders/Backhoes	8	15	0.37	690.80	25
1 Compactor	8	120	0.43	568.29	4
Employee Trips	21,120 Miles ¹		--	415.49 ²	9
Total GHG Construction Emissions					320
SMAQMD Threshold					1,100
Exceed Threshold					No
¹ based on six workers per day for six weeks (132 days) at 20 miles per day.					
² grams per mile					
Source: CalEEMod Emission and Load Factors, 2010; AES, 2015.					

As shown in **Table 3-4**, construction-related GHG emissions would be less than the SMAQMD GHG threshold for construction of 1,100 MT CO₂e. Therefore, construction GHG emissions would not result in a significant impact to the environment and would not conflict with an applicable plan, policy, or regulation. This potential impact and is less-than-significant. **Less than Significant.**

Operation

Operational activities of the Proposed Project would occur in 2015 and consist of periodic maintenance, which would not substantially increase over current maintenance practices of the basin, culvert, and pipe in the area. Operation of the Proposed Project would not increase GHG emissions over current conditions

that would trigger the SMAQMD operational threshold of 1,100 MT CO₂e per year. This is a less-than-significant impact. **Less than Significant.**

Cumulative Impacts

The Proposed Project would not create any significant new sources of GHG emissions; therefore, the project would not contribute to adverse impacts associated with cumulative GHG emissions. This impact is less than significant. **Less than Significant.**

3.4.3 MITIGATION MEASURES

None Required.

3.5 HAZARDS AND HAZARDOUS MATERIALS

3.5.1 SETTING

The setting is the same as was previously described in the original IS/MND and the only anticipated hazardous material that will be present on site is the fuel being used. This is addressed in the discussions to Water Quality below and not further discussed in this Supplemental IS/MND.

3.5.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

<u>HAZARDS & HAZARDOUS MATERIALS</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working within the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Questions A through H

No anticipated impacts from the current Proposed Project, see original IS/MND. **No Impact.**

Cumulative Impacts

No anticipated impacts from the current Proposed Project, see original IS/MND. **No Impact.**

3.5.3 MITIGATION MEASURES

None required.

3.6 HYDROLOGY AND WATER QUALITY

3.6.1 SETTING

Regulatory Context

Federal

Clean Water Act

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

Sections 303 and 304 provide for water quality standards, criteria, and guidelines. Under Section 303(d) of the CWA, the EPA publishes a list every two years of impaired bodies of water for which water quality objectives (WQOs) are not attained. Total Maximum Daily Loads (TMDLs) are established for contaminants of concern in order to ensure contamination levels decrease over time.

Section 401 (Water Quality Certification) requires an applicant for any Federal permit that proposes an activity, which may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the Act.

Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program, administered by the SWRCB, applies to projects with greater than one acre of land disturbance. Therefore, the Proposed Project will not fall under NPDES nor will it require coverage under the Construction General Permit.

Section 404 establishes a permit program for the discharge of dredged or fill material into waters of the United States. This permit program is jointly administered by USACE and the EPA.

Local

City of Sacramento General Plan

Policy LU 2.2.2 Waterway Conservation. The City shall encourage the conservation and restoration of rivers and creeks within the urbanized area as multi-functional open space corridors that complement adjoining development and connect the city’s parks and recreation system to the Sacramento and American rivers. (*RDR/MPSP*)

Goal ER 1.1 Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American rivers, and their shorelines.

Policy ER 1.1.2 Regional Planning. The City shall continue to work with local, State, and Federal agencies and private watershed organizations to improve water quality. *(IGC/JP)*

Policy ER 1.1.3 Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City's National Pollution Discharge Elimination System (NPDES) Permit. *(RDR/MPSP)*

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. *(RDR)*

Policy ER 1.1.6 Post-Development Runoff. The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development projects to prevent or reduce downstream erosion and protect stream habitat. *(RDR/MPSP)*

Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance. *(RDR/MPSP)*

Policy EC 2.1.4 Floodplain Storage Maintenance. The City shall encourage the preservation of urban creeks and rivers to maintain existing floodplain storage. *(IGC)*

Policy EC 2.1.5 Floodplain Requirements. The City shall regulate development within floodplains in accordance with State and Federal requirements and maintain the City's eligibility under the National Flood Insurance Program. *(RDR)*

City of Sacramento Municipal Code

Chapter 15.88 – Grading, Erosion, and Sediment Control. The grading ordinance was enacted for the purpose of regulating grading on property within the city limits to safeguard life, limb, health, property and the public welfare; to avoid pollution of watercourses with nutrients, sediments, or other materials generated or caused by surface water runoff; to comply with the city's national pollution discharge elimination system (NPDES) Permit No. CA0082597; and to ensure that the intended use of a graded site within the city limits is consistent with the City General Plan, any specific plans adopted, and all applicable city ordinances and regulations.

Chapter 15.104 – Floodplain Management Regulations. This chapter is designed to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. This chapter regulates development which is or might be dangerous to health, safety and property by requiring at the time of initial development or substantial improvement methods of protection against flood damage in areas vulnerable to flooding in order to minimize flood damage. This chapter regulates the following developmental impacts: filling, grading or erosion, alteration of natural flood plains, stream channels or water courses, the imposition of barriers which increase flood hazards, or any other impacts that aggravate or cause flood hazards.

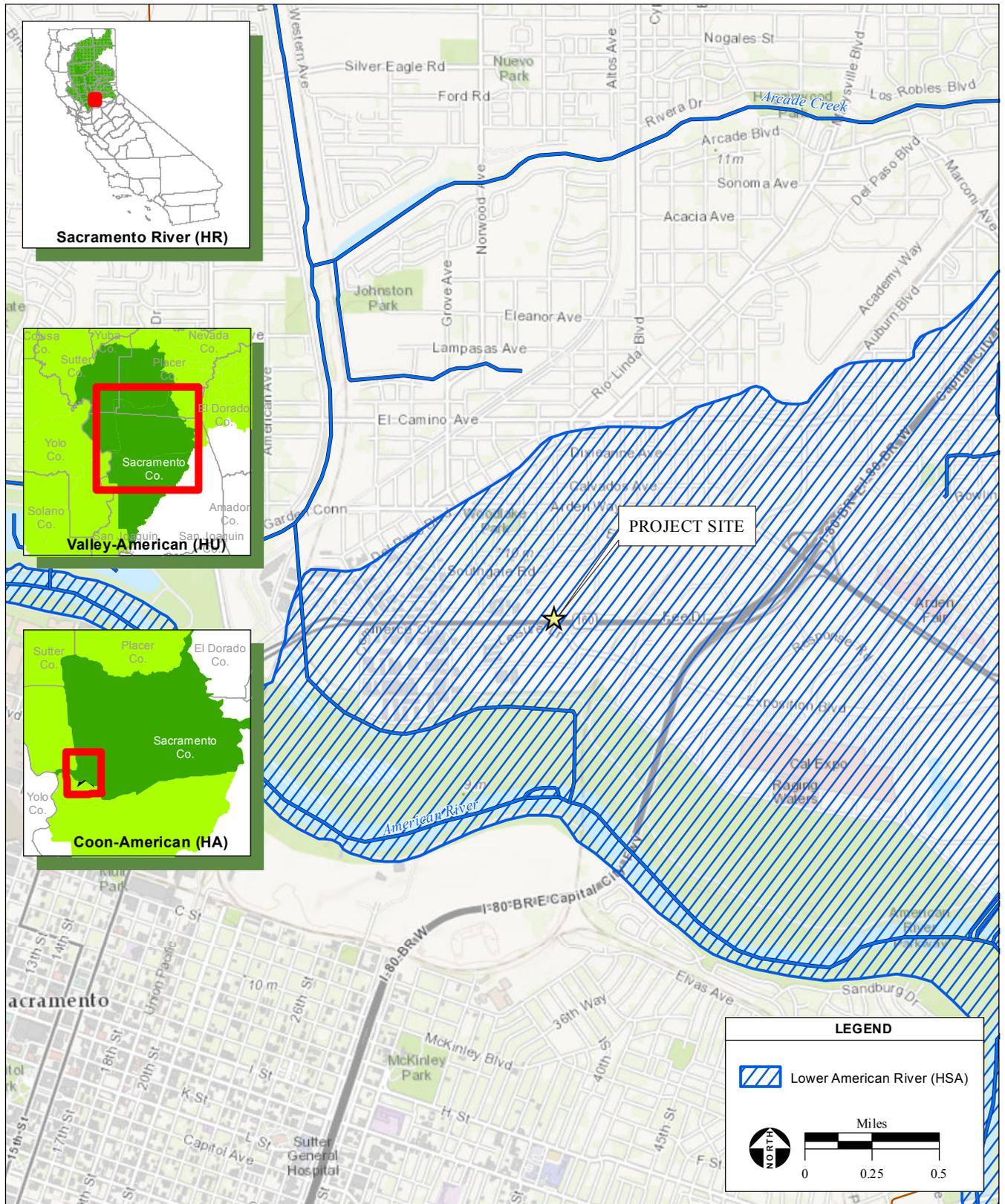
Regional Hydrology

The project site is located in the Valley-American River hydrologic unit (HU), Coon American hydrologic area (ha), and the Lower American hydrologic sub-area (hsa) and super planning watershed (spws) (California Department of Conservation, 2014). The American River and Arcade Creek are the nearest USGS blue-line streams in the vicinity, and the American River watershed consists of approximately 1,900 square miles from the Sierra Nevada to the City of Sacramento. The American River watershed drains the Sierra Nevada and surrounding foothills via the North Fork, Middle Fork, and South Fork of the American River, which drain to Folsom Lake. Folsom Dam, located approximately 18 miles upstream of the project site, dams the American River and creates Folsom Lake, a Central Valley Project reservoir that provides drinking water, flood control, hydroelectric power, and irrigation water. The American River then discharges from Folsom Lake to Lake Natoma, a regulating reservoir for Folsom Dam that is created by the Nimbus Dam. **Figure 6** shows the American River and other tributaries in the vicinity of the project site, as well as the Lower American hsa.

The 27-mile stretch of the lower American River (from Nimbus Dam to the confluence with the Sacramento River) is listed on the 303(d) list of impaired waterbodies for mercury, polychlorinated biphenyls (PCBs), and unknown toxicity (CalEPA, 2010). The TMDL for mercury was approved in 2010, and the TMDL for PCBs and unknown toxicity are expected to be completed in 2021 (CalEPA, 2010). Arcade Creek, a tributary to the American River located just north of the project site, is listed on the 303(d) list of impaired waterbodies for chlorpyrifos, copper, diazinon, malathion, pyrethroids, and sediment toxicity (CalEPA, 2010).

The Federal Emergency Management Agency (FEMA) oversees the delineation of flood zones and the provision of federal disaster assistance. FEMA manages the National Flood Insurance Program and publishes the Flood Insurance Rate Maps (FIRMs), which show the expected frequency and severity of flooding by area, typically for the existing land use and type of drainage/flood control facilities present. The project site is located on FIRM 06067C0177H. The project site is located within FEMA Zone X, areas within the 500-year flood plain or areas within the 100-year flood plain with average depths of less than 1 foot (FEMA, 2012).

As discussed in **Section 2.2**, the project site is also located in City Drainage Basin 151, a nominal 1,000 acre watershed north of and contributory to the American River. Basin 151 drains from north to south through two main pipe/channel systems that come together about 0.5 mile downstream of the project site. Stormwater in Basin 151 is pumped up and over the levee into the American River at Sump 151. The Basin, a four acre basin constructed in 1998, detains and regulates stormwater from Basin 151; a box culvert, a 60-inch pipe, and 34-inch pipe are the outlet system from this basin and feed into a ditch along the paved roadway south of CA-Hwy 160. The Proposed Project will result in construction of a new box weir outflow from the Basin and a buried pipeline within the ditch in order to increase safety along the roadway. These project components are discussed further in **Section 2.3**.



SOURCE: California Interagency Watershed Map of 1999; AES, 2015

Leisure Lane Storm Drain Improvements Project Supplemental Initial Study / 214531 ■

Figure 6
Lower American River Watershed

Groundwater

The project site lies over the southeast portion of the Sacramento Valley Groundwater Basin, a complex system of groundwater aquifers generally composed of marine sediments and stratified sand, silt, and clay layers many thousands of feet thick; only the upper layers contain usable water (DWR, 2004). The portion of the Sacramento Valley basin that lies beneath the project site is known as the South American Subbasin, ID 5-21.65 (DWR, 2004). This groundwater subbasin is approximately 388 square miles, composed of alluvial deposits (flood basin, dredge tailings, and Holocene stream channel deposits) and Miocene/Pliocene volcanic. In the eastern Sierra Nevada foothills, the aquifer is shallow on the order of a few hundred feet deep, but it increases in thickness approaching the western boundary, reaching over 2,500 feet deep on the western margin of the subbasin. Department of Water Resources (DWR) estimated the storage capacity of the subbasin at 4,816,000 acre-feet (DWR, 2004). Groundwater in the South American Subbasin typically contains detectable levels of calcium magnesium bicarbonate or magnesium calcium bicarbonate. Significant groundwater contamination has occurred within the subbasin as a result of three EPA-designated Superfund sites, Aerojet, Mather Field, and the Sacramento Army Depot, as well as other sources of contamination from landfills, power plants, and rail yards in the region (DWR, 2004).

3.6.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

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

Questions A, C and F – Water Quality

Construction

Construction of the Proposed Project may violate water quality standards or waste discharge requirements, as construction equipment and materials have the potential to leak, thereby discharging pollutants into stormwater. Construction site pollutants include particulate matter, sediment, oils and greases, concrete, and adhesives. Discharge of these pollutants could result in contamination of the American River, causing an exceedance of water quality objectives. Because grading, trenching, and earth moving activities associated with the components of the Proposed Project have the potential to result in erosion, siltation, and contamination of stormwater, this is considered a potentially significant impact. Water quality decreases with increased turbidity and total suspended solids (TSS), which may result from erosion and siltation of improperly stockpiled soil or open excavations.

During construction, unauthorized or accidental release of any fuel, hydraulic fluids, lubricants, solvents, or other chemical into the excavation cavity could directly enter surface waters and the groundwater aquifer. In order to ensure that construction of the Proposed Project does not have a significant impact on water quality, **Mitigation Measure H-1** will require best management practices (BMPs) be followed to reduce potential for erosion of topsoil, contamination of waterways from leaking equipment, and other potential discharges of pollutants during construction.

Additionally, the Proposed Project could be subject to Chapter 15.88 of the City of Sacramento Municipal Code: Grading, Erosion, and Sediment Control Ordinance; however, because the Proposed Project falls under the category of repairing a local drainage it is exempt and does not need to prepare an Erosion and Sediment Control Plan. The Proposed Project will also be required to comply with a CWA Section 404 Permit issued by the USACE and a Section 401 Water Quality Certification issued by the Central Valley RWQCB. With implementation of **Mitigation Measure H-1 and H-2** and any additional measures provided in the 404 and 401 permits, any impacts to water quality will be reduced to less-than-significant levels. **Less than Significant with Mitigation.**

Operation

Operation of the Proposed Project will not significantly interfere with water quality or violate water quality standards. Implementation of the project components will have a beneficial effect to water quality, as increased retention time within the Basin will allow for the removal of more pollutants and suspended solids from stormwater when compared to existing conditions. Because there is only a beneficial impact and no negative impacts, operation of the Proposed Project is designated as having **No Impact** to water quality.

Question B – Groundwater Supplies

The Proposed Project does not involve the use of groundwater. The Proposed Project will not introduce significant impermeable surfaces that will decrease groundwater infiltration, and it will not substantially deplete groundwater supplies. The project components will increase retention time in the Basin, which will have an overall beneficial impact to water quality and may allow additional time for water to infiltrate into the groundwater aquifer. **No Impact.**

Questions D and E – Drainage and Flooding

The Proposed Project includes modifications to the City's existing stormwater drainage system to create a safer alternative to the existing roadside ditch by piping the existing conveyance channel. Although piping the roadside ditch will result in an alteration of the water's flow path, it will not significantly alter the existing drainage patterns of the site or area in a manner that would result in on- or off-site flooding, nor would it exceed the capacity of existing or planned stormwater drainage systems. The Proposed Project will ensure the long-term viability and maintenance of the stormwater drainage system in the area, as the proposed pipe would be safer and easier to maintain than the existing roadside ditch.

No components of the Proposed Project would contribute excess runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or would provide substantial additional sources of polluted runoff. Implementation of the Proposed Project will increase retention time in Basin, which will have a beneficial impact to water quality of stormwater in the future. **Less than Significant.**

Questions G, H, I, and J – Flood Hazards and Catastrophic Events

The project site is located within FEMA Zone X, which is categorized as either an area within the 500-year flood plain or an area within the 100-year flood plain with average depths of less than 1 foot (FEMA, 2012). Project components do not include housing or residential structures. The project components would be designed to better convey storm and flood flows through the existing drainage system. The Proposed Project does not involve building any levees, building pipelines through any levees, or building dams, and would not expose people or structures to a significant risk of loss, injury, or death involving flooding due to dam or levee failure. The project site and vicinity are not at risk for inundation by seiche, tsunami, or mudflow. **Less than Significant.**

Cumulative Impacts

Construction of cumulative projects in the vicinity of the Proposed Project would be required to comply with the National Pollutant Discharge Elimination System, which is intended to reduce the potential for cumulative impacts to water quality during construction. Therefore, impacts associated with cumulative construction related water quality effects would be less than significant.

Projects in the region that involve modifications to the stormwater system are required to comply with NPDES Permit No. CAS082597 for Municipal Separate Storm Sewer Systems, which is designed to reduce cumulative impacts to the local watershed to less-than-significant levels. Similar to the Proposed Project, cumulative development projects would be subject to local, State, and federal regulations designed to minimize cumulative impacts to water resources. Standard measures for the Proposed Project in combination with compliance with County, State, and federal regulations would reduce cumulatively considerable impacts to water quality to a less than significant level. Therefore, the Proposed Project's incremental contribution to cumulative effects to water resources is less than significant. **Less than Significant.**

3.6.3 MITIGATION MEASURES

H-1 The Proposed Project would be constructed entirely within the dry season, which will minimize land disturbance and erosion during peak runoff periods.

H-2 The contractor shall enact the following water quality BMPs during construction of the Proposed Project:

- Areas where ground disturbance would occur shall be identified in advance of construction and limited to only approved areas.
- All equipment maintenance and cleaning shall be confined to staging areas that are no less than 50 feet from any waters of the U.S.
- Restore disturbed areas to pre-construction contours to the fullest extent possible.
- Temporary erosion control measures (such as silt fences, staked straw bales, and temporary revegetation) shall be employed for disturbed areas.
- Leave drainage gaps in topsoil and spoil piles to accommodate surface water runoff.
- Sediment control measures shall be in place prior to the onset of the rainy season and will be maintained until disturbed areas have been re-vegetated. Erosion control structures must be in place and operational at the end of each day if work activities are to occur during the rainy season.
- Fiber rolls shall be placed along the perimeter of disturbed areas to ensure sediment and other potential contaminants of concern are not transported off-site or to open trenches.
- Vehicles and equipment stored in the construction staging area shall be inspected regularly for signs of leakage. Leak-prone equipment will be staged over an impervious surface or other suitable means will be provided to ensure containment of any leaks. Vehicle/equipment wash waters or solvents will not be discharged to surface waters or drainage areas.
- During the wet season (October 1 through April 30), soil stockpiles and material stockpiles will be covered and protected from the wind and precipitation. Plastic sheeting will be used to cover the stockpiles and straw wattles will be placed at the base for perimeter control.
- All contractors shall immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures. Contaminated media shall be collected and disposed of at an off-site facility approved to accept such media.
- Soil conservation practices shall be completed during the fall or late winter to reduce erosion during spring runoff.
- Existing vegetation will be retained where possible.
- To the extent feasible, grading activities shall be limited to the immediate area required for construction.
- Disturbed areas will be re-vegetated after completion of construction activities.

3.7 NOISE

3.7.1 SETTING

Noise Descriptors

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

Sensitive Noise Receptors

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

The Basin is bordered by a vacant field on the west; Woodlake Elementary School to the north (approximately 333 ft from the north side impact area to the southwest corner of the school yard); an office building, apartment complex (approximately 633 ft from the north side impact area), and vacant lot to the east; and Leisure Lane to the south. However, the Proposed Project is situated at the south end of the Basin, and in the Ditch south of State Route 160 where it is surrounded by State Route 160 and Leisure Lane. The nearest sensitive receptors, in order of increasing distance, are Woodlake Elementary School, and the apartment complex that border the Basin.

Sacramento City

The Proposed Project lies within the boundaries of Sacramento City. The relevant General Plan goals and policies, as well as ordinances, are discussed below.

General Plan

The following are applicable General Plan noise Goals and Policies from the Sacramento City General Plan:

- EC 3.1.1** Exterior Noise Standards. The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in **Table 3-5**, to the extent feasible.

Only the land uses related to this project have been included in **Table 3-5**.

TABLE 3-5

EXTERIOR NOISE COMPATIBILITY STANDARDS FOR VARIOUS LAND USES

Land Use Type	Highest Level of Noise Exposure that is regarded as “normally acceptable” ^a (L _{dn} ^b or CNEL ^c)
Industrial, Manufacturing, Utilities, Agriculture	75dBA
Source: Governor’s Office of Planning and Research, State of California General Plan Guidelines 2003, October 2003	

- a. As defined in the Guidelines, “Normally Acceptable” means that the “specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.”
- b. Ldn or Day Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.
- c. CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.

EC 3.1.8 Operational Noise. The City shall require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.

EC 3.1.10 Construction Noise. The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

EC 3.1.11 Alternatives to Sound Walls. The City shall encourage the use of design strategies and other noise reduction methods along transportation corridors in lieu of sound walls to mitigate noise impacts and enhance aesthetics.

Sacramento City Codes and Ordinances

Sacramento City Code Section 8.68 addresses noise standards in the City, and subsection 8.68.060 provides the following guidance for exterior noise levels:

TABLE 3-6

SACRAMENTO CITY EXTERIOR NOISE STANDARDS

Time Period	Exterior Noise Standard
7 a.m. – 10 p.m.	55 dBA
10 p.m. – 7 a.m.	50 dBA
Source: Sacramento County Code Section 6.68.070(a)	

Section 8.68.080(d) states that the following activities shall be exempted from other noise requirements listed in Section 8.68.060:

Noise sources due to the erection (including excavation), demolition, alteration or repair of any building or structure between the hours of seven a.m. and six p.m., on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, and between nine a.m. and six p.m. on Sunday; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order. The director of building inspections, may permit work to be done during the hours not exempt by this subsection in the case of urgent necessity and in the interest of public health and welfare for a period not to exceed three days. Application for this exemption may be made in conjunction with the application for the work permit or during progress of the work.

3.7.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

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

Questions A, C, and D

Construction

Construction of the Proposed Project would generate noise and may temporarily increase noise levels at nearby sensitive land uses. Noise impacts resulting from construction would depend on: 1) the noise generated by various pieces of construction equipment; 2) the timing and duration of noise generating

activities; 3) the distance between construction noise sources and noise sensitive receptors; and 4) existing ambient noise levels.

Table 3-7 shows the approximate noise level of common construction equipment that may be used during construction of the Proposed Project at 50 feet. The General Plans specifies 55 dBA as the maximum noise level for residential outdoor activity areas during the daytime hours of 7 a.m. to 10 p.m., so 55 dBA was selected as the noise threshold to provide a conservative analysis. As shown in **Table 3-7**, construction equipment may exceed the 55 dBA threshold at 50 feet. Therefore, this is a significant impact.

TABLE 3-7
APPROXIMATE NOISE LEVEL OF COMMON
CONSTRUCTION EQUIPMENT

Equipment	dBA Leq at 50 feet	dBA Leq at 333 feet
Excavator	85	70
Front-end loader	80	65
Dump truck	84	69
Air compressor	80	65
Flat-bed delivery truck	84	69
Concrete truck	85	70
Generator (more than 25 kVA)	82	67
Pickup Truck	55	40
Hydroseeder	74	59
Compactor (ground)	80	65
1 based on a 6 dBA attenuation factor per doubling of distance. Source: Caltrans, 2009;		

However, all construction will be timed to occur between the hours of seven a.m. and six p.m., Monday through Saturday, and between the hours of nine a.m. and six p.m. on Sunday. This means that under City Code exemption 8.68.080(d), the Proposed Project, to alter an existing structure, is exempt from the noise standards. Implementation of **Mitigation Measure N-1** through **N-3** would reduce noise impacts and ensure construction of the Proposed Project adheres to City noise ordinances. The potential for impacts associated with construction noise is less than significant with mitigation. **Less than Significant with Mitigation.**

Question B

Generally, excessive vibration is only an issue when construction requiring the use of equipment with high vibration levels (i.e., compactors, large dozers, etc.) occurs within 25 to 100 feet of an existing structure. The Proposed Project does not occur within 100 feet of an existing structure. Given the infrequent use of heavy equipment, exposure to groundborne vibration from construction activities would not occur. The Proposed Project would not expose persons to excessive groundborne vibration noise levels; therefore, this is a less-than-significant impact. **Less than Significant.**

Questions E and F

The nearest airport is the Sacramento Executive Airport approximately 6.6 miles south of the project site. Mather Airport is located approximately 8.8 miles southeast of the project site. The Sacramento International Airport is approximately 9.6 miles northwest of the project site. The Proposed Project is not located within an airport land use plan or in the vicinity of a private airstrip. **No Impact.**

Cumulative Impacts

As stated above, operation of the Proposed Project could require maintenance activities; however, these activities would be periodic and would not expose sensitive receptors to noise levels above the existing ambient noise level, cause substantial temporary or periodic increases in noise levels, nor permanently increase the ambient noise. Therefore the project would not result in cumulatively considerable impacts. This impact is considered less than significant. **Less than Significant.**

3.7.3 MITIGATION MEASURES

- N-1 Construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday, and 8:00 a.m. to 6:00 p.m. on Sunday.
- N-2 Construction contractors shall use power construction equipment with noise muffling devices. All internal combustion engines used on the project site shall be equipped with adequate mufflers and shall be in good mechanical condition to minimize noise created by faulty or poor maintained engines or other components.
- N-3 Construction contractors shall locate stationary noise generating equipment as far as possible from sensitive receptors. Staging areas shall be located a minimum of 200 feet from the noise sensitive receptors listed in section 3.7.1.

3.8 MANDATORY FINDING OF SIGNIFICANCE

3.8.1 SETTING

The setting for each resource area has been described within the applicable “Setting” sections, above.

3.8.2 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

<u>MANDATORY FINDINGS OF SIGNIFICANCE</u>	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environment effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question A – Environmental Effects

As discussed in the preceding sections, the Proposed Project has a potential to create short term impacts associated with construction which could degrade the quality of the environment; however, with implementation of the identified mitigation measures, all potential impacts would be reduced to less-than-significant levels. One long term effect of the Proposed Project would be to improve water quality downstream of the Basin and Ditch by increasing retention time in the Basin, thereby also removing more suspended solids, and attached pollutants. Another beneficial long-term effect of the Proposed Project is the elimination of an open ditch on the southside of CA-Hwy 160 that is a safety hazard. A final long term effect is that the Proposed Project will encourage new job growth and businesses to locate in the City by providing an effective regional water quality treatment facility (the Basin). **Less than Significant with Mitigation.**

Questions B and C – Cumulative and Indirect Effects

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

3.8.3 MITIGATION MEASURES

None required.

4.0 SIGNIFICANCE DETERMINATION

On the basis of the environmental evaluation presented in **Section 3.0**:

- I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project design and project-specific mitigation measures described in **Section 3.0** have been agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION is recommended to be adopted.
- I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.



Signature

Scott Johnson

Printed Name



Date

City of Sacramento, Environmental Planning Services

Lead Agency

5.0 LIST OF PREPARERS

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APPENDICES



APPENDIX A

USFWS, CNDDDB, AND CNPS TABLE

APPENDIX A
REGIONALLY OCCURRING FEDERAL, STATE, AND CNPS LISTED SPECIAL-STATUS SPECIES AND THEIR DESIGNATED CRITICAL HABITAT

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
Plants					
<i>Downingia pusilla</i> dwarf downingia	--/--/2	Known from Fresno, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties in California and in South America (CNPS, 2011).	Annual herb found in Valley and foothill grassland occasionally on mesic soils, and in and vernal pools from 1 to 445 meters (CNPS, 2011).	March-May	No. The study area does not provide habitat for this species.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	--/CE/1B	Known from Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, and Tehama counties in California and in Oregon (CNPS, 2011).	Annual herb found on clay soils in vernal pools and along the lake margins of marshes and swamps from 10 to 2,375 meters (CNPS, 2011).	April-August	No. The study area does not provide habitat for this species.
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> Woolly rose-mallow	--/--/1B	Known from Butte, Contra Costa, Colusa, Glenn, Sacramento, San Joaquin, Solano, Sutter, and Yolo counties (CNPS, 2011).	Emergent perennial rhizomatous herb found in marshes and swamps, which are occasionally freshwater, from 1 to 120 meters (CNPS, 2011).	June-September	No. The study area does not provide habitat for this species.
<i>Juglans hindsii</i> Northern California black walnut	--/--/1B	Known from Contra Costa, Lake, Napa, Sacramento, Solano, and Yolo counties (CNPS, 2011).	Deciduous tree found in riparian forest and riparian woodland from 0 to 440 meters (CNPS, 2011).	April-May	No. The study area does not provide habitat for this species.
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	--/--/1B	Known from Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties (CNPS, 2011).	Annual herb found on mesic soils in valley and foothill grassland from 30 to 100 meters (CNPS, 2011).	March-May	No. The study area does not provide habitat for this species.
<i>Legenere limosa</i> Legenere	--/--/1B	Known from Alameda, Lake, Napa, Placer, Sacramento, Santa Clara, Shasta, San Joaquin, San Mateo, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties (CNPS, 2011).	Annual herb found in vernal pools from 1 to 880 meters (CNPS, 2011).	April-June	No. The study area does not contain habitat for this species.
<i>Lepidium latipes</i> var. <i>heckardii</i> Heckard's pepper-grass	--/--/1B	Known from Glenn, Merced, Sacramento, Solano, and Yolo counties (CNPS, 2011).	Annual herb found occasionally on alkaline flats in valley and foothill grassland from 2 to 200 meters (CNPS,	March-May	No. The study area does not provide habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
			2011).		
<i>Lilaeopsis masonii</i> Mason's lilaeopsis	--/CR/1B	Known from Alameda, Contra Costa, Marin, Napa, Sacramento, San Joaquin, and Solano counties (CNPS, 2011).	Rhizomatous herb found in marshes and swamps, that are occasionally brackish or freshwater, and riparian scrub from 0 to 10 meters (CNPS, 2011).	April-November	No. The study area does not provide habitat for this species.
<i>Orcuttia tenuis</i> Slender Orcutt grass	FT/CE/1B	Known from Butte, Lake, Lassen, Modoc, Plumas, Sacramento, Shasta, Siskiyou, and Tehama counties (CNPS, 2011).	Annual herb found in vernal pools from 35 to 1,760 meters (CNPS, 2011).	May-September	No. The study area does not contain habitat for this species.
<i>Orcuttia viscida</i> Sacramento Orcutt grass	FE,CH/ CE/1B	Known from Sacramento County (CNPS, 2011).	Annual herb found in vernal pools from 30 to 100 meters (CNPS, 2011).	April-July	No. The study area does not contain habitat for this species.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	--/--/1B	Known from Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, Shasta, San Joaquin, Tehama, and Ventura counties (CNPS, 2011).	Rhizomatous herb emergent found in assorted shallow freshwater marshes and swamps from 0 to 650 meters (CNPS, 2011).	May-October	Yes. See text.
Animals					
Invertebrates					
<i>Branchinecta conservatio</i> Conservancy fairy shrimp	FE, CH/--/--	Known in isolated populations from Butte, Colusa, Glenn, Merced, Solano, Stanislaus, Tehama, Ventura, Yolo, and Yuba counties (Eriksen and Belk, 1999).	Found in ephemeral wetland habitats and vernal pools on clay, volcanic, and alluvial soils within annual grassland and pine forests from 5 to 1,700 meters. Found in water temperatures as high as 23°C (Eriksen and Belk, 1999).	Wet season: November-April (adults) Dry season: May- October (eggs)	No. The study area does not contain habitat for this species.
<i>Branchinecta lynchi</i> Vernal pool fairy shrimp	FT, CH/--/--	Known from Alameda, Butte, Contra Costa, Colusa, El Dorado, Fresno, Glenn, Kings, Lake, Los Angeles, Madera, Merced, Monterey, Napa, Placer, Sacramento, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Solano, Stanislaus,	Found in ephemeral wetland habitats and vernal pools within sandstone, alkaline soils, and alluvial fan terraces, within annual grassland and pine forests from 10 to 1,700 meters (Eriksen and Belk, 1999).	Wet season: December through May (adults) Dry season: June- November (eggs)	No. The study area does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
		Tehama, Tulare, Riverside, and Yuba counties in California and in southern Oregon (Eriksen and Belk, 1999).			
<i>Desmocerus californicus dimorphus</i> Valley elderberry longhorn beetle	FT, CH/--/--	Known from Amador, Butte, Calaveras, Colusa, El Dorado, Fresno, Glenn, Kern, Madera, Mariposa, Merced, Napa, Placer, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties (NatureServe, 2011).	Found in riparian forest communities from 0 to 762 meters. Exclusive host plant is elderberry (<i>Sambucus</i> species), which must have stems at least 1-inch diameter for the beetle (NatureServe, 2011).	Year round	No. The study area does not contain habitat for this species.
<i>Lepidurus packardi</i> Vernal pool tadpole shrimp	FE, CH/--/--	Known from the Central Valley and the San Francisco Bay area from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kings, Merced, Placer, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties (USFWS, 1994).	Wide variety of ephemeral wetland habitats. Typically vernal pools on High Terrace landforms within annual grassland with clear to highly turbid water (USFWS, 1994).	Wet season: typically November-April (adults) Dry season: typically May- October (cysts)	No. The study area does not contain habitat for this species.
Fishes					
<i>Acipenser medirostris</i> Green sturgeon	FT/--/--	Adults occur in coastal waters from Mexico to Alaska and have been observed along the west coast of North America. Spawning occurs within the Rogue and Illinois Rivers in Oregon, the Klamath River Basin, the Sacramento River, the Feather River, the Pit River, and the McCloud River. Spawning is suspected within the Trinity River, South Fork Trinity, and the Eel River. Known from Butte, Colusa, Glenn, Humboldt, Mendocino, Nevada, Placer, Sacramento, Shasta, Sierra, Siskiyou,	Utilizes both freshwater and saltwater habitats. Spawning occurs in deep pools or holes in large, turbulent, freshwater river mainstems. Eggs are cast over large cobble, clean sand, or bedrock substrates. Cold, clean water is required for development. Adults live in oceanic waters, bays, and estuaries (NatureServe, 2011).	Consult Agency	No. The study area does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
		Solano, Sutter, Tehama, Trinity, Yolo, and Yuba counties (NatureServe, 2011).			
<i>Archoplites interruptus</i> Sacramento perch	--/CSC/--	Occurs throughout the Sacramento-San Joaquin, the Pajaro, and the Salinas River systems and in Clear Lake, Lake County. Isolated and introduced populations also occur in Siskiyou, Modoc, and Lassen counties, Mono Lake in Mono County, and the Owens River watershed, in Inyo County.	Warm-water lucustrine habitats including sloughs, slow-moving rivers, and lakes. Frequently occurs in reservoirs and farm ponds. Often associated with beds of rooted, submerged, and emergent vegetation and other submerged objects. Aquatic vegetation is required for early development.	Consult Agency	No. The study area does not provide habitat for this species.
<i>Hypomesus transpacificus</i> Delta smelt	FT/CT/--	Occurs almost exclusively in the Sacramento-San Joaquin estuary, from the Suisun Bay upstream through the Delta in Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties. May also occur in the San Francisco Bay.	Estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta.	Consult Agency	No. The study area does not provide habitat for this species.
<i>Oncorhynchus mykiss</i> steelhead Central Valley Steelhead	FT/--/--	Spawn in the Sacramento and San Joaquin rivers and tributaries before migrating to the Delta and Bay Area.	Found in cool, clear, fast-flowing permanent streams and rivers with riffles and ample cover from riparian vegetation or overhanging banks. Spawning: streams with pool and riffle complexes. For successful breeding, require cold water and gravelly streambed.	Consult Agency	No. The study area does not provide habitat for this species.
<i>Oncorhynchus tshawytscha</i> Chinook salmon Central Valley spring-run	FT, CH/CT/--	Spawn in the Sacramento River and some of its tributaries. Juveniles migrate from spawning grounds to the Pacific Ocean (Moyle, 2002).	Spawning occurs in large deep pools in tributaries with moderate velocities (Moyle, 2002).	Consult Agency	No. The study area does not contain habitat for this species.
<i>Oncorhynchus tshawytscha</i> Chinook salmon winter-run, Sacramento	FE/CE/--	Spawn in the upper Sacramento River. Juveniles migrate from spawning grounds to the Pacific Ocean (Moyle, 2002).	Returns to the Upper Sacramento River in the winter but delay spawning until spring and summer. Juveniles spend 5-9 months in the river and estuary before	Consult Agency	No. The study area does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
River			entering the ocean (Moyle, 2002).		
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	--/CSC/--	Endemic to the Central Valley. Occurs below the Red Bluff Diversion Dam in Tehama County to the downstream reaches of the Sacramento and American Rivers. Also occurs in the lower reaches of the Feather, Merced, and the San Joaquin Rivers. This species is largely confined to the Delta, Suisun Bay, Suisun Marsh, Napa River, Petaluma River, and Sacramento-San Joaquin estuary (NatureServe, 2011).	Predominantly freshwater estuarine systems. Prefers low-salinity, shallow-water habitats. Occurs in slow-moving sections of rivers, sloughs, and marshes. Abundance is strongly tied to outflows, because spawning occurs over flooded vegetation (NatureServe, 2011).	Consult Agency	No. The study area does not contain habitat for this species.
Amphibians					
<i>Ambystoma californiense</i> California tiger salamander Central population	FT/--/--	Occurs in Alameda, Butte, Contra Costa, Fresno, Glenn, Kern, Madera, Merced, Monterey, Sacramento, San Benito, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Solano, Sonoma, Stanislaus, Tulare, Yolo county.	Occurs in vernal pools, ephemeral wetlands, and seasonal ponds, including constructed stockponds, in grassland and oak savannah plant communities from 3 to 1,054 meters.	November-February (adults) March 15-May 15 (larvae)	No. The study area does not contain suitable habitat for this species.
<i>Rana aurora draytonii</i> California red-legged frog	FT/CSC/--	Known along the Coast from Mendocino County to Baja California, and inland through the northern Sacramento Valley into the foothills of the Sierra Nevada mountains, south to eastern Tulare County, and possibly eastern Kern County. Currently accepted range excludes the Central Valley (NatureServe, 2011).	Found in permanent and temporary pools of streams, marshes, and ponds with dense grassy and/or shrubby vegetation from 0 to 1,160 meters (NatureServe, 2011).	November-June	No. The study area does not contain habitat for this species.
<i>Spea (Scaphiopus) hammondi</i> Western spadefoot toad	--/CSC/--	Known from Butte, Calaveras, Fresno, Kern, Kings, Los Angeles, Madera, Merced, Monterey, Orange, Placer, Riverside, Sacramento, San	Inhabits valley and foothill grasslands, open chaparral, and pine-oak woodlands. Prefers open vegetation and short grasses on sandy and gravelly	January-May	No. The study area does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
		Benito, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Stanislaus, Tulare, Ventura, and Yolo counties.	soils from 0 to 4,500 feet. Breeds in quiet streams and temporary pools with temperatures between 48° F and 86° F.		
Reptiles					
<i>Actinemys marmorata</i> Western pond turtle	--/CSC/--	Known throughout California west of the Sierra-Cascade crest. Absent from desert regions except along the Mohave River and its tributaries (Stebbins, 2003).	Found in permanent ponds, lakes, streams, irrigation ditches, permanent pools and along intermittent streams. Requires aquatic habitats with suitable basking sites. Nest sites most often characterized as having gentle slopes less than 15 percent with little vegetation or sandy banks. Found from 0 to 1,430 meters (Stebbins, 2003).	Year round	No. The study area does not contain habitat for this species.
<i>Thamnophis gigas</i> Giant garter snake	FT/CT/--	Known from Butte, Colusa, Contra Costa, Fresno, Glenn, Kern, Madera, Merced, Sacramento, San Joaquin, Solano, Sutter, Yolo, and Yuba counties (Stebbins, 2003).	Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter). Inhabits small mammal burrows and other soil crevices with sunny exposure along south and west facing slopes, above prevailing flood elevations when dormant (Stebbins, 2003).	March-October	No. The study area does not contain habitat for this species.
Birds					

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
<i>Agelaius tricolor</i> Tricolored blackbird	--/CSC/--	Known from the Central Valley and surrounding foothills, throughout coastal and some inland localities in southern California, and scattered sites in Oregon, western Nevada, central Washington, and western coastal Baja California (NatureServe, 2011).	Found nesting in dense thickets of cattails, tules, willow, blackberry, wild rose, and other tall herbs near fresh water. Feeds in grass and cropland habitats (NatureServe, 2011).	Year round	No. The study area does not contain habitat for this species.
<i>Athene cucularia</i> Burrowing owl	--/CSC/--	Formerly common within the described habitats throughout the state except the northwest coastal forests and high mountains (NatureServe, 2011).	Yearlong resident of open, dry grassland and desert habitats, as well as in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats (NatureServe, 2011).	Year round	No. The study area does not contain habitat for this species.
<i>Buteo swainsoni</i> Swainson's hawk	--/CT/--	In California, breeds in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, Antelope Valley, and in eastern San Luis Obispo County (NatureServe, 2011).	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands, alfalfa, or grain fields supporting rodent populations (NatureServe, 2011).	March–October	No. The study area does not contain habitat for this species.
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	FC/CE/--	Occurs at isolated sites in Sacramento Valley in n. California, and along Kern and Colorado River systems in s. California (Cornell Lab of Ornithology, 2011).	Frequents valley foothill and desert riparian habitats. Inhabits open woodlands with clearings, and riparian habitats with dense understory foliage along slow-moving drainages, backwaters, or seeps. Prefers dense willows for roosting, but will use adjacent orchard in the Sacramento Valley (Cornell Lab of Ornithology, 2011).	June - August	No. The study area does not contain habitat for this species.
<i>Elanus leucurus</i> White-tailed kite	--/CFP/--	Permanent resident of coastal and valley lowlands (NatureServe, 2011).	Habitats include savanna, open woodland, marshes, partially cleared lands and cultivated fields, mostly in lowland situations. Nesting occurs in	Year round	No. The study area does not contain habitat for this species.

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
			trees (NatureServe, 2011).		
<i>Progne subis</i> Purple martin	--/CSC/--	Known from Mendocino, Napa, Sonoma, Lake, Riverside, Sacramento, San Luis Obispo, Placer, Shasta, San Diego and Monterey counties. Breeds from Alberta to New Brunswick, southward to central Texas and Florida. Also in scattered locations along Pacific Coast (NatureServe, 2011).	Found in a variety of wooded, low-elevations habitats. Uses Valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood (NatureServe, 2011).	Year round	No. The study area does not contain habitat for this species.
<i>Riparia riparia</i> Bank swallow	--/CT/--	Known from Siskyou, Shasta, and Lassen counties, south along the Sacramento River to Yolo County, in California (NatureServe, 2011).	Inhabits primarily riparian and other lowland habitats west of the deserts during the spring-fall period. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting holes (NatureServe, 2011).	April - July	No. The study area does not contain habitat for this species.
<i>Xanthocephalus xanthocephalus</i> Yellow-headed blackbird	--/CSC/--	Breeds from central British Columbia eastward to very western Ontario, southward into central California, central New Mexico, and northern Illinois. Scattered small populations further east along the Great Lakes to Ohio. Winters from southern Arizona and western Texas southward to southern Mexico. Some birds winter in California (Twedt and Crawford, 1995).	Breeds in prairie wetlands and along other western lakes and marshes where tall reeds and rushes are present. Forages in the wetlands and in surrounding grasslands and croplands. In winter large flocks forage in agricultural areas (Twedt and Crawford, 1995).	Year round	No. The study area does not contain habitat for this species.
Mammals					

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION	POTENTIAL TO OCCUR ON-SITE
<i>Taxidea taxus</i> American badger	--/CSC/--	Known from most of California (Ahlborn, 2005).	Found in the drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Associated with treeless regions, prairies, parklands, cold desert areas, and occasionally cultivated lands (Ahlborn, 2005).	Year round	No. The study area does not contain habitat for this species.

STATUS CODES

FEDERAL: United States Fish and Wildlife Service

FE Federally Endangered
 FT Federally Threatened
 FC Federal Candidate for Listing

STATE: California Department of Fish and Game

CE California Listed Endangered
 CR California Listed Rare
 CT California Listed Threatened
 CSC California Species of Concern
 CFP California Fully-Protected

CNPS: California Native Plant Society

List 1A Plants Presumed Extinct in California
 List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
 List 2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere