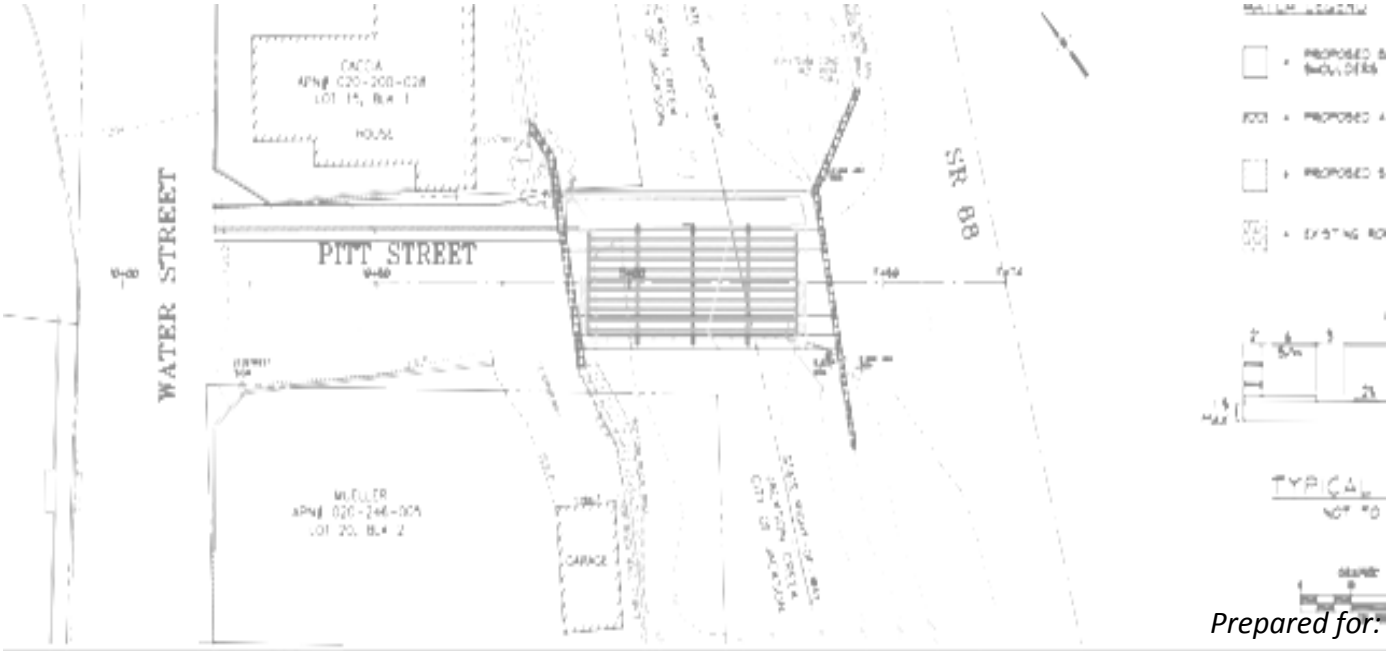
Pitt Street Bridge

MITIGATED NEGATIVE DECLARATION

December 2014



Prepared for:

City of Jackson
33 Broadway
Jackson, CA 95642
(209) 223-1646

Prepared by:

Development Impact, Inc.
5050 Laguna Boulevard, Ste. 112-613
Elk Grove, CA 95758
(916) 206-1871

City of Jackson
Pitt Street Bridge Project
Mitigated Negative Declaration
December 2014

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1. **Project Title:** Pitt Street Bridge Project

2. **Lead agency name and address:** City of Jackson. 33 Broadway, Jackson, California 95642

3. **Contact person and phone number:**

   Project Design and Construction Issues: Gary Ghio, Weber Ghio & Associates (209) 754-1824
   Environmental Issues: Paula M. Daneluk, AICP, Development Impact, Inc. (916) 206-1871

4. **Project Description:**

The City of Jackson proposes to replace the historical Pitt Street Bridge in the City of Jackson. The proposed project is for the replacement of the existing bridge structure and the resulting tie-in with the existing Pitt Street and State Route 88 (SR88). This project would be accomplished within the existing right-of-way of Pitt Street; therefore, no additional right-of-way would be needed for the project. The existing bridge approaches from Water Street to the north and continues in a one-way southbound direction that carries Pitt Street over the middle fork of Jackson Creek towards SR88. Pitt Street would remain a one-way bridge and no traffic would be exiting from SR88.

The existing Pitt Street Bridge was built in 1925. The structure consists of a single span steel Pratt pony truss with timber decking on steel floor beams, all supported by masonry abutments. The existing bridge is classified to be structurally deficient; however, as of June 2009 it is listed in the National Register of Historic Places (Windmiller, 2014). The existing bridge has a steel sidewalk (4- 6-feet wide) with timber decking cantilevered from the upstream side of the structure. Due to failure of the timber decking on the bridge, the City placed approximately six-inches of asphalt on the top of the bridge surface overlaying the wood planks in 2013.

The existing structure is constructed within the creek channel of Jackson Creek. The creek channel is a natural trapezoidal shape with a sandy silt and grass bottom. The banks are lined with vertical rock walls attached to the bridge abutments. Due to the fact that the bridge was built by an unknown agency, it is presumed that the abutments are constructed out of masonry block or concrete on unknown footings, presumably concrete spread footings.

Jackson Creek qualifies as a water of the U.S. and State. It is a perennial creek with water flowing year round in normal rainfall years and is a tributary to the Mokelumne River. The project site includes aquatic and upland habitat and vegetation, as well at emergent wetlands. The creek flow is from northeast to southwest, and is seasonally variable, originating from upstream springs and snowmelt. The existing FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge deck. The last major storm event witnessed about 1 foot of creek flow overtopping the deck (City of Jackson 2013).

The bridge, located in the Jackson City Historical Corridor, is within a residential/commercial area. Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited work space, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the City's Corporation Yard for storage

and later reused. The construction of the proposed project would be performed during the summer time and all pertinent permits would be obtained prior to any work in the stream channel. The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 2.5-feet above the existing bridge.

The existing bridge would be removed and replaced with a widened bridge and northern roadway (approximately 8-10 feet wider) at the crossing of Jackson Creek (see Project Map). In addition, the proposed bridge would also increase in length by a few feet in order to improve hydraulics of the creek. Construction would also consist of new abutments, new wingwalls and new retaining walls to match the existing adjacent stacked rock walls.

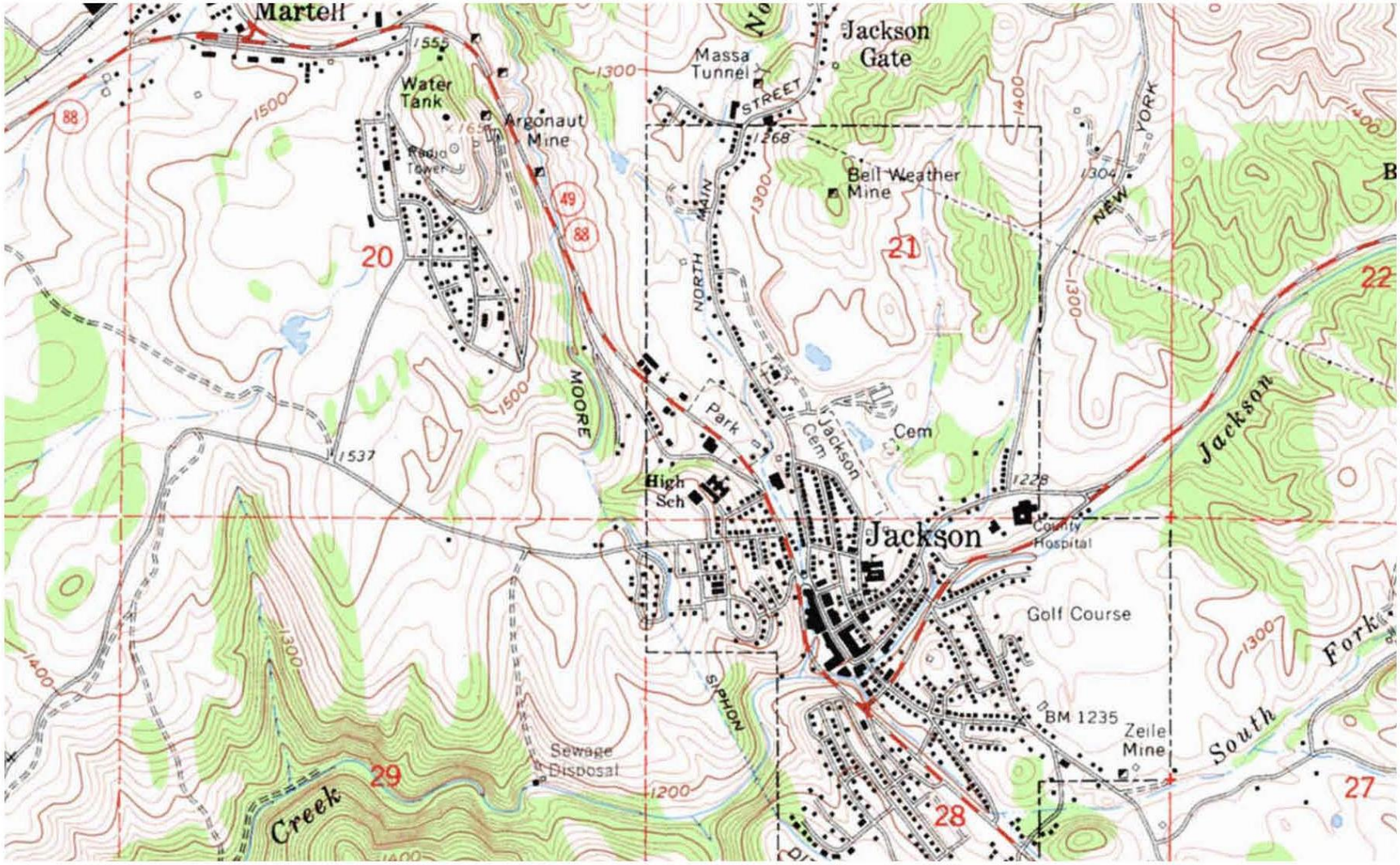
The proposed bridge would be a one-lane Cast-in-Place (CIP) prestressed slab spanning fifty-four-feet in length and thirty-two-feet in width. In addition, there would be a 6-foot wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The total project limits are less than 150-feet. The vertical alignment of the new bridge would not vary significantly from the existing profile. The existing bridge structure depth is estimated to be three-feet below the deck level. The proposed roadway conforms to the existing ROW alignment at the SR88 shoulder and at the intersection of Pitt Street and Water Street.

The existing 10-inch sewer line buried in the creek channel would be removed and replaced, as part of the Project. A backhoe would be used to remove and replace the sewer line. Excavated material would be backfilled over the new sewer line and any excess soil would be removed. Prior to the removal and replacement activities, the channel segment would be dewatered with the use of temporary coffer dams and a diversion pipe would carry flows (via gravity) from immediately above the sewer removal/replacement segment to a point immediately downstream of this location. Near the southern private driveway there is an eight- inch water line extending out of the existing abutment one structure before making a 90^0 turn and continuing into the creek channel. This water line would have portions removed during the demolition work. The existing storm drain and inlet adjacent to the southern private driveway at Abutment 1 would have portions removed during the demolition work. There is an existing twelve-inch drainage pipe day lighting out of Abutment 2 that would require relocation through the new abutment. On the downstream side of the existing bridge, there is a four-inch abandoned waterline that would be removed. There is an eight- inch waterline buried in the Pitt Street alignment and extending out of the existing Abutment 1 face. This waterline would be permanently relocated approximately three-feet southwest from the current location. Additionally, there are overhead guy wires associated with the existing overhead electrical utility pole, near Abutment 2, that would need to be temporarily relocated.

Equipment staging would be located on the existing Pitt Street roadway through the use of a temporary construction easement. The road within the project area would be fully closed during the project construction and detour routes would be made available to maintain access to all residential properties affected by the closure. Nearby residents would be subject to construction noise during the project and the hours of construction would be limited in compliance with the City's Noise Regulations. The construction equipment needed for the removal and demolition of the existing structure includes backhoes, concrete saws, torches, jackhammers, and cranes. The equipment anticipated for the construction of the new bridge includes backhoes, compactors, concrete pumps, and cranes.

Site Location Map

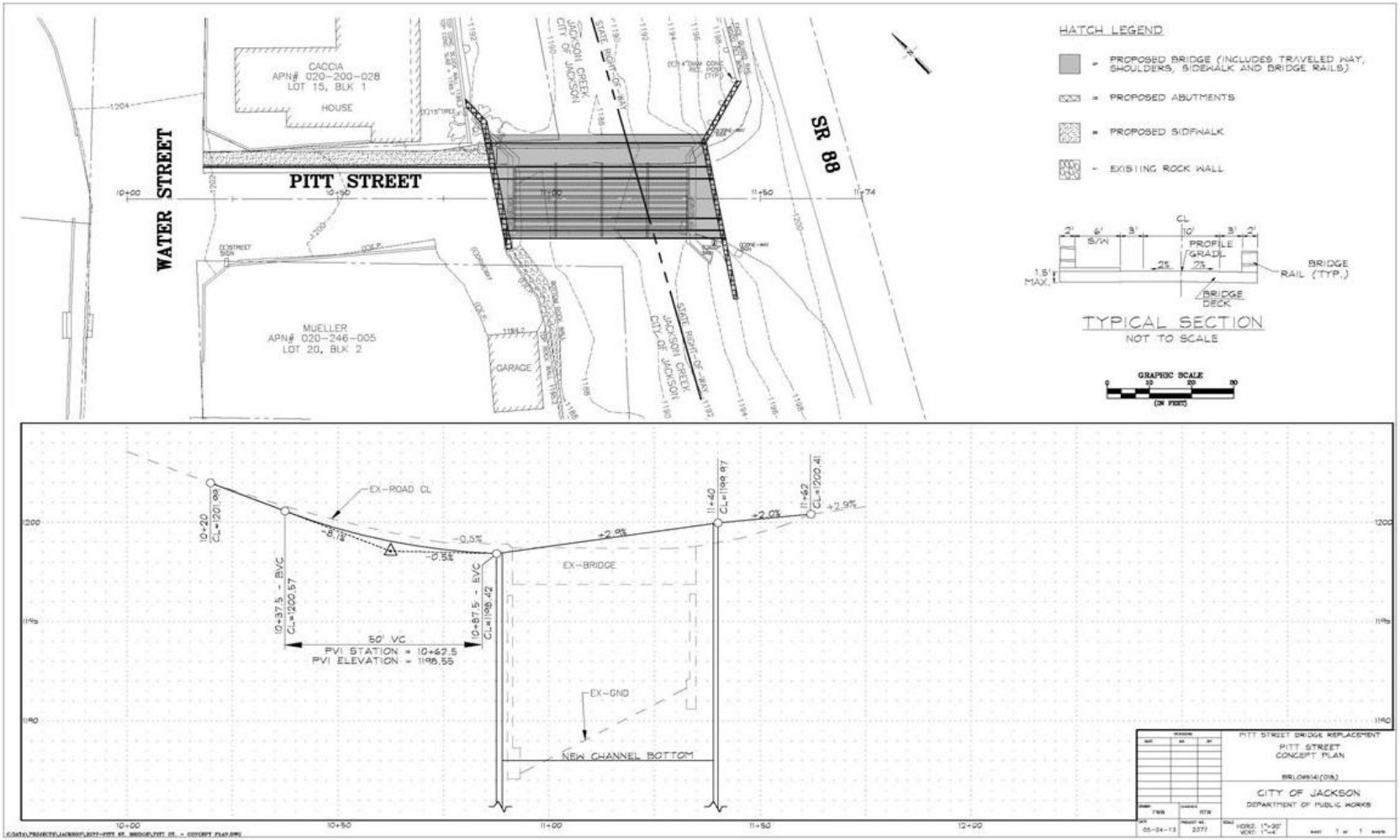
Topographic Map



City of Jackson
Pitt Street Bridge Replacement

April 2014
ISA

Project Map


HATCH LEGEND
= PROPOSED BRIDGE (INCLUDES TRAVELED WAY, SHOULDERS, SIDEWALK AND BRIDGE RAILS)
= PROPOSED ABUTMENTS
= PROPOSED SIDEWALK
= EXISTING ROCK WALL
TYPICAL SECTION
NOT TO SCALE
BRIDGE RAIL (TYP.)
BRIDGE DECK
GRAPHIC SCALE
WATER STREET
PITT STREET
SR 88
CACCIA
APN# 020-200-028
LOT 15, BLK 1
HOUSE
MUELLER
APN# 020-246-005
LOT 20, BLK 2
GARAGE
JACKSON CREEK
CITY OF JACKSON
STATE RIGHT-OF-WAY
EX-ROAD CL
EX-BRIDGE
EX-GND
NEW CHANNEL BOTTOM
50' VC
PVI STATION = 10+62.5
PVI ELEVATION = 1198.55
PITT STREET BRIDGE REPLACEMENT
PITT STREET
CONCEPT PLAN
CITY OF JACKSON
DEPARTMENT OF PUBLIC WORKS

Pictures of Site

East side of Pitt Street Bridge

Close-up of East side of Pitt Street Bridge

West side of Pitt Street Bridge

View of pedestrian path part of bridge

5. Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

DETERMINATION:
On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

A. Aesthetics –

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

Existing Environmental Conditions:

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the perceived visual character and quality of the environment, visual or aesthetic impacts may occur.

The existing bridge was built in 1929. It is considered historical and is located in the historical corridor of the City of Jackson. The bridge approaches from Water Street to the north and continues in a one-way southbound direction that carries Pitt Street over the middle fork of Jackson Creek towards SR88. The structure consists of a single span steel Pratt pony truss with timber decking on steel floor beams, all supported by masonry abutments. The existing bridge is classified to be structurally deficient; however it is eligible for listing in the National Register of Historic Places. The existing bridge has a steel sidewalk (4- 6-feet wide) with timber decking cantilevered from the upstream side of the structure. Due to failure of the timber decking on the bridge, the City placed approximately six-inches of asphalt on the top of the bridge surface overlaying the wood planks in 2013.

As discussed in the Visual Impact Assessment conducted by Development Impact, Inc. (2014), there are three primary viewer groups that would view the bridge site. Those associated with the adjacent residential properties, local motorists and users of the bridge. The views of the bridge primarily occur from the same elevation as the bridge. The surrounding roadways have a mixture of open ditches with limited curb and gutter. Additionally, there are approximately 10 structures with direct views of the bridge and there is one residence with parking on Pitt Street. There are currently no existing street lights in the vicinity of the Pitt Street Bridge.

The proposed project involves construction within Jackson Creek. There is a tree growing directly next to the existing bridge on the east side that would be removed during construction. The creek has natural upland and aquatic vegetation that grows within and along the creek in the vicinity of the bridge. This vegetation is regularly maintained as part of the City's stormwater management plan.

The replacement of the bridge structure could be potentially significant; therefore, mitigations measures to reduce the visual impact are listed below.

Discussion:

a, c) Less than Significant Impact with Mitigation Incorporated:

Due to the historic nature of the surrounding area, attention should be given to the design features of the bridge. These design features would ensure that the proposed bridge project would be compatible with surrounding architecture features that contribute to the historic nature of surrounding properties. The railings of the bridge need to be designed in a way that captures the historic sense of the surrounding area. Additionally, the proposed design would place the existing utilities under the bridge and underground. Therefore, there is an increased aesthetic value that viewers would not see the utility lines. The vegetation to be planted after construction of the bridge would soften the look around the creek which would also increase the aesthetic value of the site.

Aesthetic Mitigation Measure I: Design adjacent retaining wall to mimic current historic nature of the existing stone wall.
Timing: During final project design
Enforcement/Monitoring: City of Jackson City Engineer

Aesthetic Mitigation Measure II: The pedestrian railings on bridge should be of a type similar to railings installed in conjunction with historic design features.
Timing: During final project design
Enforcement/Monitoring: City of Jackson City Engineer

Aesthetic Mitigation Measure III: Locate any utility pipelines crossing the creek out of sight from users of the bridge.
Timing: During final project design
Enforcement/Monitoring: City of Jackson City Engineer

Aesthetic Mitigation Measure IV: Hydroseeding, in order to stabilize the slope immediately, should include native perennials and annuals as well as fast-germinating annuals which may be non-native. The native perennials and native annuals will contribute to the long-term revegetation of the slope without introducing irrigation systems, etc.
Timing: Post construction
Enforcement/Monitoring: City of Jackson City Engineer

***b, d) Less Than Significant*:**

The project site is located on SR88, however, this section of the highway is not designated a California Scenic Highway (Caltrans, 2014). It is proposed to remove an existing tree on site; however, the aesthetic impact of this would be less than significant because SR88 is not a designated scenic highway. The project would not involve any above ground lighting sources that would be permanent. It is possible that lighting would be on the site during construction phase of the project; however, this impact would only be temporary and therefore less than significant.

B. Agricultural Resources –

	Potentially Significant Impact	**Less than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to no-agricultural use or conversion of forest land to non-forest use?				X

Existing Environmental Conditions:

The proposed project is located in an urban setting, within the existing right-of-way of Pitt Street in the City of Jackson.

Discussion:

a- e) No Impact:

The proposed project is not located in an area with Prime or Unique Farmland or Farmland of Statewide Importance; nor is it located in an area zoned as forest, timberland or used for timber production. Therefore, the project would not convert agricultural or forest lands to other uses, nor would it conflict with existing agricultural and timberland zoning or a Williamson Act Contract. Therefore, there would be no impact.

C. Air Quality –

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

Environmental Conditions:

The project site is located in the City of Jackson, within the western portion of the Mountain Counties Air Basin. This area encompasses Amador, Calaveras, Mariposa, Nevada, Plumas, Sierra and Tuolumne Counties as well as portions of El Dorado and Placer Counties. At the local level, the Amador Air District (AAD) enforces local air quality rules and conducts local air quality planning. The AAD is the agency responsible for implementing emissions standards and other requirements of federal and state laws in Amador County.

While both federal and state standards for ROG, NO_x, CO, PM_{10} and $PM_{2.5}$ have been established, AAD has not developed thresholds of significance for these pollutants for CEQA purposes. In

lieu of thresholds adopted by the AAD, the District has recommended applying thresholds adopted by nearby Counties.

The nearby County most similar to Amador County is considered to be Tuolumne County. Therefore, significance thresholds recommended by the Tuolumne County Air Pollution Control District (TCAPCD) have been used to analyze the air quality impact of the Pitt Street Bridge Replacement project.

The significance thresholds recommended by the TCAPCD state that a project is considered to have a significant impact on air quality if it would result in emissions in excess of the following:

- 1,000 pounds per day (ppd) or 100 tons per year (tpy) of reactive organic gases (ROG),
- 1,000 ppd or 100 tpy of nitrogen oxides (NOx),
- 1,000 ppd or 100 tpy of inhalable particulate matter less than 10 micrometers in diameter (PM10), or
- 1,000 ppd or 100 tpy of carbon monoxide (CO).

Construction-related emissions associated with the Pitt Street Bridge Replacement project were estimated by KDA, Inc. using the Road Construction Emissions Model. The Road Construction Emissions Model is a spreadsheet-based model specifically designed to estimate emissions associated with construction of roadway facilities and other linear projects. The model uses basic project information (e.g., total construction months, project type, total project area) to estimate a construction schedule and quantify exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips, as well as fugitive particulate matter dust. Additional information on the Road Construction Emissions Model is available at the Sacramento Metropolitan Air Quality Management District internet website (http://www.airquality.org/ceqa/index.shtml).

Discussion:

a, e) No Impact:

The Amador Air District is the local agency with primary responsibility for ensuring that acceptable air quality conditions are maintained. There is no evidence or indication that the proposed project, which is consistent with the City of Jackson land use designation, would conflict with or obstruct implementation of the applicable air quality plan. An air quality plan has not been adopted. The replacement of the bridge would not increase capacity of the bridge. Furthermore, the proposed project is not the type of use that would cause substantial odors. Therefore, there would be no impact of objectionable odors.

b & c) Less Than Significant:

The Pitt Street Bridge Replacement project would not create any permanent buildings and would replace an existing bridge within the right-of-way. Pitt Street would remain a one-way bridge and no traffic would be exiting from SR88. Therefore, the project would contribute to the generation of emissions from construction vehicles, required to build the project, but would not generate any additional pollutants after project completion. The project would generate

construction related emissions from the equipment and possible fugitive dust particulate matter emissions during the construction phase. The table below contains the maximum emission estimates for ROG, NO_x, CO, and PM_{10} during construction. The table also indicates project-related emissions would be below both the daily significance thresholds. Therefore, the impact of the project on criteria pollutant emissions is considered less than significant. Additionally, Best Management Practices would help manage the potential emissions due to short term impact of the construction of the project with less than significant impact.

Table 1 Proposed Project Construction Emissions (pounds per day)

	ROG	CO	NO_x	PM_{10}
Maximum Proposed Project Emissions	0.3	1.8	3.7	0.2
Threshold of Significance	1,000	1,000	1,000	1,000

Source: Road Construction Emissions Model

d) Less Than Significant:

The project site is adjacent to an existing residential neighborhood. Residences are considered sensitive receptors to substantial pollutant concentrations. Construction of the proposed project could expose neighbors to pollutants. However, as presented in the table above, the daily emissions are well below the threshold; therefore, this impact is less than significant.

D. Biological Resources –

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

Existing Environmental Conditions:

The project site is located in the Northern Sierra Nevada Foothills, within and adjacent to Jackson Creek in the City of Jackson. A Natural Environmental Study (NES) was conducted by ECORP Consulting, Inc. (2014), along with a wetland delineation, a California red-legged frog (CRLF) habitat assessment and Special-Species Plant survey. The Biological Study Area (BSA) encompasses approximately 0.397 acres including the existing Pitt Street Bridge right-of-way

and the creek channel approximately 100 feet upriver and 100 feet downriver from the existing bridge. Jackson Creek qualifies as a water of the U.S. and State.

The Pitt Street Bridge project site is located 1,192 feet above mean sea level. The region is characterized by a Mediterranean climate with mild to moderate cold, wet winters, and hot, dry summers. Average winter temperatures range from 34° to 56° F and summer temperature averages in the 90's° F. Annual rainfall is approximately 31.1 inches (ECORP, 2014).

Jackson Creek is a relatively permanent feature and a tributary to the Mokelumne River. The existing Pitt Street Bridge crosses over a semi-channelized section of Jackson Creek. The Mokelumne River downstream of the project has been identified by the USACE Sacramento District as a navigable water.

The Jackson Creek channel is a natural trapezoidal shape with a sandy silt and grass bottom. The banks are lined with vertical rock walls attached to the bridge abutments. The creek flow is from northeast to southwest, and is seasonally variable, originating from upstream springs and snowmelt. The existing FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge deck. The last major storm event witnessed about 1 foot of creek flow overtopping the deck (City of Jackson 2013).

Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the U.S. Army Corps of Engineers (USACE). The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB). Pursuant to the U.S. Environmental Protection agency (USEPA) and U.S. Army Corps of Engineers (USACE) memorandum regarding Clean Water Act, the agencies would assert jurisdiction over waters and wetlands that abut such waters. Therefore, the USACE is likely to assert jurisdiction over Jackson Creek.

California Streambed Alterations Notification/ Agreement

Section 1602 of the Fish and Game Code requires that a Streambed Alteration Application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the

proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is a Streambed Alteration Agreement.

Local Regulations

Tree removal within the City is regulated under the City's Development Code (Title 17, Criteria for Tree Removal). Title 17 of the City of Jackson Development Code states the following criteria for tree removal:

17.40.070 – Criteria for Tree Removal:
A. All development shall conserve trees. A minimum of 3:1 replacement ratio shall apply upon removal of any such tree having a diameter greater than sixteen inches at four and one-half feet from grade. Oak trees removed shall be replaced with like species. Trees planted as replacements shall be maintained for five years, and again replaced and maintained if they fail to survive within that period.

B. No person shall cut down or remove any tree having a diameter of eight inches or greater on any public property, without review and approval by the Planning Commission. Any development proposal that calls for the removal of any tree having a diameter of eight inches or greater shall require Planning Commission approval. The subject determination would be based upon reasonable criteria, including but not limited to the following;

1. The condition of the tree with respect to its general health, damage, status as a public nuisance or traffic hazard, danger of falling, interface with utility services, and its status as host for parasitic plants, pests or diseases endangering other species of trees or plants with infection or infestation;

2. The topography of the land and the effect of the requested action on soil retention, water retention, and diversion or increased flow of surface water. Developers are encouraged to work with existing terrain;

3. The number, species, size and location of existing trees in the area and the effect of the requested action on historic values, scenic beauty, shade areas, air pollution and the general welfare of the City as a whole.

Wildlife Habitats and Plant Communities

Wildlife habitats are generally described in terms of dominate plant species and plant communities along with landform, disturbance regime, and other unique environmental characteristics. It has been found that the project area includes four vegetation communities or habitat types including perennial creek (Jackson Creek), emergent wetland, annual grassland, and ruderal/disturbed (i.e., existing bridge structure and roadway). Riparian areas are plant communities and habitats established along the margins of river banks. A complex riparian canopy is lacking from the study area however, scattered California walnut (Juglans californica), valley oaks (Quercus lobata), black locust (Robinia psuedoacacia), and tree of heaven (Ailanthus altissima) occur along the upper bank of the creek.

Perennial Creek

Approximately 0.246 acres of Water of the U.S., occur within the BSA. Jackson Creek is identified by the presence of a solid blue-line feature on the "Jackson, California" 7.5-minute quadrangle (USGS 1962). Jackson Creek is comprised of both open water and emergent wetland vegetation. Vegetation observed within the OHWM includes Santa Barbara sedge (Carex barbareae), Baltic rush (Juncus balticus), broadleaf cattail (Typha latifolia), horsetail (Equisetum arvense), Himalayan blackberry (Rubus armeniacus), common velvet grass (Holcus lanatus), and clumps of recently cut red willow (Salix laevigata).

Emergent Wetlands

According to the wetland delineation conducted by ECORP Consulting (2014), the following three criteria are needed in order for an area to be determined a wetland:

1. There has to be a majority of wetland associated species,
2. Hydraulic conditions that could result in flooding, ponding, or saturation during the growing season; and
3. Hydric soils must be present.

The definition of wetlands includes, "a prevalence of vegetation typically adapted for life in saturated soil conditions." Prevalent vegetation is characterized by the dominate plant species in the plant community (Environmental Laboratory, 1987). During the wetland delineation analysis, the "50/20 rule" was used to select the dominate plant species from each stratum of the plant community. The rule states that the dominate species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50% of the total coverage for the stratum. Plus any additional species that individually comprise 20% or more of the total cover in the stratum (HQUSACE 1992, U.S.Army Corps of Engineers 2010). There were several wetland plant species observed within the BSA such as; Santa Barbara sedge, broad-leaved cattail, water cress, horsetail, Baltic rush, water primrose, curly dock, and maintained patches of Himalayan blackberry and red willow.

Annual Grassland

The slopes of Jackson Creek transition from low-lying wetland fringe areas to annual grassland habitat. The annual grassland community is comprised primarily of non-native, naturalized Mediterranean grasses. These include, slender wild oat (Avena barbata), ripgut brome (Bromus diandrus), soft brome (Bromus hordeaceus), hedgehog dog-tail grass (Cynosurus echinatus), Italian ryegrass (Festuca perennis), velvet grass (Holcus lanatus), barley, (Hordeum murinum), and annual bluegrass (Poa annua). Other plant species observed in annual grassland habitat within the BSA include: Prickly lettuce (Lactuca serriola), Bristly ox tongue (Helminthotheca echiodes), Black mustard (Brassica nigra), white goosefoot (Chenopodium album), Russian thistle (Salsola tragus), morning glory (Convolvulus arvensis), wild pea (Lathyrus sp), sweet clover (melilotus sp), vetch (Vicia sp), goose grass (Galium aparine), and California poppy (Eschsholzia californica).

Movement Corridor

The Jackson Creek floodplain and associated wetland/riparian corridor provide a locally important movement corridor for a variety of wildlife species. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range.

According to the NES (ECORP, 2014) most of the wildlife species directly observed were birds. These species include turkey vulture (Cathartes aura), red-tail hawk (Buteo jamaicensis), mourning dove (Zenaida macroura), black phoebe (Sayornis nigricans), oak titmouse (Baeolophus inornatus), American robin (Turdus migratorius), northern mockingbird (Mimus polyglottos), American goldfinch (Carduelis tristis), house finch (Carpodacus cassinii), Brewer's blackbird (Euphagus cyanocephalus), and European starling (Sturnus vulgaris). There is no evidence of previous swallow nesting observed underneath the bridge or elsewhere in the project area. One reptilian species, western fence lizard (*celoporus occidentalis*) was observed in the BSA. Evidence of two mammals was observed (i.e. scat, tracks) including coyote and black-tailed deer. There was no evidence of maternity night, and/or day roosting sites for bats observed and the bridge underside does not appear to provide bat roosting habitat.

Ruderal/Disturbed Habitat

Ruderal habitat occurs in areas of upland disturbance such as areas of construction, grading and vehicle use. The habitat within Jackson Creek is considered disturbed habitat due to alterations by past mining practices and modifications to its floodplain such as, bank modifications, flood walls, and bridge abutments on the existing bridge.

Discussion:

a) Less Than Significant with Mitigation:

As discussed previously, according to the NES, neither special-status species, nor federally listed species were found on the proposed project site. Biologists concluded that biological conditions within the BSA likely preclude CRLF from occurring within the project area. However, to avoid any potential impacts to CRLF, the City would adopt and implement the avoidance and minimization measure listed in the mitigation measure below.

Biological Mitigation Measure I: In-water work activities shall be limited to June 1 through November 1, when CRLF are least likely to be impacted by in-water work.
Timing: During Construction
Enforcement/Monitoring: City of Jackson Engineer

b, c, e) Less than Significant with Mitigation:

Permanent and temporary impacts to riparian area in the BSA would be mitigated as discussed below. Since impacts to the riparian area would be mitigated, no cumulative impacts are

expected and the proposed impact would be less than significant. One California black walnut tree would be removed to accommodate placement of the new bridge footing. This tree would be removed in compliance with the mitigation measures below.

Permanent impacts to Jackson Creek are anticipated where the new northern footing would be constructed. The project would avoid, minimize, and/or compensate for damage and/or loss of wetland and riparian vegetation by completing the mitigation measures below.

Unavoidable direct impacts to wetland vegetation would require consultation with the appropriate jurisdiction such as USACOE, RWQCB, and CDFG. Temporary impacts would be mitigated in order to restore the affected area to pre-construction conditions in accordance with permits issued by the USACOE, RWQCB, and CDFG. With the following mitigation measures, the impact would be less than significant.

Biological Mitigation Measure I: Obtain a Section 404 permit from the USACE.
Timing: Prior to construction
Enforcement/Monitoring: City of Jackson City Engineer

Biological Mitigation Measure II: Obtain a Section 401 Water Quality Certification from the RWQCB.
Timing: Prior to construction
Enforcement/Monitoring: City of Jackson City Engineer

Biological Mitigation Measure III: Maximize avoidance of wetlands and riparian areas by including fencing and using the appropriate buffer zones as determined by a qualified biologist during construction activities.
Timing: During final project design
Enforcement/Monitoring: City of Jackson City Engineer

Biological Mitigation Measure IV: Replace wetlands with at 1:1 replacement ratio to compensate for lost extent and functioning of wetland areas.
Timing: Prior to project completion
Enforcement/Monitoring: City of Jackson City Engineer

Biological Mitigation Measure V: Implementation of Best Management Practices (BMPs). These measures would be developed in a project-specific erosion control plan. In addition, disturbed areas will be reseeded with a Caltrans-approved native seed mixture.
Timing: Prior to and during construction
Enforcement/Monitoring: City of Jackson City Engineer

Biological Mitigation Measure VI: Comply with Title 17 Criteria for Tree Removal, of the City of Jackson's Development Code.
Timing: Prior to and during construction
Enforcement/Monitoring: City of Jackson City Engineer

Biological Mitigation Measure VII: Conduct nesting bird surveys if the tree is to be removed during the nesting season (April 1 – September 1).
Timing: Prior to construction
Enforcement/Monitoring: City of Jackson Engineer

d, f) No Impact:

The project does not interfere substantially with the movement of any native, or established native, resident or migratory wildlife species or native wildlife nursery sites. The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan since these plans do not exist.

E. Cultural Resources –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X

Existing Environmental Conditions:

The existing bridge Pitt Street Bridge (Bridge No. 26C0008), was constructed in 1925. The project proposes to remove and store the existing bridge for future use and replace it with a new bridge. The Direct Area of Potential Effect (APE) includes Pitt Street from its tie-in with SR 88 through its intersection with Water Street, which includes the existing Pitt Street Bridge, as well as the Jackson Creek channel approximately 170 feet downstream (southwest) and 190 feet (northeast) from the existing bridge.

Residences on four parcels surrounding the Pitt Street Bridge encompass the Indirect APE and were evaluated for their National Register and California Register eligibility. The Indirect APE includes adjacent parcels APNs 020-200-028 (416 Water Street), 020-245-003 (409 Water Street) and 020-246-005 (408 Water Street) for their relation to the existing bridge and potential overall

ties to the Jackson Downtown Historic District. The Indirect APE also includes nearby APN 020-246-004 (402 Water Street) because of its connection to the existing bridge by sight.

Discussion:

a-b) Less than significant:

A Historic Property Survey Report (HPSR), Historical Resources Evaluation Report (HRER) and an Archaeological Survey Report (ASR) were completed for the project site in June 2014 (Windmiller, 2014). These studies determined that while the existing bridge was built during the Downtown Historic District's period of significance, it is associated with a residential portion of the City and not the historical downtown district. However, in 2004, JRP Historical Consulting completed an update of the Caltrans Historic Bridges Inventory (Hope and Feldman 2004). An update of the inventory was completed in 2006. Subsequently, the June, 2009 Caltrans listing of historical significance, local agency bridges for Amador County showed Bridge No. 26C008 listed on the National Register of Historical Resources. This bridge is listed eligible on the National Register and California Register. When it is removed from the current location, it will mention that as part of this process, the bridge's historical nature was documented and be kept intact and stored for future use therefore the impact is less than significant. The findings also concluded that the Indirect APE parcels are not eligible for the National Register or California Register.

c-d) No Impact:

California state law requires that if cultural resources are encountered work shall stop immediately and a professional archaeologist and/or the County coroner (if human remains are encountered) shall be contacted to coordinate an investigation of the discovery. If any remains are determined to be Native American, then the guidelines of the Native American Heritage Commission would be adhered to in the treatment and disposition of the remains.

F. Geology and Soils –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS—Would the Project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong Seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on - or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

Existing Environmental Conditions:

Amador County is located within an area of relatively low seismic activity. There are no Alquist-Priolo faults located in the County. According to the *Fault Activity Map of California* (2010), the closest fault is located approximately three miles to the south, near the North Fork of the Mokelumne River. The fault is classified as a Late Quaternary Fault with the last displacement 700,000 years ago. Although no active faults are located in the vicinity of the project site, the project area still has potential effects of ground motion from regional faults.

The project site contains Maripoza Formation (Jm) (Geologic Map of the Sacramento

Quadrangle, 1981), which is comprised of interbedded standstone, slate and tuffaceous sandstone (Bogen, 1984). The soil of the project site is Placer Diggings and River Wash (PW), an excessively draining soil type that is mostly gravel and sand (United States Department of Agriculture, 2014).

Discussion:

***a (i-iv) Less than Significant Impact*:**

The project site is not located within the Alquist Priolo Earthquake Zone. Therefore, this proposed project site does not pose many seismic safety risks; however the proposed bridge would be designed with the appropriate seismic criteria and ; therefore, the impact is less than significant. The new bridge connection on Pitt Street would also have reinforced cement abutments which would act as buffers from any potential landslides. Therefore, the impact of a landslide on this proposed project site is less than significant.

b- d) Less than Significant Impact:

The structural design would include design features to address both soils and seismic conditions, reducing expected impacts to a less than significant level. Some soil erosion is expected during construction, but loss of topsoil is not a significant issue due to the erosion controls specified in the design package.

e) No Impact:

The project consists of the reconstruction of an existing right-of- way of Pitt Street Bridge and would not require the use of septic tanks or alternative waste disposal systems to be built.

G. GREENHOUSE GAS EMISSIONS –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Environmental Conditions:

Amador County, nor the Amador Air District, have adopted quantitative significance thresholds for Greenhouse Gas (GHG) emissions. Therefore, thresholds used to analyze the construction emissions of the Pitt Street project were developed by the California Air Pollution Control Officers Association (CAPCOA).

The CAPCOA document *CEQA & Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* presents a 900 metric ton per year (MT/yr) of CO2e screening threshold. The CAPCOA threshold is considered a conservative threshold set at a level to "capture" or define 90 percent of land use development projects as significant. The CAPCOA document notes,

> "A single quantitative threshold was developed in order to ensure capture of 90 percent or more of likely future discretionary developments. The objective was to set the emission threshold low enough to capture a substantial fraction of future residential and nonresidential development that will be constructed to accommodate future statewide population and job growth, while setting the emission threshold high enough to exclude small development projects that will contribute a relatively small fraction of the cumulative statewide GHG emissions."

Therefore, if the Pitt Street Bridge Replacement project would generate more than 900 MT/yr of CO2e, the project is considered to have a significant impact on global climate change. If the project would generate 900 MT/yr of CO2e or less, the project is considered to have a less-than-significant impact on global climate change.

Discussion:

a-b) No Impact:

A minor amount of greenhouse gas (GHG) emissions related to the project would result from the running of construction equipment and vehicles. GHG impacts resulting from the proposed project would not contribute to any cumulatively significant impacts. Construction of the Pitt Street Bridge Replacement project would result in 319.7 MT/yr of CO_2. This amount is less than 900 MT/yr, therefore this impact is considered less than significant.

H. Hazards and Hazardous Materials –

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

Existing Environmental Conditions:

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term "hazardous material"

is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment (State of California, Health and Safety Code, Chapter 6.95, Section 25501). In some cases past uses can result in spills or leaks of hazardous materials to the ground, resulting in soil and groundwater contamination. The use, storage, transportation and disposal of hazardous materials are subject to numerous federal, State and local laws and regulations.

In 1995, the Occupational Safety and Health Administration (OSHA) required that all thermal systems insulation, surfacing materials and resilient flooring materials installed prior to 1981 be considered Presumed Asbestos Containing Materials. In addition, structures constructed prior to 1978 are presumed to contain lead-based paint unless proven otherwise. Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of regulations and require a class 1 disposal site. Additionally, under the Toxic Substances Control Act (TSCA), any leaking transformers that would remain within the construction site would require removal and/or relocation and have the transformer liquid tested and analyzed for PCBs.

An Initial Site Assessment (ISA) was conducted by Development Impact, Inc. to determine potential hazards onsite. It was found that the existing Pitt Street Bridge was originally constructed in 1925, therefore, due to the age of the existing structure there may be asbestos containing materials in the existing structure and/or lead based paint. There could also be potential lead and heavy metals such as chromium associated with pavement striping that may occur with the removal and disposal of yellow and/or white traffic stripe and pavement marking material. Potentially elevated levels of arsenic or other contaminants could be present in the exposed soil and/or rock fill, from mine tailings that may have been used as fill within the project boundary. Additionally, there is a pole-mounted electrical transformer onsite.

Discussion:

a – b) Less Than Significant Impact with Mitigation Incorporated:

As part of the site preparation for the proposed project, the existing structure would be removed, therefore reducing the potential impact of hazardous waste to people and the environment. Although the project does not include residential housing, the impact to the construction workers would be potentially significant without the proper handling and disposal techniques of hazardous waste material. With the following mitigation measures and proper disposal of potentially hazardous items, if present, the potential hazard to the public and environment would be less than significant.

Hazards Mitigation Measure I: Conduct a survey on the structure to determine the presence of asbestos and lead-based paint. If asbestos or lead based paint are present, appropriate health and safety measures shall be developed and utilized for the disposal of the structure.
Timing: Prior to Construction
Enforcement/Monitoring: City of Jackson City Engineer and Building Official

Hazard Mitigation Measure II: Conduct a preliminary screening of soil sampling and laboratory analysis for potentially elevated levels of arsenic. If levels are elevated, a Phase II Environmental Site

Assessment shall be performed and include a Health and Safety Plan for worker safety and a Work Plan for handling and disposing of the contaminated soil.
Timing: Prior to Construction
Enforcement/Monitoring: City of Jackson City Engineer

Hazard Mitigation Measure III: Conduct a soil survey for potential PCBs in pole-mounted electrical transformers. If PCBs are detected, the transformer shall be removed and disposed of in accordance with the appropriate regulatory agency.
Timing: Prior to Construction
Enforcement/Monitoring: City of Jackson City Engineer

c) Less Than Significant:

Jackson Elementary School is located northwest of the project site approximately 0.2 miles away. While the project may include demolition materials that are hazardous, the materials would be handled and disposed of according to the safety work plan and would not impact the nearby school.

d- h) No Impact:

The site is not located on a list of hazardous materials sites (ISA, 2014). The project would not impair implementation of an emergency response plan or evacuation plan; however a detour route would be necessary during construction. There are not any wildlands located adjacent to the project site. The proposed project is not in the vicinity of a private or public airstrip (ISA, 2014).

H. Hydrology and Water Quality –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?		X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a 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)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		X		
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?		X		
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?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

Existing Environmental Conditions:

Jackson Creek is a tributary in the Upper Mokelumne watershed, a subbasin of the greater San Joaquin River basin. These networks of streams collectively drain to the San Joaquin and Sacramento Rivers and convene at the Sacramento-San Joaquin Delta, which eventually drains into the San Francisco Bay and ultimately the Pacific Ocean. Approximately 5.5 miles downstream of the project, Jackson Creek flows into Lake Amador. As part of Section 303(d) of the Clean Water Act, the State of California is required to maintain a list of surface water bodies that exceed applicable water quality standards. The list includes prioritization of these surface water bodies, descriptions of the impairment, and Total Maximum Daily Loads (TMDLs) information. Currently, Jackson Creek is not listed as an impaired water body (ECORP, 2014).

Pitt Street Bridge crosses Jackson Creek over a semi-channelized section of the creek. The creek bed is natural material with banks lined with vertical rock walls attached to the bridge abutments, constricting the channel by several feet. Located at the top of the north-west rock wall, there are two privately owned residences one on each side of the bridge. At the south-east end of the bridge, Pitt Street intersects SR88, restricting the possibility to lengthen the bridge and widen the channel. The preliminary plans for the new bridge may accommodate widening the existing channel and bridge by 8-10 feet at the structure abutments; however, overtopping may still be a hydraulics issue (City of Jackson 2013). Contamination from storm water runoff transporting pollutants to Jackson Creek would not change the existing condition since the proposed bridge replacement is designed with similar capacity. According to Water Quality Assessment Report, conducted by ECORP Consulting, Inc., the replacement of the existing Pitt Street Bridge and alterations to the approaching roadway would be expected to cause short-term construction related impacts to surface water quality and long-term impacts on local storm water. Mitigations for these impacts, and others, are discussed below.

Discussion:

a, c, f) Less Than Significant Impact with Mitigation Incorporated:

Construction activities anticipate the increase of pollutants discharged into Jackson Creek. The compaction of soils from heavy machinery and the removal of vegetation may contribute to potential erosion, sedimentation, and runoff.

Storm water runoff is the predominated long-term water quality impact associated with the operation of the proposed project. Elements of design that may impact the amount of storm water runoff entering Jackson Creek would include a slight modification to stream hydraulics, due to new bridge abutments, re-contouring between the new abutments, expansion of the bridge and channel width, and modification of the north retaining wall. Potential long-term impacts also depend upon operation and maintenance of the proposed project (ECORP, 2014).

The proposed project has the potential to cause adverse impacts to the Jackson Creek streambed and associated riparian habitat. Therefore, implementation of BMPs and obtaining various permits prior to construction, such as those mentioned above in Section D, Biological Resources, would be necessary to mitigate against adverse impacts to water quality and riparian habitat of Jackson Creek reducing the impact to less than significant.

Hydrology Mitigation Measure I: Obtain a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW).
Timing: Prior to Construction
Enforcement/Monitoring: City of Jackson City Engineer

Hydrology Mitigation Measure II: Obtain a Clean Water Act Section 401 Water Quality Certification from the U.S. Environmental Protection Agency (EPA). Coordination with the California Department of Fish and Wildlife (CDFW), the Central Valley Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE) would be necessary to secure this permit.
Timing: Prior to Construction
Enforcement/ Monitoring: City of Jackson City Engineer

Hydrology Mitigation Measure III: Obtain a Clean Water Act Section 404 Nationwide Permit for Waters of the U.S. Coordination with the California Department of Fish and Wildlife (CDFW), the Central Valley Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE) would be necessary to secure this permit.
Timing: Prior to Construction
Enforcement/ Monitoring: City of Jackson City Engineer

Hydrology Mitigation Measure IV: Obtain a General Construction Permit from the U.S. Environmental Protection Agency (EPA) implementing Best Management Practices (BMPs) and a National Pollution Discharge Elimination System (NPDES).
Timing: Prior to Construction
Enforcement/ Monitoring: City of Jackson City Engineer

h) Less Than Significant Impact:

The proposed project would include constructing concrete piers within the streambed of Jackson Creek which would impede or redirect flood flows. However, the flows of Jackson Creek are currently impacted by the existing piers and the impact is expected to be similar to the existing conditions, therefore, the impact is less than significant.

b, g, I, j) No Impact:

The project does not involve placement of housing with the 100-year flood hazard. There are no large bodies of water within the area that would pose a seiche or tsunami hazard or physical/geological features resulting in a mudflow hazard. The proposed project is not located near a Sole Source Aquifer (EPA, 2013). Therefore, no impact to groundwater supply or recharge is expected.

I. Land Use and Planning --

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

Existing Environmental Conditions:

The City of Jackson's Development Code implements the policies of the General Plan by classifying and regulating the uses of land and structures within the City of Jackson. The Development Code is adopted to protect and to promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents, and businesses in the City. According to the City of Jackson's General Plan the proposed project site is located within the Historical Corridor of downtown Jackson and is designated Historical Commercial to the west and Limited Commercial to the east. On the southern end of the bridge is SR88, which is zoned Residential Single Family. On the north side of the bridge the area is zoned Residential Duplex. The existing Pitt Street is constrained between two privately owned residences at the northwest end of the bridge.

Discussion:

a – c) No Impact:

The proposed project consists of replacing an existing bridge; therefore the proposed project would not physically divide an established community within the City of Jackson. The project does not conflict with any local plans for the purpose of avoiding or mitigating environmental impact, nor is there a habitat conservation plan or natural community conservation plan in this area. Therefore, there would be no impact.

J. Mineral Resources –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Existing Environmental Conditions:

According to the City of Jackson General Plan, the soils in the Jackson area are relatively shallow and are unlikely to be used for export. However, the City of Jackson recognizes the historic use of mineral extraction in the area. While there are currently no current mining operations within its municipal boundaries, the City enacted an ordinance in 2001 to comply with California's Surface Mining and Reclamation Act of 1975. The project site is located within an existing urbanized area that is currently built out.

Discussion:

a – b) No Impact:

The City of Jackson recognizes that the extraction of minerals is a historic use in the City of Jackson; however, the City has no present mining operations within its municipal boundaries (Mining and Reclamation Municipal Code, Ch. 14.16). Additionally, the project site is not located within a mineral resource recovery site, therefore, there would be no impact to local, regional or state mineral resources from the proposed project.

K. Noise –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. NOISE – 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?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Existing Environmental Conditions:

The proposed project would replace the existing Pitt Street Bridge with a new single-lane bridge with a shoulder and separated pedestrian sidewalk. The existing bridge connects the downtown area with residential neighborhoods. The existing bridge is bordered by existing residences and SR88. According to an Environmental Noise Assessment (ENA) conducted by Bollard Acoustical Consultants, Inc. most of the noise generated in the project vicinity emanates from SR88. However, the project is within close proximity of existing residences and construction noise would contribute to increased ambient noise that would exceed the levels set in place by the Noise Element of the General Plan.

The City of Jackson General Plan Noise Element discusses noise level standards in terms of Day-Night Levels (L_{dn}). Residential-Single-Family Land Use noise level limit is $60L_{dn}$ (General Plan Noise Element, 1987). CalTrans' standards for Noise Control specifications during construction state that limits may not exceed 86 dBA 50 feet from the job site from 9 p.m. to 6 a.m. (CalTrans Standard Specifications, 2010). The Environmental Noise Assessment found construction

activities would exceed the set noise limits. The following mitigation measures would reduce the impact of the construction noise on the surrounding residences to less than significant.

Discussion:

a, d) Less than Significant Impact with Mitigation:

Equipment noise during construction of the proposed project is the primary concern in evaluating short-term noise impacts. The temporary construction noise is anticipated to exceed local noise ordinances in place by the City's General Plan. The following mitigation measures would reduce impacts to less than significant.

Noise Mitigation Measure I: Construction activities shall be limited to the daytime hours of 7 am to 7 pm.
Timing: During Construction
Enforcement/Monitoring: City of Jackson Engineer

Noise Mitigation Measure II: Local residents shall be given advanced notice of project construction schedules and notified of substantial temporary increases in local noise levels during project construction at the nearest residences to the construction activities.
Timing: Prior to Construction
Enforcement/Monitoring: City of Jackson Engineer

Noise Mitigation Measure III: Separation between construction staging areas and the nearest residences shall be maximized.
Timing: Prior to Construction
Enforcement/Monitoring: City of Jackson Engineer

Noise Mitigation Measure IV: Temporary, localized noise barriers such as hay bales, acoustic curtains, or temporary wood fencing shall be used to reduce noise impacts to the adjacent properties.
Timing: Prior and during construction
Enforcement/Monitoring: City of Jackson Engineer

Noise Mitigation Measure V: All internal combustion engines used for construction shall be fitted with mufflers.
Timing: Prior and during construction
Enforcement/Monitoring: City of Jackson City Engineer

Noise Mitigation Measure VI: Generators and compressors required during construction shall be located as far as possible from existing residents and, if necessary, shielded from view of those residences by portable noise barriers.
Timing: During construction
Enforcement/Monitoring: City of Jackson City Engineer

b) Less than Significant:

The bridge replacement would not result in the generation of long-term or permanent excessive groundborne vibration or groundborne noise levels. There would be a temporary impact from large earth moving machinery during construction resulting in an impact that is less than significant due to the temporary nature of the noise.

c, e - f) No Impact:

As discussed above, most of the ambient noise in the project vicinity emanates from SR88 and no additional capacity is being added to the roadway with the proposed project, therefore, there would be no impact to the permanent increase of ambient noise in the project area. In addition, the project is not located with two miles of an airport therefore the project would not expose people to excess noise levels.

L. Population and Housing –

	Potentially Significant Impact	**Less than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Existing Environmental Conditions:

The proposed project consists of the reconstruction of the existing Pitt Street Bridge. The project site is a right-of-way (a bridge) that connects the downtown area to surrounding neighborhoods. The bridge is a one-lane, one-way street that connects Water Street with SR88.

Discussion:

a – c) No Impact:

The proposed project would not induce population growth in the City directly with new homes or businesses or indirectly through the extension of roads or infrastructure that were not

already addressed in the General Plan. Displacement of existing housing or persons would not occur since there are no houses within the right-of-way. The proposed project is located within an already established road network and would have no impact on population or housing.

M. Public Services –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i).Fire protection?			X	
ii). Police protection?			X	
iii). Schools?				X
iv). Parks?				X
v). Other public facilities?				X

Existing Environmental Conditions:

The project site is currently within the Jackson Fire Department jurisdiction, which has primary responsibility for fire prevention, inspection and protection. The closest fire department to the project site is approximately 0.4 miles west, located at 175 Main Street. Police protection is the responsibility of the City of Jackson Police Department (JPD) located 0.2 miles west from the project site at 33 Broadway. Jackson Elementary School is located northwest of the project site approximately 0.2 miles away. The City of Jackson owns and operates four public park facilities. Detert Park is located 0.7 miles north on Piccardo Lane. Petkovich Park is located 0.2 miles west of the Pitt Street Bridge off Broadway. Tailing Wheels Park is located 1.3 miles north of the proposed project site on N. Main. Lastly, Gold Ridge Park is located 0.9 miles south of Pitt Street Bridge off Alpine Street.

Discussion:

i, ii) Less than Significant Impact:

The project would not have an adverse impact on response times, except temporarily during construction when there will be a detour in place. The City of Jackson reports on average emergency calls are responded to in three minutes and non-emergency calls are responded to in about 15-20 minutes.

iii-v) No Impact:

The project is a minor roadway improvement and does not involve the creation of new housing, and therefore would have no impact on schools, parks or other public facilities.

N. Recreation –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Existing Environmental Conditions:

As previously mentioned The City of Jackson owns and operates four public park facilities all within 1.5 miles of the proposed project site. These areas range from a plaza style gathering area in historic downtown Jackson to a recreation park with municipal pool, youth baseball diamond and play structure. However, the proposed project is a bridge replacement; therefore no new housing units or commercial facilities are planned as part of the proposed project.

Discussion:

a – b) No Impact:

The project would not impact the use of existing neighborhood or regional parks and thus would not cause physical deterioration of these facilities or require the construction of new facilities. There would be no impact on recreational facilities.

O. Transportation/Traffic --

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

Existing Conditions:

The existing bridge is located on a short segment of Pitt Street that provides a one-way connection between Water Street and SR88 in the City of Jackson. The replacement bridge would remain a one-way street after completion. The current Pitt Street Bridge is primarily used by the residents of Jackson, as a short cut to State Highway 88 from the residential and commercial areas along Court Street, Water Street, and New York Ranch Road. Currently, there is one resident that has parking access off Pitt Street north of the bridge.

Discussion:

a – b) Less than Significant Impact:

The project itself would not cause an increase in traffic load or capacity of the area, or exceed a level of service standard for the roads and intersections. However, during construction the

existing Pitt Street Bridge would be closed resulting in a less than significant temporary increase of traffic load on other streets in the vicinity.

c, d, g) No Impact:

The proposed project would not have an adverse effect on existing air traffic patterns, nor would it be located in the flight path of arriving and departing planes. The existing bridge would be removed and replaced with a bridge of similar design features. The proposed bridge would be approximately 8-10 feet wider and a few feet longer in order to improve hydraulics of the creek. Due to the similar design and improved hydraulics of the creek, there would be no increased hazards due to design features or incompatible uses. There would not be any conflicts with adopted policies, plans or programs supporting alternative transportation such as bus turnouts or bicycle racks with this project. However, the project proposes a new sidewalk along the bridge which would improve pedestrian access to and from the Historical Downtown area to the surrounding residential areas.

e, f) Less than Significant Impact:

The proposed project would not result in inadequate emergency access for police or fire services, however, during construction this segment of Pitt Street would be closed requiring an alternate route which would require traffic to use the detour during an emergency response. However, as discussed in Section M, Public Services, this would be a less than significant impact. As mentioned above, there is currently one residence using a parking spot on the street that would be closed during construction. The following mitigation measure would be implemented during construction to reduce the impact on parking to less than significant.

Traffic Mitigation Measure I: Alternative parking arrangements or permit access shall be made to accommodate the resident with a parking spot on the proposed project site.
Timing: During Construction
Enforcement/Monitoring: City Engineer

P. Utilities and Service Systems –

	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Existing Environmental Conditions:

The Jackson Water Resources Department provides safe and reliable drinking water to the residences of Jackson. The City purchases water from the Amador Water Agency, which treats water from the Mokelumne River. The City's Public Works Department operates the wastewater treatment plant in the City and takes care of the City's storm drains. The City has adopted an implementation schedule in compliance with the State Water Resources Control Board Order No. 2006-003 to develop programs to improve wastewater management. The City of Jackson's wastewater treatment facility was opened in 1985 and is located 0.5 miles west of Highway 49/SR88.

Discussion:

a- g) Less Than Significant:

Since the proposed project is the replacement of an existing bridge, there would be no permanent impact to the utilities, however, temporary construction easements and utility relocations would be necessary. The project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board because no new sewer connections are anticipated with this project. The project would not require water or expansion of water facilities to accommodate additional water flow nor would it require new storm water drainage facilities or expansion.

During construction, however, several water, storm water, and sewer pipes would be relocated or replaced. On site there is a ten-inch sewer line buried in the creek channel, slightly west of the middle of the bridge that would be replaced. Near the southern private driveway there is an eight-inch water line and storm drain integrated into the existing Abutment 1 structure, so portions would be removed as part of the demolition work. There is also an existing twelve-inch drainage pipe day lighting out of Abutment 2 that would be relocated through the new abutment. On the downstream side of the existing bridge, there is a four-inch abandoned waterline that would be removed. There is an eight-inch waterline buried in the Pitt Street alignment and extending out of the existing Abutment 1 face. This waterline would be permanently relocated approximately three-feet southwest from the current location. These relocations would have a temporary, less than significant impact during the construction period, but would not have a long-term impact on services.

Additionally, the project would require the removal of road materials; however, the amount of road material being removed would not be enough to have a significant impact on landfill capacities and all material would be disposed of in compliance with federal, state and local regulations.

MANDATORY FINDINGS OF SIGNIFICANCE --

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

Discussion

a) Less than Significant Impact with Mitigation Incorporated:

As discussed in the Aesthetics, Biological Resources, Hazards and Hazardous Materials, Hydrology, Noise, and Transportation and Traffic sections of this Initial Study/Mitigated Negative Declaration (IS/MND), the project would result in potentially significant temporary impacts as a result of construction that would have the potential to degrade the quality of the environment. However, adoption and implementation of mitigation measures described in this IS/MND would reduce these individual impacts to less than significant levels.

b) Less than Significant Impact:

The project is consistent with the City's General Plan to provide adequate infrastructure for growth and would not create any impacts that would be cumulatively considerable. All project impacts have been reduced by adherence to basic regulatory requirements incorporated into the project.

c) Less than Significant Impact:

The proposed project would not have any direct or indirect adverse impacts on humans because construction effects would be temporary and have been reduced or eliminated by incorporating mitigation measures into the project.

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Appendix A

Cultural Reports

ARCHAEOLOGICAL SURVEY REPORT
PITT STREET BRIDGE REPLACEMENT PROJECT
CITY OF JACKSON
AMADOR COUNTY, CALIFORNIA
BRLO-5141 (018)
Section 28, T.6N, R.11E MDM
Jackson, Calif. 7.5' USGS Quadrangle

By

Ric Windmiller, M.A.

Prepared for

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Gary Scholze PQS-PI Date
Prehistoric Archaeology
Caltrans District 10

Approved by: _____ _____
Julie Myrah, Branch Chief Date
Local Assistance and MPS
Environmental Branch
Caltrans District 10

SUMMARY OF FINDINGS

The Pitt Street Bridge Replacement Project will replace the existing bridge structure (Bridge No. 26C0008) and the resulting tie-in with Pitt Street and State Route 88 in the City of Jackson, Amador County, California. The existing bridge, built in the natural channel of the Middle Fork, Jackson Creek, is classified as structurally deficient. The existing bridge was constructed by an unknown agency in 1925. It is presumed that the abutments are constructed of masonry block or concrete on unknown footings.

Staging would be located on the existing Pitt Street roadway by temporary construction easement. The road within the Area of Potential Effect's Area of Direct Impact (or Direct APE) would be fully closed during construction. Ingress and egress would be along existing roads.

The purpose of this Archaeological Survey Report (ASR) is to provide an inventory of archaeological resources located within the Area of Direct Impact. As a result of a records search by the North Central Information Center, California Historical Resources Information System, a sacred lands file search by the Native American Heritage Commission and contacts with Native Americans listed by the commission, other background research and a field inspection, no archaeological resources were identified within the Direct APE.

The vertical APE is unknown, as the depth of the existing bridge abutments to be removed is unknown. On the southeast side of Jackson Creek and within the Direct APE lies State Route 88, which was apparently built on fill at this particular location. On the northwest side of the creek, the sediment above the creek bank is a sandy silt. Flooding apparently can occur about the northwest bank, as the City reports that a 100-year flood event could top the existing bridge by 2.5 feet. The creek bed is rocky. Geologic maps place the Direct APE over Jurassic meta-sediments, mainly Mariposa slate and graywacke, wall rock of the local mines. Though it may be possible to encounter buried historic or prehistoric archaeological resources, the probability is low due to the design of the project and the relatively small area in which ground disturbance is anticipated..

In this report, Caltrans is determining the sensitivity for cultural resources in the area and documenting identification efforts. Several studies have taken place near the project area, but no studies that cover the project's Direct APE were identified. The City of Jackson is receiving federal funding and is, therefore, subject to the review under the *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of Federal -Aid Highway Program in California* (Section 106 PA).

It is Caltrans policy to avoid cultural resources whenever possible. Further investigations may be needed if site(s) cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans policy that work stop in the area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

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INTRODUCTION

The Pitt Street Bridge Replacement Project will replace the existing bridge structure and the resulting tie-in with Pitt Street and State Route 88 in the City of Jackson. The existing bridge is classified as structurally deficient. The proposed new bridge would be a one-lane Cast-in-Place prestressed slab spanning 54 feet in length and 32 feet in width. In addition, there would be a six foot wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The vertical alignment of the new bridge would not vary significantly from the existing profile. The new bridge would be about 8-10 feet wider than the existing bridge. The new bridge would also be a few feet longer than the old one to improve hydraulics of the creek.
(see Figures 1-3, Appendix A).

Field inspection of the project's Area of Direct Impact (ADI) was conducted by Ric Windmiller, M.A., Registered Professional Archaeologist on March 7, 2014. Windmiller has more than 40 years experience directing archaeological surveys and excavations ranging from the Canadian eastern arctic to northwest Mexico. His experience in northern California includes excavations and field surveys in 36 counties north of the Tehachapis including Amador County. Windmiller is the former assistant to the Highway Salvage Archaeologist for the State of Arizona and former staff archaeologist, University of Colorado. Windmiller also served as National Park Service staff archaeologist in Interagency Services and Indian Assistance. Since 1987, Windmiller has operated a consultancy that provides both public and private sector clients with archaeological, historic architectural and paleontological services. Windmiller meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric and historical archaeology.

PROJECT LOCATION AND DESCRIPTION

The Pitt Street Bridge Replacement Project is located in the City of Jackson, Amador County, California (see Figures 4-7, Appendix B). Physiographically, the APE lies a north-south trending valley within a 12-mile section of the Mother Lode claimed to have produced the richest yield in gold recorded for any section of the lode of equal length (Bowen and Crippen 1948:62).

The proposed project is situated in the south portion of Jackson in a residential neighborhood near, but not adjacent to the Jackson Downtown Historic District (see Appendix B: Other Figures).

The proposed project will replace the existing Pitt Street bridge structure and tie-in with Pitt Street and State Route 88. The existing bridge is classified as structurally deficient. The structure was built in 1925 by an unknown agency and it is presumed that the abutments are constructed of masonry block or concrete on unknown footings.

Pitt Street is constrained between two privately owned residences at the northwest end of the existing bridge. Due to limited work space, the existing bridge would be completely removed to

the City's Corporation Yard prior to new construction. The old bridge will be stored and later reused.

The proposed new bridge would be a one-lane Cast-in-Place prestressed slab spanning 54 feet in length and 32 feet in width. In addition, there would be a six foot wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The vertical alignment of the new bridge would not vary significantly from the existing profile. The new bridge would be about 8-10 feet wider than the existing bridge. The new bridge would also be a few feet longer than the old one to improve hydraulics of the creek.

Construction would include new abutments, new wing walls and new retaining walls to match the existing adjacent stacked rock walls. A 10-inch sewer line buried in the creek channel slightly west of the middle of the existing bridge would be replaced. An eight inch water line and storm drain are integrated into the existing abutment. Portions of those lines would be removed as part of the demolition work. Overhead electric lines near the second abutment provide power to three residences across the creek. During construction, the guy wires would be temporarily relocated. An existing 12-inch drainage pipe that spills from the second abutment would be relocated through the new abutment. A four inch abandoned waterline on the downstream side of the existing bridge would be removed. And eight inch water line buried in the Pitt Street alignment and extending down to the first abutment would be permanently relocated about three feet to the southwest.

Staging would be located on the existing Pitt Street roadway by temporary construction easement. The road within the Area of Potential Effect (APE) would be fully closed during construction. Ingress and egress would be along existing roads.

The vertical APE is unknown, as the depth of the existing bridge abutments to be removed is unknown. On the southeast side of Jackson Creek and within the Direct APE (Area of Direct Impact or ADI) lies State Route 88, which was apparently built partly on fill at this particular location. On the northwest side of the creek, the sediment above the creek bank is a sandy silt. Flooding apparently can occur above the northwest bank, as the City reports that a 100-year flood event could top the existing bridge by 2.5 feet. The creek bed is rocky. Geologic maps place the geographic APE over Jurassic meta-sediments, mainly Mariposa slate and graywacke, wall rock of the local mines. Though it may be possible to encounter buried historic or prehistoric archaeological resources, the probability is low due to the design of the project and the relatively small area in which ground disturbance is anticipated (see APE map, Figure 3, Appendix A).

SOURCES CONSULTED

The sources consulted include the North Central Information Center, California Historical Resources Information System, the California Office of Historic Preservation, California State Library, the Native American Heritage Commission, Native American contacts listed by the

commission, published and unpublished references and maps in the consultant's own library.

Records Search Results

The North Central Information Center, California Historical Resources Information System completed a records search on March 4, 2014 (NCIC File No. AMA-14-04). The records search included the listing of cultural resource records and surveys within a one-eighth mile radius of the APE (both Direct and Indirect APEs), as well as historic properties listed on the Office of Historic Preservation's Historic Property Data File for Amador County–2012, Determinations of Eligibility --2012, National Register of Historic Places–2004, California Inventory of Historic Resources--1976, Caltrans Bridge Inventory–2009, and historic maps (1870 GLO plat for the township; 1888 Jackson USGS quadrangle; 1962 USGS Jackson quadrangle).

Information center staff identified 32 cultural resources located within the records search area. However, only one, the Pitt Street at Middle Fork, Jackson Creek bridge (Bridge No. 26C0008/P-03-1620) is located within the project APE. Most of the remaining 31 cultural resources are buildings.

The Directory of Properties in the Historic Property Data File for Amador County lists the Pitt Street bridge as built in 1902 and determined eligible for the National Register by the Keeper on December 24, 1985 under criteria A and C.

The updated Caltrans Bridge Inventory of June 2009 lists the year during which the bridge was built as 1925. The updated bridge inventory also indicates that the bridge remains listed on the National Register of Historic Places.

The single archaeological resource, the Jackson Courthouse Site (CA-AMA-499), identified by the records search is located well outside both Indirect APE and Direct APE according to the information center's maps. However, the site is not listed in the Archaeological Determinations of Eligibility for Amador County.

Information center staff identified three cultural resources located within the records search area in the California Inventory of Historic Resources: Amador County Hospital Building; Jackson's Pioneer Jewish Synagogue Site and; Pioneer Hall. Not one of the three is located within the project APE. Pioneer Hall (115 Main Street), Saint Sava Serbian Orthodox Church (724 N. Main Street), the Tallon House (115 Broadway) and the Amador County Hospital (708 Court Street) complete the National Register listings provided by the information center for the records search area (note the information center's omission of the Pitt Street bridge).

The 1870 General Land Office (GLO) plat illustrates a road and "old surface gold diggings" in the project vicinity. The 1888 Jackson topographic map illustrates a road and the town center in the vicinity of the project. The 1962 Jackson quadrangle illustrates roads and houses in the vicinity and the Pitt Street bridge number is penciled in (26C0008) (see Appendix C for records

search results).

Summary of Other Sources Consulted

The consultant conducted additional research at the California State Library, California Office of Historic Preservation (OHP) and the consultant's own library, which included National Register nomination forms for the Jackson Downtown Historic District from OHP, Sanborn Fire Insurance maps from the State Library and publications on historic mines and towns of the area, as well as gray literature. While two historic Native American villages existed in the locality according to published maps, the scale of those maps was too small to determine any precise relationship between the APE and the village sites (see "Ethnography," below).

Native American Coordination

On March 6, 2014, the Native American Heritage Commission completed a search of its sacred lands file. As a result of that search, commission staff indicated that Native American cultural resources may be impacted by the bridge replacement project. The site in question is the Jackson Courthouse site (CA-AMA-499). Commission staff advised contacting the Jackson Band of Mi-wuk Indians for specific information regarding this site.

Commission staff included a list of Native American contacts along with its letter report and advisory regarding the Jackson Courthouse site. On May 12, 2014, the consultant posted a letter to each of the contacts listed below. In the letter, the consultant described the project, requested information and concerns regarding known or suspected sites of importance and included a location map. On June 13, 2014, the consultant followed up by attempting to reach each contact by telephone. The results are outlined below:

Jackson Band of Mi-wuk Indians, Jackson. The consultant attempted to contact Mr. Irvin Bo Marks, Chairperson listed by the commission and Mr. Sam Baugh, the cultural resources representative listed by the commission. There was no response to the consultant's letter. While attempting to reach both with a follow-up telephone call, the consultant learned that Mr. Marks had been replaced by Mr. Adam Dalton. The consultant left a message. However, the call was not returned. In attempting to reach Mr. Baugh by telephone, the consultant learned that Mr. Baugh's position is vacant. There was speculation that the tribal council may take over Mr. Baugh's responsibilities. However, there was no direct response to the consultant's queries.

Mr. Dwight Dutschke, Ione. The consultant attempted to contact Mr. Dutschke by mail; there was no response. A follow-up telephone call was attempted. However, the number was disconnected.

Mr. Randy Yonemura, Sacramento. The consultant attempted to contact Mr. Yonemura by letter as well as by telephone. To date, there has been no response to the letter or to the voice

mail message left by the consultant.

Ms. June Ortega Geary, Colusa. The consultant attempted to contact Ms. Geary by letter as well as by telephone. To date, there has been no response to the letter or to the voice mail message left by the consultant.

Ms. Beatrice Mae Ortega Crabtree, Chico. The consultant attempted to contact Ms. Crabtree by letter as well as by telephone. To date, there has been no response to the letter or to the voice mail message left by the consultant (for more detail, see Appendix D: Native American Coordination).

BACKGROUND

Environment

Jackson is situated in the narrow valley of the three forks of Jackson Creek. With an elevation averaging around 1200 feet above sea level, Jackson lies at the lower margin of the Foothill or Digger Pine-Chaparral Belt. Pine-oak woodlands and brush lands or chaparral are often intermingled at this elevation of the west slope Sierra Nevada. Summers are rainless and hot; winters are moderate with 15-40 inches of rain and little fog (Storer and Usinger 1963:27).

Jackson lies on the Mariposa Formation with slate and some conglomerate of Upper Jurassic age. On the west side of the valley, the Mariposa Formation is flanked by Logtown Ridge greenstone. On the east, amphibolite schist lies next to the Mariposa Formation. The hills beyond the east side of the valley are underlain by schist, slate and metachert of the Calaveras Formation of Carboniferous to Permian age (Clark 1970:74).

Ethnography

Our knowledge of pre-gold rush native life in the lower foothills of Amador County is far from complete. Jackson is located in former Central Sierra Miwok territory, according to archaeologist Richard Levy (1978:400).

Miwok villages were located on knolls and ridges near water courses (Napton 1991:18). The principal winter settlements, the “permanent” villages, included semi-subterranean, earth-covered dwellings and an earth lodge 40-50 feet in diameter. Temporary summer camps found at the same low elevations of the Sierra foothills had rude brush shelters or thatched structures (Levy 1978:408).

Levy noted two villages in the Jackson area, both along Jackson Creek: *Tukupesü* on the north side of Jackson Creek and *Polasü* on the south side of Jackson Creek (Levy 1978:400). The geographic APE encompasses a relatively short reach of Jackson Creek within the built environment of the City of Jackson.

The Jackson vicinity was classed by Kroeber as "Northern Miwok." On a map of slightly larger scale than that of Levy, the village of *Tukupe-sü* is illustrated in Kroeber's definitive work on California Indians on the north side of Jackson Creek at Jackson. *Pola-sü* is illustrated on the south side of Jackson Creek, also at Jackson (Kroeber 1925:445; Plate 37). Therefore, it a reasonable to assume that both villages may have been located within a mile radius of the project APE.

While Miwok-speaking people of other areas met Spanish explorers as early as the late 1700s, and the effects of missionization and disease took their toll during the early 1800s, native people in the foothills did not experience the full effects of colonization until California's gold rush.

Prehistory

Since the early 1950s, stone tools of the so-called "Farmington Complex" have been unearthed periodically along the Sacramento Valley-Sierra foothills ecotone (Moratto 1984:62). Archaeologist Eric Ritter has shown that the artifacts are either contemporaneous with, or older than the Modesto Formation. This geologic association dates the tools between 10,000 and 5000 B.C. (Ritter *et al.* 1976).

Commenting on the 1979 excavations by Peak & Associates of a stone tool quarry and campsites in the Calero Basin near Rancho Murieta, eight miles northwest of Jackson, Southwestern archaeologist, Julian Hayden remarked about the similarity of artifact types with those of San Dieguito II. San Dieguito II is an early culture of southern California and the Lower Colorado River area (Peak 1981; Julian Hayden, personal communication 1994).

San Dieguito II is coeval with the Western Pluvial Lakes Tradition. An adaptation of ancient cultures to lake, marsh and grassland habitats along the east side of the Sierra Nevada, the Western Pluvial Lakes Tradition dates back as early as 9,000 B.C. (Moratto 1984:90-91).

Ten miles south of the APE, archaeological excavations at Camanche Reservoir in the 1960s revealed a culture sequence dating back 4500 years. All three Sacramento Delta cultures were identified during the excavations: the Windmiller Culture (2500-1500 B.C.); Cosumnes Culture (1500 B.C.-A.D. 500) and the Hotchkiss Culture (A.D. 500-historic period) (Johnson 1967).

Scientific excavations at other Native American archaeological sites in the lower foothills have revealed mostly late prehistoric and historic finds. Located near Camanche Reservoir, Bamert Cave, dug by University of California, Berkeley scientists, is one example (Heizer and Hester 1973). Another is the Applegate site, located a few miles north of Camanche Reservoir (Johnson 1970).

Some scholars believe that speakers of Hokan languages were the first to settle California at the end of the last Ice Age (Taylor 1961, Hopkins 1965). Archaeologist Michael Moratto proposed that native people who left behind what we term the "Western Pluvial Lakes Tradition" and its

variants such as the Farmington Complex and the finds at Rancho Murieta, correspond to the emergence and early differentiation of Hokan (Moratto 1984:544).

With global warming, the continental ice fields retreated, and montane glaciers, such as those high in the Sierra Nevada, all but disappeared. As a consequence, the sea level rose. By 6000 B.C., marine waters invaded the depression in what is now San Francisco Bay. By 4000 B.C., the Sacramento Delta was flooded, creating marsh habitat, the remnants of which we see today (Atwater *et al.* 1977 and Atwater and Hedel 1976).

Speakers of pre-Utian languages entered the lower Sacramento Valley and settled the Delta during the mid-Altithermal, the climate of which was warmer and drier than today. The early Windmiller Culture of 2500 B.C. is thought to represent such a group that migrated probably from the northwest Great Basin and Columbia Plateau region, a hypothesis that is now supported to an extent by DNA studies (Johnson *et al.* 2012:67).

Between 1000 B.C. and 500 B.C., as the climate improved to present-day conditions, proto-Yokutsan-speaking people, represented by the Windmiller Culture, began moving from the Sacramento Delta into the central Sierra foothills and San Joaquin Valley. Possibly as early as the first few centuries before Christ, the Cosumnes Culture, speakers of another Utian language, proto-Miwokan, began expanding eastward into the older Utian-Yokutsan domain. The late prehistoric period, represented by the Hotchkiss Culture, probably reflects use of the lower foothills around Jackson by Miwok-speaking people.

A recent updated synthesis of Central Valley archaeology notes little new information in some localities due to few new investigations other than surface surveys and the inadequacy of older collections in meeting the needs of current research objectives. However, researchers have taken the cultural periods, above, and updated the time span of each period based on new radiocarbon determinations adjusted with modern calibration curves (Rosenthal *et al.* 2007:150):

Paleo-Indian (11,550-8550 cal B.C.)
Lower Archaic (8550-5550 cal B.C.)
Middle Archaic (5550-550 cal B.C.)
Upper Archaic (550 cal B.C.-cal A.D. 1100)
Emergent (cal A.D. 1100-Historic)

History

The first authentic reports of Caucasians in what is now Amador County began with Sutter's trip in 1846 to a stand of sugar pine on a ridge between Amador and Sutter creeks. The party dug a pit, laid sills and whip-sawed timber for construction of a ferry used to cross the Sacramento River (Mason 1881:65; Cenotto 1977:7).

Within a few months of the 1848 gold discovery at Coloma, Miwok territory was overrun with

miners searching hills and streams for the precious metal (Carlson and Clark 1954:151, Napton 1991:20). During the summer of that year, travelers between Drytown and the Mokelumne River would stop at a spring near where the National Hotel at Jackson was later built. Some mining was done by Mexicans at the same location. Littered with bottles, the location was named, *Bottileas*. By August, 1850, there were seven buildings in the little settlement. Log construction and tents predominated. By December, 1850, the town burgeoned to 100 houses. By trickery, several citizens removed the county records from Double Springs to a shake shanty at the foot of Court Street in Jackson. The town of Jackson became the county seat (Mason 1881:167-168).

Placer mining in the gulches around Jackson were profitable, although the strikes were not comparable to those in the Mokelumne River. All three forks of Jackson Creek were reportedly well-paying. The best locale for surface mining was near the confluence of the creeks in the vicinity of the National Hotel. The flats near Tunnel Hill were also productive. However, Jackson grew also because of its location at the crossroads to Volcano, Mokelmune Hill and the southern mines. There was a road to Sacramento by way of Rancheria and Drytown and a second road by way of Buena Vista. Some of the routes were reportedly built on "Indian trails" (Mason 1881:167, 169).

Several brick buildings were put up by 1854. With the increase in population came numerous merchants and their shops. Sloan and others established a gas works, which produced *Aubin* gas made from pitch wood. In 1861, the prodigious rains that winter washed out 20 buildings constructed over Jackson Creek on Broadway. The flood was followed by a fire in 1862. Another flood devastated the town in 1878 "running deep enough to float a steamboat" (Mason 1881:175).

With the end of placer mining, many of the Chinese miners moved away from Jackson's Chinatown, which had occupied both sides of Main Street at the north end of the business district. There were also Chinese in south Jackson and around Jackson Gate who moved away. At least some of those whose remains had been placed in the Chinese cemetery near the other cemeteries were removed for shipment back to China, as was the custom of the day (Cenotto 1977:54).

Although placer mining was the initial draw to the region, lode mining commenced in 1850, if not before, along the 20-mile belt of gold mineralization in western Amador County. In the Jackson vicinity, the Argonaut Mine was first developed in 1850. The Kennedy followed in 1856. The Zeila Mine on the south side of Jackson opened in the 1860s. Later disputes over the Pioneer vein was the cause of litigation between the Argonaut and Kennedy mines. The Zeila closed in 1914 due to problems with tailings disposal. Additional mines in the Jackson locality included the Moore, South Jackson, Bell Weather and others. Overall, lode mining in the region flourished for some 90 years (Clark 1970:69).

By 1896, the town had a population of about 3,000. Businesses on both sides of Main Street were mostly brick buildings at this time. Jackson boasted of three churches, three newspapers, four hotels, two restaurants, five boarding houses, two livery stables, four blacksmith shops and other

stores. Both gas and electricity lighted the town at night. Mining, ranching and farming, particularly orchards and vineyards supported the local economy (DeGrange 1998:88-89).

Gold production ceased during World War II by order of the War Production Board. Prior to closure, the Kennedy Mine tailings had been lifted by the Kennedy wheels and filled a small valley south of the mine. After the war, the tailings were reworked (Wagner 1970:125).

By 1948, there was little that remained of the Jackson of the gold rush era. Most of the substantial buildings were stuccoed by this time. Neon signs replaced the older wooden signage (DeGrange 1998:90).

FIELD METHODS

Ric Windmiller inspected the Area of Direct Impact on March 7, 2014. The field inspection was started on the northeast end of the APE and proceeded to the southwest end of the APE on both sides of the water course and most of the creek bed. The consultant examined exposed soils along both banks. The existing stream of water was clear and so the consultant was able to examine the rocks for bedrock milling stations and other large artifacts. The APE also encompasses Pitt Street on the northwest side of SR 88. However, this portion of the APE was paved over. Nonetheless, unpaved areas adjacent to the APE were closely examined for any evidence of historic or prehistoric archaeological deposits that may extend into the APE under the pavement.

The entire APE was examined along transects approximately three meters apart or less. Vegetation was low and visibility of the ground surface encompassed approximately 50 percent of the APE. It is unlikely that any significant archaeological resources were overlooked.

STUDY FINDINGS AND CONCLUSIONS

No archaeological resources were identified within the project APE. This conclusion is based on the above efforts including a records search, Native American contacts, review of historic maps, local and regional published histories, and field inspection by a qualified senior archaeologist. Pitt Street within the APE appears to have been built on cuts and fills. The north side of SR 88 within the APE appears to have been constructed on considerable fill.

Though unlikely, if previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.

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APPENDIX A: MAPS

Figure 1. Study vicinity map.

Figure 2. Study location map.

Figure 3. Study coverage map (Area of Potential Effect).

APPENDIX B: OTHER FIGURES

Figure 4. Pitt Street Bridge APE looking northeast across State Route 88 from Center Street.

Figure 5. Looking northeast towards Pitt Street bridge from southwest end of APE.

Figure 6. Looking southeast from upstream side of Pitt Street bridge across State Route 88 toward neighborhood south of APE.

Figure 7. Looking northwest at neighborhood north of the Pitt Street bridge.

APPENDIX C: RECORDS SEARCH RESULTS

This attachment may contain information on the specific locations of archaeological resources. This information is not for publication or release to the general public. It is for planning, management and research purposes only. Infor-mation on the locations of prehistoric and historic sites are exempted from the California Freedom of Information Act, as specified in Government Code §6254.10.

APPENDIX D: NATIVE AMERICAN COORDINATION

CONSULTATION LOG

Native American Heritage Commission
1550 Harbor Boulevard
West Sacramento, CA 95691

March 4, 2014
Consultant faxed letter to commission requesting a sacred lands file search and list of Native American contacts for the Pitt Street Bridge Replacement Project.

March 6, 2014
The Native American Heritage Commission responded to the consultant's request. A search of the sacred lands file indicated that the project may impact the Jackson Court House site (CA-AMA-499). Commission staff recommended contacting the Jackson Band of Mi-Wuk Indians for specific information regarding this site. The commission also included a list of Native American contacts.

Mr. Dwight Dutschke
9820 5 Mile Drive
Ione, CA 95640

May 12, 2014
Consultant posted a letter to all contacts listed by the commission describing the proposed project and asking for any information or concerns regarding known or suspected sites of Native American significance that may be impacted by the proposed project. No reply was received.

June 13, 2014
Consultant attempted to contact Mr. Dutschke by telephone using the only number provided by the commission. However, the number had been disconnected. No new telephone number was offered by the automated response from the service provider. No reply has been received to date.

Mr. Randy Yonemura
4305-39th Avenue
Sacramento, CA 95824

May 12, 2014
Consultant posted a letter to all contacts listed by the commission describing the proposed project and asking for any information or concerns regarding known or suspected sites of Native American significance that may be impacted by the proposed project. No reply was received.

June 13, 2014
Consultant attempted to contact Mr. Yonemura by telephone. However, the consultant left a detailed message on Mr. Yonemura's voice mail. No reply has been received to date.

Mr. Irvin Bo Marks, Chairperson
Jackson Band of Mi-Wuk Indians
P.O. Box 1090
Jackson, CA 95642

May 12, 2014
Consultant posted a letter to all contacts listed by the commission describing the proposed project and asking for any

information or concerns regarding known or suspected sites of Native American significance that may be impacted by the proposed project. No reply was received.

June 13, 2014
Consultant attempted to contact Mr. Bo Marks by telephone. However, staff indicated that Mr. Bo Marks had been replaced by Mr. Adam Dalton. The consultant left a detailed telephone message for Mr. Dalton. No response has been received to date.

Jackson Band of Mi-Wuk Indians
Mr. Sam Baugh, Cultural Resources Representative
1580 Long Gate Road
Plymouth, CA 95669

May 12, 2014
Consultant posted a letter to all contacts listed by the commission describing the proposed project and asking for any information or concerns regarding known or suspected sites of Native American significance that may be impacted by the proposed project. No reply was received.

June 13, 2014
Consultant attempted to contact Mr. Baugh by telephone. However, staff indicated that Mr. Baugh was no longer the cultural resources representative and his position has not been refilled. Staff commented that the Tribal Council may take on the responsibility held by Mr. Baugh, although no decision has been made. No further directions were received from the tribe.

Ms. June Ortega Geary
P.O. Box 6675
Colusa, CA 95927

May 12, 2014
Consultant posted a letter to all contacts listed by the commission describing the proposed project and asking for any information or concerns regarding known or suspected sites of Native American significance that may be impacted by the proposed project. No reply was received.

June 13, 2014
Consultant attempted to contact Ms. Geary by telephone. However, there was no answer and no voice mail connection. No reply has been received to date.

Ms. Beatrice Mae Ortega Crabtree
390 Rio Linda #5
Chico, CA 95926

May 12, 2014
Consultant posted a letter to all contacts listed by the commission describing the proposed project and asking for any information or concerns regarding known or suspected sites of Native American significance that may be impacted by the proposed project. No reply was received.

June 13, 2014
Consultant would have attempted to contact Ms. Crabtree by means other than the U.S. mail. However, the commission did not have a phone number or other means of contact for her.

HISTORIC PROPERTY SURVEY REPORT

1. UNDERTAKING DESCRIPTION AND LOCATION

District	County	Route	Post Miles	Unit	E-FIS Project Number	Phase

District	*County*	*Federal Project. Number. (Prefix, Agency Code, Project No.)*	*Location*
10	AMA	5141 (018)	Jackson

For Local Assistance projects off the highway system, use headers in italics

Project Description:

The City of Jackson, in cooperation with the California Department of Transportation, is planning to replace the Pitt Street at Middle Jackson Creek bridge (Bridge No. 26C0008) (see Figures 1 and 2, Attachment A). The existing bridge would be removed, stored for future use and replaced with a new bridge. The vertical alignment of the new bridge would not vary significantly from the existing profile. The new bridge would be about 8-10 feet wider than the existing bridge. The new bridge would also be a few feet longer than the old one to improve hydraulics of the creek. Construction would include new abutments, new wing walls and new retaining walls to match the existing adjacent stacked rock walls. Abandoned utilities will be removed; utilities in use will be replaced and/or relocated to accommodate the new bridge and abutments. Staging would be located on the existing Pitt Street roadway by temporary construction easement. Ingress and egress would be along existing roads.

2. AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) for the project was established in consultation with with Gary Scholze PQS/PI—Prehistoric Archaeology, Joshua Wafer PQS-Architectural History, and Parminder Singh Local Assistance Engineer, on July 3, 2014. The APE map is located in Figure 3, Attachment A in this Historic Property Survey Report.

The Direct APE (Area of Direct Impact) encompasses Pitt Street including the existing bridge from its connection with State Route 88 to and including its connection with Water Street, as well as the creek channel approximately 170 feet downstream (southwest) and 190 feet (northeast) from the existing bridge. The Indirect APE encompasses four residential parcels: APNs 020-200-028 (416 Water Street), 020-245-003 (409 Water Street), 020-246-005 (408 Water Street) and 020-246-004 (402 Water Street). The vertical APE is unknown, as the depth of the existing bridge abutments to be removed is unknown. It is anticipated that excavation of the existing abutments to place new abutments would be the maximum depth of excavation.

3. CONSULTING PARTIES / PUBLIC PARTICIPATION

_x_ Native American Tribes, Groups and Individuals (This is the complete list from NAHC)

- Dwight Dutschke. Initial contact by US mail in a letter dated 5-12-2014. There was no response. Attempted contact by telephone on 6-13-2014. Phone was disconnected. No further response.
- Randy Yonemura. Initial contact by US mail in a letter dated 5-12-2014. There was no response. Attempted contact by telephone on 6-13-2014. Left detailed voicemail message. No further response.
- Irvin Bo Marks, Chairperson, Jackson Band of Mi-Wuk Indians. Initial contact by US mail in a letter dated 5-12-2014. There was no response. Attempted contact by telephone on 6-13-2014. Tribe's staff indicated that Bo Marks had been replaced by Adam Dalton. Left detailed voicemail message for Mr. Dalton. However, there was no response.
- Sam Baugh, Cultural Resources Representative, Jackson Band of Mi-Wuk Indians. Initial contact by US mail in a letter dated 5-12-2014. There was no response. Attempted contact by telephone on 6-13-2014. Tribe's staff indicated that Mr. Baugh was no longer the cultural resources representative and his position has not be refilled. Staff commented that the tribal council may take on Mr. Baugh's duties, however, no decision has been made. No further directions were received from the tribe.
- June Ortega Geary. Initial contact by US mail in a letter dated 5-12-2014. There was no response. Attempted contact by telephone on 6-13-2014. However, there was no answer and no voice mail connection. No reply to the original letter has been received to date.

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- Beatrice Mae Ortega Crabtree. Initial contact by US mail in a letter dated 5-12-2014. There was no response. Attempted contact by telephone on 6-13-2014. However, the commission did not have a phone number or other means of reaching Ms. Geary for comment.

x Native American Heritage Commission

- 3-4-2014. Sub-consultant requests sacred lands file search of the Commission.
- 3-6-2014. Commission responds with a letter report indicating that the project may impact the Jackson Court House site (CA-AMA-499). Commission staff recommended contacting the Jackson Band of Mi-Wuk Indians for specific information regarding this site. The commission attached a list of Native American contacts (see above).

4. SUMMARY OF IDENTIFICATION EFFORTS

Delete this instruction line and statements below that are not applicable.

x National Register of Historic Places
x California Register of Historical Resources
x California Inventory of Historic Resources
x California Historical Landmarks
x California Points of Historical Interest
x California Historical Resources Information System (CHRIS)
x Caltrans Historic Highway Bridge Inventory
_ Caltrans Cultural Resources Database (CCRD)

x Other Sources consulted *[e.g., historical societies, city archives, etc. List names and dates below]*

- Amador County Assessor's Office, various times, 2014.
- Tristan Tosier, State Office of Historic Preservation, various times, 2014
- California State Library, various times, 2014

_ **Results:** *(Provide a brief summary and research results, as well as inventory findings.)*

- The North Central Information Center, California Historical Resources Information System, completed a records search of the APE and a one-eighth mile radius beyond the APE on March 4, 2014. The Directory of Properties in the Historic Property Data File identified the Pitt Street Bridge (Bridge No. 26C0008) as determined eligible for the National Register under criteria A and C by the Keeper in 1985. A re-evaluation was conducted in 2004 by JRP Historical Consulting. As a result, the 2006 updated Caltrans Bridge Inventory listed the bridge as eligible for the National Register. No other listings are cited for the APE. However, the Historic Property Data File listed the Jackson Downtown Historic District as listed on the National Register under Criterion A by the Keeper in 2000. The district is located well outside the Pitt Street bridge APE. The information center listed 32 cultural resources located within the records search area including CA-AMA-499, the Jackson Court House site. However, none of the buildings or sites listed by the information center is located within the APE with the exception of the Pitt Street bridge (Bridge No. 26C0008).
- While the information center produced listings that included the Jackson Downtown Historic District, information center staff could not produce a map showing the district's boundaries. On various dates, the consultant contacted Tristan Tosier at OHP who located the National Register Nomination forms for the district and transmitted the forms to the information center where staff in turn provided a copy of the documents to the consultant.
- In a letter dated March 6, 2014, the Native American Heritage Commission reported that the Pitt Street Bridge Replacement Project may impact the Jackson Court House site (CA-AMA-499). Commission staff recommended contacting the Jackson Band of Mi-Wuk Indians for specific information regarding this site. The consultant attempted to make contact on several occasions. However, the tribe did not provide any specific direction (see above). The records search located the site well outside of the Pitt Street bridge APE.
- Archaeological field inspection was conducted by Ric Windmiller, M.A., R.P.A. on March 7, 2014. Windmiller inspected the creek channel and all other exposures within the Direct APE along zig-zagging transects no more than three meters apart. No prehistoric or historic archaeological resources were identified (see ASR, Attachment B).

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- Historic architectural field inspection was conducted by historian Katherine Vallaire, M.A. on May 15, 2014. The Indirect APE included four parcels. The residences on each parcel were documented on DPR forms and evaluated by Vallaire. None of the buildings were found eligible for the National Register or the California Register (see HPSR, Attachment C). Based on the above research, no historical resources or historic properties will be affected with the exception of the Pitt Street bridge, which was listed on the National Register by the Keeper under Criteria A and C.

5. PROPERTIES IDENTIFIED

x The following cultural resources within the APE are **not eligible** for inclusion in the National Register of Historic Places:

- **416 Water Street (APN 020-200-028)**
- **409 Water Street (APN 020-245-003)**
- **408 Water Street (020-246-005)**
- **402 Water Street (020-246-004)**

(See Attachment D: HRER)

x The following properties within the APE **previously were listed or determined eligible** for inclusion in the National Register of Historic Places and that determination is still valid. *(Include date of listing or determination)*:

- Bridge No. 26C0008 determined eligible under criteria A and C by the Keeper in 1985 (see Attachment D: HRER)

6. HPSR to District File

x Not applicable.

7. HPSR to SHPO

x Caltrans has determined there are properties within the APE that were evaluated as a result of the project and are **not eligible** for inclusion in the National Register of Historic Places; see Section 5. Under Section 106 Programmatic Agreement Stipulation VIII.C.6, Caltrans requests SHPO's concurrence in this determination.

x Caltrans has determined there are properties within the APE that were evaluated as a result of the project and are **eligible** for inclusion in the National Register of Historic Places; see Section 5. Under Section 106 Programmatic Agreement Stipulation VIII.C.6, Caltrans requests SHPO's concurrence in this determination.

x Caltrans, in accordance with Section 106 Programmatic Agreement Stipulations IX.B and X, will continue consultation with SHPO on the assessment of effects.

8. HPSR to CSO

x Not applicable.

9. Findings for State-Owned Properties

*(Check all that apply. Copy to CSO. **Transmit to SHPO**. If State-owned buildings or structures were evaluated or there are previously identified State-owned historic properties within the APE. **Delete this instruction line and findings that are not applicable.**)*

x Not applicable; project does not involve Caltrans right-of-way or Caltrans-owned property.

_ Caltrans has determined that **the State-owned resources** (built environment and archaeological resources) within the APE **do not require evaluation or are exempt from evaluation** because they meet the criteria set forth in the Section 106 Programmatic Agreement Attachment 4 (Properties Exempt from Evaluation) **or were previously determined not eligible** for inclusion in the National Register of Historic Places and/or registration as a California Historical Landmark and that determination is still valid; see Section 5.

_ Caltrans has evaluated and concluded that there are **State-owned resources** (built environment, archaeological and non-structural resources) within the APE that **do NOT meet National Register of Historic Places and/or California Historical Landmark** eligibility criteria;

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see Section 5. Pursuant to PRC 5024(b), Caltrans requests SHPO's concurrence in this determination.

- Caltrans has evaluated and determined that there are **State-owned archaeological sites, landscapes, non-structural resources** within the APE that **meet the National Register of Historic Places criteria and/or California Historical Landmark** eligibility criteria; see Section 5. Pursuant to PRC 5024(f), Caltrans is providing notice and summary to and requests comments from SHPO.
- Caltrans has evaluated, and pursuant to PRC 5024(b), requests SHPO's concurrence in the determination that there are **State-owned buildings, structures, objects and districts** within the APE that **meet National Register of Historic Places and/or the California Historical Landmarks** eligibility criteria. Additionally, Caltrans **requests that SHPO add these resources to the Master List** of Historical Resources pursuant to PRC §5024(d).
- Caltrans has determined that this project will have **no effect** to **state-owned archaeological sites, landscapes, non-structural resources** within the APE that meet National Register of Historic Places and/or California Historical Landmarks eligibility criteria, is providing notice and summary to and requests comments from SHPO pursuant to PRC §5024(f). [*List the resource(s) and explain why they would not be affected.]*
  -
- Caltrans has concluded that this project will have **no effect** on **state-owned buildings, structures, objects, and districts** within the APE that meet National Register of Historic Places and/or California Historical Landmarks eligibility criteria and is providing notice and summary to and requests concurrence from SHPO pursuant to PRC §5024.5. [*List the resource(s) and explain why they would not be affected.]*
  -
- Caltrans has determined that this project will have **no adverse effect** to **state-owned archaeological sites, landscapes, non-structural resources** within the APE that meet National Register and/or California Historical Landmarks eligibility criteria and is providing notice and summary to and seeks comments from SHPO pursuant to PRC §5024(f). *[List the resource(s) and refer to Standard Conditions – ESA above, or include description of proposed treatments, ESAs, protective covenants, etc., below or indicate below which HPSR attachment contains the description.]*
  -
- Caltrans has concluded that this project will have **no adverse effect** on **state-owned buildings, structures, objects, districts** within the APE that meet National Register of Historic Places and/or California Historical Landmarks eligibility criteria. *[Name of Caltrans PQS]*, who meets the Professionally Qualified Staff Standards in Section 106 Programmatic Agreement Attachment 1 as Principal Architectural Historian, has reviewed the documentation and concluded that it meets the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. Caltrans is providing notice and summary to SHPO and requests SHPO's comments pursuant to PRC §5024.5. *[List the resource(s) and indicate reference to Standard Conditions –ESA or Standard Conditions-SOIS above, or include description of proposed work, ESAs, protective covenants, etc., below or indicate below, which HPSR attachment contains the description.]*
  -
- For **state-owned qualified historical buildings and properties** within the APE, Caltrans has **applied the California Historical Building Code** (CHBC) to relevant sections of the current code(s) and/or standards and, if applicable, has consulted with the California Historical Building Safety Board (SHBSB) through its Executive Director pursuant to Health and Safety Code Section 18961 and its implementing regulations at California Code of Regulations Title 24 Part 8 Section 8-103.2.(*Indicate below whether use of current code(s) and standards adversely affected character-defining features of the property and describe the alternative solutions under the CHBC, or indicate below which HPSR attachment contains the description. If applicable, attach copies of correspondence with the SHBSB or its Executive Director.)*
  -

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10. CEQA Considerations

(Check all that apply. Consultation with SHPO is not required under CEQA. ***Delete this instruction line and findings that are not applicable.****)*

x Not applicable; Caltrans is not the lead agency under CEQA.

11. List of Attached Documentation

(Provide the author/date and peer reviewer/date of the technical report. ***Delete this instruction line and documentation that is not applicable.****)*

X Project Vicinity, Location, and APE Maps (Attachment A)

X California Historic Bridge Inventory sheet (Attachment B)

X Historical Resources Evaluation Report (HRER) (Attachment D)

- Windmiller, Ric and Katherine Vallaire. 2014. Historic Resources Evaluation Report, Pitt Street Bridge Replacement Project, City of Jackson, Amador County, California.

X Archaeological Survey Report (ASR) (Attachment C)

- Windmiller, Ric. 2014. Archaeological Survey Report, Pitt Street Bridge Replacement Project, City of Jackson, Amador County, California.

_ Archaeological Evaluation Report (CARIDAP, XPI, PII, PIII)

-

_ Environmentally Sensitive Area (ESA) Action Plan

-

_ Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) Action Plan

-

_ Other *(Specify below)*

-

12. HPSR Preparation and Caltrans Approval

Prepared by: *(sign on line)*

Consultant / discipline:	*Ric Windmiller PQS-PI, Prehistoric and Historical Archaeology*	Date
Affiliation	*Ric Windmiller, Consulting Archaeologist* *2280 Grass Valley Hwy. #205* *Auburn, CA 95603*	

Reviewed for approval by: *(sign on line)*

District 10 Caltrans PQS discipline/level:	*Gary Scholze* *PQS-PI Prehistoric Archaeology*	Date

Reviewed for approval By: *(sign online)*

District 10 Caltrans PQS discipline/level:	*Joshua Wafer* *PQS-PI Architectural History*

Approved by: *(sign on line)*

District 10 EBC:	*Julie Myrah, Branch Chief* *Local Assistance and MPS* *Environmental Branch* *Caltrans District 10*	Date

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HISTORICAL RESOURCES EVALUATION REPORT
PITT STREET BRIDGE REPLACEMENT PROJECT
CITY OF JACKSON
AMADOR COUNTY, CALIFORNIA

BRLO-5141 (018)
Section 28, T.6N, R.11E MDM
Jackson, Calif. 7.5' USGS Quadrangle

By

Ric Windmiller, M.A.
Katherine Vallaire, M.A.

Prepared for

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Prepared by: _____ _____
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Joshua Wafer PQS-PI Date
Architectural History
Caltrans District 10

Approved by: _____ _____
Julie Myrah, Branch Chief Date
Local Assistance and MPS
Environmental Branch
Caltrans District 10

July, 2014

SUMMARY OF FINDINGS

The City of Jackson proposes to replace the Pitt Street at Middle Fork, Jackson Creek bridge, Amador County, California. The existing bridge would be removed, stored for future use and replaced with a new bridge. However, it is anticipated that the alignment of the new bridge will not vary significantly from the profile of the existing bridge, and will therefore not cause a significant visual effect to the historic character of the neighborhood.

The California Department of Transportation (Caltrans), acting as the lead agency under the delegated authority of the Federal Highway Administration (FHWA), is providing the project oversight as federal funds are involved that will be administered by District 10, Office of Local Assistance. The studies conducted for this project are consistent with Caltrans' responsibilities under the January 2004 *Programmatic Agreement (PA)Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California.*

Five cultural resources (the existing bridge and four residences on surrounding parcels) required evaluation. The existing bridge (Bridge No. 26C0008) is the only cultural resource located in the Area of Direct Impact (ADI). The bridge was constructed in 1925. Its National Register eligibility was re-evaluated as "eligible" in 2004 by JRP Historical Consulting, the results of which were published in the 2006 updated Caltrans Bridge Inventory. As a National Register-eligible property, the bridge is automatically eligible for the California Register of Historical Resources.

Residences on four parcels encompassed by the Indirect APE were evaluated for both the National Register and California Register under each criterion of eligibility. In conducting the evaluation, potential association between the residences and the nearby Jackson Downtown Historic District was considered. Though three of the four residences were built within the historic district's period of significance (1900, 1909, 1920), none of the four residences are directly related to the district's themes of commercial, government and civic development. The fourth residence was built in 1964, well outside of the historic district's period of significance (1857-1949). All four residential properties have been impacted by alterations, including repairs using modern materials and changes in design.

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PROJECT DESCRIPTION

The proposed project would replace the existing Pitt Street bridge over Jackson Creek (Bridge No. 26C0008) and tie-in with Pitt Street and State Route 88 in the City of Jackson, Amador County, California (see Figures 1 and 2). The existing bridge is classified as structurally deficient. The structure was built by an unknown agency and it is presumed that the abutments are constructed of masonry block or concrete on unknown footings.

Pitt Street is constrained between two privately owned residences at the northwest end of the existing bridge. Due to limited work space, the existing bridge would be completely removed to the City's Corporation Yard prior to new construction. The old bridge will be stored and later reused. The proposed new bridge would be a one-lane Cast-in-Place prestressed slab spanning 54 feet in length and 32 feet in width. In addition, there would be a six foot wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The vertical alignment of the new bridge would not vary significantly from the existing profile. The new bridge would be about 8-10 feet wider than the existing bridge. The new bridge would also be a few feet longer than the old one to improve hydraulics of the creek.

Construction would include new abutments, new wing walls and new retaining walls to match the existing adjacent stacked rock walls. A 10-inch sewer line buried in the creek channel slightly west of the middle of the existing bridge would be replaced. An eight inch water line and storm drain are integrated into the existing abutment. Portions of those lines would be removed as part of the demolition work. Overhead electric lines near the second abutment provide power to three residences across the creek. During construction, the guy wires would be temporarily relocated. An existing 12-inch drainage pipe that spills from the second abutment would be relocated through the new abutment. A four inch abandoned waterline on the downstream side of the existing bridge would be removed. And eight inch water line buried in the Pitt Street alignment and extending down to the first abutment would be permanently relocated about three feet to the southwest.

Staging would be located on the existing Pitt Street roadway by temporary construction easement. The road within the Area of Potential Effect (APE) would be fully closed during construction. Ingress and egress would be along existing roads.

Area of Potential Effect

The Area of Potential Effect (APE) encompasses Pitt Street from its tie-in with State Route 88 through its intersection with Water street, which includes the existing Pitt Street Bridge (Bridge No. 26C0008), as well as the Jackson Creek channel approximately 170 feet downstream (southwest) and 190 feet (northeast) from the existing bridge. This describes the Direct APE or Area of Direct Impact (ADI). The Indirect APE includes adjacent parcels APNs 020-200-028 (416 Water Street), 020-245-003 (409 Water Street) and 020-246-005 (408 Water Street) for their relation to the existing bridge and potential overall ties to the Jackson Downtown Historic District. The Indirect APE also includes nearby APN 020-246-004 (402 Water Street) because of its connection to the existing bridge by sight (see Figure 3).

RESEARCH METHODS

The sources consulted include the North Central Information Center, California Historical Resources Information System; the Native American Heritage Commission; Native American contacts listed by the Commission; local residents; California Office of Historic Preservation; Amador County Assessor's Office, published and unpublished references and maps in the consultant's own library, including but not limited to all five volumes of *Logan's Alley* by the late Amador County Archivist (Cenoto 1988a, 1988b, 2000, 2003, 2006); The reprinted 1927 *Amador County History* by Federation of Women's Clubs (Cenotto 1977); *History of Amador County* (Mason 1881); Donald S. Napoli's "Jackson Downtown Historic District, National Register of Historic Places Registration Form" (Napoli 1999) and; JRP Consulting's 2004 evaluation of the existing Pitt Street bridge (Bridge No. 26C0008) in *Caltrans Historic Bridges Inventory Update* (Hope and Feldman 2004).

The records search by the North Central Information Center included the listing of cultural resource records and surveys within a one-eighth mile radius of the APE, as well as historic properties listed on the Office of Historic Preservation's Historic Property Data File for Amador County–2012, Determination of Eligibility --2012, National Register of Historic Places–2004, California Inventory of Historic Resources--1976, Caltrans Bridge Inventory–2009, historic maps (1870 GLO plat for the township; 1888 Jackson USGS quadrangle; 1962 USGS Jackson quadrangle).

FIELD METHODS

Inspection of the Direct and Indirect Areas of Potential Effect was conducted by architectural historian, Katherine Vallaire on May 15, 2014. Buildings and the existing bridge located within the APE were examined and photographed, and notes taken regarding their approximate age, architectural style and integrity. Due to restricted access, close examination of each of the four adjacent or nearby properties (402, 408, 409 and 416 Water Street) located within the Indirect APE was not possible. Therefore photographs were taken and inspections were made from the streets.

HISTORICAL OVERVIEW

Jackson began as a place called *Bottileas* for the numerous bottles lying around a spring where the National Hotel now stands. In 1848, the place was a stopover for travelers between the Mokelumne River and Drytown. The first Caucasian resident was Louis Tellier, who lived in a log cabin (Cenotto 1977:53).

By September, 1850, placer mining was at its height in the Jackson area. South of Jackson, Tunnel Hill and Butte City were very rich diggings at this time. Gold was recovered mainly by use of rockers and long toms. The native people prospected in Indian Gulch near the present location of Jackson's county hospital. They recovered gold by sharing scarce water to operate their rockers (Cenotto 1977:54-57).

Most of the important lode mines were discovered in the 1850s. For example, the Moore Mine and the original Kennedy claim were both started in 1856 (Cenotto 1977:57; Bowen and Crippen 1948:62). By the time of its closure in 1942, the Kennedy had achieved a vertical depth of 5,912 feet with approximately 150 miles of underground workings. The nearby Argonaut Mine was first worked in 1850. The mine was expanded along inclined shafts to a depth of 6,300 feet on the incline and included eight miles of drifts, crosscuts and tunnels, four miles of raises and 50 miles of stope floors. Other lode mines in the Jackson vicinity included the Zeile, South Jackson, Bell Weather and Ratto (Bowen and Crippen 1948:64).

By 1860, Jackson's downtown was well established. The population of the town was about 1,000. Placer mining was the mainstay of the local economy. Mines farther away depended on Jackson for supplies. As placer mining waned, lode mining increased. The Chinese who worked the marginal placer mines, left. Jackson's Chinatown, located on Main Street since the 1850s, lost its vitality. However, commercial uses of the downtown remained much the same. Street level establishments focused on the retail trade. Offices and sleeping rooms occupied the second story in two story buildings (Napoli 1999:33).

From the mid-1860s to the late 1880s there was little growth in the business activity of downtown Jackson. However, as lode mining progressed, the local economy improved. Gold production increased dramatically as the Kennedy Mine pushed its first deep shaft in 1885 and the Argonaut expanded its workings in the mid-1890s. Other smaller mines also increased production during the same period. As a consequence, the local population increased by a third during the 10 year period of 1890-1900. Downtown businesses prospered. New buildings were put up along Main and Court streets including Jackson's first bank, the Bank of Amador. The downtown district's largest hotels, the National and the Globe, added a third story. The County government expanded from the courthouse, adding a Hall of Records next door. The City incorporated in 1905 (Napoli 1999:34).

Local mines remained busy from 1900 to the start of World War II. However, the need for additional miners did not increase significantly. According to architectural historian, Donald S. Napoli, the City's population reached 2,035 in 1910, dropped to 1,601 in 1920 then increased to 2,005 in 1930 and 2,024 in 1940. During this period, the downtown district was kept up to date but did not expand (Napoli 1999:34).

A major shift occurred with the advent of the automobile. Livery stables were replaced by gas stations and automotive repair facilities. Prohibition also had a major effect by shutting down the most popular business, saloons. Only half of them returned to business at the close of Prohibition in 1933. Motion picture entertainment was added to gambling and prostitution. New commercial buildings were put up. Several chain stores opened: Safeway and Sprouse-Reitz. The downtown district maintained its status as Jackson's commercial, governmental and civic center.

The local economy did not enjoy any benefit from the war. All of the area's mines were closed down in 1942 by order of the War Production Board. Many of the local workers left for jobs in the San Francisco Bay area and did not return after the war. The principal mines did not reopen. The City's population dropped by an estimated seven percent in the decade of the 1940s. The downtown district remained as the City's hub of activity, which was principally retail shops. Night clubs offered gambling and brothels operated openly. Fraternal organizations, women's

societies and labor unions met in lodge halls, while other groups met in the National Hotel and the Women's Club Building.
Napoli concluded that the Jackson Downtown Historic District's period of significance began in 1857 with construction of the earliest building that did not experience substantial changes. The ending date was reckoned at 1949, after which any construction had no exceptional significance. To quote Napoli, "No other area of the city was nearly as important during the period or has the same historical associations" (Napoli 1999:36).

Many of Jackson's early settlers came to California by covered wagon. The Bartons were no exception. Henry Barton, his wife and children arrived in 1853 and settled on Water Street, which was then called, "Snougerville" after a local landowner. The house and several others in Jackson were made from lumber sawed at a mill that stood at the foot of Water Street (Cenotto 1977:54).

The residential neighborhood immediately adjacent to the Pitt Street Bridge, including the Water Street houses next to Jackson Creek have been subject to flooding just as that portion of the Jackson Downtown Historic District downstream from the bridge. Therefore, it is no surprise that the existing residences date to various periods up to and including the 1960s. Many of the older houses have undergone significant alterations in attempts to modernize their appearance or execute repairs.

DESCRIPTION OF CULTURAL RESOURCES

The cultural resources identified within both the Direct and Indirect APE include an existing bridge (Bridge No. 26C0008) built in 1925 and houses on four lots: APNs 020-200-028 (416 Water Street), 020-245-003 (409 Water Street), 020-246-005 (408 Water Street) and 020-246-004 (402 Water Street).

Bridge No. 26C0008. The existing Pitt Street bridge was built in 1925. The structure consists of a single span steel Pratt pony truss with timber decking on steel floor beams, all supported by masonry abutments. The bridge supports a steel sidewalk four feet, six inches wide with timber decking cantilevered from the upstream side of the structure. In 2013, the City replaced approximately six inches of asphalt to the top of the bridge surface overlaying the wood planks.

416 Water Street (APN 020-200-028). Built in 1909, this Folk National style house has a T-shaped footprint and full basement. The house has a moderately pitched cross-gabled roof covered in modern composite shingles. The entry consists of a wrap-around porch shaded by a dropped roof that is supported by four decorative posts. The house is clad in a mixture of horizontal wood board and vinyl siding. The original brick chimney has been cut and capped by the overhanging eaves of the new roof. Fenestration includes modern vinyl and aluminum sliding windows. The rear of the house contains a basement entry that is recessed beneath the first story overhang of the house. Multiple modern windows have been added to allow light into the basement. The new roofing was added in 1990. The porch foundation was replaced in 1991. In 1997, the house was damaged by a flood and the lower level was repaired in a modern design. In 1999, the redwood deck was installed over the existing siding on the south and west elevations.

409 Water Street (APN 020-245-003). This Folk National style residence was constructed in 1900. Designed as a "high water"residence, the building includes an attic and full basement set within a concrete stem foundation. The house has a moderate-pitched, front-gabled roof that extends into a hipped roof over its cross-section. The roof is clad with modern composite shingles installed in 2005. The exterior is a composite of horizontal wood boards and vinyl siding. Entrances include an inset porch at the cross-section, a porch at the front of the house under the attic overhand, and a centered, recessed basement entry also at the front of the house. Fenestration includes multiple modern vinyl and aluminum fixed and sliding windows. Modern additions to the rear of the house as well as modern improvements have been added over time. The property also includes a separate garage converted into a shed or office located at the rear of the parcel. The converted garage has a rectangular plan, a hipped-front gabled roof clad in modern composite shingles and horizontal vinyl siding.

408 Water Street (APN 020-246-005). This 1,364 square foot residence with detached garage was constructed in 1964. Built on rectangular plan, the house is single story with a partial basement. The house has a moderately-pitched side gabled roof with overhanging eaves. The northeastern roof eave extends over the front porch and is supported by metal porch supports connected to a metal railing. The house is clad in horizontal wood beam siding. The main entrance faces Pitt Street and is accessed from the front porch. The rear entrance is accessed from a wooden stairway that leads up the east elevation of the house to the first level. There is also a basement door located near the northeast corner of the house. Fenestration includes aluminum and vinyl sliding windows located on the first level as well as the basement level. The detached garage has a square plan, moderately-pitched front gable roof covered in composite shingles, a modern garage door and vinyl windows.

402 Water Street (APN 020-246-004). This example of a Folk National style house was built in 1920. The residence was constructed on an L-shaped plan. The house rests on a full basement. Its roof is gable on hip clad in modern composite shingles. The main entry is located in an inset porch, supported by two decorative posts connected to the porch railing. The house is clad in modern horizontal vinyl siding. Fenestration includes modern vinyl fixed and sliding windows located on both the first story and basement. In the 1980s and 1990s, the house underwent numerous repairs including the deck railings, the stairway and siding. In 2009, the house was severely damaged by a fire and was not fully restored until 2010.

RESOURCE SIGNIFICANCE

Bridge No. 26C0008. The existing Pitt Street bridge was constructed in 1925. The earliest available Sanborn Fire Insurance map of the locality is dated 1898 and shows a footbridge crossing at the same site. By 1912, a vehicular bridge was built alongside the footbridge. Clearly there were a succession of bridges at the same location (Sanborn Map Company 1898, 1912). However, no vestige of the prior bridges remains. The current existing bridge serves a residential neighborhood nearly two blocks east of the east boundary of the Jackson Downtown Historic District. Although the existing bridge was built during the Downtown Historic District's period of significance, it is associated with a residential portion of the City and not the historic district, which is associated with the commercial, government and civic development of Jackson. However, in 2004, JRP Historical Consulting completed an update of the Caltrans Historic Bridges Inventory (Hope and Feldman 2004). An update of the inventory was completed in 2006.

Subsequently, the June, 2009 Caltrans listing of historical significance, local agency bridges for Amador County showed Bridge No. 26C008 listed on the National Register.

416 Water Street (APN 020-200-028). Dating back to 1909, this Folk National style house was built within the Jackson Downtown Historic District's period of significance. However, the house lies outside (east of) the historic district and is associated with the surrounding residential area as opposed to the commercial, government and civic themes of the Jackson Downtown Historic District. Therefore, the house is not a contributing resource of the historic district. Since its initial construction, the house has undergone considerable alterations. Although it is associated with residential development of Jackson in the early 1900s, it does not possess sufficient integrity of materials and design to convey any historical importance it may have had. The house is not associated with a significant individual, nor is it the work of a master or an exceptional example of its architectural style. It is unlikely to yield information to future researchers Therefore, the house is not eligible for listing on the National Register under Criterion A, B, C, or D, nor is it eligible for the California Register of Historical Resources under Criterion 1, 2, 3 or 4.

409 Water Street (APN 020-245-003). Like the residence at 416 Water Street, this Folk National style house was built within the Jackson Downtown Historic District's period of significance. However, the house lies outside (east of) the historic district and is associated with the surrounding residential area as opposed to the commercial, government and civic themes of the Jackson Downtown Historic District. Therefore, the house is not a contributing resource of the historic district. Since its initial construction, the house has undergone considerable alterations. Although it is associated with residential development of Jackson in the early 1900s, it does not possess sufficient integrity of materials and design to convey any historical importance it may have had. The house is not associated with a significant individual, nor is it the work of a master or an exceptional example of its architectural style. It is unlikely to yield information to future researchers. Therefore, the house is not eligible for listing on the National Register under Criterion A, B, C, or D, nor is it eligible for the California Register of Historical Resources under Criterion 1, 2, 3 or 4.

408 Water Street (APN 020-246-005). This mid-1960s residence was built long after the end of the Jackson Downtown Historic District's period of significance. In addition, the house lies outside (east of) the historic district. Although just 50 years old, the house is not sufficiently old to have gained any historical importance. The house is not associated with any architectural style and is not the best example of residential architecture of the period. The residence is not associated with a significant individual, nor is it the work of a master. It is unlikely to yield important information to future researchers. Therefore, the residence is not eligible for the National Register under Criterion A, B, C or D, nor is it eligible for the California Register under Criterion 1, 2, 3, or 4.

402 Water Street (APN 020-246-004). Constructed in 1920, this Folk National House has undergone significant alterations and repairs in recent years. Though built during the Jackson Downtown Historic District's period of significance, the house lies outside (east of) the historic district and is not associated with the historic district's commercial, government and civic themes, but rather the residential development of the period. However, the house does not retain sufficient integrity to convey any historical importance it may have had. Modern construction has seriously compromised its integrity of materials and design. The house is not associated with a significant individual, it is not the work of a master, and it is not an exceptional example of its architectural style. It is unlikely to yield information important to future researchers. Therefore, the residence is

not eligible for the National Register under Criterion A, B, C, or D, nor is it eligible for the California Register under Criterion 1, 2, 3, or 4.

FINDINGS AND CONCLUSIONS

The following property has been evaluated as eligible for the National Register of Historic Places by Caltrans and therefore is automatically eligible for the California Register of Historical Resources:

Name	Address	Community	OHP Status	MR #
Pitt Street Bridge Bridge #26C0008	Pitt Street at Middle Fork Jackson Creek	Jackson	3s	1

The following properties have been evaluated as not eligible for inclusion in the National Register or the California Register as a result of this study (Primary numbers have not yet been assigned by the information center; Street addresses are used to identify the properties):

Name	Address/Location	Community	OHP Status	MR #
Residence	416 Water Street	Jackson	6z	2
Residence	409 Water Street	Jackson	6z	3
Residence	408 Water Street	Jackson	6z	4
Residence	402 Water Street	Jackson	6z	5

Conclusions

The Area of Direct Impact (Direct APE) and the surrounding Indirect APE are located near but not adjacent to the Jackson Downtown Historic District, which is listed on the National Register of Historic Places. The themes represented by the historic district are local commercial, government and civic development. The historic district's period of significance is 1857-1949, after which any construction had no exceptional significance. To quote the architectural historian who authored the National Register nomination forms, "No other area of the city was nearly as important during the period or has the same historical associations" (Napoli 1999:36).

The APE, which includes the Area of Direct Impact and the Area of Indirect Impact is located in a residential part of Jackson. Though all but one building located within the APE were constructed during the historic district's period of significance, they are not directly related to the historic district's themes of commercial, government or civic development, nor are they located within or adjacent to the historic district.

Only one cultural resource was identified within the Area of Direct Impact: the existing Pitt Street bridge at the Middle Fork, Jackson Creek (Bridge No. 26C0008). The Pitt Street bridge (Map Reference #1) is listed as eligible for the National Register of Historic Places in the updated Caltrans Bridge Inventory of 2009 and is therefore automatically eligible for the California Register of Historical Resources. The bridge will be removed and stored for future use.

Four parcels in the immediate vicinity of the Pitt Street bridge are located within the Indirect APE: APNs 020-200-028 (416 Water Street), 020-245-003 (409 Water Street), 020-246-005 (408 Water Street) and 020-246-004 (402 Water Street). The residence at 416 Water Street (Map Reference #2) is not eligible for the National Register or the California Register under any criterion. The residence at 409 Water Street (Map Reference #3) is not eligible for the National Register or the California Register under any criterion. The residence at 408 Water Street (Map Reference #4) is 50 years old this year and is not eligible for the National Register or the California Register under any criterion. The residence at 402 Water Street (Map Reference #5) is not eligible for the National Register or the California Register under any criterion.

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1912 Jackson, Cal. Sanboran Map Company, New York.

PREPARERS' QUALIFICATIONS

Ric Windmiller, M.A., Registered Professional Archaeologist has more than 40 years experience conducting and directing archival and field research in prehistoric and historical archaeology, including both surveys and excavations in the western United States, Canada and Mexico. His most recent projects include the City of Folsom Manhole Access Roads Improvement Project; HPSR/ASR for the Garden Highway Improvements Project, City of Yuba City and; City of Rocklin's Sucker Ravine-Loomis Tributary "CLOMR."

Katherine Vallaire, M.A., Historian has 10 years experience in cultural resource management. Her most recent projects include documenting and evaluating the historic buildings and structures of the Aufdermauer Ranch Complex in eastern Sacramento County, historic buildings of the Jackson Township Specific Plan area and the Sierra College Rocklin Campus Master Plan Update.

APPENDIX A: MAPS

Figure 1. Study vicinity map.

Figure 2. Study location map.

Figure 3. Study coverage map (Area of Potential Effect).

APPENDIX B: DPR 523 FORMS

Appendix B

Community Impact Assessment

Pitt Street Bridge

COMMUNITY IMPACT ASSESSMENT

Federal Aid No.BRLO-5141 (018)

Prepared for:

City of Jackson
33 Broadway
Jackson, CA 95642
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California Department of Transportation District 10
1976 East Dr. Martin Luther King Jr. Blvd.
Stockton, CA 95205
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Prepared by:

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February 2014

Pitt Street Bridge

COMMUNITY IMPACT ASSESSMENT

Federal Aid No.BRLO-5141 (018)

Prepared for:

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February 2014

Prepared by: Paula Daneluk *Date: April 24, 2014*

Paula M. Daneluk, AICP
Development Impact, Inc.

Approved by: _____ *Date:* _____

California Department of Transportation
District 10

This Community Impact Assessment was prepared in consultation with Caltrans District 10 staff. The intent of this community impact assessment is to substantiate findings presented within the environmental document by acting as a technical support document.

PROJECT DESCRIPTION

The City of Jackson proposes to replace the historical Pitt Street Bridge in the City of Jackson. The proposed project is for the replacement of the existing bridge structure and the resulting tie-in with the existing Pitt Street and State Route 88 (SR88) would be accomplished within the existing right-of-way of Pitt Street; therefore, no additional right-of-way would be needed for the project. The existing bridge approaches from Water Street to the north and continues in a one-way southbound direction that carries Pitt Street over the middle fork of Jackson Creek towards SR88. Pitt Street would remain a one-way bridge and no traffic would be exiting from SR88.

The existing Pitt Street Bridge was built in 1925. The structure consists of a single span steel Pratt pony truss with timber decking on steel floor beams, all supported by masonry abutments. The existing bridge is classified to be structurally deficient; however it is eligible for listing in the Nationals Register of Historic Places. The existing bridge has a steel sidewalk (4'-6' wide) with timber decking cantilevered from the upstream side of the structure. Due to failure of the timber decking on the bridge, the City replaced approximately six (6) inches of asphalt to the top of the bridge surface overlaying the wood planks in 2013.

The existing structure is constructed within a creek channel on sandy silt. The creek channel is natural, however; the sides of the creek are lined with vertical rock walls. Due to the fact that the bridge was built by an unknown agency, it is presumed that the abutments are constructed out of masonry block or concrete on unknown footings, presumably concrete spread footings.

The bridge, located in the Jackson City Historical Corridor, is within a residential/commercial area. Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited work space, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the city's corp yard for storage and later reused. The construction of the proposed project will be performed during the summer time and all pertinent permits will be obtained prior to any work in the stream channel. The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge. The last major storm overtopped the deck by about 1 foot.

The existing bridge would be removed and replaced with a widened bridge and northern roadway (approximately 8-10 feet wider) at the crossing of Jackson Creek (see Figure X). In addition, the proposed bridge would also increase in length by a few feet in order to improve hydraulics of the creek. Construction would also consist of new abutments, new wingwalls and new retaining walls to match the existing adjacent stacked rock walls.

The proposed bridge would be a one-lane Cast-in-Place (CIP) prestressed slab spanning fifty-four (54) feet in length and thirty-two (32) feet in width. In addition, there would be a six (6) foot wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The total project limits are less than 150 feet. The vertical alignment of the new bridge would not vary significantly from the existing profile. The existing bridge structure depth is estimated to be three (3) feet below the deck level. The proposed roadway conforms to the existing ROW alignment at the SR88 shoulder and at the intersection of Pitt Street and Water Street.

There is a ten (10) inch sewer line buried in the creek channel, slightly west of the middle of the bridge that would be replaced. Near the southern private driveway there is an eight (8) inch water line and storm drain integrated into the existing abutment one (1) structure, so portions will be removed as part of the demolition work. There are overhead electric lines to the east side, near abutment two (2), providing power to three (3) residences across the creek. During construction the guy wires would be temporarily relocated. There is also an existing twelve (12) inch drainage pipe day lighting out of abutment two (2) that would be relocated through the new abutment. On the downstream side of the existing bridge, there is a four (4) inch abandoned waterline that would be removed. There is an eight (8) inch waterline buried in the Pitt Street alignment and extending out of the existing abutment one (1) face. This waterline will be permanently relocated.

Equipment staging would be located on the existing Pitt Street roadway through the use of a temporary construction easement. The road within the project area would be fully closed during the project construction and detour routes would be made available to maintain access to all residential properties affected by the closure. Nearby residents will be subject to construction noise during the project and the hours of construction will consider these impacts. The construction equipment needed for the removal and demolition of the existing structure includes backhoes, concrete saws, torches, jackhammers, and cranes. The equipment anticipated for the construction of the new bridge includes backhoes, compactors, concrete pumps, and cranes.

IMPACTS

The following discussion is intended to describe the potential impacts to the community that could result from the construction and operation of the proposed project and the efforts taken by the community to address concerns and identify the proposed project location.

As indicated in the project description, this project is relatively narrow in scope and does not involve a large area. During construction there would be minor temporary noise impacts which have been analyzed in the *Construction Noise Memorandum* (2012) prepared for the proposed project. Accordingly, with the limitation of the construction to daytime hours no adverse impacts were identified. The project would require the removal of the existing bridge structure and the reconstruction of the replacement bridge. The roadway would be closed during this

time and a Traffic Management Plan (TMP) was prepared to address the detour and closure to ensure access to the surrounding properties and traffic flow in the area. The proposed project would not involve the acquisition of additional property since the project would be completed within the existing right-of-way and existing easements.

The proposed project will be developed in accordance with Title VI of the Civil Rights Act of 1964, which provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Consistent with this, the environmental justice analysis for the proposed project includes existing population estimates with the presence of minority and low-income population groups, community outreach and public involvement efforts, and a discussion of potential adverse effects and measures to minimize those effects for the population groups. The median income for the population group identified in the City of Jackson is $44,386 which is higher than the surrounding Amador County population which has a median income of $41,884. Within the City of Jackson, less than 2% of the total population are identified as minority groups, excluding the Hispanic or Latino population. The Hispanic or Latino populations represent 4.8% of the total population. Based on the current proportion of minority residents and median household incomes in the area, disproportionate impacts to minority and low-income populations are not anticipated as a result of the project. Based on the above discussion and analysis, the project will not cause disproportionately high and adverse effects on any minority or low-income populations regarding environmental justice as per Executive Order 12898.

The proposed project is a bridge replacement and would involve the removal of the existing bridge and construction of a new bridge at the existing bridge location. Although the proposed project is located entirely within the existing right-of-way of Pitt Street, the surrounding properties are zoned Limited Commercial, north of the project, properties on the east side, along Water Street, are zoned Historical Commercial, and the properties on the west side are zoned Residential Single Family. The proposed project is in compliance with the Comprehensive Plan (2010) as noted in the following Comprehensive Plan Goals and Objectives:

> *Objective 1: Update municipal infrastructure and facilities to meet the current and future needs of the entire community.*
>
> - *E. Maintain the existing infrastructure. A well-maintained infrastructure is very important to perceived neighborhood quality. Cracked sidewalks, streets with potholes and broken curbing portray images of neighborhood instability, declining property values and ruin. It is therefore imperative that neighborhood infrastructure be regularly inspected and maintained.*
>
> *Objective 2: Use transportation management tools to help the road system operate more efficiently*
>
> - *E. Implement the Federal transportation management systems. Continue the implementation of the federal transportation management systems for bridges,*

> *pavement conditions, congested corridors and alternative modes of travel. This process requires a thorough evaluation of road-widening projects.*

The proposed project would result in a positive effect of road system operations as well as maintaining infrastructure quality for neighborhood aesthetics and public safety. Furthermore, the proposed project would be consistent with the residential and historical zoning in the area and would not result in a substantial change in the land use pattern in the area.

QT-H1: General Housing Characteristics:
Census 2000 Summary File 1 (SF 1) 100-

Note: This is a modified view of the original table.

NOTE: For information on confidentiality protection, nonsampling error, definitions, and count corrections see http://www.census.gov/prod/cen2000/doc/sf1.pdf

Subject	Jackson city, California	
	Number	Percent
TENURE		
Occupied housing units	1,746	100.0
Owner-occupied housing units	983	56.3
Renter-occupied housing units	763	43.7
RACE OF HOUSEHOLDER		
Occupied housing units	1,746	100.0
One race	1,716	98.3
White	1,651	94.6
Black or African American	6	0.3
American Indian and Alaska Native	24	1.4
Asian	10	0.6
Native Hawaiian and Other Pacific	1	0.1
Some other race	24	1.4
Two or more races	30	1.7
HISPANIC OR LATINO HOUSEHOLDER		
Occupied housing units	1,746	100.0
Hispanic or Latino (of any race)	83	4.8
Not Hispanic or Latino	1,663	95.2
White alone	1,594	91.3

(X) Not applicable.

Source: U.S. Census Bureau, Census 2000 Summary File 1, Matrices H3, H4, H5, H6, H7, and H16.

Appendix C

Initial Site Assessment

Pitt Street Bridge Replacement

INITIAL SITE ASSESSMENT

Federal Aid No. 10-AMA-88-14.53
BRLO 5141 (018)

April 2014

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Introduction

This Initial Site Assessment (ISA) was prepared in consultation with Caltrans staff. This ISA was conducted in general conformance with the methods and procedures described in the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments" published in November 2005 and in conformance with the Caltrans Guidelines for Initial Site Assessments (ISA) Checklist for Hazardous Waste.

The objective of this assessment is to identify recognized environmental conditions (RECs) located within the Pitt Street Bridge Proposed Study Area (site) that could pose a potential hazardous materials/waste risk to public health or to the environment. Recognized environmental conditions are defined within ASTM Designation E-1527 as the presence or likely presence of any hazardous wastes and/or substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

This ISA includes the following:

- A review of the current and past uses.
- A site reconnaissance to assess evidence of current and/or past use or storage of toxic or hazardous material; ponds, landfills, drywells, waste streams or other disposal units; visible soil discoloration, aboveground storage tanks; electrical transformers containing polychlorinated biphenyls (PCBs); and drums, barrels and other storage containers.
- A visual review of adjacent properties to assess their potential to adversely impact the site.
- A review of available federal and state Environmental Protections Agency (EPA) lists of known or potential hazardous waste sites or landfills, and sites currently under investigation for environmental violations in the site area. Using area-profile services provided by Environmental Data Resources, Inc., Development Impact cataloged sites that have been identified on regulatory agency lists. Search criteria were in conformance with ASTM Standard E1527-05.
- Contact with relevant municipal, county and state agencies to review readily available records and permits.

This assessment specifically excluded cultural, archeological, and biological assessments, as well as, sampling and analysis for the potential presence of asbestos containing building materials, lead based paint, or an assessment for radon gas. Nor did the ISA include collection and/or analysis of air, soil, groundwater, or other environmental samples.

Project Description

The City of Jackson proposes to replace the historical Pitt Street Bridge in the City of Jackson. The proposed project is for the replacement of the existing bridge structure and the resulting tie-in with the existing Pitt Street and State Route 88 (SR88) would be accomplished within the existing right-of-way of Pitt Street; therefore, no additional right-of-way would be needed for the project. The existing bridge approaches from Water Street to the north and continues in a one-way southbound direction that

carries Pitt Street over the middle fork of Jackson Creek towards SR88. Pitt Street would remain a one-way bridge and no traffic would be exiting from SR88.

The existing Pitt Street Bridge was built in 1925. The structure consists of a single span steel Pratt pony truss with timber decking on steel floor beams, all supported by masonry abutments. The existing bridge is classified to be structurally deficient; however it is eligible for listing in the Nationals Register of Historic Places. The existing bridge has a steel sidewalk (4'-6' wide) with timber decking cantilevered from the upstream side of the structure. Due to failure of the timber decking on the bridge, the City replaced approximately six (6) inches of asphalt on the top of the bridge surface overlaying the wood planks in 2013.

The existing structure is constructed within a creek channel on sandy silt. The creek channel is natural, however; the sides of the creek are lined with vertical rock walls. Due to the fact that the bridge was built by an unknown agency, it is presumed that the abutments are constructed out of masonry block or concrete on unknown footings, presumably concrete spread footings.

The bridge, located in the Jackson City Historical Corridor, is within a residential/commercial area. Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited work space, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the City's Corporation Yard for storage and later reused. The construction of the proposed project will be performed during the summer time and all pertinent permits will be obtained prior to any work in the stream channel. The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge. The last major storm overtopped the deck by about 1 foot.

The existing bridge would be removed and replaced with a widened bridge and northern roadway (approximately 8-10 feet wider) at the crossing of Jackson Creek (see Figure 1). In addition, the proposed bridge would also increase in length by a few feet in order to improve hydraulics of the creek. Construction would also consist of new abutments, new wingwalls and new retaining walls to match the existing adjacent stacked rock walls.

The proposed bridge would be a one-lane Cast-in-Place (CIP) prestressed slab spanning fifty-four (54) feet in length and thirty-two (32) feet in width. In addition, there would be a six-foot wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The total project limits are less than 150 feet. The vertical alignment of the new bridge would not vary significantly from the existing profile. The existing bridge structure depth is estimated to be three (3) feet below the deck level. The proposed roadway conforms to the existing ROW alignment at the SR88 shoulder and at the intersection of Pitt Street and Water Street.

There is a ten (10) inch sewer line buried in the creek channel, slightly west of the middle of the bridge that would be replaced. Near the southern private driveway there is an eight (8) inch water line and storm drain integrated into the existing Abutment 1 structure, so portions will be removed as part of the demolition work. There are overhead electric lines to the east side, near Abutment 2, providing power to three (3) residences across the creek. During construction the guy wires would be temporarily relocated. There is also an existing twelve (12) inch drainage pipe day-lighting out of Abutment 2 that would be relocated through the new abutment. On the downstream side of the existing bridge, there is a four (4) inch abandoned waterline that would be removed. There is an eight (8) inch waterline buried

in the Pitt Street alignment and extending out of the existing abutment one (1) face. This waterline will be permanently relocated.

Equipment staging would be located on the existing Pitt Street roadway through the use of a temporary construction easement. The road within the project area would be fully closed during the project construction and detour routes would be made available to maintain access to all residential properties affected by the closure. Nearby residents will be subject to construction noise during the project and the hours of construction will reduce these impacts. The construction equipment needed for the removal and demolition of the existing structure includes backhoes, concrete saws, torches, jackhammers, and cranes. The equipment anticipated for the construction of the new bridge includes backhoes, compactors, concrete pumps, and cranes.

Project Location and Description of the Site

The site is situated in Jackson, California, on Pitt Street between Water Street and State Route 88 (SR88). The project would require the removal of the existing bridge structure and the reconstruction of the replacement bridge. The proposed project would not involve the acquisition of additional property since the project would be completed within the existing right-of-way. Although the proposed project is located entirely within the existing right-of-way of Pitt Street, the surrounding properties are zoned Limited Commercial, north of the project, properties on the east side, along Water Street, are zoned Historical Commercial, and the properties on the west side are zoned Residential Single Family. Appendix A contains a Site Location map. In addition, photographs were taken during the site reconnaissance and are in Appendix B.

Physical and Environmental Setting of the Site

Environmental characteristics including topography, geology, soils and hydrogeology were evaluated based on site observations, published literature, and maps.

Topography

Topographic map coverage of the Pitt Street Bridge site is provided by the United States Geological Survey (USGS), Jackson, California, 7.5-minute quadrangle map dated 1962. The site lies within the northern middle portion of Section 28, Township 6 North, Range 11 East, Mount Diablo Baseline and Meridian. According to the map, the site is located at an elevation of approximately 1,191 feet above mean sea level.

Geology

The site is located within the Foothills of the Sierra Nevada Mountains. The Sierra Nevada, a fault block dipping gently to the southwest, is composed of igneous and metamorphic rocks of pre-Tertiary age which comprise the basement complex beneath the valley (USGS, 1986). This region is typified by a belt of northwest-trending metamorphic, volcanic and igneous rocks, which have been sheared, deformed, and intruded during periods of tectonic and volcanic activity. In general, the bedding of the sedimentary

and meta-sedimentary units trend north to northwest and dip steeply to the east. The project site contains Maripoza Formation (Jm) (Geologic Map of the Sacramento Quadrangle, 1981), which is comprised of interbedded standstone, slate and tuffaceous sandstone (Bogen, 1984).

Soils

Review of the US Department of Agriculture, Natural Resources Conservation Service Websoil Survey for the site reveals that surface soils on the site are comprised of Placer Diggings and River Wash (PW), an excessively draining soil type that is mostly gravel and sand (United States Department of Agriculture, 2014).

Groundwater

Information pertaining to groundwater elevations and gradient data in the general site vicinity is limited. The California Department of Water Resources does not monitor groundwater wells in the site vicinity. According to Geotracker, the groundwater is estimated to be at an elevation of 1,191 feet in the surrounding area. However, the project site is the area within the streambed of Jackson Creek which is a perennial creek and the project is located within the floodplain of the creek. It is anticipated that surface water would be disturbed as well as groundwater encountered within the underlying rock.

Historical Information of the Site and Adjoining Properties

The City of Jackson was settled as a result of the discovery of gold in the area in 1848 during the California Gold Rush. The area surrounding the project site was originally settled as a mining camp. Currently, the surrounding properties are zoned Limited Commercial, north of the project, properties on the east side, along Water Street, are zoned Historical Commercial, and the properties on the west side are zoned Residential Single Family. The history of land-use on and near the site was determined from review of historic aerial photographs, topographic maps and interviews. The information is summarized in the following sections.

Sanborn Fire Insurance Map Review

The availability of Sanborn Maps with coverage of the site area was determined by Environmental Data Resources, Inc. (EDR). EDR is a national commercial provider of environmental database information. Sanborn Maps are detailed drawings of site development and were typically used by fire insurance companies to determine site for insurability. These maps are significant research tools because they often reveal potential hazardous materials issues that may be present on a particular site, such as automobile service garages, aboveground and surface indicators of underground fuel storage tanks.
Historical maps of the site and general vicinity covering the years 1898, 1912, and 1930, were obtained through Sanborn Maps, a publisher of historical and current city maps created to estimate fire insurance liabilities.

1898

There is a pedestrian bridge crossing Jackson Creek at the project site location. This pedestrian bridge is one of two (2) access points from the west side of town to the east side of town. Pitt Street south of the creek is visible and appears to end at the southern edge of the creek. There is a residential structure on either side of Water Street, to the north of Jackson Creek, at the end of the pedestrian bridge. There is a residence structure on the southern side of Jackson Creek, along the pedestrian bridge at the end of Pitt Street. The surrounding area is developed residential.

1912

The existing pedestrian bridge crossing Jackson Creek appears to have been expanded into a vehicular bridge at the project site location. Pitt Street south of the creek is visible where it previously ended at the southern edge of the creek; it has now been extended and turns into Center Street. It appears the residential structure on the southern side of Jackson Creek, has been moved away from Jackson Creek and closer to Pitt Street.

1930

The same conditions exist with the exception that the residence structure between Pitt Street and Jackson Creek has been increased in size.

Aerial Photographic Review

Historical aerial photographs of the site and general vicinity covering the years 1944, 1957, 1962, 1973, 1984, 1987, 1998, 2005, 2010, and 2012 were obtained through Environmental Data Resources, Inc. (EDR). The results of the maps and photographs were reviewed and are discussed below by year

1944

According to the aerial photographs of the project site, properties in the immediate vicinity of the project appear unchanged. There is mature vegetation along Jackson Creek.

1957

State Route 88 is now a main thoroughfare through town and connects to Pitt Street. The properties in the immediate vicinity of the project appear unchanged. There is a minor decrease in vegetation along the creek.

1962

Properties in the immediate vicinity of the project appear unchanged. Vegetation along the creek has decreased.

1973

The aerial photograph for this year is unclear in detail; however it is apparent that the project site remains unchanged. Vegetation in the area has increased.

1984

The project site appears unchanged. Vegetation along the creek has increased.

1987

The project site appears unchanged. Vegetation along Water Street has decreased.

1998

There appears to be no change to the project site or immediate area. The surrounding Northern areas have become more residential structures developed.

2005

There appears to be no change to the project site or immediate area.

2010

There appears to be no change to the project site or immediate area.

2012

The project site appears to remain unchanged.

Topographic Map Review

Historical USGS topographic maps with coverage of the site and surrounding area were reviewed. Topographic maps of the Jackson California Quadrangle, dated 1902, 1962, and 1973 and the Sutter Creek California Quadrangles, dated 1944 and 1962 were available for review. The maps were obtained from EDR and are included as an Appendix to this report.

1902

The City of Jackson is depicted as a developed town on the west side of Jackson Creek. There is no crossing of Jackson Creek shown. The majority of the lands outside of the developed portion of the City of Jackson were shown as open and undeveloped.

1944

The area of the site is included in the developed areas of the City of Jackson. There appears to be development along the east and west side of Jackson Creek, with an added crossing of Jackson Creek shown in the project area.

1962

State Highway 88 is now indicated through the City of Jackson. A golf course is also added to the west side of Jackson Creek, and a cemetery to the north of Jackson Creek. More development is located on either side of Jackson Creek, although the project site appears to remain unchanged.

1973

The project site appears to remain unchanged.

Naturally Occurring Asbestos Maps

Naturally Occurring Asbestos (NOA) can occur in serpentine rock. The most common forms of NOA minierals are chrysotile, actinolite, and tremolite. A review of the "General Location Guide for Ultramafic Rocks in California-Areas Likely to Contain Naturally Occurring Asbestos" (CGS Open-file Report 2000-19, 2000) indicated that NOA was not present in the project vicinity.

California Oil/Gas Well Maps

Review of California Department of conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) website reveals that no DOGGR maps exist for Amador County.

Interviews

Interviews were not performed with the owners of the property. Due to the availability of regulatory agency data and personal knowledge of the local government staff associated with potential recognized environmental conditions (REC's) on this property, this does not present a significant data gap to the ISA.

Ownership

As shown on the Area of Potential Effect Exhibit in Appendix A, the roadway and bridge are located within the City of Jackson right-of-way for Pitt Street and the adjacent parcels on either side of the right-of-way are owned by individuals. Available ownership information was obtained through Amador County Assessor's Office. According to the Assessor's office on April 22, 2014, the ownership entity for the property located north-east side of the Pitt Street right-of-way is listed as: "Eveyln M. Caccia." The Amador County Assessor's Office has assigned the following Assessor's Parcel Number (APN 020-200-028) and listed the respective legal owner and address as Evelyn M. Caccia, 416 Water Street, Jackson, CA 95642.

According to the Assessor's office on April 22, 2014, the ownership entity for the property located on the east side of the Pitt Street right-of-way is listed as "Steve and Lorraine Bock." The Amador County

Assessor's Office has assigned the following Assessor's Parcel Number (APN 020-246-005) and listed the respective legal owner and address as Steve and Lorraine Bock, 400 Water Street, Jackson, CA 95642.

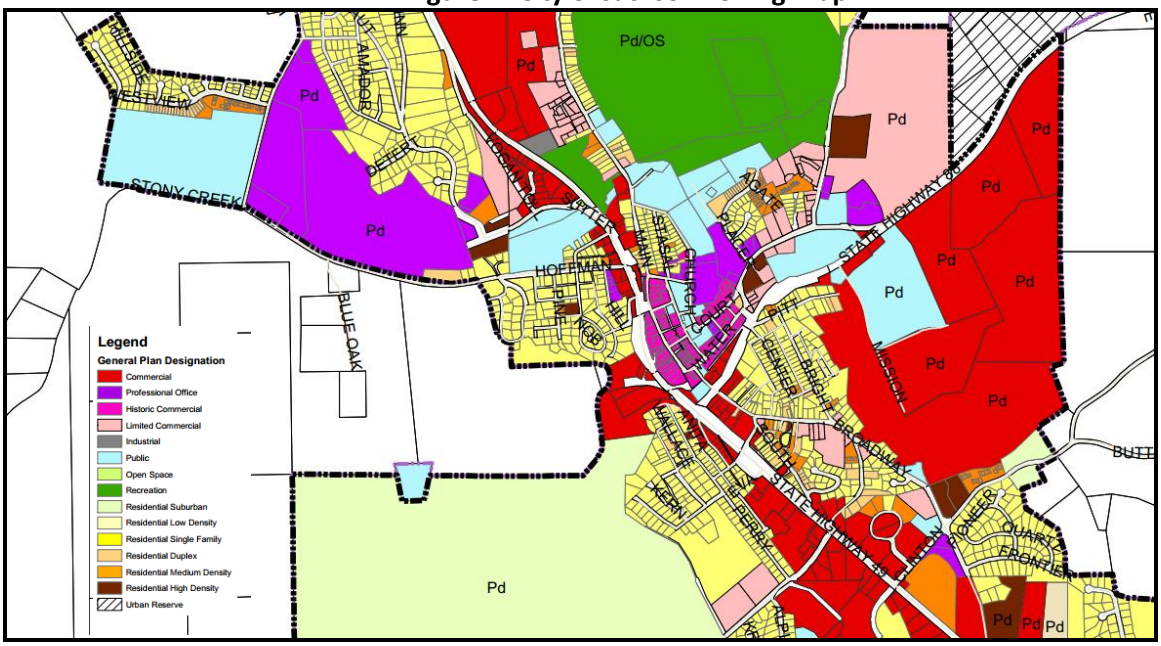
Building Department Records

The City of Jackson Planning Department was contacted on April 22, 2014, concerning files pertaining to past site development. City personnel stated that no structures have been permitted on the project site.

Zoning/Land Use Records

According to the City of Jackson zoning map (Figure 1) the project site is located with the City's right-of-way and the surrounding properties are zoned Limited Commercial, north of the project, properties on the east side, along Water Street, are zoned Historical Commercial, and the properties on the west side are zoned Residential Single Family.

Figure 1: City of Jackson Zoning Map



Other Historical Sources

No other historical sources of information were reviewed during the preparation of this report.

Prior Assessments

No prior assessment reports for the site were made available to Development Impact during the preparation of this report.

Environmental Record Sources

EDR was contacted to provide a summary of facilities within the ASTM-designated search radii that are listed on regulatory agency databases as shown in Table 1. The site was not listed on any of the agency database summaries provided by EDR. A copy of the EDR report is included as Appendix C to this report. The two sites discussed below are within close proximity and up gradient to the project site. In addition to the EDR search, information was obtained from the Amador County Environmental Health Department located in Jackson, California.

TABLE 1: Regulatory Agency Database Search

	EDR Listed Database	*ASTM E 1527-05 Search Distance*
Federal		
Federal NPL Site List	NPL	1 mile
Federal Delisted NPL Site List	Delisted NPL	½ mile
Federal CERCLIS List	CERCLIS	½ mile
Federal CERCLIS NFRAP Site List	CERCLIS NFRAP	½ mile
Federal RCRA CORRACTS Facilities List	CORRACTS	1 mile
Small Quantity & Large Quantity Generators	RCRAInfo	Site & adjoining
Landfills and Solid Waste Management Units	RCRA SQG	½ mile
Federal Institutional Control / Engineering Control Registries	US ENG Controls US INST Controls	Site only
Federal ERNS List	ERNS	Site only
State		
State-equivalent NPL (Hist. Cal-Sites)	Hist. Cal-Sites	1 mile
State-equivalent CERCLIS	RESPONSE	½ mile
State Landfill and/or Solid Waste Disposal Site Lists	SWF/LF (SWIS) WMUDS/SWAT	½ mile
State Leaking Underground Storage Tanks	LUST Reg 5 Geotracker	½ mile
Tribal Leaking Underground Storage Tanks	Indian LUST	½ mile
State Registered Underground Storage Tanks	UST	Site & adjoining
Tribal Registered Underground Storage Tanks	Indian UST	Site & adjoining
State Registered Aboveground Storage Tanks	AST	Site & adjoining
State Institutional Control Registries	DEED	Site only
State Voluntary Cleanup Sites	VCP	½ mile
State Brownfield Sites	US Brownfields	½ mile
Additional Environmental Record Sources		
Hazardous Waste & Substances Sites List	CORTESE	½ mile
DTSC EnviroStor	Envirostor	1 mile
SLIC	SLIC Reg5	½ mile
Cleaner Facilities	Drycleaners	¼ mile
HAZNET	HAZNET	¼ mile
Local County		
Amador County Environmental Health Dept.		Site only

Facilities Identified in the Regulatory Lists and Record Review

PG&E Manufactured Gas Plant (MGP)

The PG&E MGP is approximately 883 feet southeast of the project site at the intersection of McDowell Street and Water Street and 14 feet below the project's elevation. MGP sites were used from 1800's to 1950's to produce gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. The byproducts from this process was frequently disposed of directly at the plant site and can remain and spread slowly, serving as a continuous source of groundwater and soil contamination, potentially causing harm to human health and the environment. This site is downstream of the site; therefore, any potential of contaminated soils or groundwater will not affect the site area.

Former Manufactured Gas Plant (MGP)

The former MGP site was located at an elevation approximately 11 feet above and 884 feet southwest of the project site at 80 Broadway. As discussed above, these facilities were typically used between 1800-1950. The source of potential soil contamination would be polynuclear aromatic hydrocarbons (PAHs). However, the source is not within the area of concern, based on its distance and being down gradient from the site. Additionally, the chemicals of concern are not likely to be present at this source.

Former Brown's Auto Repair

The former Brown's Auto Repair was approximately two feet above the project site's elevation and 900 feet southwest of the proposed project site at 112 Water Street. This site closed as an auto repair shop in 1999, therefore, considering the type of use, there is a potential risk of environmental and health concerns for the surrounding areas. However, this source is not within the project's area of concern, based on its distance, gradient and suspected chemicals. Additionally, chemicals of concern are not likely to be present at this source and soil characteristics of the area would make vapor migration unlikely as well.

Former Manufactured Gas Plant (MGP)

The former MGP site was approximately two feet above the project's elevation and 999 feet southwest of the project site on the corner of Water Street and Main Street. The source of potential soil contamination would be polynuclear aromatic hydrocarbons (PAHs). However, the source is not within the project's area of concern, based on its distance and being down-gradient from the site. Additionally, the chemicals of concern are not likely to be present at this source, and soil characteristics of the area would make vapor migration unlikely as well.

Water Street Antiques

Water Street Antiques is located at an elevation approximately 999 feet southwest of the project site at 19 Water Street. This case was opened as a LUST Clean Up Site on April 26, 2013 after an unauthorized release of gasoline. This case is still open and is eligible for closure. However, the source is not within the area of concern based on its distance, gradient and suspected chemical of concern. The hydrologic characteristics of the area suggest that vapors would not migrate from the source to the proposed site.

Webb/Jones Building

Webb/Jones Building is located at an elevation approximately two feet above and 1,004 feet southwest of the project site at 19 Main Street. This case was opened as a LUST Clean Up Site on December 15, 2011 due to an unauthorized release of gasoline. The case has since been completed and closed.

Former Standard Oil Service Station

The former Standard Oil Service Station is located 1,007 feet southwest of the project site at 16 Water Street. This case was opened as a LUST Clean Up Site on September 30, 2013 due to an unauthorized release contaminates potentially containing Benzene, Toluene, Xylene, and Gasoline. This case has since been completed and closed.

Former Jackson Cleaners

The former Jackson Cleaners is located at an elevation approximately 15 feet above the project site and 1,044 feet southwest of the proposed project site. Even though the site closed in 2002 there is a potential risk of environmental and health concerns for the surrounding areas. However, the source is not within the area of concern, based on its distance, gradient and suspected chemicals. Additionally, chemicals of concern are not likely to be present at this source and soil characteristics of the area would make vapor migration unlikely as well.

Ratto Theater

The Ratto Theater is located approximately 15 feet above the project's elevation and 1,044 feet southwest of the project site at 149 Main Street. This case was opened as a LUST Clean Up Site on March 17, 1999 due to an unauthorized release of heating oil/ fuel oil. The case has since been completed and closed.

Sierra Energy

Sierra Energy is located at an elevation approximately 14 feet above and 1,045 feet southwest of the project site at 116 Main Street. This case was opened as a LUST Clean Up Site on January 19, 2010 due to an unauthorized release of gasoline. The case has since been completed and closed.

Former L&M Automotive

The former L&M Automotive was approximately 11 feet above the project's elevation and 1,127 feet southwest of the proposed project site at 176 Main Street. This site closed as auto repair shop in 1999, therefore, there is a potential risk of environmental and health concerns for the surrounding areas. However, the source is not within the area of concern, based on its distance, gradient and suspected chemicals. Furthermore, chemicals of concern are not likely to be present at this source and soil characteristics of the area would make vapor migration unlikely as well.

Sierra Pacific Industries

Sierra Pacific Industries is approximately 16 feet below the project's elevation and 1,149 feet southwest of the proposed project site at the intersection of Highway 49 and State Route 88. This case was opened

July 31, 1998 and remains open due to the unauthorized release of potential contaminates such as Chlorinated Hydrocarbons, Dioxin/Furanas, and Polynuclear aromatic hydrocarbons. However, the source is not within the area of concern, based on its distance and gradient.

Home and Farm Kitchen Supply

Home and Farm Kitchen Supply is located at an elevation approximately 11 feet above and 1,212 feet west of the project site at 215 Main Street North. This case was opened as a LUST Clean Up Site on October 4, 2002 due to an unauthorized release of gasoline. The case has since been completed and closed.

Kramer Residence

This private residence is located an elevation approximately 42 feet above and 1,332 feet northwest of the project site at 425 Stasal Street. This case was opened as a LUST Clean Up Site due to an unauthorized release of heating oil/ fuel oil. The case has since been completed and closed.

Amador County Corporation Yard

The Amador County Corporation Yard is located at an elevation approximately 13 feet above and 1,390 feet northwest of the project site at 1220 Airport Road. This case was opened as a LUST Clean Up Site on May 4, 2000 due to an unauthorized release of gasoline. The case has since been completed and closed.

Chevron #9-2797

Chevron #9-2797 is located approximately 3 feet above the project elevation and 1,595 feet south of the project site at 115 Highway 49 South. This case was opened as a LUST Clean Up Site on October 12, 2012 due to an unauthorized release of gasoline. The case is currently open and awaiting verification monitoring. However, the source of contamination is not within the area of concern based on its distance, gradient and suspected chemical of concern. The hydrologic characteristics of the area suggest that vapors would not migrate from the source to the proposed site. Furthermore, chemicals of concern are not likely to be present at this source.

Huberty Property

The Huberty Property is located at an elevation approximately 25 feet above and 1,652 feet northwest of the project site at 120 Hoffman Street. This case was opened as a LUST Clean Up Site due to an unauthorized release of heater fuel. The case has since been completed and closed.

Private Residence

This private residence is located at an elevation approximately 25 feet above and 1,653 feet northwest of the project site. This case was opened as a LUST Clean Up Site on July 14, 2003 due to an unauthorized release of heater fuel. The case has since been completed and closed.

Former County Hospital

The former County Hospital has been renovated and is currently operating as the Amador County Office. The site is located at an elevation approximately 24 feet above and 1,713 feet northwest of the project site at 810 Court Street. This case was opened in early 1980s following an unauthorized release of total petroleum hydrocarbon (TPH) from an underground storage tank system at the site. Corrective action was taken as directed by the Central Valley Regional Water Quality Control Board (CVRWQCB). In 1987, 18,000 gallons were removed from the site. In 2004, 1,000 gallons of contaminates were removed from the site. The tanks have since been emptied of all contaminates. Groundwater monitoring and observation had been on-going, however, studies have indicated that the site has been remediated and that no further action at this site was required.

County Jail

The County Jail site is located on Court Street, approximately 1,600 feet northeast of the intersection of Water Street/ Pitt Street. This case was opened as a LUST Cleanup Site following an unauthorized release of total petroleum hydrocarbon (TPH) from an underground storage tank system at the site. The tank holds 1,000 gallons of diesel for a standby generator. In 2013, a new standby 350 gallon aboveground tank was added to the site and the previous generator was removed and decommissioning is currently underway. The site of the County Jail is still currently in use; however, there is a plan in place to close the site in the near future.

Reconnaissance of the Subject Property and Vicinity

The site was inspected by Development Impact on January 24, 2014, to observe current conditions and to review for any signs of visible contamination. Appendix B contains photographs of the site taken during the site reconnaissance. The site consisted of an existing bridge and paving in the rights-of-way, utilities including water lines and Jackson Creek. The weather that day was sunny and warm, which did not limit the observations of potential RECs. There were two residential houses adjacent to the existing bridge on site. Also included is a copy of the Caltrans Initial Site Assessment (ISA) Checklist and photographs of the project site.

Observations of Site

Based on the reconnaissance, the following Table summarizes the observations of the site.

TABLE 2: Site Observations

Observation	*Observed on Site*	*Description / Notes*
Bare Soil with Stains	No	
Soil Stockpile or Imported Fill	No	
Pavement with Stains	Yes	Roadway has minor surface stains.
Loading Docks	No	
Rail Line / Spur	No	
Hazardous Materials Storage	No	
Petroleum Hydrocarbon Storage	No	
Aboveground Tanks	No	
Underground Tanks	No	
Solid Waste Storage	No	
Liquid Waste Storage	No	
Air Emissions Controls	No	
On-Site Disposal (non-sewage)	No	
On-site Sewage Disposal	No	
Municipal Water Supply Connection	Yes	A water line transverses the project site. A realignment/relocation is part of the project.
Domestic Well	No	
Industrial Well	No	
Agricultural Well	No	
Groundwater Monitoring Well	No	
Odor	No	
Structure with Potential for Asbestos/Lead Based Paint	Yes	Existing Pitt Street bridge.
Other: Pavement striping on existing roadway, potential PCBs associated with pole-mounted electrical transformers	Yes	Pavement striping on Pitt Street. Existing pole-mounted electrical transformer.

Based on the site reconnaissance, potential RECs within the site boundaries include the following:

- Lead and chromium associated with the bridge and pavement striping on Pitt Street.
- Potential elevated levels of arsenic or other contaminants in the exposed soil and / or rock from mine tailings that may be within the project boundaries.
- Potential for PCBs with the existing pole-mounted electrical transformers.

Observations of Adjacent Properties

Based on the reconnaissance, the following Table summarizes the observations of the adjacent properties.

TABLE 3: Immediately Adjacent Properties Observations

Observation	*Observed on Site*	*Description / Notes*
Bare Soil with Stains	No	
Soil Stockpile or Imported Fill	No	
Pavement with Stains	Yes	Roadways have minor surface stains.
Loading Docks	No	
Rail Line / Spur	No	
Hazardous Materials Storage	No	
Petroleum Hydrocarbon Storage	No	
Aboveground Tanks	No	
Underground Tanks	No	
Solid Waste Storage	No	
Liquid Waste Storage	No	
Air Emissions Controls	No	
On-Site Disposal (non-sewage)	No	
On-site Sewage Disposal	No	
Municipal Water Supply Connection	Yes	All structures are connected to the municipal water supply.
Domestic Well	No	
Industrial Well	No	
Agricultural Well	No	
Groundwater Monitoring Well	No	
Odor	No	
Structure with Potential for Asbestos or Lead Based Paint	Yes	Surrounding structures appear to be built at different times in the past. Some are more than 50 years old. However, no adjacent structures would be impacted. The bridge is older than 50 years old.
Other: pavement striping on existing roadways, potential PCBs associated with pole-mounted electrical transformers	Yes	Pavement striping on Pitt Street.

Based on the site reconnaissance, potential RECs on adjacent properties include the following:

- Potential for lead paint and asbestos within the existing structures. However, no structure would be removed. No work is planned on the adjacent properties.
- Lead and chromium associated with the pavement striping on Pitt Street.
- Potential elevated levels of arsenic or other contaminants in the exposed soil and / or rock from mine tailings that may be within the project boundaries.

Conclusions and Recommendations

Development Impact, Inc. performed an Initial Site Assessment (ISA) for the Pitt Street Bridge Replacement project. The properties assessed for this ISA included Amador County APN 020-246-005, APN 020-200-028 and the surrounding rights-of way (as shown in the Appendix) in Jackson, California. This ISA was prepared in general accordance with the Caltrans ISA Guidance document. Development Impact, Inc. identified the following data gaps in the ISA information:

- The existing bridge structure was not tested as part of this ISA. However, due to the age of the structure, it is assumed that there is potential for RECs (asbestos and lead paint) and these potential RECs have been identified as part of this report.

- Interviews were not performed with the owners of the properties. However, regulatory and local agency staffs have had continuing direct communication with the surrounding property owners. Due to the availability of regulatory agency data associated with potential RECs on these properties and the surrounding properties, the lack of interviews does not present a significant data gap to this ISA.

This ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. The following recognized environmental conditions have been identified in connection with the site/project. Based on the governmental records search, select agency interviews, aerial photographs and topographic map review, and a site reconnaissance, the following actions are recommended to verify the presence/extent of the RECs, to evaluate the potential for remediation, and to determine proper health and safety measures such as specifications for project construction:

- Potential Asbestos Containing Materials (ACM): New uses of ACM were banned by the EPA in 1989. Due to the age of the bridge structure, an asbestos survey would need to be conducted on the structure and adjacent wing walls in accordance with 40 CFR 763 (Asbestos Hazard Emergency Response Act) prior to demolition activities and appropriate health and safety measures be developed and utilized for proper disposal and handling.

- Potential Lead-Based Paint: Potential lead-based paint on the structure is possible because structures constructed prior to 1978 are presumed to contain lead-based paint unless proven otherwise. It is recommended that a lead-based paint survey be conducted on the structure prior to demolition activities and appropriate health and safety measures be developed and utilized for proper disposal and handling.

- Potential Lead and Heavy Metals Associated with Pavement Markings: Potential lead and heavy metals such as chromium associated with pavement striping may occur with the removal and disposal of yellow and/or white traffic stripe and pavement marking materials (paint, thermoplastic, permanent tape, and temporary tape) on Pitt Street. Paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of Regulations and require disposal in a Class 1 disposal site. If older striping or paint is removed separately prior to grinding, it would likely be considered a hazardous waste. It is recommended that testing be performed prior to disposal for better hazardous waste characterization. Also, Standard Special Provisions will be included in the construction contract for worker and public safety.

- Potential Mine Tailings: Potential elevated levels of arsenic or other contaminants in the exposed soil and or rock fill from mine tailings may have been used as fill within the project boundary. Other activities in the area have required the excavation of the mine tailings up to a depth of two feet and replacement with clean fill material (EPA 1998). It is recommended that a Preliminary Site Investigation (PSI) (environmental screening for CAM17 metals) be performed in areas of exposed soils within the project construction area to determine the possible presence and levels of heavy metals from mine tailings that may have been used as fill in the project boundaries or upstream projects. This PSI should be conducted during PS&E and should consist of soil sampling and laboratory analysis. Levels should conform to the State of California CalModified Preliminary Remediation Goals values and any naturally occurring/background levels. Mine tailings, if encountered shall be handled and disposed of per local, state and federal requirements.

- Aerially-Deposited Lead: Lead has been known to settle on unpaved shoulders and medians of older highways as a result of leaded gasoline emissions and elevated lead levels have been identified in such situations. Aerially-deposited lead is likely not an issue on Pitt Street, due to the small amount of traffic on the roadway. Additionally, a Preliminary Site Investigation will be conducted to address mine tailings in the soil and the presence of heavy metals, including lead.

- Potential PCBs: Potential PCBs in pole-mounted electrical transformers have not been determined. EPA amended its rules under the Toxic Substances Control Act (TSCA) [Final Rule, 40 CFR Parts 750 and 761: June 29, 1998, Volume 63, Number 124], which address the manufacture, processing, distribution in commerce, use, cleanup, storage and disposal of polychlorinated biphenyls (PCBs). This rule provides flexibility in selecting disposal technologies for PCB wastes and expands the list of available decontamination procedures; and provides less burdensome mechanisms for obtaining EPA approval for a variety of activities. Any leaking transformers that will either remain within the construction limits or will require removal and / or relocation should have the transformer fluid sampled and analyzed by qualified personnel for PCBs. If PCBs are detected, the transformer should be removed and disposed of in accordance with the appropriate regulatory agency.

- Unknown Hazards: As with any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction. If known or previously unknown hazardous waste/material is encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction should be followed.

Based on the above conclusions and recommendations, additional ISAs are not warranted. However, one PSI that addresses asbestos-containing materials, lead-based paint (on the structure and striping/pavement marking material), and heavy metals and PCBs in soils should be conducted. The PSI should be conducted during PS&E. If the project description changes, then further investigation would be required to determine the impact to the revised project.

Qualifications

I declare that, to the best of my knowledge and belief, I meet the definition of Environmental Professional. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Paula Daneluk

Paula M. Daneluk, AICP
Development Impact, Inc.

Ms. Daneluk has conducted initial site assessments for a number of different project types including shopping centers, gas stations, residential housing projects, school sites and industrial sites. Ms. Daneluk has almost twenty years of experience managing and supervising individuals who conduct, prepare, oversee, and / or review initial site assessments.

Ms. Daneluk is a Principal with Development Impact, Inc and has been a practicing planner since 1992. Ms. Daneluk has long provided a balanced interface between public agencies and the development community while planning, directing and evaluating the work of professional and technical staff in environmental analysis, current planning, advance planning, zoning, permit processing, environmental compliance, code enforcement and special projects.

Ms. Daneluk's responsibilities include personally managing complex, highly visible, sensitive and controversial projects. Ms. Daneluk provides day-to-day leadership and works with staff to ensure a high-performance work environment that supports achieving the firm and its client's goals and mission. She is knowledgeable in the theories, practice and standards of environmental analysis, as well as current, advanced, and capital improvement planning. Ms. Danleuk's experience also includes preparation of Design Guidelines, ordinance revisions, Comprehensive Plans and Capital Improvement Plans for municipalities. She exercises sound independent judgement and represents the clients effectively in a wide variety of meetings and forums.

Ms. Daneluk, coordinates and supervises the environmental and entitlement process for private development projects. While managing the development team of professional engineers, biologists, architects, economic analysts and owner representatives, Ms. Daneluk guides projects through the approval process. Working with this wide array of professionals, Ms. Daneluk accomplishes a project approval that both the community and the property owners can endorse.

Ms. Daneluk regularly attends various conferences, workshops and extended education classes to increase her knowledge of the latest environmental, planning and development practices and case law. Ms. Daneluk has been a member of the American Institute of Certified Planners since July 1998.

Education

Bachelors of Science in Public Administration from Stephen F. Austin State University – May 1993, graduate Magna Cum Laude.

Limitations and Limited Conditions

The purpose of an environmental assessment is to reasonably assess the potential for, or actual impact of, past practices on a given site which may pose an environmental impairment. No assessment is thorough enough to identify all potential environmental impairments at a given site. If environmental impairments have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such conditions, but rather the result of the services performed within the scope, limitations, and cost of the work performed.

The conclusions presented in this report are solely professional opinions based on information provided regarding the site and the findings of the reconnaissance and records search. Information obtained from the aerial photographs is an interpretation of features observed in the photographs. Actual conditions may have been different from those interpreted. Conclusions presented are based on conditions as they existed at the time the work was performed. Changes in existing conditions due to time lapse, natural causes, or operations adjacent to the site may deem conclusions presented invalid, unless the changes are reviewed and the conclusions reevaluated. Such conditions may require additional field and laboratory investigations to assess if the conclusions are applicable considering the changed conditions.

This work was performed for the sole use of our client. Any reliance on this report by a third party is at such party's sole risk. Others who seek to rely on the finding have a duty to determine the adequacy of this report for their intended use, time and locations. Development Impact does not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report. No other warranty, either expressed or implied, is made. The standard of practice is time-dependent. Services provided were performed consistent with generally-accepted professional consulting principles and practices for environmental assessors in Amador County, California at the time the work was performed. During the performance of the assessment, all readily available materials pertaining to the project site were collected and reviewed to prepare this document. This assessment is not a full-scale environmental site investigation to prove that the project site is environmentally devoid of hazardous or toxic materials. The findings and conclusions presented in this report are solely professional opinions derived in accordance with current standards of professional practice.

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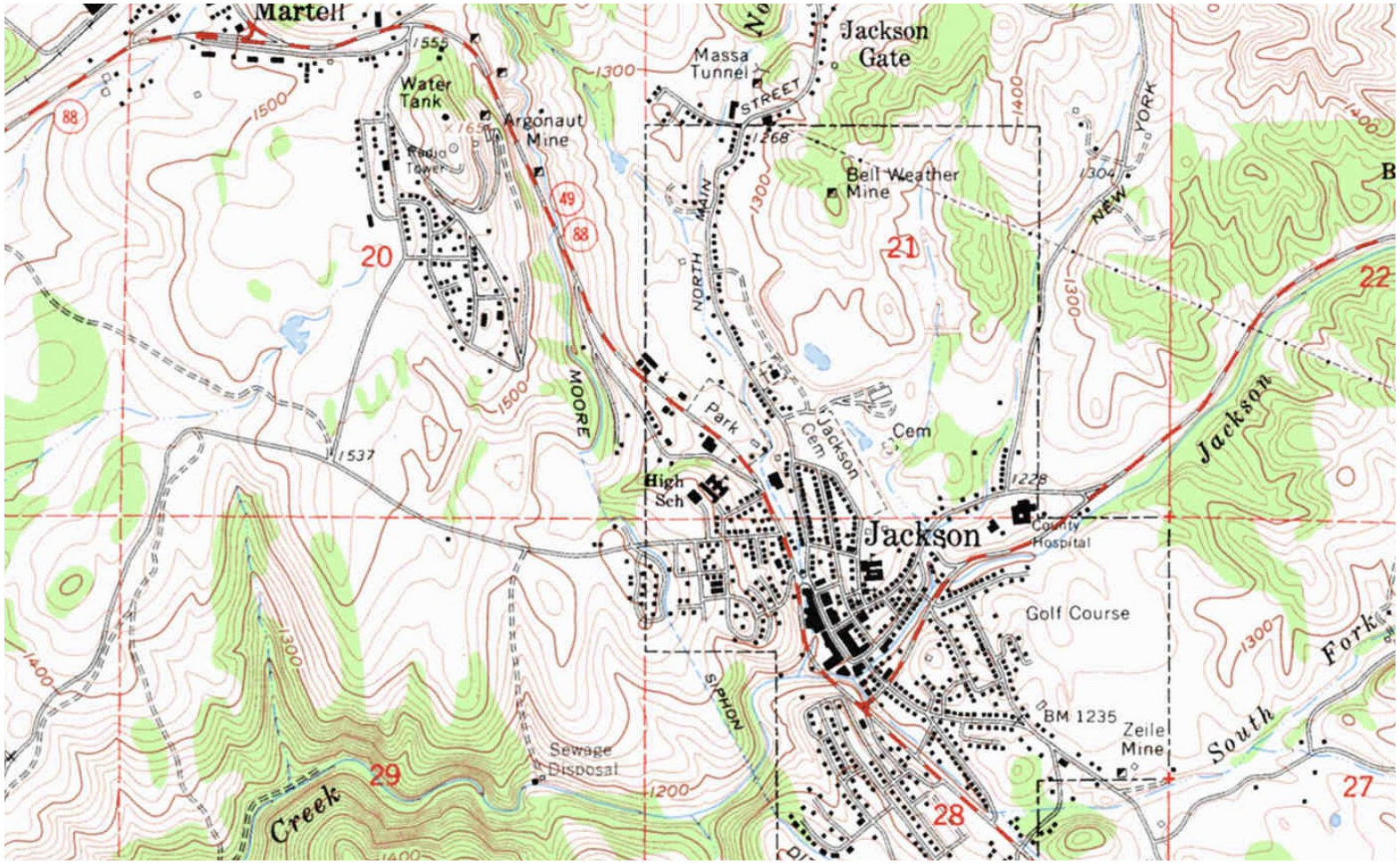
Site Location Map

Topographic Map

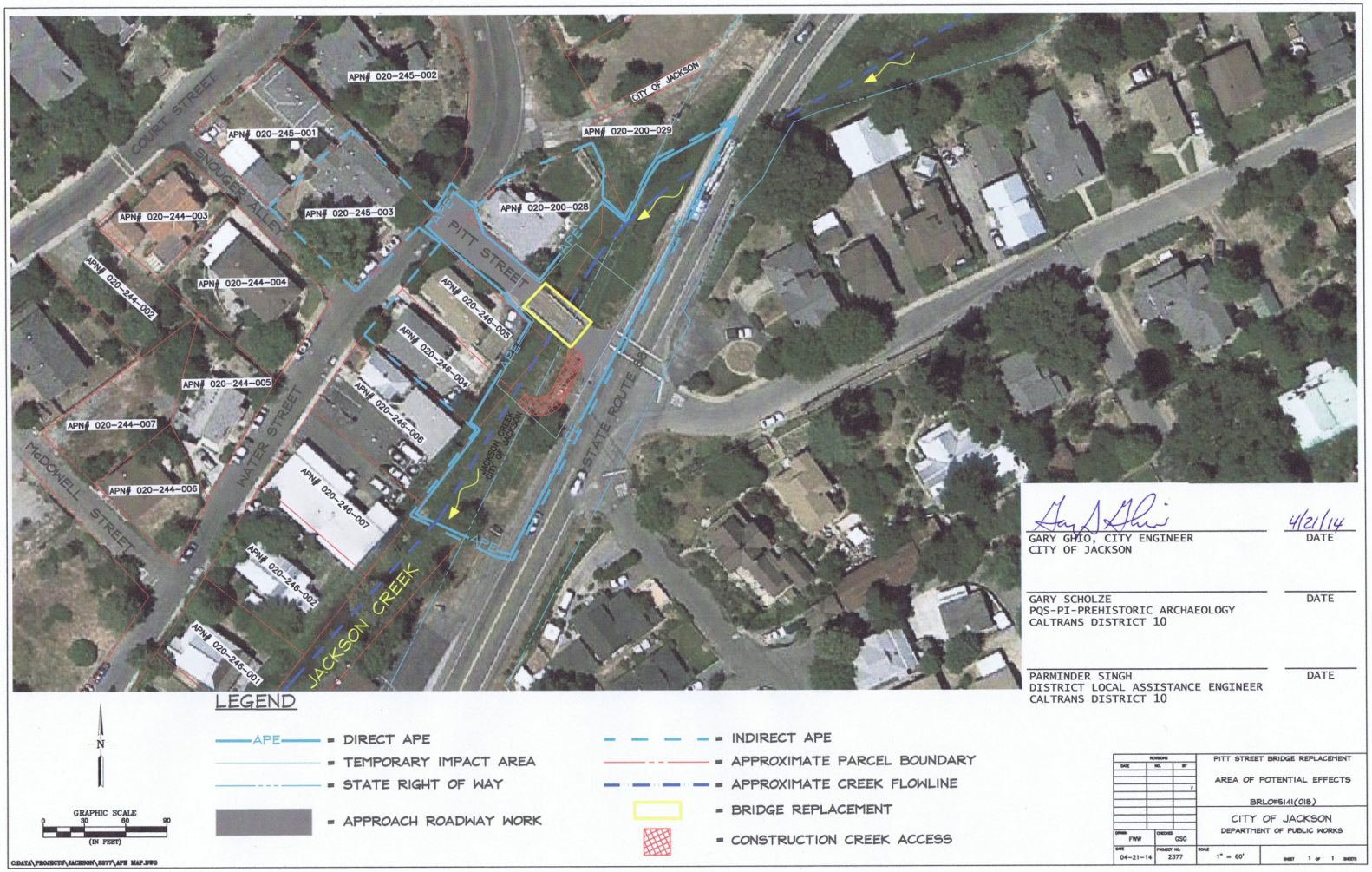


Aerial Picture

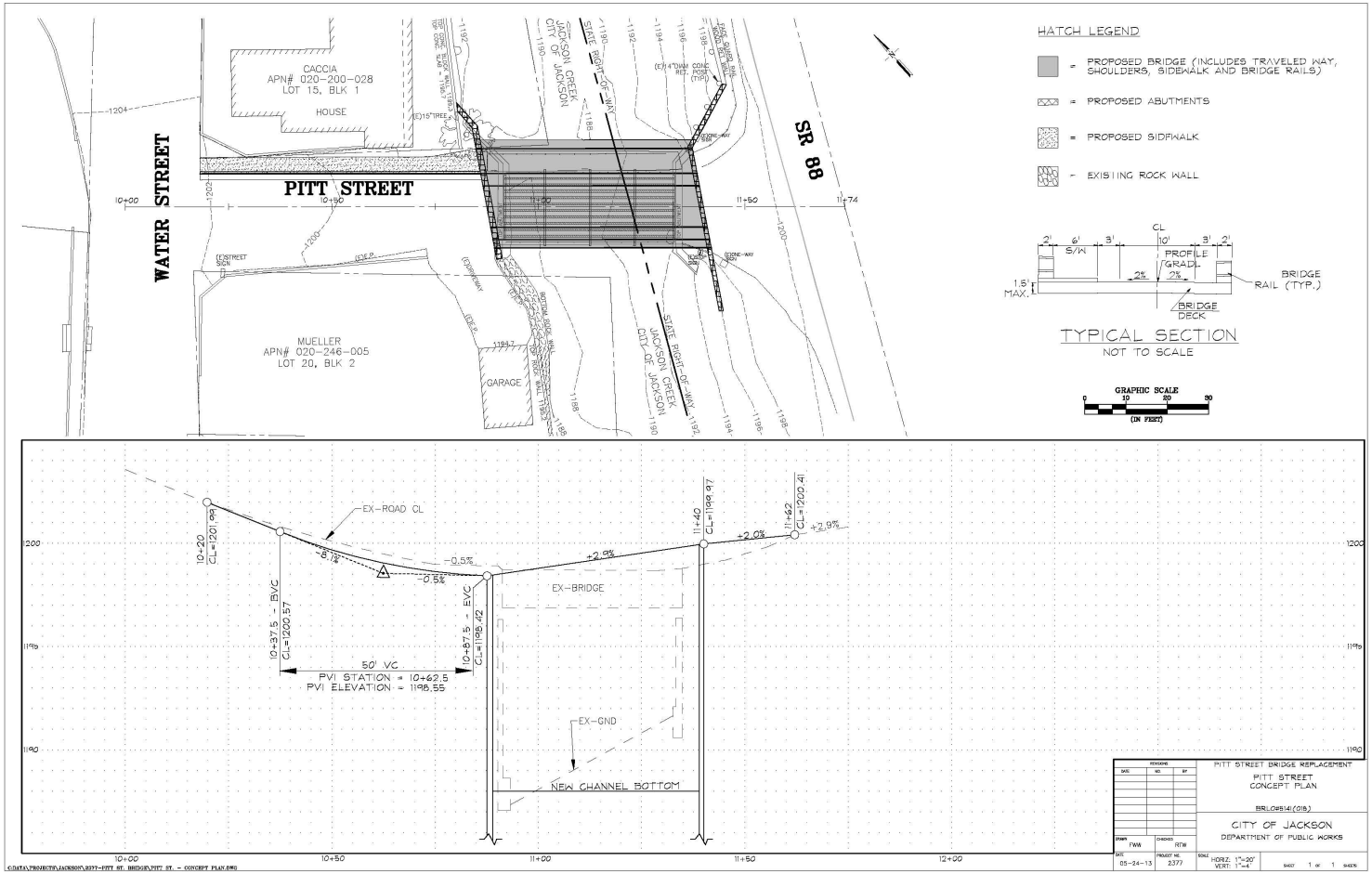
City of Jackson
Pitt Street Bridge Replacement

April 2014
ISA

Area of Potential Environmental Impact



Project Map


HATCH LEGEND
= PROPOSED BRIDGE (INCLUDES TRAVELED WAY, SHOULDERS, SIDEWALK AND BRIDGE RAILS)
= PROPOSED ABUTMENTS
= PROPOSED SIDEWALK
= EXISTING ROCK WALL
TYPICAL SECTION
NOT TO SCALE
BRIDGE RAIL (TYP.)
BRIDGE DECK
GRAPHIC SCALE
(IN FEET)
WATER STREET
PITT STREET
SR 88
CACCIA
APN# 020-200-028
LOT 15, BLK 1
HOUSE
MUELLER
APN# 020-246-005
LOT 20, BLK 2
GARAGE
JACKSON CREEK
CITY OF JACKSON
STATE RIGHT-OF-WAY
EX-ROAD CL
EX-BRIDGE
EX-GND
NEW CHANNEL BOTTOM
50' VC
PVI STATION = 10+62.5
PVI ELEVATION = 1198.55
PITT STREET BRIDGE REPLACEMENT
PITT STREET
CONCEPT PLAN
CITY OF JACKSON
DEPARTMENT OF PUBLIC WORKS

Pictures of Site

East side of Pitt Street Bridge

Close-up of East side of Pitt Street Bridge

West side of Pitt Street Bridge

View of pedestrian path part of bridge

Initial Site Assessment (ISA) Checklist

Project Information

District 10 County TU Route NA Post Mile NA EA NA

Description Replacement of existing Pitt Street Bridge over Jackson Creek in Jackson, CA.

Is the project on the HW Study Minimal-Risk Projects List (HW1)? NO

Project Manager Frank Whitmore phone # 209.754.1825

Project Engineer Frank Whitmore phone # 209.754.1825

Project Screening

Attach the project location map to this checklist to show location of all known and/or potential HW sites identified.

1. Project Features: New R/W? No Excavation? Yes Railroad Involvement? No

   Structure demolition/modification? Yes Subsurface utility relocation? Yes

2. Project Setting Pitt Street Bridge crossing Jackson Creek

   Rural or Urban Urban

   Current land uses Existing one-lane bridge, Pitt Street ROW

   Adjacent land uses Historical Corridor: Residential, Commercial
   (industrial, light industry, commercial, agricultural, residential, etc.)

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.

4. Conduct Field Inspection. Date 1/24/14 Use the attached map to locate potential or known HW sites.

   STORAGE STRUCTURES / PIPELINES:

   Underground tanks Not observed Surface tanks Not observed

   Sumps Not observed Ponds Not observed

   Drums Not observed Basins Not observed

   Transformers Yes Landfill Not observed

   Other Water and wastewater subsurfaces utilities

Initial Site Assessment (ISA) Checklist

(continued)

CONTAMINATION: (spills, leaks, illegal dumping, etc.)

Surface staining Minor on pavement Oil sheen Not observed

Odors Not detected Vegetation damage Not observed

Other NA

HAZARDOUS MATERIALS: (asbestos, lead, etc.)

Buildings None Spray-on fireproofing Not observed

Pipe wrap Not observed Friable tile Not observed

Acoustical plaster Not observed Serpentine Not observed

Paint Yes Other Bridge may have paint/ aesbestos. Mine tailings

5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.

6. Other comments and/or observations: NA

ISA Determination

Does the project have potential hazardous waste involvement? Yes If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? No If "YES," explain; then give an estimate of additional time required: _____

See attached report for details/explanation.

A brief memo should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted by Paula M. Daneluk **Date** 4/16/14

Pitt Street Bridge
Pitt Street
Jackson, CA 95642

Inquiry Number: 3849793.6s
April 21, 2014

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600-10).

STANDARD ENVIRONMENTAL RECORDS	Maximum Search Distance*	Summary		
		property	1/10	1/10 - 1/3
Federal NPL	0.333	0	0	0
Federal CERCLIS	0.333	0	0	0
Federal RCRA CORRACTS facilities list	0.333	0	0	0
Federal RCRA TSD facilities list	0.333	0	0	0
Federal RCRA generators list	property	0	-	-
Federal institutional controls / engineering controls registries	0.333	0	0	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	0.333	0	0	0
State and tribal - equivalent CERCLIS	0.333	0	0	2
State and tribal landfill / solid waste disposal	0.333	0	0	0
State and tribal leaking storage tank lists	0.333	0	0	14
State and tribal registered storage tank lists	property	0	-	-
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.333	0	0	0
State and tribal Brownfields sites	not searched	-	-	-
Other Standard Environmental Records	0.333	0	0	5

HISTORICAL USE RECORDS				
Former manufactured Gas Plants	0.333	0	0	1
Historical Gas Stations	0.25	0	0	2
Historical Dry Cleaners	0.25	0	0	1
Exclusive Recovered Govt. Archives	0.333	0	0	12

*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied. See the section 'Record Sources and Currency' for information on individual databases.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

PITT STREET BRIDGE
PITT STREET
JACKSON, CA 95642

COORDINATES

Latitude (North):	38.3499 - 38° 20′ 59.63745″
Longitude (West):	120.7708 - 120° 46′ 14.871826″
Elevation:	1202 ft. above sea level

EXECUTIVE SUMMARY

PHYSICAL SETTING INFORMATION

Flood Zone:	Available
NWI Wetlands:	Available

AQUIFLOW®

Search Radius: 0.333 Mile.

No Aquiflow sites reported.

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name:	Riverwash
Soil Surface Texture:	
Hydrologic Group:	Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
Soil Drainage Class:	Somewhat excessively drained
Hydric Status:	Partially hydric
Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 31 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	Not Reported	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141 Min: 42	Max: Min:

EXECUTIVE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	5 inches	59 inches	Not Reported	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141 Min: 42	Max: Min:

Soil Map ID: 2

Soil Component Name: Exchequer

Soil Surface Texture: loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 15 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	5 inches	9 inches	unweathered bedrock	Not reported	Not reported	Max: 4 Min: 0.07	Max: Min:

Soil Map ID: 3

Soil Component Name: Mixed alluvial land

Soil Surface Texture:

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	Not Reported	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 5.6
2	9 inches	59 inches	Not Reported	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel. COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel.	Max: 141 Min: 42	Max: 7.3 Min: 5.6

Soil Map ID: 4

Soil Component Name: Auburn

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

EXECUTIVE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 36 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	9 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
3	14 inches	18 inches	unweathered bedrock	Not reported	Not reported	Max: 1.4 Min: 0	Max: Min:

Soil Map ID: 5

Soil Component Name: Auburn

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 61 inches

Depth to Watertable Min: > 0 inches

EXECUTIVE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	11 inches	24 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
3	24 inches	29 inches	weathered bedrock	Not reported	Not reported	Max: 0.42 Min: 0	Max: Min:
4	29 inches	33 inches	unweathered bedrock	Not reported	Not reported	Max: 1.4 Min: 0	Max: Min:

Soil Map ID: 6

Soil Component Name: Auburn

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 36 inches

Depth to Watertable Min: > 0 inches

EXECUTIVE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
2	9 inches	14 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 5.6
3	14 inches	18 inches	unweathered bedrock	Not reported	Not reported	Max: 1.4 Min: 0	Max: Min:

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
MANUFACTURED GAS PLANT - JACKSON 2 ENVIROSTOR: State and tribal - equivalent CERCLIS	S BANK MIDDLE FORK JACKSON CREEK	1/10 - 1/3 SSW	▲ 2	17
MANUFACTURED GAS PLANT - JACKSON 1 ENVIROSTOR: State and tribal - equivalent CERCLIS	CORNER OF WATER & MAIN STREET	1/10 - 1/3 SW	▲ B4	21
WATER STREET ANTIQUES LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	19 WATER ST	1/10 - 1/3 SW	▲ B5	23
WEBB/JONES BUILDING LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	19 MAIN ST	1/10 - 1/3 SW	▲ B6	35
FORMER STANDARD OIL SERVICE STATION LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	16 WATER STREET	1/10 - 1/3 SW	▲ B7	42
SIERRA ENERGY LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	116 MAIN ST W (AKA: 117 JACKSON)	1/10 - 1/3 WSW	▲ C9	48
RATTO THEATER LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	149 MAIN ST	1/10 - 1/3 W	▲ D10	56
SIERRA PACIFIC INDUSTRIES-MARTELL FUNGICIDE DIP TANK AREA SLIC: State and tribal leaking storage tank lists	INTERSECTION OF HIGHWAYS 49 AND 88	1/10 - 1/3 SW	▼ 12	60
HOME & FARM KITCHEN SUPPLY LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	215 MAIN ST N	1/10 - 1/3 W	▲ 13	61
PRIVATE RESIDENCE LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	PRIVATE RESIDENCE	1/10 - 1/3 NW	▲ E14	64
KRAMER RESIDENCE LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	425 STASAL STREET	1/10 - 1/3 NW	▲ E15	66

EXECUTIVE SUMMARY

Name	Address	Dist/Dir	Map ID	Page
AMADOR CO CORPORATION YARD LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	1220 AIRPORT RD	1/10 - 1/3 WNW	▲ 16	67
CHEVRON #9-2797 LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	115 HWY 49 S	1/10 - 1/3 S	▲ 17	70
HUBERTY PROPERTY LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	120 HOFFMAN STREET	1/10 - 1/3 WNW	▲ F18	79
PRIVATE RESIDENCE LUST: State and tribal leaking storage tank lists	PRIVATE RESIDENCE	1/10 - 1/3 WNW	▲ F19	80
OLD COUNTY HOSPITAL LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	810 COURT ST	1/10 - 1/3 NE	▲ 20	82

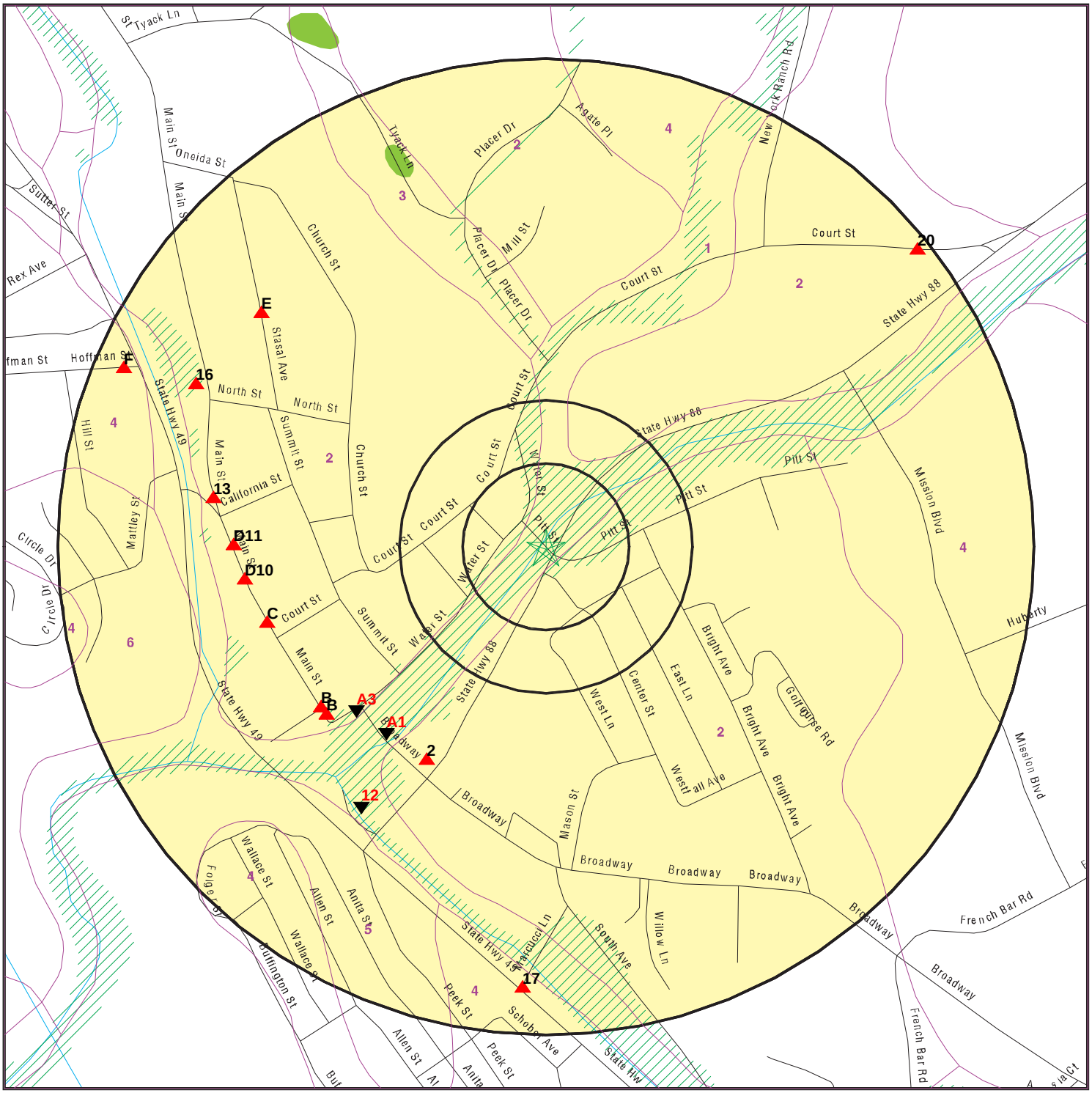
HISTORICAL USE RECORDS

Name	Address	Dist/Dir	Map ID	Page
PG AND E MGP JACKSON EDR MGP: Former manufactured Gas Plants	SE OF INT OF MCDOWELL ST AND WATER ST	1/10 - 1/3 SW	▼ A1	16
112 WATER ST EDR US Hist Auto Stat: Historical Gas Stations	112 WATER ST	1/10 - 1/3 SW	▼ A3	19
WATER STREET ANTIQUES LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	19 WATER ST	1/10 - 1/3 SW	▲ B5	23
WEBB/JONES BUILDING LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	19 MAIN ST	1/10 - 1/3 SW	▲ B6	35
FORMER STANDARD OIL SERVICE STATION LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	16 WATER STREET	1/10 - 1/3 SW	▲ B7	42
111 MAIN ST EDR US Hist Cleaners: Historical Dry Cleaners	111 MAIN ST	1/10 - 1/3 WSW	▲ C8	47
SIERRA ENERGY LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	116 MAIN ST W (AKA: 117 JACKSON)	1/10 - 1/3 WSW	▲ C9	48
RATTO THEATER	149 MAIN ST	1/10 - 1/3 W	▲ D10	56

EXECUTIVE SUMMARY

Name	Address	Dist/Dir	Map ID	Page
LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives				
176 MAIN ST EDR US Hist Auto Stat: Historical Gas Stations	176 MAIN ST	1/10 - 1/3 W	▲ D11	59
HOME & FARM KITCHEN SUPPLY LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	215 MAIN ST N	1/10 - 1/3 W	▲ 13	61
PRIVATE RESIDENCE LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	PRIVATE RESIDENCE	1/10 - 1/3 NW	▲ E14	64
KRAMER RESIDENCE LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	425 STASAL STREET	1/10 - 1/3 NW	▲ E15	66
AMADOR CO CORPORATION YARD LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	1220 AIRPORT RD	1/10 - 1/3 WNW	▲ 16	67
CHEVRON #9-2797 LUST: State and tribal leaking storage tank lists HIST CORTESE: Other Standard Environmental Records RGA LUST: Exclusive Recovered Govt. Archives	115 HWY 49 S	1/10 - 1/3 S	▲ 17	70
HUBERTY PROPERTY LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	120 HOFFMAN STREET	1/10 - 1/3 WNW	▲ F18	79
OLD COUNTY HOSPITAL LUST: State and tribal leaking storage tank lists RGA LUST: Exclusive Recovered Govt. Archives	810 COURT ST	1/10 - 1/3 NE	▲ 20	82

PRIMARY MAP - 3849793.6s



0 300 1/3 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- SSURGO Soil
- Areas of Concern

SITE NAME: Pitt Street Bridge	CLIENT: Development Impact
ADDRESS: Pitt Street Jackson CA 95642	CONTACT: Paula Daneluk
LAT/LONG: 38.3499 / 120.7708	INQUIRY #: 3849793.6s DATE: February 07, 2014 12:21 pm

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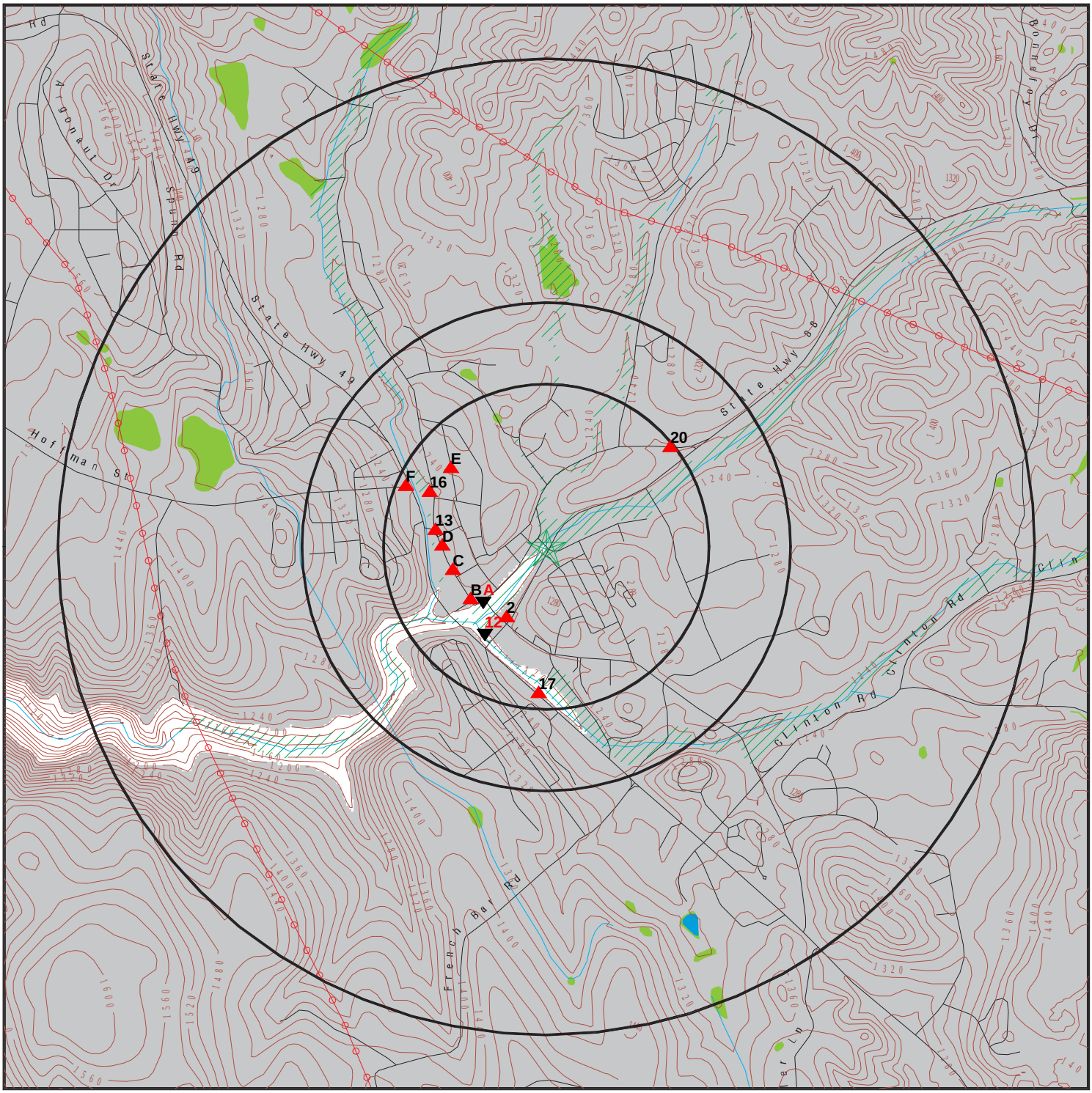
SECONDARY MAP - 3849793.6s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/3 1/2 1 Miles

- Indian Reservations BIA
- Contour Lines
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Upgradient Area
- Areas of Concern

SITE NAME: Pitt Street Bridge	CLIENT: Development Impact
ADDRESS: Pitt Street Jackson CA 95642	CONTACT: Paula Daneluk
LAT/LONG: 38.3499 / 120.7708	INQUIRY #: 3849793.6s DATE: February 07, 2014 12:19 pm

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AERIAL PHOTOGRAPHY - 3849793.6s

0 300 1/3 Miles

N

SITE NAME:	Pitt Street Bridge	CLIENT:	Development Impact
ADDRESS:	Pitt Street Jackson CA 95642	CONTACT:	Paula Daneluk
		INQUIRY #:	3849793.6s
LAT/LONG:	38.3499 / 120.7708	DATE:	February 07, 2014 12:24 pm

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LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**			EDR SITE ID NUMBER
▼ MAP ID#	Direction Distance Range Relative Elevation	(Distance feet / miles) Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

PG AND E MGP JACKSON SE OF INT OF MCDOWELL ST AND WATER ST, JACKSON, CA, 95642			1008407691
▼ A1	SW 1/10 - 1/3	(883 ft. / 0.167 mi.)	Former manufactured Gas Plants
	14 ft. Lower Elevation	1188 ft. Above Sea Level	

Worksheet:

Manufactured Gas Plants: Former manufactured Gas Plants

The Pacific Gas and Electric Company (PG&E) completed a "Historical Overview of the Former Manufactured Gas Plants in Northern and Central California", dated 1987, which states that the first gas works in Jackson began operation in 1854. It operatedno longer than 1862

MANUFACTURED GAS PLANT - JACKSON 2 S BANK MIDDLE FORK JACKSON CREEK, JACKSON, CA, 95642			S102008324
▲ 2	SSW 1/10 - 1/3	(884 ft. / 0.167 mi.)	State and tribal - equivalent CERCLIS
	11 ft. Higher Elevation	1213 ft. Above Sea Level	

Worksheet:

ENVIROSTOR: State and tribal - equivalent CERCLIS

Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Jerry Lile
Supervisor:	Steven Becker
Division Branch:	Cleanup San Joaquin
Facility ID:	03490010
Site Code:	Not Reported
Assembly:	05
Senate:	08
Special Program:	EPA - PASI
Status:	Inactive - Needs Evaluation
Status Date:	03/20/2008
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not Reported
Latitude:	38.34778
Longitude:	-120.7723
APN:	NONE SPECIFIED
Past Use:	MANUFACTURED GAS PLANT
Potential COC:	Polynuclear aromatic hydrocarbons (PAHs
Confirmed COC:	Polynuclear aromatic hydrocarbons (PAHs, NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	SQ-SK-JAK-2
Alias Type:	Alternate Name
Alias Name:	CAN000908564
Alias Type:	CERCLIS ID
Alias Name:	03490010
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not Reported
Completed Sub Area Name:	Not Reported
Completed Document Type:	Not Reported
Completed Date:	Not Reported
Comments:	Not Reported
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported

MANUFACTURED GAS PLANT - JACKSON 2, S BANK MIDDLE FORK JACKSON CREEK, JACKSON, CA 95642 (Continued)

Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

112 WATER ST 112 WATER ST, JACKSON, CA, 95642			1015160331
▼ A3	SW 1/10 - 1/3	(902 ft. / 0.171 mi.)	Historical Gas Stations
	2 ft. Lower Elevation	1200 ft. Above Sea Level	

Worksheet:

EDR Historical Auto Stations: Historical Gas Stations

Name: BROWNS AUTO REPAIR
Year: 1999
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2000
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2001
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2002
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2003
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2004
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2006
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2007
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2008
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2009
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2010
Address: 112 WATER ST

Name: BROWNS AUTO REPAIR
Year: 2011
Address: 112 WATER ST

112 WATER ST, 112 WATER ST, JACKSON, CA 95642 (Continued)

Name:	BROWNS AUTO REPAIR
Year:	2012
Address:	112 WATER ST

MANUFACTURED GAS PLANT - JACKSON 1 CORNER OF WATER & MAIN STREET, JACKSON, CA, 95642			S102008323
▲ B4	SW 1/10 - 1/3	(999 ft. / 0.189 mi.)	State and tribal - equivalent CERCLIS
	2 ft. Higher Elevation	1204 ft. Above Sea Level	

Worksheet:

ENVIROSTOR: State and tribal - equivalent CERCLIS

Site Type:	Evaluation
Site Type Detailed:	Evaluation
Acres:	1
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not Reported
Supervisor:	Steven Becker
Division Branch:	Cleanup Sacramento
Facility ID:	03490009
Site Code:	Not Reported
Assembly:	05
Senate:	08
Special Program:	Not Reported
Status:	Inactive - Needs Evaluation
Status Date:	05/15/1995
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	Not Reported
Latitude:	38.348
Longitude:	-120.7735
APN:	NONE SPECIFIED
Past Use:	MANUFACTURED GAS PLANT
Potential COC:	Polynuclear aromatic hydrocarbons (PAHs
Confirmed COC:	Polynuclear aromatic hydrocarbons (PAHs, NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	SQ-SK-JAK-1
Alias Type:	Alternate Name
Alias Name:	03490009
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not Reported
Completed Sub Area Name:	Not Reported
Completed Document Type:	Not Reported
Completed Date:	Not Reported
Comments:	Not Reported
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported

MANUFACTURED GAS PLANT - JACKSON 1, CORNER OF WATER & MAIN STREET, JACKSON, CA 95642 (Continued)

Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

WATER STREET ANTIQUES 19 WATER ST, JACKSON, CA, 95642			S100272709
▲ B5	SW 1/10 - 1/3	(999 ft. / 0.189 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records Exclusive Recovered Govt. Archives
	Equal Elevation	1202 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600500014
Latitude:	38.348602395
Longitude:	-120.772799728
Case Type:	LUST Cleanup Site
Status:	Open - Eligible for Closure
Status Date:	04/26/2013
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030017
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Aquifer used for drinking water supply, Surface water
Potential Contaminants of Concern:	Gasoline
Site History:	The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600500014

Contact:

Global Id:	T0600500014
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	Not Reported
City:	Jackson
Email:	Not Reported
Phone Number:	Not Reported

Global Id:	T0600500014
Contact Type:	Regional Board Caseworker

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600500014
Status:	Open - Case Begin Date
Status Date:	04/29/1991
Global Id:	T0600500014
Status:	Open - Site Assessment
Status Date:	10/30/1997
Global Id:	T0600500014
Status:	Open - Site Assessment
Status Date:	01/12/2000
Global Id:	T0600500014
Status:	Open - Verification Monitoring
Status Date:	07/20/2002
Global Id:	T0600500014
Status:	Open - Remediation
Status Date:	11/15/2006
Global Id:	T0600500014
Status:	Open - Remediation
Status Date:	12/11/2007
Global Id:	T0600500014
Status:	Open - Remediation
Status Date:	12/12/2007
Global Id:	T0600500014
Status:	Open - Site Assessment
Status Date:	02/15/2008
Global Id:	T0600500014
Status:	Open - Assessment & Interim Remedial Action
Status Date:	03/02/2011
Global Id:	T0600500014
Status:	Open - Remediation
Status Date:	03/02/2011
Global Id:	T0600500014
Status:	Open - Remediation
Status Date:	10/18/2012
Global Id:	T0600500014
Status:	Open - Eligible for Closure
Status Date:	04/26/2013

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Regulatory Activities:

Global Id:	T0600500014
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	06/25/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	04/29/2002
Action:	Notice to Comply
Global Id:	T0600500014
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	09/17/2004
Action:	Other Workplan
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	10/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	04/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	03/04/2013
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	06/22/2012
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	11/30/2009
Action:	Clean Up Fund - 5-Year Review Summary
Global Id:	T0600500014
Action Type:	ENFORCEMENT

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	08/24/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/27/2011
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/05/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	10/28/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	12/12/2007
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	08/28/2007
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/20/2008
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/07/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	09/08/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	05/11/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	10/31/2010
Action:	CAP/RAP - Other Report
Global Id:	T0600500014
Action Type:	RESPONSE

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	01/31/2008
Action:	Soil and Water Investigation Workplan
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	12/11/2007
Action:	CAP/RAP - Final Remediation / Design Plan
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	06/30/2007
Action:	Interim Remedial Action Report
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	06/30/2011
Action:	Well Installation Report
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	11/16/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	04/10/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/02/2000
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/03/2000
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	03/31/2000
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	01/31/2008
Action:	Other Report / Document
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	04/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	01/15/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	11/07/2013
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	05/24/2013
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	01/22/2007
Action:	CAP/RAP - Feasibility Study Report
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	11/15/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/01/2012
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	10/26/2009
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	10/30/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	04/29/2003
Action:	File review
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	08/13/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	07/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	04/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	01/25/2012
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	12/09/2002
Action:	Soil and Water Investigation Report
Global Id:	T0600500014
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	10/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	09/30/2007
Action:	Other Report / Document
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/02/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/23/2004
Action:	Notice of Violation
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	03/22/2004
Action:	13267 Requirement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	11/20/2006
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	12/21/2005
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	03/17/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	03/30/2007
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	10/04/2007
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	12/27/2007
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/25/2002
Action:	Site Visit / Inspection / Sampling
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	07/15/2002
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	07/15/2004
Action:	Interim Remedial Action Plan
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	10/25/2004
Action:	Other Workplan
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	01/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	04/15/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	06/30/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	02/11/2010
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	03/24/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	07/12/2013
Action:	Other Workplan - Regulator Responded
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	06/30/2013
Action:	Soil Vapor Intrusion Investigation Workplan - Regulator Responded
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	02/20/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	04/20/2007
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	01/12/2005
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	04/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	09/21/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/28/2011
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	11/07/2012
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	RESPONSE

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	07/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	12/24/2008
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	12/29/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/29/2009
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/16/2013
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	07/16/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	04/10/2013
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	03/31/2012
Action:	Remedial Progress Report
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	10/30/2013
Action:	Soil Vapor Intrusion Investigation Report
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	03/08/2007
Action:	Staff Letter
Global Id:	T0600500014
Action Type:	ENFORCEMENT

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

Date:	07/26/2007
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	01/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	09/30/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	10/12/2010
Action:	Verbal Enforcement
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	07/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	07/20/2002
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	ENFORCEMENT
Date:	05/30/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	10/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500014
Action Type:	RESPONSE
Date:	03/21/2005
Action:	CAP/RAP - Other Report

LUST REG 5:

Region:	5
Status:	Pollution Characterization
Case Number:	030017
Case Type:	A, F
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	0

WATER STREET ANTIQUES, 19 WATER ST, JACKSON, CA 95642 (Continued)

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	3
Reg By:	LTNKA
Reg Id:	030017

RGA LUST: Exclusive Recovered Govt. Archives

2012	WATER STREET ANTIQUES	19 WATER ST
2011	WATER STREET ANTIQUES	19 WATER ST
2010	WATER STREET ANTIQUES	19 WATER ST
2009	WATER STREET ANTIQUES	19 WATER ST
2008	WATER STREET ANTIQUES	19 WATER ST
2007	WATER STREET ANTIQUES	19 WATER ST
2006	WATER STREET ANTIQUES	19 WATER ST
2005	WATER STREET ANTIQUES	19 WATER ST
2003	WATER STREET ANTIQUES	19 WATER ST
2002	WATER STREET ANTIQUES	19 WATER ST
2001	WATER STREET ANTIQUES	19 WATER ST
2000	WATER STREET ANTIQUES	19 WATER ST
1998	WATER STREET ANTIQUES	19 WATER ST
1997	WATER STREET ANTIQUES	19 WATER ST
1996	WATER STREET ANTIQUES	19 WATER ST
1995	WATER STREET ANTIQUES	19 WATER ST
1994	WATER STREET ANTIQUES	19 WATER ST
1993	WATER STREET ANTIQUES	19 WATER ST

WEBB/JONES BUILDING 19 MAIN ST, JACKSON, CA, 95642			S103770896
▲ B6	SW 1/10 - 1/3	(1004 ft. / 0.19 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records Exclusive Recovered Govt. Archives
	2 ft. Higher Elevation	1204 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600500050
Latitude:	38.3481875
Longitude:	-120.7738582
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/15/2011
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030058
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Gasoline
Site History:	The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600500050

Contact:

Global Id:	T0600500050
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600500050
Contact Type:	Regional Board Caseworker

WEBB/JONES BUILDING, 19 MAIN ST, JACKSON, CA 95642 (Continued)

Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600500050
Status:	Open - Case Begin Date
Status Date:	10/23/1993
Global Id:	T0600500050
Status:	Open - Site Assessment
Status Date:	10/23/1993
Global Id:	T0600500050
Status:	Open - Site Assessment
Status Date:	12/30/1998
Global Id:	T0600500050
Status:	Open - Site Assessment
Status Date:	03/16/2011
Global Id:	T0600500050
Status:	Open - Verification Monitoring
Status Date:	06/09/2011
Global Id:	T0600500050
Status:	Open - Verification Monitoring
Status Date:	09/28/2011
Global Id:	T0600500050
Status:	Completed - Case Closed
Status Date:	12/15/2011

Regulatory Activities:

Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	09/15/2005
Action:	Site Visit / Inspection / Sampling
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	02/24/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery
Global Id:	T0600500050

WEBB/JONES BUILDING, 19 MAIN ST, JACKSON, CA 95642 (Continued)

Action Type:	ENFORCEMENT
Date:	07/27/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	10/12/2010
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	10/11/2010
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	02/23/2011
Action:	Meeting
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	03/17/2011
Action:	Staff Letter
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	10/19/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500050
Action Type:	RESPONSE
Date:	01/15/2011
Action:	Other Report / Document
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	07/27/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	09/12/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	09/08/2008
Action:	Staff Letter
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	12/01/2008
Action:	Verbal Enforcement
Global Id:	T0600500050

WEBB/JONES BUILDING, 19 MAIN ST, JACKSON, CA 95642 (Continued)

Action Type:	ENFORCEMENT
Date:	09/04/2008
Action:	Site Visit / Inspection / Sampling
Global Id:	T0600500050
Action Type:	RESPONSE
Date:	03/15/2011
Action:	Preliminary Site Assessment Workplan
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	10/12/2010
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	09/13/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	03/07/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	12/08/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	12/02/2011
Action:	Notification - Public Notice of Case Closure
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	12/15/2011
Action:	Closure/No Further Action Letter
Global Id:	T0600500050
Action Type:	RESPONSE
Date:	06/30/2011
Action:	Site Assessment Report
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	09/26/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	12/07/2011
Action:	Verbal Enforcement
Global Id:	T0600500050

WEBB/JONES BUILDING, 19 MAIN ST, JACKSON, CA 95642 (Continued)

Action Type:	ENFORCEMENT
Date:	11/02/2011
Action:	Notification - Public Notice of Case Closure
Global Id:	T0600500050
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0600500050
Action Type:	RESPONSE
Date:	03/14/2011
Action:	Correspondence
Global Id:	T0600500050
Action Type:	RESPONSE
Date:	03/14/2011
Action:	Soil and Water Investigation Workplan
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	10/06/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	10/13/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	12/13/2010
Action:	Staff Letter
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	05/18/2006
Action:	Staff Letter
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	09/28/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	08/16/2010
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	04/13/2009
Action:	Verbal Enforcement
Global Id:	T0600500050

WEBB/JONES BUILDING, 19 MAIN ST, JACKSON, CA 95642 (Continued)

Action Type:	ENFORCEMENT
Date:	06/14/2010
Action:	Staff Letter
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	02/23/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	ENFORCEMENT
Date:	05/05/2011
Action:	Verbal Enforcement
Global Id:	T0600500050
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

LUST REG 5:

Region:	5
Status:	Preliminary site assessment underway
Case Number:	030058
Case Type:	Drinking Water Aquifer affected
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	3
Reg By:	LTNKA
Reg Id:	030058

RGA LUST: Exclusive Recovered Govt. Archives

2012	WEBB/JONES BUILDING	19 MAIN ST
2011	WEBB/JONES BUILDING	19 MAIN ST
2010	WEBB/JONES BUILDING	19 MAIN ST
2009	WEBB/JONES BUILDING	19 MAIN ST
2008	WEBB/JONES BUILDING	19 MAIN ST
2007	WEBB/JONES BUILDING	19 MAIN ST
2006	WEBB/JONES BUILDING	19 MAIN ST
2005	WEBB/JONES BUILDING	19 MAIN ST
2003	WEBB/JONES BUILDING	19 MAIN ST

WEBB/JONES BUILDING, 19 MAIN ST, JACKSON, CA 95642 (Continued)

2002	WEBB/JONES BUILDING	19 MAIN ST
2001	WEBB/JONES BUILDING	19 MAIN ST
2000	WEBB/JONES BUILDING	19 MAIN ST

FORMER STANDARD OIL SERVICE STATION 16 WATER STREET, JACKSON, CA, 95642			S111240320
▲ B7	SW 1/10 - 1/3	(1007 ft. / 0.191 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	Equal Elevation	1202 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T10000003259
Latitude:	38.3482447601223
Longitude:	-120.772817730904
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/30/2013
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030081
LOC Case Number:	Not Reported
File Location:	Regional Board
Potential Media Affect:	Aquifer used for drinking water supply, Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Benzene, Toluene, Xylene, Gasoline
Site History:	The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T10000003259

Contact:

Global Id:	T10000003259
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Global Id:	T10000003259
Contact Type:	Local Agency Caseworker

FORMER STANDARD OIL SERVICE STATION, 16 WATER STREET, JACKSON, CA 95642 (Continued)

Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Status History:

Global Id:	T10000003259
Status:	Open - Case Begin Date
Status Date:	02/09/2009
Global Id:	T10000003259
Status:	Open - Site Assessment
Status Date:	09/12/2011
Global Id:	T10000003259
Status:	Open - Remediation
Status Date:	07/15/2012
Global Id:	T10000003259
Status:	Open - Verification Monitoring
Status Date:	10/15/2012
Global Id:	T10000003259
Status:	Open - Eligible for Closure
Status Date:	06/20/2013
Global Id:	T10000003259
Status:	Completed - Case Closed
Status Date:	09/30/2013

Regulatory Activities:

Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	04/11/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	07/05/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	07/09/2012
Action:	Staff Letter
Global Id:	T10000003259
Action Type:	RESPONSE
Date:	01/31/2013
Action:	Monitoring Report - Quarterly

FORMER STANDARD OIL SERVICE STATION, 16 WATER STREET, JACKSON, CA 95642 (Continued)

Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	04/24/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	09/19/2011
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	09/12/2011
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	12/19/2011
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	11/14/2011
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	06/19/2013
Action:	Notification - Public Notice of Case Closure
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	09/30/2013
Action:	Closure/No Further Action Letter
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	05/30/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	08/29/2012
Action:	Staff Letter
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	01/04/2012
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	01/04/2012
Action:	Verbal Enforcement

FORMER STANDARD OIL SERVICE STATION, 16 WATER STREET, JACKSON, CA 95642 (Continued)

Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	01/11/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	04/10/2013
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	09/12/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	09/23/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	04/10/2013
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	04/10/2013
Action:	Verbal Enforcement
Global Id:	T10000003259
Action Type:	RESPONSE
Date:	01/22/2013
Action:	Request for Closure - Regulator Responded
Global Id:	T10000003259
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T10000003259
Action Type:	RESPONSE
Date:	06/26/2013
Action:	Well Destruction Workplan - Regulator Responded
Global Id:	T10000003259
Action Type:	RESPONSE
Date:	12/16/2011
Action:	Site Assessment Report
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	04/29/2013
Action:	Technical Correspondence / Assistance / Other

FORMER STANDARD OIL SERVICE STATION, 16 WATER STREET, JACKSON, CA 95642 (Continued)

Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	12/03/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T10000003259
Action Type:	ENFORCEMENT
Date:	06/20/2013
Action:	Notification - Public Notice of Case Closure
Global Id:	T10000003259
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

RGA LUST: Exclusive Recovered Govt. Archives

2012	FORMER STANDARD OIL SERVICE STATION	16 WATER STREET
2011	FORMER STANDARD OIL SERVICE STATION	16 WATER STREET

111 MAIN ST 111 MAIN ST, JACKSON, CA, 95642			1014975393
▲ C8	WSW 1/10 - 1/3	(1044 ft. / 0.198 mi.)	Historical Dry Cleaners
	15 ft. Higher Elevation	1217 ft. Above Sea Level	

Worksheet:

EDR Historical Cleaners: Historical Dry Cleaners

Name:	JACKSON CLEANERS
Year:	2002
Address:	111 MAIN ST
Name:	JACKSON CLEANERS
Year:	2003
Address:	111 MAIN ST
Name:	JACKSON CLEANERS
Year:	2004
Address:	111 MAIN ST
Name:	JACKSON CLEANERS
Year:	2005
Address:	111 MAIN ST
Name:	JACKSON CLEANERS
Year:	2006
Address:	111 MAIN ST
Name:	JACKSON CLEANERS
Year:	2010
Address:	111 MAIN ST
Name:	JACKSON CLEANERS
Year:	2012
Address:	111 MAIN ST

SIERRA ENERGY 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA, 95640			S105736183
▲ C9	WSW 1/10 - 1/3	(1045 ft. / 0.198 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	14 ft. Higher Elevation	1216 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600500054
Latitude:	38.352288446
Longitude:	-120.934996242
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/19/2010
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030063
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Aquifer used for drinking water supply, Surface water
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600500054

Contact:

Global Id:	T0600500054
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600500054
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600500054
Status:	Open - Case Begin Date

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Status Date:	06/30/1999

Global Id:	T0600500054
Status:	Open - Site Assessment
Status Date:	06/30/1999

Global Id:	T0600500054
Status:	Open - Site Assessment
Status Date:	09/15/1999

Global Id:	T0600500054
Status:	Open - Remediation
Status Date:	03/15/2000

Global Id:	T0600500054
Status:	Open - Verification Monitoring
Status Date:	07/02/2003

Global Id:	T0600500054
Status:	Completed - Case Closed
Status Date:	01/19/2010

Regulatory Activities:

Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	10/03/2000
Action:	Staff Letter

Global Id:	T0600500054
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600500054
Action Type:	RESPONSE
Date:	10/15/2004
Action:	Monitoring Report - Quarterly

Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	11/17/2009
Action:	Meeting

Global Id:	T0600500054
Action Type:	RESPONSE
Date:	11/24/2009
Action:	Clean Up Fund - 5-Year Review Summary

Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	06/10/2008
Action:	Staff Letter

Global Id:	T0600500054
Action Type:	ENFORCEMENT

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Date:	02/26/2008
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	10/24/2007
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	09/26/2002
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	04/29/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	04/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	01/30/2009
Action:	Risk Assessment Report
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	06/30/2008
Action:	Well Installation Report
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	04/02/2008
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	10/30/2007
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	10/25/2000
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	04/03/2000
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Date:	12/16/2002
Action:	* Verbal Communication
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	05/15/2008
Action:	Other Workplan
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	01/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	07/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	09/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	01/15/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	01/14/2010
Action:	Clean Up Fund - Case Closure Review Summary Report (RSR)
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	10/08/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	04/29/2003
Action:	File review
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	07/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0600500054
Action Type:	RESPONSE

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Date:	01/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	07/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	04/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	01/26/2010
Action:	Clean Up Fund - Letter to RP
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	01/19/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	01/21/2010
Action:	State Water Board Closure Order
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	11/23/2009
Action:	Verbal Enforcement
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	03/11/2009
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	11/04/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	12/31/2009
Action:	Monitoring Report - Semi-Annually
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	02/10/2010
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Date:	04/21/2008
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	04/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	04/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	07/15/2002
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	12/22/2000
Action:	Soil and Water Investigation Report
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	04/30/2008
Action:	Other Workplan
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	03/14/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	03/24/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	09/12/2002
Action:	File review
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	07/06/2006
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	04/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	RESPONSE

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Date:	10/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	10/17/2008
Action:	Verbal Enforcement
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	07/11/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	12/23/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	09/16/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	01/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	03/15/2007
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	03/08/2007
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	06/18/2007
Action:	Staff Letter
Global Id:	T0600500054
Action Type:	ENFORCEMENT
Date:	03/27/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500054
Action Type:	RESPONSE
Date:	12/15/2007
Action:	Unknown

LUST REG 5:

SIERRA ENERGY, 116 MAIN ST W (AKA: 117 JACKSON), IONE, CA 95640 (Continued)

Region:	5
Status:	Post remedial action monitoring
Case Number:	030063
Case Type:	A, F
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	5

RGA LUST: Exclusive Recovered Govt. Archives

2012	SIERRA ENERGY	116 MAIN ST W (AKA: 117 JACKSON)
2011	SIERRA ENERGY	116 MAIN ST W (AKA: 117 JACKSON)
2010	SIERRA ENERGY	116 MAIN ST W (AKA: 117 JACKSON)
2009	SIERRA ENERGY	116 MAIN ST W (AKA: 117 JACKSON)

RATTO THEATER 149 MAIN ST, JACKSON, CA, 95642			S103479857
▲ D10	W 1/10 - 1/3	(1093 ft. / 0.207 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records Exclusive Recovered Govt. Archives
	12 ft. Higher Elevation	1214 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600500049
Latitude:	38.349448
Longitude:	-120.774866
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/17/1999
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030057
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Aquifer used for drinking water supply
Potential Contaminants of Concern:	Heating Oil / Fuel Oil
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600500049

Contact:

Global Id:	T0600500049
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600500049
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600500049
Status:	Open - Case Begin Date

RATTO THEATER, 149 MAIN ST, JACKSON, CA 95642 (Continued)

Status Date:	10/22/1998

Global Id:	T0600500049
Status:	Open - Site Assessment
Status Date:	10/22/1998

Global Id:	T0600500049
Status:	Completed - Case Closed
Status Date:	03/17/1999

Regulatory Activities:

Global Id:	T0600500049
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600500049
Action Type:	ENFORCEMENT
Date:	03/17/1999
Action:	Closure/No Further Action Letter

Global Id:	T0600500049
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 5:

Region:	5
Status:	Case Closed
Case Number:	030057
Case Type:	Drinking Water Aquifer affected
Substance:	BUNKER FUEL OIL
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	3
Reg By:	LTNKA
Reg Id:	030057

RGA LUST: Exclusive Recovered Govt. Archives

2012	RATTO THEATER	149 MAIN ST
2011	RATTO THEATER	149 MAIN ST
2010	RATTO THEATER	149 MAIN ST
2009	RATTO THEATER	149 MAIN ST

RATTO THEATER, 149 MAIN ST, JACKSON, CA 95642 (Continued)

2008	RATTO THEATER	149 MAIN ST
2007	RATTO THEATER	149 MAIN ST
2006	RATTO THEATER	149 MAIN ST
2005	RATTO THEATER	149 MAIN ST
2003	RATTO THEATER	149 MAIN ST
2002	RATTO THEATER	149 MAIN ST
2001	RATTO THEATER	149 MAIN ST
2000	RATTO THEATER	149 MAIN ST

176 MAIN ST 176 MAIN ST, JACKSON, CA, 95642			1015273821
▲ D11	W 1/10 - 1/3	(1127 ft. / 0.213 mi.)	Historical Gas Stations
	11 ft. Higher Elevation	1213 ft. Above Sea Level	

Worksheet:

EDR Historical Auto Stations: Historical Gas Stations

Name: L & M AUTOMOTIVE
Year: 1999
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2000
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2001
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2002
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2003
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2008
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2010
Address: 176 MAIN ST

Name: LYNCHS AUTOMOTIVE
Year: 2011
Address: 176 MAIN ST

Name: L & M AUTOMOTIVE
Year: 2012
Address: 176 MAIN ST

SIERRA PACIFIC INDUSTRIES-MARTELL FUNGICIDE DIP TANK AREA INTERSECTION OF HIGHWAYS 49 AND 88, MARTELL, CA, 95654			S109286067
▼ 12	SW 1/10 - 1/3	(1149 ft. / 0.218 mi.)	State and tribal leaking storage tank lists
	16 ft. Lower Elevation	1186 ft. Above Sea Level	

Worksheet:

SLIC: State and tribal leaking storage tank lists

Region:	STATE
Facility Status:	**Open - Referred**
Status Date:	07/31/2008
Global Id:	T10000000129
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Lead Agency Case Number:	Not Reported
Latitude:	38.3473298750715
Longitude:	-120.773121126953
Case Type:	Cleanup Program Site
Case Worker:	CC
Local Agency:	Not Reported
RB Case Number:	WDRsNo. 98-094
File Location:	Not Reported
Potential Media Affected:	Aquifer used for drinking water supply, Other Groundwater (uses other than drinking water), Sediments, Surface water, Under Investigation
Potential Contaminants of Concern:	Other Chlorinated Hydrocarbons, Dioxin / Furans, Polynuclear aromatic hydrocarbons (PAHs)
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_SLIC_ST&global_id=T10000000129

HOME & FARM KITCHEN SUPPLY 215 MAIN ST N, JACKSON, CA, 95642			S104548942
▲ 13	W 1/10 - 1/3	(1212 ft. / 0.229 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	11 ft. Higher Elevation	1213 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600593571
Latitude:	38.350636
Longitude:	-120.775129
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/04/2002
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030069
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600593571

Contact:

Global Id:	T0600593571
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600593571
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600593571
Status:	Open - Case Begin Date

HOME & FARM KITCHEN SUPPLY, 215 MAIN ST N, JACKSON, CA 95642 (Continued)

Status Date:	06/13/2000

Global Id:	T0600593571
Status:	Open - Site Assessment
Status Date:	06/13/2000

Global Id:	T0600593571
Status:	Completed - Case Closed
Status Date:	10/04/2002

Regulatory Activities:

Global Id:	T0600593571
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600593571
Action Type:	ENFORCEMENT
Date:	11/27/2000
Action:	Staff Letter

Global Id:	T0600593571
Action Type:	ENFORCEMENT
Date:	10/04/2002
Action:	Closure/No Further Action Letter

Global Id:	T0600593571
Action Type:	ENFORCEMENT
Date:	07/30/2002
Action:	Staff Letter

Global Id:	T0600593571
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0600593571
Action Type:	RESPONSE
Date:	07/05/2002
Action:	Request for Closure

Global Id:	T0600593571
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

LUST REG 5:

Region:	5
Status:	Case Closed
Case Number:	030069
Case Type:	Other ground water affected
Substance:	GASOLINE

HOME & FARM KITCHEN SUPPLY, 215 MAIN ST N, JACKSON, CA 95642 (Continued)

Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

RGA LUST: Exclusive Recovered Govt. Archives

2012	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2011	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2010	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2009	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2008	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2007	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2006	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2005	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2003	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2002	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N
2001	HOME & FARM KITCHEN SUPPLY	215 MAIN ST N

PRIVATE RESIDENCE PRIVATE RESIDENCE, JACKSON, CA, 95642			S110653959
▲ E14	NW 1/10 - 1/3	(1326 ft. / 0.251 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	42 ft. Higher Elevation	1244 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600519763
Latitude:	38.352204
Longitude:	-120.77438
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/14/2004
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030074
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Heating Oil / Fuel Oil
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600519763

Contact:

Global Id:	T0600519763
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600519763
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600519763
Status:	Open - Case Begin Date

PRIVATE RESIDENCE, PRIVATE RESIDENCE, JACKSON, CA 95642 (Continued)

Status Date:	02/25/2003

Global Id:	T0600519763
Status:	Completed - Case Closed
Status Date:	01/14/2004

Regulatory Activities:

Global Id:	T0600519763
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600519763
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Other (Use Description Field)

Global Id:	T0600519763
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0600519763
Action Type:	ENFORCEMENT
Date:	01/14/2004
Action:	Closure/No Further Action Letter

Global Id:	T0600519763
Action Type:	RESPONSE
Date:	07/23/2003
Action:	Request for Closure

Global Id:	T0600519763
Action Type:	ENFORCEMENT
Date:	05/29/2003
Action:	Staff Letter

Global Id:	T0600519763
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

RGA LUST: Exclusive Recovered Govt. Archives

2012	PRIVATE RESIDENCE	PRIVATE RESIDENCE
2010	PRIVATE RESIDENCE	PRIVATE RESIDENCE

KRAMER RESIDENCE 425 STASAL STREET, JACKSON, CA, 95642			S105911344
▲ E15	NW 1/10 - 1/3	(1332 ft. / 0.252 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	42 ft. Higher Elevation	1244 ft. Above Sea Level	

Worksheet:

LUST REG 5: State and tribal leaking storage tank lists

Region:	5
Status:	Case Closed
Case Number:	030074
Case Type:	Undefined
Substance:	#6 FUEL OIL
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

RGA LUST: Exclusive Recovered Govt. Archives

2009	KRAMER RESIDENCE	425 STASAL STREET
2008	KRAMER RESIDENCE	425 STASAL STREET
2007	KRAMER RESIDENCE	425 STASAL STREET
2006	KRAMER RESIDENCE	425 STASAL STREET
2005	KRAMER RESIDENCE	425 STASAL STREET

AMADOR CO CORPORATION YARD 1220 AIRPORT RD, MARTELL, CA, 95654			S104233707
▲ 16	WNW 1/10 - 1/3	(1390 ft. / 0.263 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records Exclusive Recovered Govt. Archives
	13 ft. Higher Elevation	1215 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600500058
Latitude:	38.3515
Longitude:	-120.7752
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/04/2000
Lead Agency:	AMADOR COUNTY
Case Worker:	Not Reported
Local Agency:	AMADOR COUNTY
RB Case Number:	030067
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600500058

Contact:

Global Id:	T0600500058
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600500058
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600500058
Status:	Open - Case Begin Date

AMADOR CO CORPORATION YARD, 1220 AIRPORT RD, MARTELL, CA 95654 (Continued)

Status Date:	06/24/1999

Global Id:	T0600500058
Status:	Open - Site Assessment
Status Date:	06/24/1999

Global Id:	T0600500058
Status:	Completed - Case Closed
Status Date:	05/04/2000

Regulatory Activities:

Global Id:	T0600500058
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600500058
Action Type:	ENFORCEMENT
Date:	05/04/2000
Action:	Closure/No Further Action Letter

Global Id:	T0600500058
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

LUST REG 5:

Region:	5
Status:	Case Closed
Case Number:	030067
Case Type:	Undefined
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Local
Program:	LUST
MTBE Code:	N/A

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	3
Reg By:	LTNKA
Reg Id:	030067

RGA LUST: Exclusive Recovered Govt. Archives

2012	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2011	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2010	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2009	AMADOR CO CORPORATION YARD	1220 AIRPORT RD

AMADOR CO CORPORATION YARD, 1220 AIRPORT RD, MARTELL, CA 95654 (Continued)

2008	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2007	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2006	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2005	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2003	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2002	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2001	AMADOR CO CORPORATION YARD	1220 AIRPORT RD
2000	AMADOR CO CORPORATION YARD	1220 AIRPORT RD

CHEVRON #9-2797 115 HWY 49 S, JACKSON, CA, 95642			S101293921
▲ 17	S 1/10 - 1/3	(1595 ft. / 0.302 mi.)	State and tribal leaking storage tank lists Other Standard Environmental Records Exclusive Recovered Govt. Archives
	3 ft. Higher Elevation	1205 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600500016
Latitude:	38.3465896
Longitude:	-120.7727201
Case Type:	LUST Cleanup Site
Status:	Open - Verification Monitoring
Status Date:	10/17/2012
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030019
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	The case was opened following an unauthorized release from an underground storage tank system at the subject site. Corrective action is underway as directed by the CVRWQCB. Corrective action may consist of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof. A summary of the site history is available by clicking on either the "Cleanup Status History", "Regulatory Activities" or the "Site Maps/Documents" tab. For a complete site history the case file at the CVRWQCB should be consulted.
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600500016

Contact:

Global Id:	T0600500016
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439
Global Id:	T0600500016
Contact Type:	Regional Board Caseworker

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600500016
Status:	Open - Case Begin Date
Status Date:	04/11/1991
Global Id:	T0600500016
Status:	Open - Site Assessment
Status Date:	10/15/1997
Global Id:	T0600500016
Status:	Open - Site Assessment
Status Date:	01/12/1998
Global Id:	T0600500016
Status:	Open - Remediation
Status Date:	06/15/2001
Global Id:	T0600500016
Status:	Open - Remediation
Status Date:	08/06/2001
Global Id:	T0600500016
Status:	Open - Verification Monitoring
Status Date:	09/27/2005
Global Id:	T0600500016
Status:	Open - Verification Monitoring
Status Date:	02/24/2011
Global Id:	T0600500016
Status:	Open - Verification Monitoring
Status Date:	03/29/2011
Global Id:	T0600500016
Status:	Open - Verification Monitoring
Status Date:	10/17/2012

Regulatory Activities:

Global Id:	T0600500016
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Monitored Natural Attenuation
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	11/30/2000

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	03/05/2008
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	02/01/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	02/13/2009
Action:	Other Report / Document
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	04/15/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	10/25/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	01/26/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	05/01/2012
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	04/17/2007
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	09/06/2002
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	11/03/2008

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	11/17/2008
Action:	Site Visit / Inspection / Sampling
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	04/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	07/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	01/31/2013
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	09/06/2002
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	11/20/2007
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/09/2007
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	07/02/2001
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	04/10/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/11/2012
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	01/31/2014

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Action:	Soil and Water Investigation Workplan
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	04/29/2003
Action:	File review
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/18/2001
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	08/08/2007
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	05/10/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	03/30/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	07/31/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	01/27/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	11/15/2007
Action:	Other Workplan
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	08/15/2003
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	12/03/2013

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	11/19/2013
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	11/15/2007
Action:	Other Workplan
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	03/06/2013
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	04/30/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	04/30/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	11/02/2011
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	09/15/2002
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	10/21/2002
Action:	Other Workplan
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	10/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	04/28/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	04/29/2013

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	01/15/2013
Action:	Request for Closure - Regulator Responded
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/30/2006
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	05/22/2007
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	01/15/2004
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	04/30/2013
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	02/25/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	07/09/2009
Action:	Staff Letter
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	04/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	07/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/09/2012
Action:	Verbal Enforcement
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	06/01/2010

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	12/07/2010
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	11/25/2013
Action:	Request for Closure - Regulator Responded
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	06/07/2007
Action:	Site Visit / Inspection / Sampling
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/19/2007
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	07/31/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	07/19/2006
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	10/15/2005
Action:	Monitoring Report - Quarterly
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	10/26/2010
Action:	Site Visit / Inspection / Sampling
Global Id:	T0600500016
Action Type:	ENFORCEMENT
Date:	03/26/2013
Action:	Verbal Enforcement
Global Id:	T0600500016
Action Type:	RESPONSE
Date:	01/26/2006
Action:	Monitoring Report - Quarterly

LUST REG 5:

Region:	5

CHEVRON #9-2797, 115 HWY 49 S, JACKSON, CA 95642 (Continued)

Status:	Post remedial action monitoring
Case Number:	030019
Case Type:	Other ground water affected
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	6

HIST CORTESE: Other Standard Environmental Records

Region:	CORTESE
Facility County Code:	3
Reg By:	LTNKA
Reg Id:	030019

RGA LUST: Exclusive Recovered Govt. Archives

2012	CHEVRON #9-2797	115 HWY 49 S
2011	CHEVRON #9-2797	115 HWY 49 S
2010	CHEVRON #9-2797	115 HWY 49 S
2009	CHEVRON #9-2797	115 HWY 49 S
2008	CHEVRON #9-2797	115 HWY 49 S
2007	CHEVRON #9-2797	115 HWY 49 S
2006	CHEVRON #9-2797	115 HWY 49 S
2005	CHEVRON #9-2797	115 HWY 49 S
2003	CHEVRON #9-2797	115 HWY 49 S
2002	CHEVRON #9-2797	115 HWY 49 S
2001	CHEVRON #9-2797	115 HWY 49 S
2000	CHEVRON #9-2797	115 HWY 49 S
1998	CHEVRON #9-2797	115 HWY 49 S
1997	CHEVRON #9-2797	115 HWY 49 S
1996	CHEVRON #9-2797	115 HWY 49 S
1995	CHEVRON #9-2797	115 HWY 49 S
1994	CHEVRON#9-2797	115 HWY 49 S
1993	CHEVRON#9-2797	115 HWY 49 S

HUBERTY PROPERTY 120 HOFFMAN STREET, JACKSON, CA, 95642			S105911342
▲ F18	WNW 1/10 - 1/3	(1652 ft. / 0.313 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	25 ft. Higher Elevation	1227 ft. Above Sea Level	

Worksheet:

LUST REG 5: State and tribal leaking storage tank lists

Region:	5
Status:	Case Closed
Case Number:	030073
Case Type:	Other ground water affected
Substance:	HEATER FUEL
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

RGA LUST: Exclusive Recovered Govt. Archives

2009	HUBERTY PROPERTY	120 HOFFMAN STREET
2008	HUBERTY PROPERTY	120 HOFFMAN STREET
2007	HUBERTY PROPERTY	120 HOFFMAN STREET
2006	HUBERTY PROPERTY	120 HOFFMAN STREET
2005	HUBERTY PROPERTY	120 HOFFMAN STREET

PRIVATE RESIDENCE PRIVATE RESIDENCE, JACKSON, CA, 95642			S110653960
▲ F19	WNW 1/10 - 1/3	(1653 ft. / 0.313 mi.)	State and tribal leaking storage tank lists
	25 ft. Higher Elevation	1227 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600593989
Latitude:	38.351677
Longitude:	-120.7761
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/14/2003
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030073
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Not Reported
Potential Contaminants of Concern:	Heating Oil / Fuel Oil
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600593989

Contact:

Global Id:	T0600593989
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Global Id:	T0600593989
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Status History:

Global Id:	T0600593989
Status:	Open - Case Begin Date

PRIVATE RESIDENCE, PRIVATE RESIDENCE, JACKSON, CA 95642 (Continued)

Status Date:	11/12/2002

Global Id:	T0600593989
Status:	Completed - Case Closed
Status Date:	07/14/2003

Regulatory Activities:

Global Id:	T0600593989
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600593989
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported

Global Id:	T0600593989
Action Type:	ENFORCEMENT
Date:	07/14/2003
Action:	Closure/No Further Action Letter

Global Id:	T0600593989
Action Type:	ENFORCEMENT
Date:	07/14/2003
Action:	State Water Board Closure Order

Global Id:	T0600593989
Action Type:	Other
Date:	01/01/1950
Action:	Leak Stopped

OLD COUNTY HOSPITAL 810 COURT ST, JACKSON, CA, 95642			S105174059
▲ 20	NE 1/10 - 1/3	(1713 ft. / 0.324 mi.)	State and tribal leaking storage tank lists Exclusive Recovered Govt. Archives
	24 ft. Higher Elevation	1226 ft. Above Sea Level	

Worksheet:

LUST: State and tribal leaking storage tank lists

Region:	STATE
Global Id:	T0600591907
Latitude:	38.352575
Longitude:	-120.765891
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/30/2010
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Case Worker:	GTM
Local Agency:	AMADOR COUNTY
RB Case Number:	030076
LOC Case Number:	Not Reported
File Location:	Not Reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not Reported
Click here to access the California GeoTracker records for this facility:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_LUST_ST&global_id=T0600591907

Contact:

Global Id:	T0600591907
Contact Type:	Local Agency Caseworker
Contact Name:	ROBERT FOURT
Organization Name:	AMADOR COUNTY
Address:	500 ARGONAUT LANE
City:	JACKSON
Email:	Not Reported
Phone Number:	2092236439

Global Id:	T0600591907
Contact Type:	Regional Board Caseworker
Contact Name:	GLENN T. MEEKS
Organization Name:	CENTRAL VALLEY RWQCB (REGION 5S)
Address:	11020 SUN CENTER DRIVE #200
City:	RANCHO CORDOVA
Email:	gmeeks@waterboards.ca.gov
Phone Number:	Not Reported

Status History:

Global Id:	T0600591907
Status:	Open - Case Begin Date

OLD COUNTY HOSPITAL, 810 COURT ST, JACKSON, CA 95642 (Continued)

Status Date:	09/18/2001

Global Id:	T0600591907
Status:	Open - Site Assessment
Status Date:	10/22/2001

Global Id:	T0600591907
Status:	Open - Remediation
Status Date:	12/14/2004

Global Id:	T0600591907
Status:	Open - Verification Monitoring
Status Date:	11/27/2006

Global Id:	T0600591907
Status:	Completed - Case Closed
Status Date:	03/29/2010

Global Id:	T0600591907
Status:	Completed - Case Closed
Status Date:	03/30/2010

Regulatory Activities:

Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	09/25/2006
Action:	Staff Letter

Global Id:	T0600591907
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery

Global Id:	T0600591907
Action Type:	RESPONSE
Date:	04/30/2007
Action:	Monitoring Report - Quarterly

Global Id:	T0600591907
Action Type:	RESPONSE
Date:	07/30/2007
Action:	Monitoring Report - Quarterly

Global Id:	T0600591907
Action Type:	RESPONSE
Date:	03/31/2009
Action:	Request for Closure

Global Id:	T0600591907
Action Type:	RESPONSE
Date:	07/30/2004
Action:	Other Report / Document

Global Id:	T0600591907
Action Type:	RESPONSE

OLD COUNTY HOSPITAL, 810 COURT ST, JACKSON, CA 95642 (Continued)

Date:	12/07/2004
Action:	CAP/RAP - Other Report
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	10/19/2009
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	10/17/2007
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	08/28/2007
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	03/30/2010
Action:	Well Destruction Report
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	04/18/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	10/14/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	01/12/2009
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	01/15/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	01/22/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT

OLD COUNTY HOSPITAL, 810 COURT ST, JACKSON, CA 95642 (Continued)

Date:	05/29/2009
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	04/02/2009
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	11/16/2009
Action:	Notification - Public Notice of Case Closure
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	12/31/2009
Action:	Notification - Public Notice of Case Closure
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	01/20/2010
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	05/18/2004
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	09/10/2007
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	07/15/2006
Action:	Well Installation Report
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	04/26/2006
Action:	Other Workplan
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	08/06/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT

OLD COUNTY HOSPITAL, 810 COURT ST, JACKSON, CA 95642 (Continued)

Date:	04/08/2004
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	05/15/2009
Action:	Other Workplan
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	08/15/2009
Action:	Risk Assessment Report
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	03/31/2009
Action:	Other Workplan
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	10/31/2007
Action:	Monitoring Report - Quarterly
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	04/07/2005
Action:	Other Report / Document
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	04/14/2009
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	03/30/2010
Action:	Closure/No Further Action Letter
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	04/27/2006
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	07/30/2004
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	01/11/2006
Action:	Request for Closure
Global Id:	T0600591907
Action Type:	REMEDIATION

OLD COUNTY HOSPITAL, 810 COURT ST, JACKSON, CA 95642 (Continued)

Date:	01/01/1950
Action:	Monitored Natural Attenuation
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	07/11/2008
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	07/16/2009
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	11/30/2009
Action:	Fact Sheets - Public Participation
Global Id:	T0600591907
Action Type:	ENFORCEMENT
Date:	04/20/2007
Action:	Staff Letter
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	07/28/2004
Action:	Other Report / Document
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	07/28/2004
Action:	Other Workplan
Global Id:	T0600591907
Action Type:	RESPONSE
Date:	10/15/2006
Action:	Monitoring Report - Quarterly

LUST REG 5:

Region:	5
Status:	Post remedial action monitoring
Case Number:	030076
Case Type:	Other ground water affected
Substance:	GASOLINE
Staff Initials:	GTM
Lead Agency:	Regional
Program:	LUST
MTBE Code:	N/A

RGA LUST: Exclusive Recovered Govt. Archives

2012 OLD COUNTY HOSPITAL 810 COURT ST

OLD COUNTY HOSPITAL, 810 COURT ST, JACKSON, CA 95642 (Continued)

2011	OLD COUNTY HOSPITAL	810 COURT ST
2010	OLD COUNTY HOSPITAL	810 COURT ST
2009	OLD COUNTY HOSPITAL	810 COURT ST
2008	OLD COUNTY HOSPITAL	810 COURT ST
2007	OLD COUNTY HOSPITAL	810 COURT ST
2006	OLD COUNTY HOSPITAL	810 COURT ST
2005	OLD COUNTY HOSPITAL	810 COURT ST
2003	OLD COUNTY HOSPITAL	810 COURT ST

RECORD SOURCES AND CURRENCY

To maintain currency of the following databases, EDR contacts the appropriate agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

PRP: Potentially Responsible Parties

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Number of Days to Update: 72
Last EDR Contact :01/02/2014

Source: EPA
Telephone: 202-564-6023

RMP: Risk Management Plans

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012
Number of Days to Update: 46
Last EDR Contact :01/27/2014

Source: Environmental Protection Agency
Telephone: 202-564-8600

ALAMEDA CO. UST: Underground Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Alameda county.

Date of Government Version: 11/13/2013
Number of Days to Update: 46
Last EDR Contact :12/30/2013

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

AST: Aboveground Petroleum Storage Tank Facilities

Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Number of Days to Update: 21
Last EDR Contact :01/03/2014

Source: California Environmental Protection Agency
Telephone: 916-327-5092

Alameda County CS: Contaminated Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 11/13/2013
Number of Days to Update: 31
Last EDR Contact :12/30/2013

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700

CA BOND EXP. PLAN: Bond Expenditure Plan

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Number of Days to Update: 6
Last EDR Contact :05/31/1994

Source: Department of Health Services
Telephone: 916-255-2118

CA FID UST: Facility Inventory Database

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Number of Days to Update: 24
Last EDR Contact :12/28/1998

Source: California Environmental Protection Agency
Telephone: 916-341-5851

CA LA LF: City of Los Angeles Landfills

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Number of Days to Update: 29
Last EDR Contact :01/20/2014

Source: Engineering & Construction Division
Telephone: 213-473-7869

CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2013
Number of Days to Update: 37
Last EDR Contact :01/13/2014

Source: Department of Toxic Substances Control
Telephone: 916-255-6504

CHMIRS: California Hazardous Material Incident Report System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/14/2013
Number of Days to Update: 34
Last EDR Contact :01/30/2014

Source: Office of Emergency Services
Telephone: 916-845-8400

CONTRA COSTA CO. SITE LIST: Site List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/18/2013
Number of Days to Update: 42
Last EDR Contact :11/04/2013

Source: Contra Costa Health Services Department
Telephone: 925-646-2286

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/30/2013
Number of Days to Update: 56
Last EDR Contact :12/31/2013

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400

CUPA AMADOR: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List

Date of Government Version: 12/05/2013
Number of Days to Update: 24
Last EDR Contact :12/09/2013

Source: Amador County Environmental Health
Telephone: 209-223-6439

CUPA BUTTE: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 08/01/2013
Number of Days to Update: 20
Last EDR Contact :01/13/2014

Source: Public Health Department
Telephone: 530-538-7149

CUPA CALVERAS: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility Listing

Date of Government Version: 09/30/2013
Number of Days to Update: 56
Last EDR Contact :12/30/2013

Source: Calveras County Environmental Health
Telephone: 209-754-6399

CUPA COLUSA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 12/05/2013
Number of Days to Update: 53

Source: Health & Human Services
Telephone: 530-458-0396

Last EDR Contact :11/15/2013

CUPA DEL NORTE: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility list

Date of Government Version: 01/09/2013
Number of Days to Update: 46
Last EDR Contact :11/04/2013

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426

CUPA EL DORADO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 11/18/2013
Number of Days to Update: 56
Last EDR Contact :11/04/2013

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623

CUPA FRESNO: CUPA Resources List
Standard Environmental Record Source: Other Standard Environmental Records
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 09/30/2013
Number of Days to Update: 42
Last EDR Contact :01/13/2014

Source: Dept. of Community Health
Telephone: 559-445-3271

CUPA HUMBOLDT: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility list.

Date of Government Version: 12/16/2013
Number of Days to Update: 21
Last EDR Contact :11/20/2013

Source: Humboldt County Environmental Health
Telephone: Not Reported

CUPA IMPERIAL: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 11/06/2013
Number of Days to Update: 28
Last EDR Contact :01/27/2014

Source: San Diego Border Field Office
Telephone: 760-339-2777

CUPA INYO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list.

Date of Government Version: 09/10/2013
Number of Days to Update: 33
Last EDR Contact :12/09/2013

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238

CUPA KINGS: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records

RECORD SOURCES AND CURRENCY

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/12/2013
Number of Days to Update: 25
Last EDR Contact :12/09/2013

Source: Kings County Department of Public Health
Telephone: 559-584-1411

CUPA LAKE: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

Cupa facility list

Date of Government Version: 01/23/2013
Number of Days to Update: 33
Last EDR Contact :01/20/2014

Source: Lake County Environmental Health
Telephone: 707-263-1164

CUPA MADERA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/20/2013
Number of Days to Update: 24
Last EDR Contact :11/20/2013

Source: Madera County Environmental Health
Telephone: 559-675-7823

CUPA MERCED: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility list.

Date of Government Version: 08/23/2013
Number of Days to Update: 42
Last EDR Contact :11/20/2013

Source: Merced County Environmental Health
Telephone: 209-381-1094

CUPA MONO: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA Facility List

Date of Government Version: 12/02/2013
Number of Days to Update: 30
Last EDR Contact :12/02/2013

Source: Mono County Health Department
Telephone: 760-932-5580

CUPA MONTEREY: CUPA Facility Listing

Standard Environmental Record Source: Other Standard Environmental Records

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2013
Number of Days to Update: 32
Last EDR Contact :11/20/2013

Source: Monterey County Health Department
Telephone: 831-796-1297

CUPA NEVADA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility list.

Date of Government Version: 11/06/2013
Number of Days to Update: 27
Last EDR Contact :11/04/2013

Source: Community Development Agency
Telephone: 530-265-1467

CUPA SAN LUIS OBISPO: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List.

Date of Government Version: 08/26/2013
Number of Days to Update: 44
Last EDR Contact :11/20/2013

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596

CUPA SANTA BARBARA: CUPA Facility Listing
Standard Environmental Record Source: Other Standard Environmental Records
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Number of Days to Update: 28
Last EDR Contact :11/21/2013

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167

CUPA SANTA CLARA: Cupa Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa facility list

Date of Government Version: 12/03/2013
Number of Days to Update: 54
Last EDR Contact :12/02/2013

Source: Department of Environmental Health
Telephone: 408-918-1973

CUPA SANTA CRUZ: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
CUPA facility listing.

Date of Government Version: 12/09/2013
Number of Days to Update: 24
Last EDR Contact :12/09/2013

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761

CUPA SHASTA: CUPA Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility List.

Date of Government Version: 12/03/2013
Number of Days to Update: 29
Last EDR Contact :11/21/2013

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789

CUPA SONOMA: Cupa Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Cupa Facility list

Date of Government Version: 09/30/2013
Number of Days to Update: 56
Last EDR Contact :12/30/2013

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174

RECORD SOURCES AND CURRENCY

CUPA TUOLUMNE: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

Cupa facility list

Date of Government Version: 11/04/2013
Number of Days to Update: 28
Last EDR Contact :01/27/2014

Source: Divison of Environmental Health
Telephone: 209-533-5633

CUPA YUBA: CUPA Facility List

Standard Environmental Record Source: Other Standard Environmental Records

CUPA facility listing for Yuba County.

Date of Government Version: 12/06/2013
Number of Days to Update: 25
Last EDR Contact :12/06/2013

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523

DEED: Deed Restriction Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/09/2013
Number of Days to Update: 24
Last EDR Contact :12/10/2013

Source: DTSC and SWRCB
Telephone: 916-323-3400

DRYCLEANERS: Cleaner Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013
Number of Days to Update: 35
Last EDR Contact :12/09/2013

Source: Department of Toxic Substance Control
Telephone: 916-327-4498

EL SEGUNDO UST: City of El Segundo Underground Storage Tank

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in El Segundo city.

Date of Government Version: 10/21/2013
Number of Days to Update: 33
Last EDR Contact :01/20/2014

Source: City of El Segundo Fire Department
Telephone: 310-524-2236

EMI: Emissions Inventory Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Number of Days to Update: 58
Last EDR Contact :12/26/2013

Source: California Air Resources Board
Telephone: 916-322-2990

ENF: Enforcement Action Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/09/2013
Number of Days to Update: 56
Last EDR Contact :01/27/2014

Source: State Water Resoruces Control Board
Telephone: 916-445-9379

ENVIROSTOR: EnviroStor Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/06/2013
Number of Days to Update: 27
Last EDR Contact :11/06/2013

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HAULERS: Registered Waste Tire Haulers Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of registered waste tire haulers.

Date of Government Version: 11/20/2013
Number of Days to Update: 36
Last EDR Contact :11/18/2013

Source: Integrated Waste Management Board
Telephone: 916-341-6422

HAZNET: Facility and Manifest Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Number of Days to Update: 41
Last EDR Contact :01/17/2014

Source: California Environmental Protection Agency
Telephone: 916-255-1136

HIST CAL-SITES: Calsites Database

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Number of Days to Update: 21
Last EDR Contact :02/23/2009

Source: Department of Toxic Substance Control
Telephone: 916-323-3400

HIST CORTESE: Hazardous Waste & Substance Site List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Number of Days to Update: 76
Last EDR Contact :01/22/2009

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Number of Days to Update: 22
Last EDR Contact :03/23/2009

Source: Santa Clara Valley Water District
Telephone: 408-265-2600

HIST UST: Hazardous Substance Storage Container Database

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Number of Days to Update: 18
Last EDR Contact :07/26/2001

Source: State Water Resources Control Board
Telephone: 916-341-5851

HWP: EnviroStor Permitted Facilities Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/25/2013
Number of Days to Update: 35
Last EDR Contact :11/26/2013

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

HWT: Registered Hazardous Waste Transporter Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/15/2013
Number of Days to Update: 43
Last EDR Contact :01/14/2014

Source: Department of Toxic Substances Control
Telephone: 916-440-7145

KERN CO. UST: Underground Storage Tank Sites & Tank Listing
Standard Environmental Record Source: State and tribal registered storage tank lists
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Number of Days to Update: 29
Last EDR Contact :11/08/2013

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700

LA Co. Site Mitigation: Site Mitigation List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013
Number of Days to Update: 32
Last EDR Contact :01/20/2014

Source: Community Health Services
Telephone: 323-890-7806

LDS: Land Disposal Sites Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 12/16/2013
Number of Days to Update: 18
Last EDR Contact :12/17/2013

Source: State Water Qualilty Control Board
Telephone: 866-480-1028

LIENS: Environmental Liens Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 10/08/2013
Number of Days to Update: 43
Last EDR Contact :12/09/2013

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

LONG BEACH UST: City of Long Beach Underground Storage Tank
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Number of Days to Update: 34
Last EDR Contact :01/30/2014

Source: City of Long Beach Fire Department
Telephone: 562-570-2563

LOS ANGELES CO. HMS: HMS: Street Number List

RECORD SOURCES AND CURRENCY

Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013
Number of Days to Update: 65
Last EDR Contact :01/13/2014

Source: Department of Public Works
Telephone: 626-458-3517

LOS ANGELES CO. LF: List of Solid Waste Facilities
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/21/2013
Number of Days to Update: 36
Last EDR Contact :01/21/2014

Source: La County Department of Public Works
Telephone: 818-458-5185

LUST: Geotracker's Leaking Underground Fuel Tank Report
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 12/16/2013
Number of Days to Update: 18
Last EDR Contact :12/17/2013

Source: State Water Resources Control Board
Telephone: see region list

LUST REG 1: Active Toxic Site Investigation
Standard Environmental Record Source: State and tribal leaking storage tank lists
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Number of Days to Update: 29
Last EDR Contact :08/01/2011

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769

LUST REG 2: Fuel Leak List
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Number of Days to Update: 30
Last EDR Contact :09/19/2011

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433

LUST REG 3: Leaking Underground Storage Tank Database
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786

Last EDR Contact :07/18/2011

LUST REG 4: Underground Storage Tank Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Number of Days to Update: 35
Telephone: 213-576-6710
Last EDR Contact :09/06/2011

LUST REG 5: Leaking Underground Storage Tank Database

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Source: California Regional Water Quality Control Board Central Valley Region (5)
Number of Days to Update: 9
Telephone: 916-464-4834
Last EDR Contact :07/01/2011

LUST REG 6L: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Source: California Regional Water Quality Control Board Lahontan Region (6)
Number of Days to Update: 27
Telephone: 530-542-5572
Last EDR Contact :09/12/2011

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Number of Days to Update: 22
Telephone: 760-241-7365
Last EDR Contact :09/12/2011

LUST REG 7: Leaking Underground Storage Tank Case Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Number of Days to Update: 27
Telephone: 760-776-8943
Last EDR Contact :08/01/2011

LUST REG 8: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Source: California Regional Water Quality Control Board Santa Ana Region (8)

Number of Days to Update: 41
Last EDR Contact :08/15/2011
Telephone: 909-782-4496

LUST REG 9: Leaking Underground Storage Tank Report

Standard Environmental Record Source: State and tribal leaking storage tank lists

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Source: California Regional Water Quality Control Board San Diego Region (9)
Number of Days to Update: 28
Telephone: 858-637-5595
Last EDR Contact :09/26/2011

LUST SANTA CLARA: LOP Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 12/02/2013
Source: Department of Environmental Health
Number of Days to Update: 30
Telephone: 408-918-3417
Last EDR Contact :12/02/2013

MARIN CO. UST: Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal registered storage tank lists

Currently permitted USTs in Marin County.

Date of Government Version: 10/07/2013
Source: Public Works Department Waste Management
Number of Days to Update: 48
Telephone: 415-499-6647
Last EDR Contact :01/03/2014

MCS: Military Cleanup Sites Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 12/16/2013
Source: State Water Resources Control Board
Number of Days to Update: 18
Telephone: 866-480-1028
Last EDR Contact :12/17/2013

MED WASTE VENTURA: Medical Waste Program List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 10/02/2013
Source: Ventura County Resource Management Agency
Number of Days to Update: 28
Telephone: 805-654-2813
Last EDR Contact :10/28/2013

MWMP: Medical Waste Management Program Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/20/2013
Number of Days to Update: 24
Last EDR Contact :12/09/2013
Source: Department of Public Health
Telephone: 916-558-1784

NAPA CO. LUST: Sites With Reported Contamination
Standard Environmental Record Source: State and tribal leaking storage tank lists
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Number of Days to Update: 63
Last EDR Contact :12/02/2013
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

NAPA CO. UST: Closed and Operating Underground Storage Tank Sites
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Number of Days to Update: 23
Last EDR Contact :12/02/2013
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269

NOTIFY 65: Proposition 65 Records
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Number of Days to Update: 18
Last EDR Contact :12/17/2013
Source: State Water Resources Control Board
Telephone: 916-445-3846

NPDES: NPDES Permits Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/19/2013
Number of Days to Update: 42
Last EDR Contact :11/21/2013
Source: State Water Resources Control Board
Telephone: 916-445-9379

ORANGE CO. LUST: List of Underground Storage Tank Cleanups
Standard Environmental Record Source: State and tribal leaking storage tank lists
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2013
Number of Days to Update: 21
Last EDR Contact :11/08/2013
Source: Health Care Agency
Telephone: 714-834-3446

ORANGE CO. UST: List of Underground Storage Tank Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/04/2013 Source: Health Care Agency
Number of Days to Update: 21 Telephone: 714-834-3446
Last EDR Contact :11/08/2013

Orange Co. Industrial Site: List of Industrial Site Cleanups
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Petroleum and non-petroleum spills.

Date of Government Version: 11/04/2013 Source: Health Care Agency
Number of Days to Update: 21 Telephone: 714-834-3446
Last EDR Contact :11/08/2013

PLACER CO. MS: Master List of Facilities
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2013 Source: Placer County Health and Human Services
Number of Days to Update: 28 Telephone: 530-745-2363
Last EDR Contact :12/09/2013

PROC: Certified Processors Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

A listing of certified processors.

Date of Government Version: 12/16/2013 Source: Department of Conservation
Number of Days to Update: 21 Telephone: 916-323-3836
Last EDR Contact :12/17/2013

RESPONSE: State Response Sites
Standard Environmental Record Source: State and tribal - equivalent NPL
Search Distance: 0.333 Mile

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/06/2013 Source: Department of Toxic Substances Control
Number of Days to Update: 27 Telephone: 916-323-3400
Last EDR Contact :11/06/2013

RIVERSIDE CO. LUST: Listing of Underground Tank Cleanup Sites
Standard Environmental Record Source: State and tribal leaking storage tank lists
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/10/2013 Source: Department of Environmental Health
Number of Days to Update: 36 Telephone: 951-358-5055
Last EDR Contact :12/19/2013

RIVERSIDE CO. UST: Underground Storage Tank Tank List

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Riverside county.

Date of Government Version: 10/10/2013
Number of Days to Update: 36
Last EDR Contact :12/19/2013

Source: Department of Environmental Health
Telephone: 951-358-5055

SAN DIEGO CO. HMMD: Hazardous Materials Management Division Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Number of Days to Update: 23
Last EDR Contact :12/09/2013

Source: Hazardous Materials Management Division
Telephone: 619-338-2268

SAN DIEGO CO. LF: Solid Waste Facilities
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Number of Days to Update: 42
Last EDR Contact :11/18/2013

Source: Department of Health Services
Telephone: 619-338-2209

SAN DIEGO CO. SAM: Environmental Case Listing
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Number of Days to Update: 24
Last EDR Contact :12/09/2013

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371

SAN FRANCISCO CO. LUST: Local Oversite Facilities
Standard Environmental Record Source: State and tribal leaking storage tank lists
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Number of Days to Update: 10
Last EDR Contact :11/08/2013

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920

SAN FRANCISCO CO. UST: Underground Storage Tank Information
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920

Last EDR Contact :11/08/2013

SAN JOSE HAZMAT: Hazardous Material Facilities

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/12/2013
Number of Days to Update: 49
Last EDR Contact :11/08/2013

Source: City of San Jose Fire Department
Telephone: 408-535-7694

SAN MATEO CO. LUST: Fuel Leak List

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2013
Number of Days to Update: 21
Last EDR Contact :12/12/2013

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

SCH: School Property Evaluation Program

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/06/2013
Number of Days to Update: 27
Last EDR Contact :11/06/2013

Source: Department of Toxic Substances Control
Telephone: 916-323-3400

SLIC: Statewide SLIC Cases

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 12/16/2013
Number of Days to Update: 30
Last EDR Contact :12/17/2013

Source: State Water Resources Control Board
Telephone: 866-480-1028

SLIC REG 1: Active Toxic Site Investigations

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Number of Days to Update: 18
Last EDR Contact :08/01/2011

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Number of Days to Update: 30
Telephone: 510-286-0457
Last EDR Contact :09/19/2011

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Source: California Regional Water Quality Control Board Central Coast Region (3)
Number of Days to Update: 28
Telephone: 805-549-3147
Last EDR Contact :07/18/2011

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Source: Region Water Quality Control Board Los Angeles Region (4)
Number of Days to Update: 47
Telephone: 213-576-6600
Last EDR Contact :07/01/2011

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Source: Regional Water Quality Control Board Central Valley Region (5)
Number of Days to Update: 16
Telephone: 916-464-3291
Last EDR Contact :09/12/2011

SLIC REG 6L: SLIC Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Source: California Regional Water Quality Control Board, Lahontan Region
Number of Days to Update: 35
Telephone: 530-542-5574
Last EDR Contact :08/15/2011

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Source: Regional Water Quality Control Board, Victorville Branch
Number of Days to Update: 22
Telephone: 619-241-6583
Last EDR Contact :08/15/2011

SLIC REG 7: SLIC List

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Source: California Regional Quality Control Board, Colorado River Basin Region
Number of Days to Update: 36
Telephone: 760-346-7491
Last EDR Contact :08/01/2011

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Source: California Region Water Quality Control Board Santa Ana Region (8)
Number of Days to Update: 11
Telephone: 951-782-3298
Last EDR Contact :09/12/2011

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

Standard Environmental Record Source: State and tribal leaking storage tank lists

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Source: California Regional Water Quality Control Board San Diego Region (9)
Number of Days to Update: 17
Telephone: 858-467-2980
Last EDR Contact :08/08/2011

SOLANO CO. LUST: Leaking Underground Storage Tanks

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Source: Solano County Department of Environmental Management
Number of Days to Update: 21
Telephone: 707-784-6770
Last EDR Contact :12/12/2013

SOLANO CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Source: Solano County Department of Environmental Management
Number of Days to Update: 20
Telephone: 707-784-6770
Last EDR Contact :12/12/2013

SONOMA CO. LUST: Leaking Underground Storage Tank Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/01/2013
Source: Department of Health Services
Number of Days to Update: 55
Telephone: 707-565-6565
Last EDR Contact :12/30/2013

SUTTER CO. UST: Underground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Sutter county.

Date of Government Version: 12/10/2013
Number of Days to Update: 24
Last EDR Contact :12/09/2013

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500

SWEEPS UST: SWEEPS UST Listing
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Number of Days to Update: 35
Last EDR Contact :06/03/2005

Source: State Water Resources Control Board
Telephone: Not Reported

SWF/LF (SWIS): Solid Waste Information System
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

Active, Closed and Inactive Landfills.SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills.These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteriafor solid waste landfills or disposal sites.

Date of Government Version: 11/18/2013
Number of Days to Update: 42
Last EDR Contact :11/21/2013

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320

SWRCY: Recycler Database
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

A listing of recycling facilities in California.

Date of Government Version: 12/16/2013
Number of Days to Update: 21
Last EDR Contact :12/17/2013

Source: Department of Conservation
Telephone: 916-323-3836

Sacramento Co. CS: Toxic Site Clean-Up List
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/05/2013
Number of Days to Update: 47
Last EDR Contact :01/06/2014

Source: Sacramento County Environmental Management
Telephone: 916-875-8406

Sacramento Co. ML: Master Hazardous Materials Facility List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/05/2013
Number of Days to Update: 47
Last EDR Contact :01/06/2014

Source: Sacramento County Environmental Management
Telephone: 916-875-8406

San Bern. Co. Permit: Hazardous Material Permits
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/26/2013
Number of Days to Update: 34
Last EDR Contact :11/08/2013

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041

San Mateo Co. BI: Business Inventory
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 10/01/2013
Number of Days to Update: 49
Last EDR Contact :12/16/2013

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921

TORRANCE UST: City of Torrance Underground Storage Tank
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Number of Days to Update: 33
Last EDR Contact :01/13/2014

Source: City of Torrance Fire Department
Telephone: 310-618-2973

TOXIC PITS: Toxic Pits Cleanup Act Sites
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Number of Days to Update: 27
Last EDR Contact :01/26/2009

Source: State Water Resources Control Board
Telephone: 916-227-4364

UIC: UIC Listing
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/25/2013
Number of Days to Update: 21

Source: Deaprtment of Conservation
Telephone: 916-445-2408

Last EDR Contact :12/17/2013

UST: Active UST Facilities
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/16/2013 Source: SWRCB
Number of Days to Update: 21 Telephone: 916-341-5851
Last EDR Contact :12/17/2013

UST MENDOCINO: Mendocino County UST Database
Standard Environmental Record Source: State and tribal registered storage tank lists
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009 Source: Department of Public Health
Number of Days to Update: 8 Telephone: 707-463-4466
Last EDR Contact :12/02/2013

UST SAN JOAQUIN: San Joaquin Co. UST
Standard Environmental Record Source: State and tribal registered storage tank lists
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 12/18/2013 Source: Environmental Health Department
Number of Days to Update: 20 Telephone: Not Reported
Last EDR Contact :12/17/2013

VCP: Voluntary Cleanup Program Properties
Standard Environmental Record Source: State and tribal voluntary cleanup sites
Search Distance: 0.333 Mile

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 11/06/2013 Source: Department of Toxic Substances Control
Number of Days to Update: 27 Telephone: 916-323-3400
Last EDR Contact :11/06/2013

VENTURA CO. BWT: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 10/29/2013 Source: Ventura County Environmental Health Division
Number of Days to Update: 54 Telephone: 805-654-2813
Last EDR Contact :11/19/2013

VENTURA CO. LF: Inventory of Illegal Abandoned and Inactive Sites
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Source: Environmental Health Division
Number of Days to Update: 49 Telephone: 805-654-2813

Last EDR Contact :01/03/2014

VENTURA CO. LUST: Listing of Underground Tank Cleanup Sites
Standard Environmental Record Source: State and tribal leaking storage tank lists
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Number of Days to Update: 37
Last EDR Contact :11/19/2013
Source: Environmental Health Division
Telephone: 805-654-2813

VENTURA CO. UST: Underground Tank Closed Sites List
Standard Environmental Record Source: State and tribal registered storage tank lists
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/26/2013
Number of Days to Update: 21
Last EDR Contact :12/16/2013
Source: Environmental Health Division
Telephone: 805-654-2813

WDS: Waste Discharge System
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Number of Days to Update: 9
Last EDR Contact :11/21/2013
Source: State Water Resources Control Board
Telephone: 916-341-5227

WIP: Well Investigation Program Case List
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.25 Mile

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Number of Days to Update: 13
Last EDR Contact :12/26/2013
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726

WMUDS/SWAT: Waste Management Unit Database
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Number of Days to Update: 30
Last EDR Contact :11/08/2013
Source: State Water Resources Control Board
Telephone: 916-227-4448

YOLO CO. UST: Underground Storage Tank Comprehensive Facility Report
Standard Environmental Record Source: State and tribal registered storage tank lists
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/18/2013
Number of Days to Update: 15
Last EDR Contact :12/17/2013

Source: Yolo County Department of Health
Telephone: 530-666-8646

2020 COR ACTION: 2020 Corrective Action Program List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.25 Mile

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Number of Days to Update: 7
Last EDR Contact :11/15/2013

Source: Environmental Protection Agency
Telephone: 703-308-4044

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Standard Environmental Record Source: Federal CERCLIS

Search Distance: 0.333 Mile

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013
Number of Days to Update: 72
Last EDR Contact :11/11/2013

Source: EPA
Telephone: 703-412-9810

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013
Number of Days to Update: 72
Last EDR Contact :11/11/2013

Source: EPA
Telephone: 703-412-9810

COAL ASH DOE: Sleam-Electric Plan Operation Data

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Number of Days to Update: 76
Last EDR Contact :01/13/2014

Source: Department of Energy
Telephone: 202-586-8719

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Number of Days to Update: 77
Last EDR Contact :12/13/2013

Source: Environmental Protection Agency
Telephone: Not Reported

CONSENT: Superfund (CERCLA) Consent Decrees
Standard Environmental Record Source: Federal NPL
Search Distance: 0.333 Mile

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Number of Days to Update: 57
Last EDR Contact :12/26/2013

Source: Department of Justice, Consent Decree Library
Telephone: Varies

CORRACTS: Corrective Action Report
Standard Environmental Record Source: Federal RCRA CORRACTS facilities list
Search Distance: 0.333 Mile

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/10/2013
Number of Days to Update: 75
Last EDR Contact :01/02/2014

Source: EPA
Telephone: 800-424-9346

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
Standard Environmental Record Source: State and tribal landfill / solid waste disposal
Search Distance: 0.333 Mile

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Number of Days to Update: 137
Last EDR Contact :01/27/2014

Source: EPA, Region 9
Telephone: 415-947-4219

DELISTED NPL: National Priority List Deletions
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013
Number of Days to Update: 78
Last EDR Contact :01/09/2014

Source: EPA
Telephone: Not Reported

DOT OPS: Incident and Accident Data
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012

Source: Department of Transporation, Office of Pipeline Safety

Number of Days to Update: 42 Telephone: 202-366-4595
Last EDR Contact :11/06/2013

EPA WATCH LIST: EPA WATCH LIST
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013 Source: Environmental Protection Agency
Number of Days to Update: 31 Telephone: 617-520-3000
Last EDR Contact :11/15/2013

ERNS: Emergency Response Notification System
Standard Environmental Record Source: Federal ERNS list
Search Distance: Property

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013 Source: National Response Center, United States Coast Guard
Number of Days to Update: 66 Telephone: 202-267-2180
Last EDR Contact :01/10/2014

FEMA UST: Underground Storage Tank Listing
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Source: FEMA
Number of Days to Update: 55 Telephone: 202-646-5797
Last EDR Contact :01/13/2014

FINDS: Facility Index System/Facility Registry System
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013 Source: EPA
Number of Days to Update: 111 Telephone: Not Reported
Last EDR Contact :12/10/2013

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Number of Days to Update: 25
Last EDR Contact :11/21/2013
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Standard Environmental Records

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Number of Days to Update: 25
Last EDR Contact :11/21/2014
Source: EPA
Telephone: 202-566-1667

FUDS: Formerly Used Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Number of Days to Update: 15
Last EDR Contact :12/13/2013
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Number of Days to Update: 40
Last EDR Contact :12/17/2007
Source: Environmental Protection Agency
Telephone: 202-564-2501

HMIRS: Hazardous Materials Information Reporting System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/30/2013
Number of Days to Update: 76
Last EDR Contact :01/03/2014
Source: U.S. Department of Transportation
Telephone: 202-366-4555

ICIS: Integrated Compliance Information System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011 Source: Environmental Protection Agency
Number of Days to Update: 61 Telephone: 202-564-5088
Last EDR Contact :10/09/2014

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013 Source: EPA Region 1
Number of Days to Update: 184 Telephone: 617-918-1313
Last EDR Contact :01/30/2014

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013 Source: EPA Region 10
Number of Days to Update: 29 Telephone: 206-553-2857
Last EDR Contact :01/27/2014

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/01/2013 Source: EPA Region 4
Number of Days to Update: 91 Telephone: 404-562-8677
Last EDR Contact :01/27/2014

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 08/20/2013 Source: EPA, Region 5
Number of Days to Update: 70 Telephone: 312-886-7439
Last EDR Contact :01/27/2014

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011 Source: EPA Region 6
Number of Days to Update: 59 Telephone: 214-665-6597
Last EDR Contact :01/27/2014

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013 Source: EPA Region 7

Number of Days to Update: 66 Telephone: 913-551-7003
Last EDR Contact :01/27/2014

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012 Source: EPA Region 8
Number of Days to Update: 49 Telephone: 303-312-6271
Last EDR Contact :01/27/2014

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013 Source: Environmental Protection Agency
Number of Days to Update: 42 Telephone: 415-972-3372
Last EDR Contact :01/27/2014

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: 0.333 Mile

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Source: Environmental Protection Agency
Number of Days to Update: 52 Telephone: 703-308-8245
Last EDR Contact :11/04/2013

INDIAN UST R1: Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013 Source: EPA, Region 1
Number of Days to Update: 272 Telephone: 617-918-1313
Last EDR Contact :01/30/2014

INDIAN UST R10: Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal registered storage tank lists
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013 Source: EPA Region 10
Number of Days to Update: 65 Telephone: 206-553-2857
Last EDR Contact :01/27/2014

INDIAN UST R4: Underground Storage Tanks on Indian Land
Standard Environmental Record Source: State and tribal registered storage tank lists
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/01/2013 Source: EPA Region 4

Number of Days to Update: 91 Telephone: 404-562-9424
Last EDR Contact :01/27/2014

INDIAN UST R5: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/20/2013 Source: EPA Region 5
Number of Days to Update: 70 Telephone: 312-886-6136
Last EDR Contact :01/27/2014

INDIAN UST R6: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011 Source: EPA Region 6
Number of Days to Update: 34 Telephone: 214-665-7591
Last EDR Contact :01/27/2014

INDIAN UST R7: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012 Source: EPA Region 7
Number of Days to Update: 43 Telephone: 913-551-7003
Last EDR Contact :01/27/2014

INDIAN UST R8: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013 Source: EPA Region 8
Number of Days to Update: 92 Telephone: 303-312-6137
Last EDR Contact :01/27/2014

INDIAN UST R9: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013 Source: EPA Region 9
Number of Days to Update: 129 Telephone: 415-972-3368
Last EDR Contact :01/27/2014

INDIAN VCP R1: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: 0.333 Mile

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013 Source: EPA, Region 1
Number of Days to Update: 66 Telephone: 617-918-1102

Last EDR Contact :01/03/2014

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

Standard Environmental Record Source: State and tribal voluntary cleanup sites

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Number of Days to Update: 27
Last EDR Contact :04/20/2009

Source: EPA, Region 7
Telephone: 913-551-7365

LEAD SMELTER 1: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Number of Days to Update: 13
Last EDR Contact :01/03/2014

Source: Environmental Protection Agency
Telephone: 703-603-8787

LEAD SMELTER 2: Lead Smelter Sites

Standard Environmental Record Source: Other Standard Environmental Records

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Number of Days to Update: 36
Last EDR Contact :12/02/2009

Source: American Journal of Public Health
Telephone: 703-305-6451

LIENS 2: CERCLA Lien Information

Standard Environmental Record Source: Federal CERCLIS

Search Distance: Property

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013
Number of Days to Update: 15
Last EDR Contact :01/27/2014

Source: Environmental Protection Agency
Telephone: 202-564-6023

LUCIS: Land Use Control Information System

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: 0.333 Mile

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/20/2013
Number of Days to Update: 70
Last EDR Contact :11/18/2013

Source: Department of the Navy
Telephone: 843-820-7326

MLTS: Material Licensing Tracking System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Number of Days to Update: 91
Last EDR Contact :12/09/2013

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

NPL: National Priority List

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Number of Days to Update: 78
Last EDR Contact :01/21/2014

Source: EPA
Telephone: Not Reported

NPL Site Boundaries

Sources:

EPA"s Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-566-0690

EPA Region 1
Telephone: 617-918-1102

EPA Region 2
Telephone: 212-637-4293

EPA Region 3
Telephone: 215-814-5418

EPA Region 4
Telephone: 404-562-8681

EPA Region 5
Telephone: 312-353-1063

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6118

EPA Region 9
Telephone: 415-947-4579

EPA Region 10
Telephone: 206-553-4479

NPL LIENS: Federal Superfund Liens

Standard Environmental Record Source: Federal NPL

Search Distance: Property

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267

Last EDR Contact :08/15/2011

ODI: Open Dump Inventory

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 | Source: Environmental Protection Agency
Number of Days to Update: 39 | Telephone: 800-424-9346
Last EDR Contact :06/09/2004

PADS: PCB Activity Database System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013 | Source: EPA
Number of Days to Update: 107 | Telephone: 202-566-0500
Last EDR Contact :01/28/2014

PCB TRANSFORMER: PCB Transformer Registration Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 | Source: Environmental Protection Agency
Number of Days to Update: 83 | Telephone: 202-566-0517
Last EDR Contact :01/30/2014

Proposed NPL: Proposed National Priority List Sites

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

A site that has been proposed for listing on the NationalPriorities List through the issuance of a proposed rule in the Federal Register.EPA then accepts public comments on the site, responds to the comments,and places on the NPL those sites that continue to meet therequirements for listing.

Date of Government Version: 10/25/2013 | Source: EPA
Number of Days to Update: 78 | Telephone: Not Reported
Last EDR Contact :01/09/2014

RAATS: RCRA Administrative Action Tracking System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 | Source: EPA
Number of Days to Update: 35 | Telephone: 202-564-4104

Last EDR Contact :06/02/2008

RADINFO: Radiation Information Database

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013 Source: Environmental Protection Agency

Number of Days to Update: 23 Telephone: 202-343-9775

Last EDR Contact :01/10/2014

RCRA NonGen / NLR: RCRA - Non Generators

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2013 Source: Environmental Protection Agency

Number of Days to Update: 75 Telephone: 703-308-8895

Last EDR Contact :01/02/2014

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013 Source: Environmental Protection Agency

Number of Days to Update: 75 Telephone: 703-308-8895

Last EDR Contact :01/02/2014

RCRA-LQG: RCRA - Large Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013 Source: Environmental Protection Agency

Number of Days to Update: 75 Telephone: 703-308-8895

Last EDR Contact :01/02/2014

RCRA-SQG: RCRA - Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RECORD SOURCES AND CURRENCY

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/10/2013
Number of Days to Update: 75
Last EDR Contact :01/02/2014

Source: Environmental Protection Agency
Telephone: 703-308-8895

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

Standard Environmental Record Source: Federal RCRA TSD facilities list

Search Distance: 0.333 Mile

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/2013
Number of Days to Update: 75
Last EDR Contact :01/02/2014

Source: Environmental Protection Agency
Telephone: 703-308-8895

ROD: Records Of Decision

Standard Environmental Record Source: Federal NPL

Search Distance: 0.333 Mile

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/26/2013
Number of Days to Update: 143
Last EDR Contact :12/12/2013

Source: EPA
Telephone: 703-416-0223

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Number of Days to Update: 54
Last EDR Contact :01/20/2014

Source: Environmental Protection Agency
Telephone: 615-532-8599

SSTS: Section 7 Tracking Systems

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203

Last EDR Contact :01/28/2014

TRIS: Toxic Chemical Release Inventory System

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011 Source: EPA

Number of Days to Update: 44 Telephone: 202-566-0250

Last EDR Contact :11/27/2013

TSCA: Toxic Substances Control Act

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006 Source: EPA

Number of Days to Update: 64 Telephone: 202-260-5521

Last EDR Contact :12/26/2013

UMTRA: Uranium Mill Tailings Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Source: Department of Energy

Number of Days to Update: 146 Telephone: 505-845-0011

Last EDR Contact :11/26/2013

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013 Source: EPA

Number of Days to Update: 30 Telephone: 202-564-5962

Last EDR Contact :12/26/2013

US AIRS MINOR: Air Facility System Data

Standard Environmental Record Source: Other Standard Environmental Records

A listing of minor source facilities.

Date of Government Version: 10/23/2013 Source: EPA

Number of Days to Update: 30 Telephone: 202-564-5962

Last EDR Contact :12/26/2013

US BROWNFIELDS: A Listing of Brownfields Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/24/2013 Source: Environmental Protection Agency

Number of Days to Update: 73 Telephone: 202-566-2777

Last EDR Contact :12/24/2013

US CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013 Source: Drug Enforcement Administration

Number of Days to Update: 22 Telephone: 202-307-1000

Last EDR Contact :12/05/2013

US ENG CONTROLS: Engineering Controls Sites List

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 12/17/2013 Source: Environmental Protection Agency

Number of Days to Update: 14 Telephone: 703-603-0695

Last EDR Contact :12/09/2013

US FIN ASSUR: Financial Assurance Information

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/28/2013 Source: Environmental Protection Agency

Number of Days to Update: 38 Telephone: 202-566-1917

Last EDR Contact :11/18/2013

US HIST CDL: National Clandestine Laboratory Register

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Number of Days to Update: 131
Last EDR Contact :03/23/2009

Source: Drug Enforcement Administration
Telephone: 202-307-1000

US INST CONTROL: Sites with Institutional Controls

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: Property

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 12/17/2013
Number of Days to Update: 14
Last EDR Contact :12/09/2013

Source: Environmental Protection Agency
Telephone: 703-603-0695

US MINES: Mines Master Index File

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Number of Days to Update: 28
Last EDR Contact :12/06/2013

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

AOCONCERN: San Gabriel Valley Areas of Concern

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Number of Days to Update: 206
Last EDR Contact :12/17/2013

Source: EPA Region 9
Telephone: 415-972-3178

DOD: Department of Defense Sites

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: 0.333 Mile

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Number of Days to Update: 62
Last EDR Contact :01/15/2014

Source: USGS
Telephone: 888-275-8747

INDIAN RESERV: Indian Reservations

Standard Environmental Record Source: Other Standard Environmental Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005 Source: USGS
Number of Days to Update: 34 Telephone: 202-208-3710
Last EDR Contact :01/15/2014

PWS: Public Water System Data
Standard Environmental Record Source: Other Standard Environmental Records
Search Distance: Property

This Safe Drinking Water Information System (SDWIS) file contains public water systems name and address, population served and the primary source of water

Date of Government Version: 04/12/2007 Source: EPA
Number of Days to Update: N/A Telephone: Not Reported
Last EDR Contact :12/09/2013

RECORD SOURCES AND CURRENCY

HISTORICAL USE RECORDS

RGA LF: Recovered Government Archive Solid Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: 0.333 Mile

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: Not Reported
Source: EDR
Number of Days to Update: 196
Telephone: Not Reported
Last EDR Contact :06/01/2012

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: 0.333 Mile

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: Not Reported
Source: EDR
Number of Days to Update: 182
Telephone: Not Reported
Last EDR Contact :06/01/2012

EDR MGP: EDR Proprietary Manufactured Gas Plants

Standard Environmental Record Source: Former manufactured Gas Plants

Search Distance: 0.333 Mile

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: 08/28/2009
Source: EDR, Inc.
Number of Days to Update: 55
Telephone: Not Reported
Last EDR Contact :11/30/2012

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

Standard Environmental Record Source: Historical Gas Stations

Search Distance: 0.25 Mile

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007
Source: EDR, Inc.
Number of Days to Update: 42
Telephone: Not Reported
Last EDR Contact :02/21/2007

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

Standard Environmental Record Source: Historical Dry Cleaners

Search Distance: 0.25 Mile

RECORD SOURCES AND CURRENCY

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007
Number of Days to Update: 42
Last EDR Contact :02/21/2007

Source: EDR, Inc.
Telephone: Not Reported

RECORD SOURCES AND CURRENCY

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5' minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW® Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW® Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services. The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

STREET AND ADDRESS INFORMATION

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Pitt Street Bridge
Pitt Street
Jackson, CA 95642

Inquiry Number: 3849793.4
February 06, 2014

EDR Historical Topographic Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
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EDR Historical Topographic Map Report

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Historical Topographic Map

N	TARGET QUAD NAME: JACKSON MAP YEAR: 1902 SERIES: 30 SCALE: 1:125000	SITE NAME: Pitt Street Bridge ADDRESS: Pitt Street Jackson, CA 95642 LAT/LONG: 38.3499 / -120.7708	CLIENT: Development Impact CONTACT: Paula Daneluk INQUIRY#: 3849793.4 RESEARCH DATE: 02/06/2014

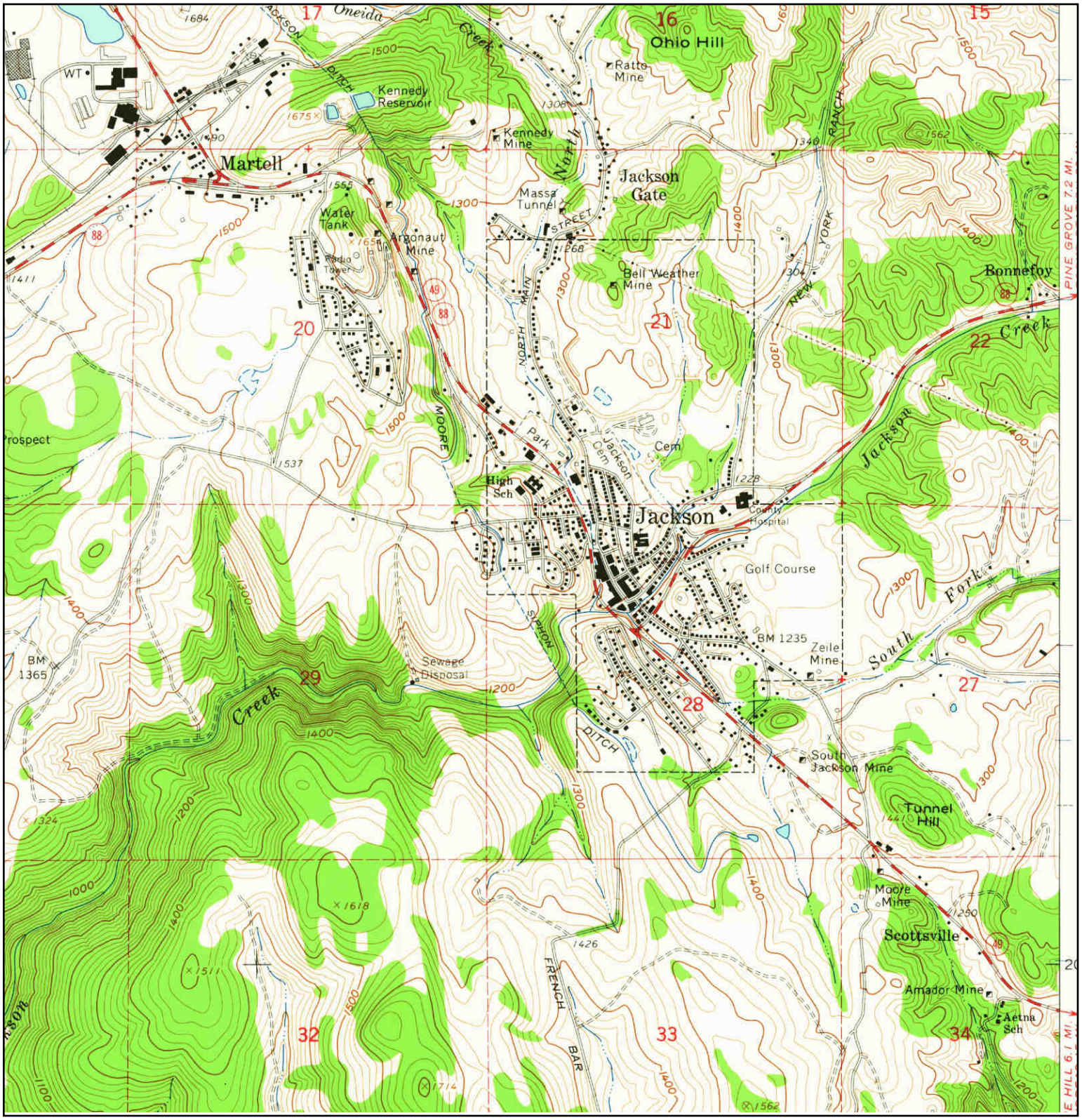
Historical Topographic Map

N	TARGET QUAD NAME: SUTTER CREEK MAP YEAR: 1944 SERIES: 15 SCALE: 1:62500	SITE NAME: Pitt Street Bridge ADDRESS: Pitt Street Jackson, CA 95642 LAT/LONG: 38.3499 / -120.7708	CLIENT: Development Impact CONTACT: Paula Daneluk INQUIRY#: 3849793.4 RESEARCH DATE: 02/06/2014

Historical Topographic Map

N	TARGET QUAD NAME: SUTTER CREEK MAP YEAR: 1962 SERIES: 15 SCALE: 1:62500	SITE NAME: Pitt Street Bridge ADDRESS: Pitt Street Jackson, CA 95642 LAT/LONG: 38.3499 / -120.7708	CLIENT: Development Impact CONTACT: Paula Daneluk INQUIRY#: 3849793.4 RESEARCH DATE: 02/06/2014

Historical Topographic Map



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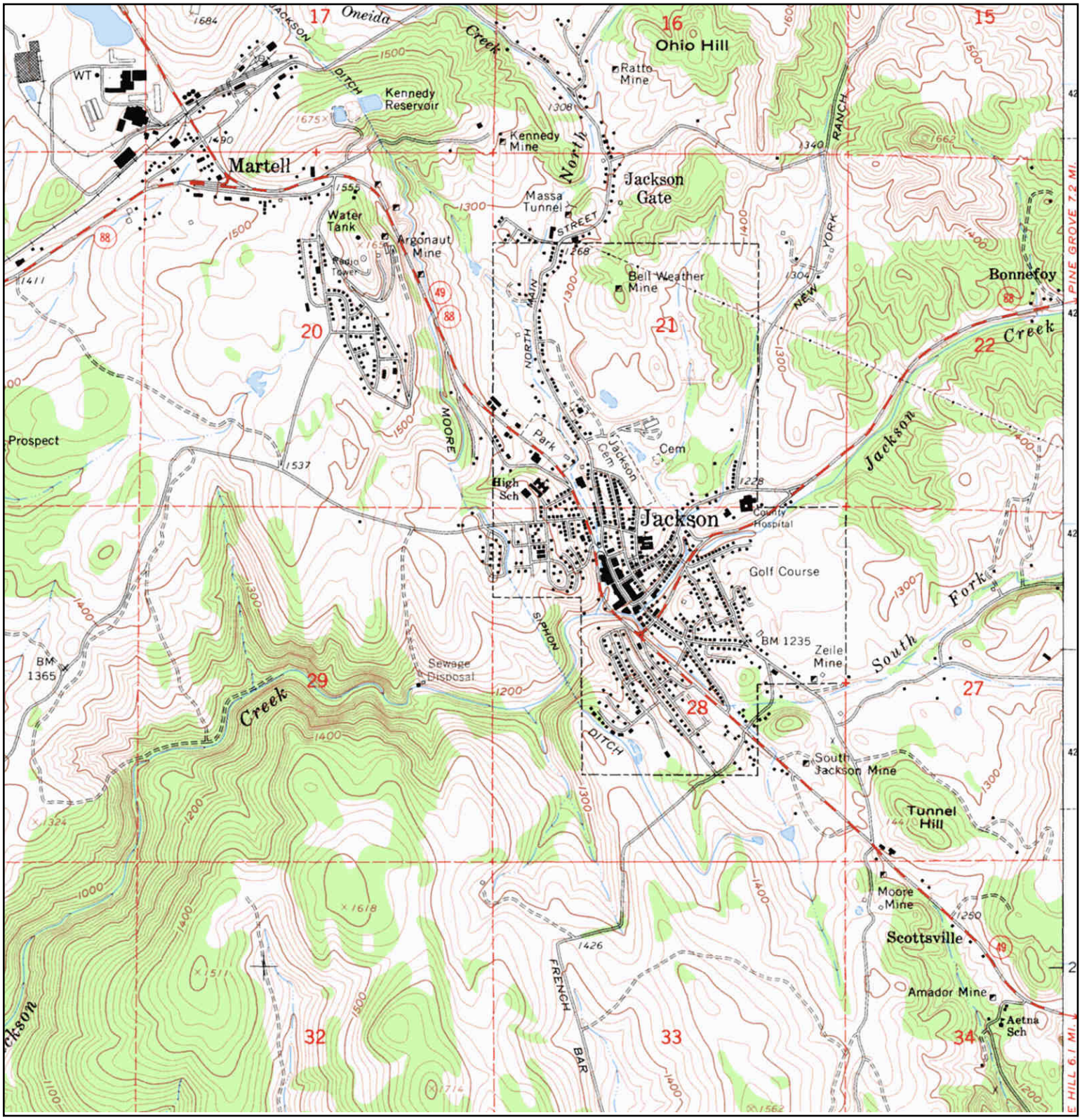
Historical Topographic Map



N	TARGET QUAD NAME: JACKSON MAP YEAR: 1973 PHOTOINSPECTED FROM : 1962 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Pitt Street Bridge ADDRESS: Pitt Street Jackson, CA 95642 LAT/LONG: 38.3499 / -120.7708	CLIENT: Development Impact CONTACT: Paula Daneluk INQUIRY#: 3849793.4 RESEARCH DATE: 02/06/2014

Appendix D

Biological Reports

Pitt Street Bridge
Replacement Project

Natural Environment Study

California Department of Transportation
District 10

City of Jackson

10 AMA-Pitt Street Bridge (No. 26C008)
Over Jackson Creek

Federal Aid Number: BRL0 5141 (018)

September 2014

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Natural Environment Study

Pitt Street Bridge Replacement Project

California Department of Transportation
District 10

City of Jackson

10AMA – Pitt Street Bridge (No. 26C008)
Over Jackson Creek

Federal Aid Number: BRLO 5141 (018)

Approved By: _____ Date: _____

Michael Daly
City Manager
Phone: (209) 223-1646
City of Jackson

Approved By: _____Date: _____

Julie Myrah, Maintenance and Planning Service Branch Chief
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California Department of Transportation

Summary

The City of Jackson (City) proposes to replace the Pitt Street Bridge that carries Pitt Street over Jackson Creek in the City of Jackson. The project would replace the existing Pitt Street Bridge structure with an extended and widened bridge structure and northern roadway, a sidewalk, and a tie-in with the existing Pitt Street and State Route 88 (SR88). The new structure would improve hydraulics within Jackson Creek and reduce flooding hazards, increase safety, and provide a bridge that is in compliance with local, regional, and statewide plans.

For the purposes of this Natural Environment Study (NES), the study area for the project encompasses approximately 0.397 acres (ac) and is defined as the Biological Study Area (BSA). The BSA includes the existing Pitt Street Bridge and the bank-to-bank extent of the creek channel extending approximately 100 feet upriver and 100 feet downriver from the existing bridge. The northern edge of the creek channel is lined with a vertical rock wall, which forms a distinct boundary between the creek channel and adjacent developed areas. Adjacent parcels to the north of the BSA include residential/commercial areas and a portion of Pitt Street. Parcels to the south include a portion of Pitt Street and SR88.

The jurisdictional delineation determined that Jackson Creek qualifies as Water's of the U.S. and State. Potential Water's of the United States (U.S.) were delineated on April 3rd and 14th, 2014. Verification by the U.S. Army Corps of Engineers (USACE) is pending. A total of 0.246-ac of Waters of the U.S. were mapped within the BSA, and include the perennial flows of Jackson Creek and adjacent emergent wetlands located along the stream margins of Jackson Creek. A total of approximately 0.058-ac of Waters of the U.S. are anticipated to be impacted by the proposed project, including < 0.001-ac of permanent impacts and 0.058-ac of temporary impacts. Permanent impacts to Waters of the U.S. will be mitigated to comply with the Clean Water Act and the 404(b)(1) standard for non-net loss of wetlands. Planned acreage compensation for permanently impacted wetlands will be purchased at a Caltrans and USACE- approved mitigation bank at a 1:1 ratio. Temporarily impacted Waters of the U.S. will be reseeded with a Caltrans-approved native seed mixture.

The City will obtain a Clean Water Act (CWA), Section 404 nationwide permit (NWP 14 for Linear Transportation Projects) from the United States Army Corps of Engineers (USACE) and a CWA, Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB) – Central Valley Region for impacts to Waters of the U.S. The City will also notify the California Department of Fish and Wildlife (CDFW) of the project, as a Streambed Alteration Agreement (Fish and Game Code, Section 1602 – Administered by CDFW) will be required due to the project's impacts. This project will comply with all permit conditions and Best Management Practices (BMPs) will be implemented to minimize sedimentation and erosion to protect water quality to Waters of the U.S. These measures will include timing windows for in-water construction that limit such activities to periods of low flow volumes in Jackson Creek (June 1 – November 1). Construction is anticipated to commence in 2016 in middle to late May and continue through the end of September; however, all in-water construction will be restricted to the identified periods of low flow volumes.

No special-status species were found in the BSA and no federally listed species are expected to occur or be affected by the proposed project. A Habitat Assessment for California red-legged frog (CRLF) found potentially suitable dispersal habitat within the BSA and within 1 mile of the BSA. Biological conditions within the BSA, however, likely preclude CRLF from occurring within the project. To avoid potential impacts to CRLF, the City will adopt and implement avoidance and minimization measures. These measures will include, but are not limited to, limiting in-water work activities between June 1 through November 1, when CRLF are least likely to be impacted by in-water work. As such, the proposed project may affect, but is not likely to adversely affect CRLF. As the non-federal NEPA lead agency, Caltrans will consult with the United States Fish and Wildlife Service (USFWS) and request concurrence with this determination.

The spread of invasive species within the BSA will be managed to the greatest extent possible. Several invasive plant species, identified by The California Invasive Plant Council (CalIPC) as being a serious problem in California, already occur within the BSA. These species are identified on The California Invasive Plant Inventory (CIPI) (CalIPC 2006) and

the 2007 updated list. These species and associated mitigation measures to manage these species are presented in Sections 3.1.3 and 5.5, respectively.

One California black walnut tree will be removed to accommodate placement of the new bridge footing. Removal of this tree will be mitigated pursuant to Title 17 of the City of Jackson's Development Code, which would require planning commission approval. Preconstruction nesting bird surveys will be conducted prior to removal of this tree if it is to be removed during the nesting season (April 1 – September 1).

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List of Abbreviated Terms

ac	acre(s)
BMPs	Best management practices
BSA	Biological study area
CAD	computer-aided design
CalIPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CIPI	California Invasive Plant Inventory
City	City of Jackson
cm	centimeter(s)
CNDDB	California Department of Fish and Wildlife Natural Diversity Database
CNPS	California Native Plant Society
CRLF	California red-legged frog
CWA	Clean Water Act
ECORP	ECORP Consulting Inc.
EPA	United States Environmental Protection Agency
ESA	environmentally sensitive area
F	Fahrenheit
FESA	Federal Endangered Species Act
FSTIP	Federal Statewide Transportation Improvement Program
FT	Federally threatened
ft	feet/foot
ha	hectare
HR	Hydrologic Region
in	inch(es)

km	kilometer(s)
m	meter(s)
MBTA	Migratory Bird Treaty Act
MDBM	Mount Diablo Base and Meridian
mi	mile(s)
mm	millimeter(s)
NES	Natural Environment Study
NPPA	Native Plant Protection Act
NMFS	National Marine Fisheries Service
NWP	Nationwide permit
OHWM	ordinary high water mark
PES	Preliminary Environmental Study
RWQCB	Regional Water Quality Control Board
SSC	State species of special concern
TCB	Tri-colored blackbird
WPT	Western pond turtle
U.S.	United States
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey

Chapter 1. Introduction

This Natural Environment Study (NES) has been prepared for the Pitt Street Bridge Replacement Project (project), located in the City of Jackson, Amador County, California (*Figure 1. Project Vicinity* and *Figure 2. Project Location and Vicinity*). The City of Jackson (City), in cooperation with the designated non-federal NEPA lead agency, California Department of Transportation (Caltrans), proposes to remove and replace the Pitt Street Bridge at the crossing of Jackson Creek.

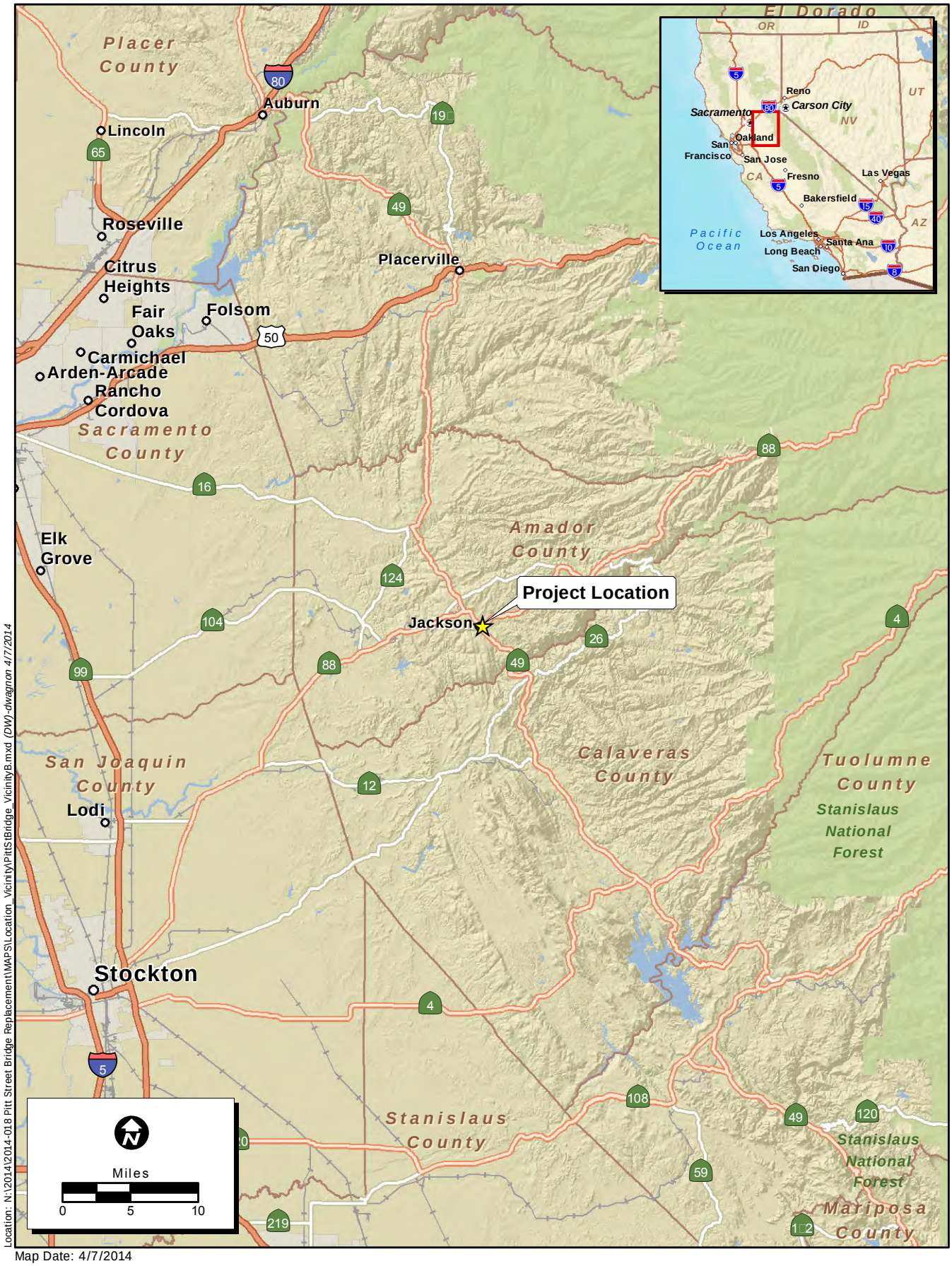
1.1. Project History

The Pitt Street Bridge was constructed in 1925 and connects Pitt Street, a conventional 15-foot one-lane local roadway, to State Route 88. The City of Jackson proposes to replace the Pitt Street Bridge for the following safety concerns: width of the existing structure does not meet the minimum required width based upon the current average daily traffic, the existing structural conditions, and the Sufficiency Rating of this bridge. For these reasons, the Pitt Street Bridge replacement is proposed to support safe vehicular and pedestrian passage and lower maintenance.

1.2. Project Description

1.2.1 Project Location

The proposed project is located in the City of Jackson along Pitt Street, approximately 0.25 mile (mi) east of Old Highway 49 and at the intersection of Pitt Street and Highway 88, in Amador County, California (Figure 2). The site corresponds to Section 28, Township 6 North, and Range 11 East [(Mount Diablo Base and Meridian (MDBM)] of the “Jackson, California” 7.5-minute quadrangle United States Geological Survey (USGS) topographic quadrangle (U.S. Department of the Interior, Geological Survey 1973), and within the Upper Mokelumne River Watershed (HUC 8# 18040012, U.S. Department of Interior, Geological Survey 1978).



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Map Date: 4/7/2014

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ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Vicinity

Pitt Street Bridge Replacement

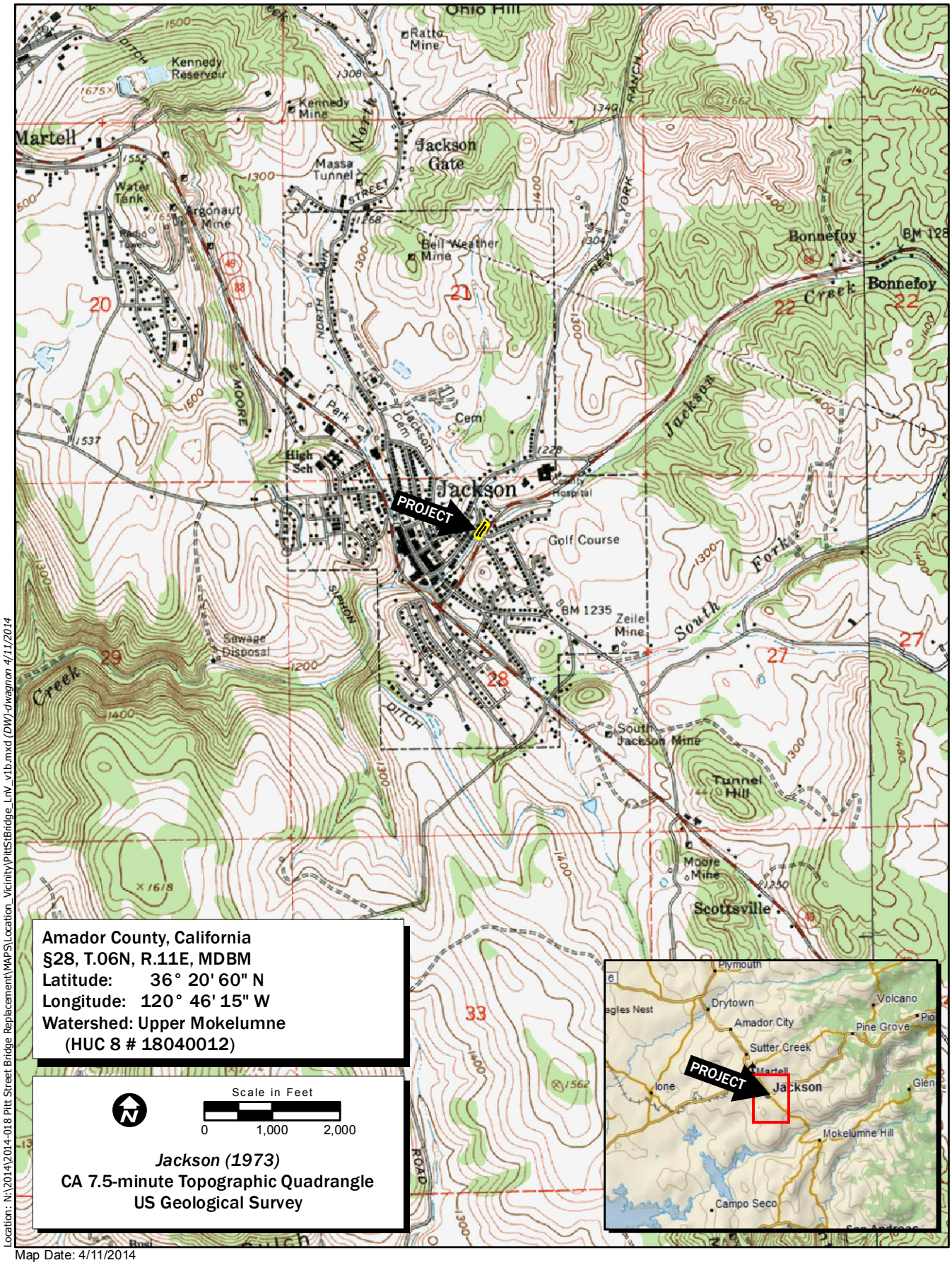

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Figure 2. Project Location and Vicinity

Pitt Street Bridge Replacement

1.2.2 Existing Conditions

The Pitt Street Bridge is located in a residential area of Jackson and provides one-way vehicular traffic and pedestrian access over Jackson Creek to State Route 88. The existing bridge structure consists of a single-span steel Pratt pony truss with timber decking on steel floor beams supported by masonry abutments.

The Pitt Street Bridge was constructed in 1925 and has not been updated. It is currently classified as structurally deficient for vehicle use and has no designated sidewalks and carries a Sufficiency Rating of 22.5 out of 100. The bridge was closed in 1983 due to advanced deterioration; then had limited repairs in 1985 enabling the bridge to be reopened. The steel superstructure is bent and corroded with heavy rust. Based on the condition of the railings and the lack of designated sidewalks, the bridge is not considered safe for pedestrians by current standards. In addition, the footing for the abutment at the east end has been exposed due to water scouring, thus causing a stability concern. (City of Jackson 2013)

Pitt Street Bridge crosses Jackson Creek over a semi-channelized section of the creek. The creek bed is natural material with the banks lined with vertical rock walls attached to the bridge abutments, constricting the channel by several feet. Located at the top of the north-west rock wall, there are two privately owned residences one on each side of the bridge. At the south-east end of the bridge, Pitt Street intersects SR88, restricting the possibility to lengthen the bridge and widen the channel by a few feet. The preliminary plans for the new bridge may accommodate widening the existing channel and bridge by 8-10 feet at the structure abutments; however, overtopping may still be a hydraulics issue. (City of Jackson 2013).

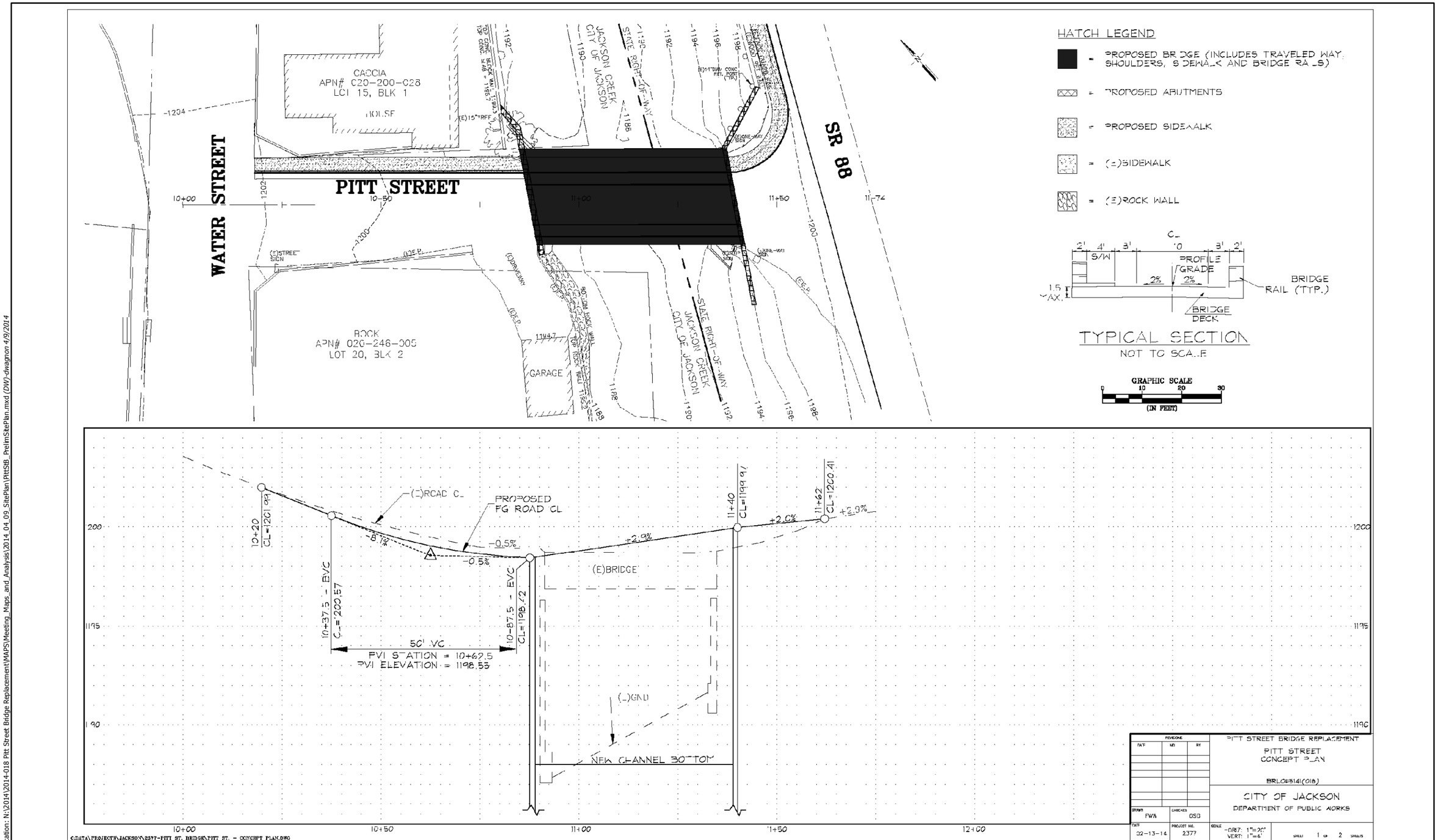
The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge. The last major storm overtopped the deck by about 1 foot.

1.2.3 Build Alternative (Project)

The replacement of the existing Pitt Street Bridge would be a similar profile, single-span bridge that would provide one 10-foot traffic lane, two 3-foot shoulders, a 6-foot separated sidewalk, railings and concrete barriers. The proposed structure would be 54-feet long by 32-feet wide (approximately 8-10 feet wider and a few feet longer than the existing bridge) and would remain a one-way access to State Route 88. The proposed plan is to conform to the existing roadway elevation on the northwest end and the southeast end vertical elevation would be slightly revised. The new abutments would likely be founded on spread footings or doweled directly into native bedrock. With the installation work of new abutments and footings, the creek channel would be re-contoured between the new abutments. It has also been proposed to add a formal sidewalk to north side of Pitt Street from the bridge to Water Street and extend the sidewalk starting on the south end of the bridge towards the bridge on SR88 just north of the Pitt Street intersection. Figure 3 (Preliminary Site Plan) depicts these project elements.

Approach roadways would be rehabilitated after the new bridge is placed and utilities are reconnected. This would include the intersection of Pitt Street and Water Street. Rehabilitation of the approaches would consist of re-paving the road, restriping, sidewalks, and curb ramps. At the bridge deck, improvements would include construction of shoulders and traffic barriers, railing, sidewalk, curb ramps, and signs. Alterations to the approach to State Route 88 may not be the standard intersection taper and turning radii but they would accommodate Fire Truck and School Bus turning movements.

The Project includes relocating and/or replacing the following utilities: (1) The existing 10-inch sewer line buried in the creek channel would be removed and replaced, as part of the Project. A backhoe will be used to remove and replace the sewer line. Excavated material will be backfilled over the new sewer line and any excess soil will be removed from the BSA. Prior to the removal and replacement activities, the channel segment will be dewatered with the use of temporary coffer dams and a diversion pipe that will carry flows (via gravity) from immediately above the sewer removal/replacement segment to a point immediately downstream of this location (2) The existing eight inch water line that is buried in the



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Map Date: 4/9/2014

Figure 3. Preliminary Site Plan Map

Pitt Street Bridge Replacement

roadway along Pitt Street extends out of the existing abutment 1 before making a 90^0 turn and continuing into the creek channel, would have portions removed during the demolition work. (3) The existing storm drain and inlet adjacent to the southern private driveway at abutment 1 would have portions removed during the demolition work. (4) The existing 12-inch drainage pipe day lighting out of abutment 2 into the creek would require relocation through the new abutment. (5) The existing four inch abandoned water line would need to be removed. (6) Guy wires associated with the existing overhead electrical utility pole at abutment 2 would need to be temporarily relocated.

Equipment staging would be located on the existing paved Pitt Street roadway through the use of a temporary construction easement. The road within the Project area would be fully closed during the Project construction and detour routes would be made available to maintain access to the residences and businesses in the area. Temporary construction easements would also be needed for three private parcels adjacent to the Project wing and retaining walls, and bridge abutment 1 on the north side of the Project area for access.

Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited work space, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the City's Corporation Yard for storage and later reused. The construction of the Proposed Project will be performed during the summer time (mid May to end of September) and all pertinent permits will be obtained prior to any work in the stream channel. The replacement structure would maintain the nearly vertical slopes of the west side of the channel but the section opening would be widened by 8-10 feet.

1.2.4 No-Build Alternative

The No Project Alternative would result in no improvements to the existing bridge and its safety rating. The existing bridge would continue to deteriorate and likely close due to safety of the structure.

Chapter 2. Study Methods

2.1. Regulatory Requirements

2.1.1. Federal Regulations

2.1.1.1. Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that are listed as endangered or threatened by the United States (U.S.) Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of FESA prohibits the take of endangered wildlife, where take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging-up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 USC 1538). Under Section 7 of the FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

2.1.1.2. Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS

issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Department of Fish and Wildlife (CDFW) Code.

2.1.1.3. Federal Clean Water Act

The federal Clean Water Act's (CWA) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" without a permit from the U.S. Army Corps of Engineers (USACE). The definition of waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit.

Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

2.1.1.4. Invasive Species (Executive Order 13112)

Executive Order 13112 mandates that federal agencies whose actions may affect the status of invasive species to "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species." Under Executive Order

13112, an invasive species is defined as a non-native species whose introduction does, or is likely to cause, economic or environmental harm, or harm human health.

2.1.2. State or Local Regulations

2.1.2.1. California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA, but unlike its federal counterpart, CESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the CDFW Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill". CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.1.2.2. Fully Protected Species

The State of California first began to designate species as "Fully Protected" prior to the creation of the CESA and FESA. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, mammals, amphibians and reptiles, birds and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (Fish and Game Code Section 4700 – applies to fully protected mammals, Section 3511 – applies to birds, Section 5050 – applies the reptiles and amphibians, and Section 5515 – applies to fish species) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

2.1.2.3. Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (Fish and Game Code Sections 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered native plants in this State." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code (Administered by CDFW).

2.1.2.4. California Streambed Alteration Notification/Agreement

Section 1602 of the Fish and Game Code requires that a Streambed Alteration Application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is a Streambed Alteration Agreement.

2.2. Studies Required

2.2.1. Pre-Field Research

Prior to conducting field surveys, a list of special-status plants and wildlife known to occur in the vicinity of the BSA (Figure 4) or in similar environments elsewhere in the region was acquired. A detailed description of the BSA is presented in Section 3.1.1. A list of potentially occurring special-status species was created for the BSA based on the following sources:

- The USFWS official species list for Amador County (USFWS 2014, Appendix A);

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Meeting_Maps_and_Analysis\2014_04_09_SitePlan\PittStB_BSA.mxd (DW) dwagnon 5/8/2014

Map Date: 5/8/2014
Photo Source: Microsoft, June 2011 (World Imagery ESRI online accessed 5/8/2014)

Figure 4. Biological Study Area (BSA)

Pitt Street Bridge Replacement

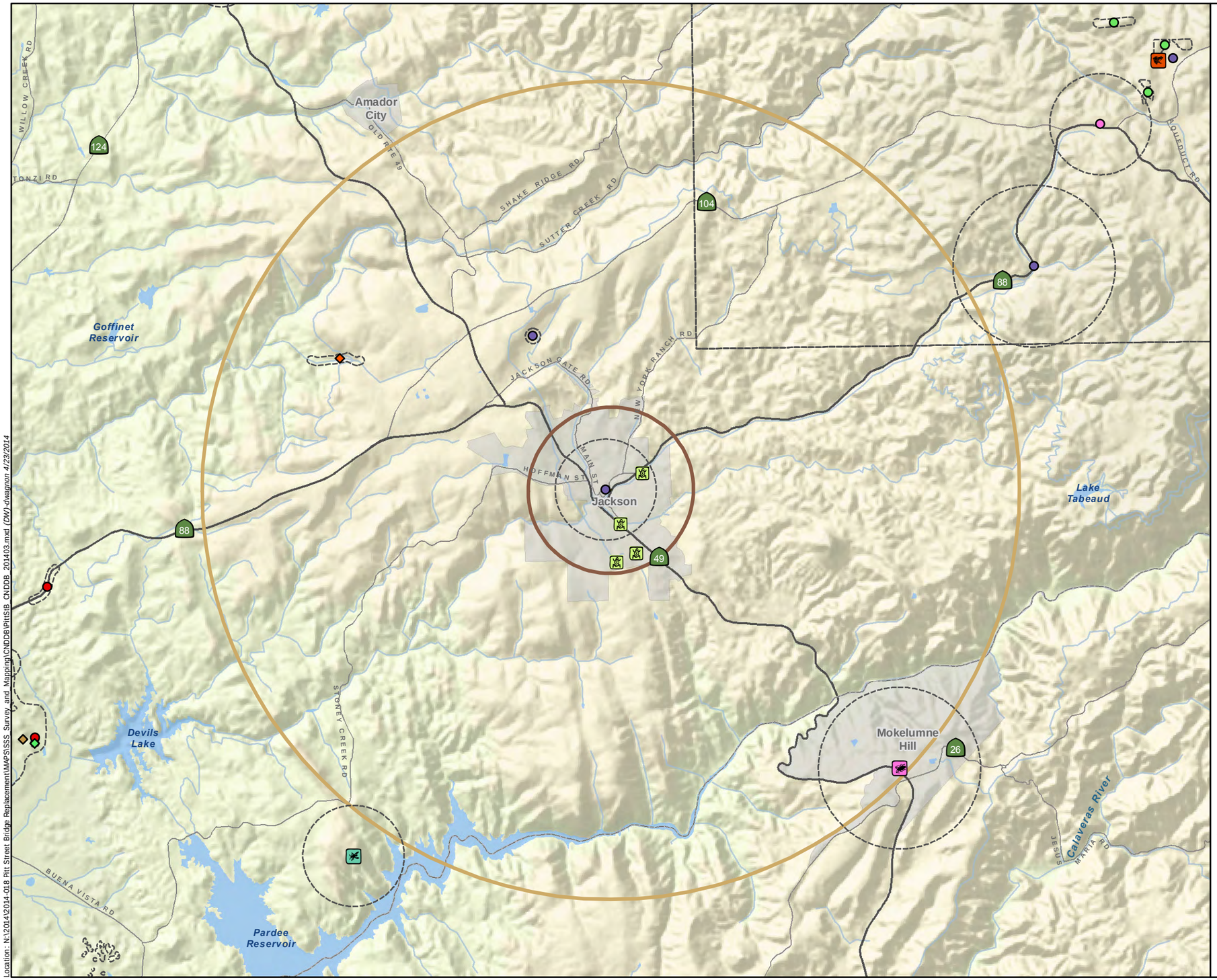
- CDFW Natural Diversity Database (CNDDB) record search for the "Jackson, CA," 7.5-minute quadrangle and all surrounding USGS topographic 7.5-minute topographic quadrangles within a 5- mi radius surrounding the BSA including "Amador City, CA", "Pine Grove, CA", "Mokelumne Hill, CA", "San Andreas, CA", "Valley Springs, CA", "Wallace, CA", "Ione, CA", and "Irish Hill, CA" (CDFG 2003) (Figure 5. *CNDDB Occurrences of Special-Status Species*) (Appendix B); and
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants record search of the "Jackson, California" 7.5-minute USGS topographic quadrangle and the eight surrounding quadrangles (CNPS 2014, Appendix C).

2.2.2. Special-Status Species Assessment

A biological field survey was conducted on April 3, 2014 to assess special-status species and their habitat within the BSA. The assessment consisted of systematically walking through the entire BSA and inspecting all habitats for presence of special-status species with potential to occur there. Notes on habitats and their location within the BSA were recorded, and examined for the presence of any special-status species. The hydrological and aquatic resources, soils, natural vegetation communities, dominant plant and common animal species, potential migration and movement corridors, and invasive species were all noted and described.

A focused California red-legged frog (CRLF) habitat assessment following the protocols described in the United States Fish and Wildlife Service *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frogs* (USFWS 2005) was conducted on April 17, 2014, by qualified biologist, Eric Stitt. The CRLF habitat assessment was conducted within the BSA and in upstream areas to Washington Blvd, and downstream to the confluence of Jackson Creek with North Fork Jackson Creek. Potential habitat was evaluated by walking the Jackson Creek streambed while assessing in-water habitats, shoreline structure, and adjacent uplands. Parameters including aquatic habitat type, percentage, and location; vegetation assemblage; aquatic vertebrate species present; and upland information were recorded onto standardized datasheets. Aquatic habitats and adjacent uplands were evaluated relative to their potential to support breeding activities,

Figure 5.
CNDDB Occurrences of Special-Status Species



Distance From Project

- 1 mile
- 5 miles

Boundaries

- Project Boundary [1]
- CNDDB Polygon Extent [2]

CNDDB Occurrences [2]

Plants

- Big-scale Balsamroot
- Bisbee Peak Rush-rose
- Ione Buckwheat
- Ione Manzanita
- Parry's Horkelia
- Prairie Wedge Grass
- Red Hills Soaproot
- Tuolumne Button-celery

Invertebrates

- Leech's Skyline Diving Beetle
- Grady's Cave Amphipod
- Rudolph's Cave Harvestman

Amphibians/Reptiles

- Foothill Yellow-legged Frog
- Western Pond Turtle

Birds

- Tricolored Blackbird

This map may include multiple species' occurrences at each location, some of which may not be visible on this graphic. The CNDDB occurrences shown may not reflect the actual location of the occurrence.

**** Species occurrence is represented solely by a polygon. The centroid point is not visible within the map extents.***
^ Location is suppressed. Placement only indicates presence on quad.

[1] Project Boundary: ECORP (Approved by Caltrans)
[2] CDFW California Natural Diversity Database (CNDDB), Mar. 2014 Update (GIS Shapefile) CNDDB Occurrences Located on USGS 7.5' Quadrangles: Amador City, Ione, Jackson, Mokelumne Hill, Pine Grove.

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAP\SSS_Survey and Mapping\CNDDB\PittStB_CNDDB_201403.mxd (DW) dwagnon 4/23/2014

2014-018 Pitt Street Bridge Replacement

Miles
0 1 2

Map Date: 4/23/2014

foraging activities, refugia and hibernacula, and as dispersal corridors. Prior to the site visits, the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB) (CDFW 2014) was queried for nearby occurrences and a literature review was completed to determine historic status of California red-legged frogs in Amador County.

2.2.3. Waters of the U.S.

A wetland delineation was conducted by qualified senior biologist, Tom Scofield, on 3 April 2014. Supplementary wetland data was collected by qualified senior biologist, Eric Stitt, on 12 April 2014. The wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Region Supplement) (USACE 2008). The boundaries of potential waters of the U.S. were delineated through aerial photograph interpretation and standard field methods (i.e., paired data set analyses), and all wetland data were recorded on Arid West Region - Wetland Determination Data Forms. Potential waters of the U.S., including wetlands, were mapped in the field using a global positioning system (GPS) unit capable of submeter accuracy (e.g., Trimble GeoXT) and/or georectified aerial photography. A color aerial photograph (1"=100' scale, NAIP 2009) was used to assist with mapping and field verification. *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990) and the *Soil Survey of Amador County* (USDA-NRCS 2012) were used to aid in identifying hydric soils in the field. *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin, et. al., *ed.* 2012) was used for plant nomenclature and identification. The potential Waters of the U.S. discussed in this report have not been verified by the USACE and represent a calculated estimation of the jurisdictional area within the BSA and are subject to modification following the USACE verification process. A wetland delineation map illustrating the potential Waters of the U.S. within the BSA is presented in Figure 6.

Figure 6.
Wetland Delineation

Map Features

- Biological Study Area - 0.□97 ac.
- Waters of the U.S. - 0.246 ac.
- Soil Points

SAMPLE POINTS

WATERS OF THE U.S.

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
01	38.350105, -120.770641
03	38.349823, -120.770927

UPLAND

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
02N	38.350091, -120.770614
04N	38.349800, -120.770887

[1] ***Boundary Source: ECORP Consulting, Inc. and City of Jackson***

[2] *The summary values for each feature have been rounded to the nearest round number or 1/1000 decimal. Summation of these values in the table may not equal the total reported.*

[3] *Subject to U.S. Army Corps of Engineers verification*
This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.

Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *9/9/2014*)

Map Date: 9/9/2014
Delineator: T. Scofield
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Wetland_Mapping\Wetland_Delineation\v2\PittSt_B_WDv2_11x17.mxd (DW) kOrtega 9/9/2014

2.2.4. Vegetation Community Mapping

Vegetation communities observed during the site assessment and special-status plant survey were delineated onto aerial photographs. The vegetation community polygons were then digitized into a computer-aided design (CAD) format (Figure 7).

2.3. Personnel and Survey Dates

A special-status species assessment, vegetation community mapping, and a wetland delineation of the BSA was conducted on April 3, 2014 by ECORP senior biologist Tom Scofield. Supplemental wetland data and a California red-legged frog habitat assessment survey was conducted on April 14, 2014.

2.4. Agency Coordination and Professional Contacts

The USFWS official species list for Amador County was received on April 23, 2014 (USFWS 2014, Appendix A) and CDFW's Natural Diversity Database (CNDDB) record search for the "Jackson, CA," 7.5-minute quadrangle and all surrounding USGS topographic 7.5-minute topographic quadrangles was received on May 12, 2014 (Appendix B).

2.5. Limitations That May Influence Results

A site assessment was conducted within the BSA to determine the type and extent of habitats present and to determine the potential for special-status species to occur within the BSA. Based on the habitats observed, a focused rare plant survey may be required since the BSA provides potential habitat for rare plants. Focused rare plant surveys are recommended in spring/summer of 2014 to adequately survey for plant species that may occur in the BSA.

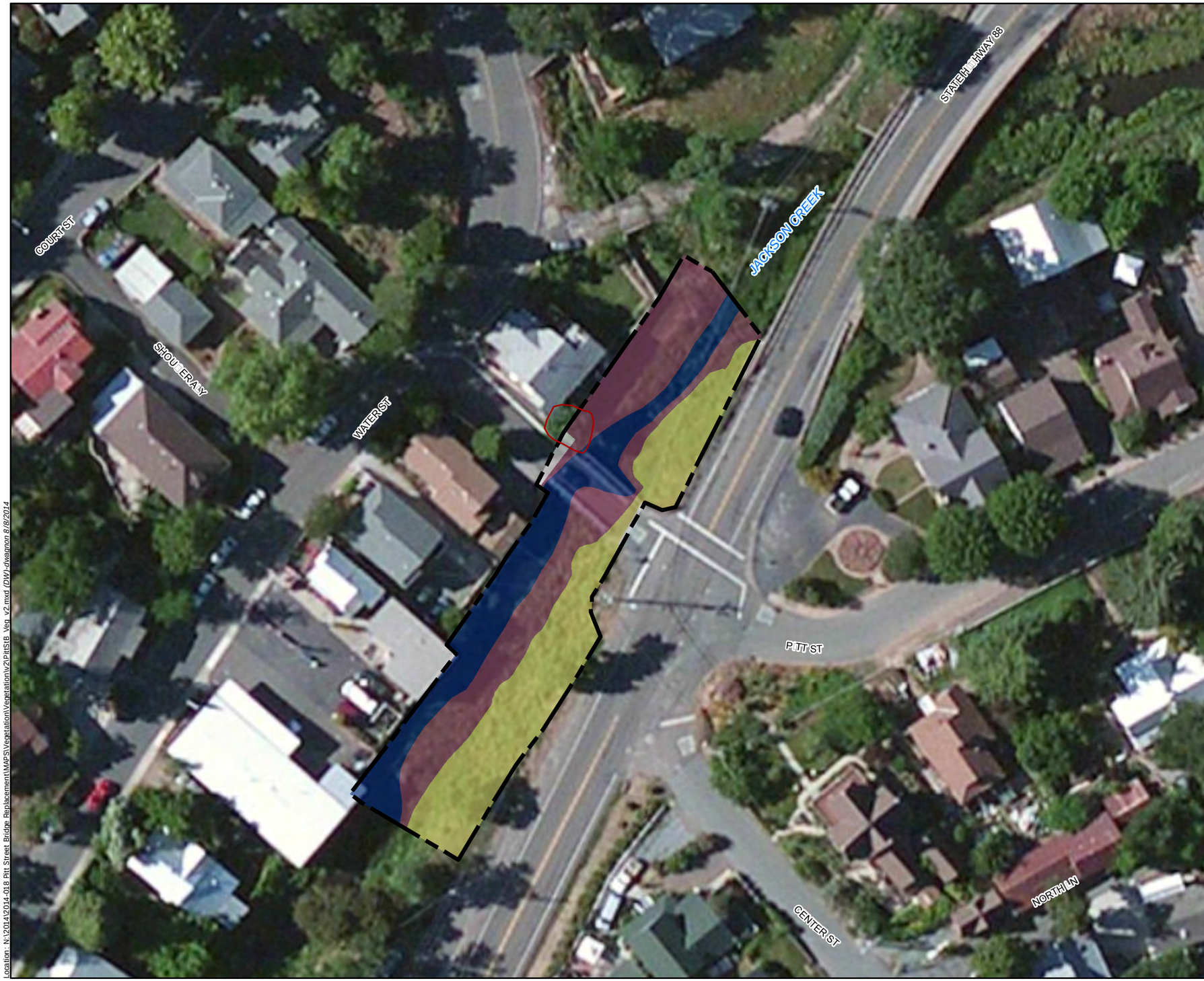


Figure 7.
Vegetation Map

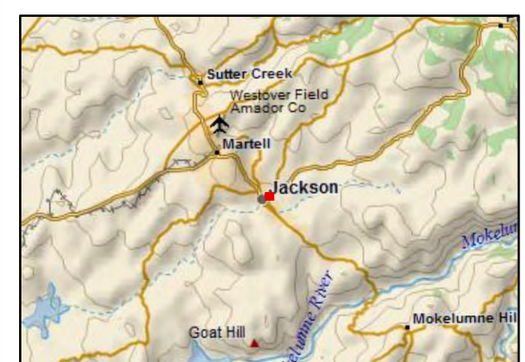
Map Features

- Biological Study Area - 0.□97 ac.
- Walnut Tree To Be Removed

□and Cover Types

- Non-native Annual □rassland - 0.148 ac.
- Emergent Wetland - 0.14□ac.
- Perennial Creek - 0.10□ac.
- Ruderal/Disturbed - 0.00□ac.

[1] *Boundary Source: ECORP Consulting, Inc. and City of Jackson*



Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Map Date: 8/8/2014
Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *8/8/2014*)

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Vegetation\Vegetation\v2\PittStB_Veg_v2.mxd *(DW)-dwagnon 8/8/2014*

Chapter 3. Results: Environmental Setting

3.1. Description of the Existing Biological and Physical Conditions

3.1.1. Biological Study Area

The project is located in the Northern Sierra Nevada Foothills District of the Sierra Nevada floristic region of California (*The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin, et. al., *ed.* 2012). The approximate 0.397-ac BSA includes aquatic and upland habitat types including Jackson Creek and its floodplain and annual grasslands located on the upper slopes along the south side of Jackson Creek. In addition, ruderal/disturbed areas associated with the bridge structure occur within the BSA (Figure 7).

3.1.2. Physical Conditions

3.1.2.1. Topography

The BSA is situated at an elevational range of approximately 1,190 to 1,200 ft above mean sea level. Jackson Creek and its floodplain are at the lowest elevation on site (approximately 1,190 ft) and elevations rise to approximately 1,200 ft on the north and south sides of the BSA, sloping upwards towards the top of bank.

3.1.2.2. Geology and Soils

The Project site is within a geologic area of Jurassic Marine sedimentary rocks comprised of shale, sandstone, minor conglomerate, chert, slate, limestone and minor pyroclastic rocks (Caltrans 2012).

According to the *Soil Survey of Amador County, California* (U.S. Department of Agriculture, Soil Conservation Service Amador Area, NRCS 2013), one soil unit, or type, has been mapped within the BSA: (Pw) Placer diggings and Riverwash (Figure 8, *Natural Resources Conservation Service Soil Types*).

Placer diggings and Riverwash are found along drainage channels and are characterized by 0 to 15 percent slopes, endure frequent flooding, and are excessively drained. The typical profile consists of gravelly sand in the top 0-6 inches and stratified extremely gravelly coarse sand to gravelly sand in the remaining 60 inches. These soils have been established at elevations ranging from 170 to 3,500 feet with mean annual precipitation of approximately 18 to 40 inches and mean annual air temperatures of 55 to 61 degrees Fahrenheit.

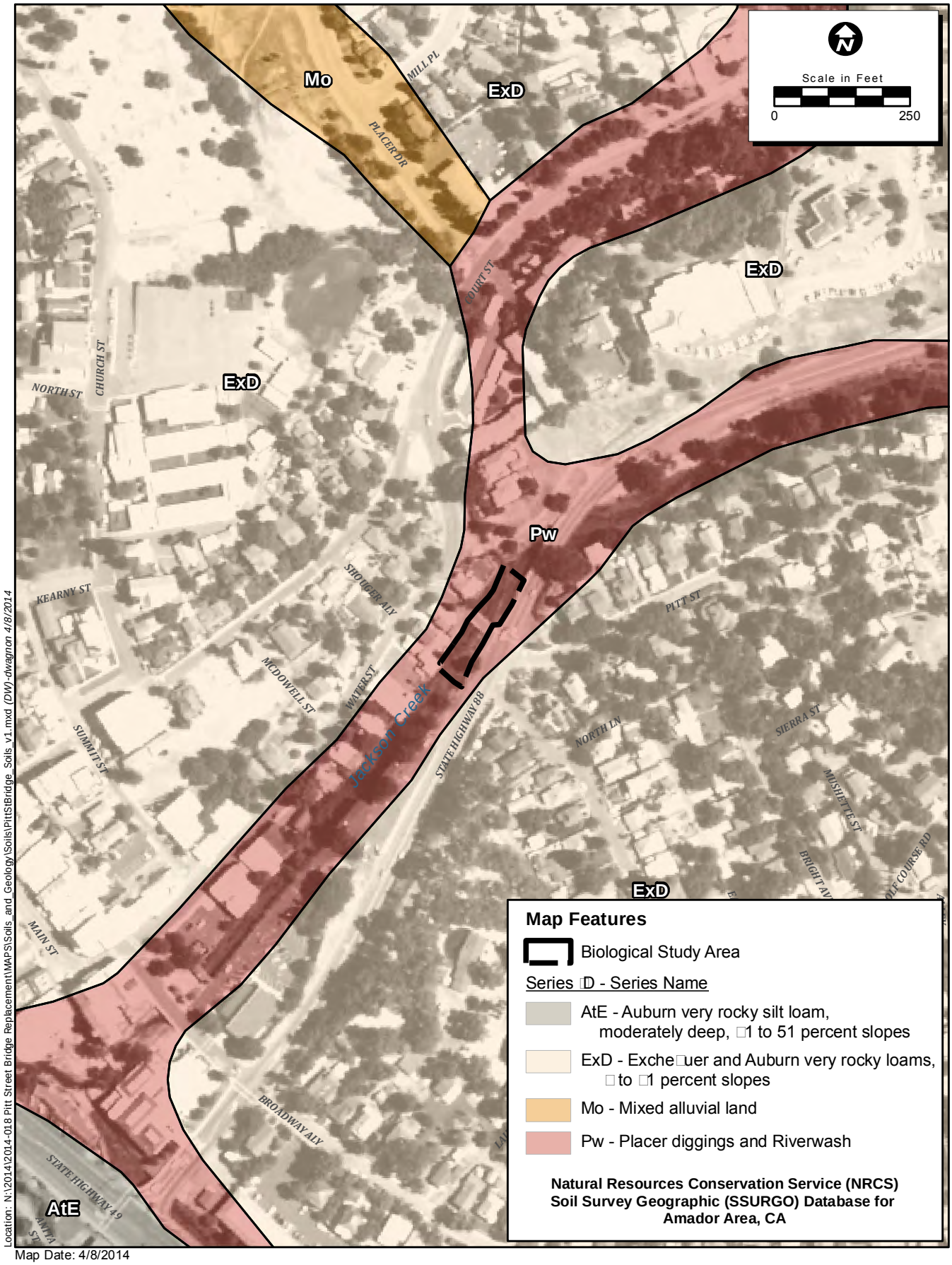
3.1.2.3. Climate

The BSA is characterized by a Mediterranean climate with mild to moderately cold, wet winters, and hot, dry summers. Average annual temperatures range from 52-62 degrees (°) Fahrenheit (F) with a winter record low temperature of 17° F and summer high temperatures reaching over 100° F. Annual precipitation in the City is approximately 33.71 in (Caltrans 2012) and primarily falls in the form of rainfall, with very little snowfall.

3.1.2.4. Hydrology

Regional Hydrology

Jackson Creek is a tributary of the greater San Joaquin River basin. The proposed project is located within the Upper Mokelumne River Watershed (USGS 1978), and the Mokelumne River is a tributary of the San Joaquin River. The network of streams that collectively drain to the San Joaquin and Sacramento Rivers convene to form the Sacramento-San Joaquin Delta, which eventually drains into the San Francisco Bay and ultimately the Pacific Ocean.



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Map Date: 4/8/2014
Photo Source: NAIP 2012

Figure 8. Natural Resources Conservation Service Soil Types

Pitt Street Bridge Replacement

Approximately 5.5 miles downstream of the project, Jackson Creek flows into main stem Jackson Creek and into Lake Amador.

The proposed project is located within the Upper Mokelumne sub-basin (USGS 1978). The Upper Mokelumne Subbasin is composed of 11 hydrologic sub-basins that are divided into watersheds and subwatersheds. The Proposed Project is located within the Upper Jackson Creek subwatershed/hydrologic unit of the greater Jackson Creek Watershed.

The Jackson Creek channel is a natural trapezoidal shape with a sandy silt and grass bottom. The creek flow is from northeast to southwest, and is seasonally variable, originating from upstream springs and snowmelt. The existing FEMA data puts the 100-year flood event approximately 2.5 feet above the existing deck. The last major storm event witnessed about 1 foot of creek flow overtopping the deck (City of Jackson 2013). The Project site is located in zone AE according to the FEMA Flood Insurance Rate Maps (FEMA 2010). Most precipitation occurs between November and April with the driest season between June and September. The average annual precipitation is 33.71 inches. (Caltrans 2012).

3.1.3. Biological Conditions in the Biological Study Area

The approximate 0.397-ac BSA includes aquatic and upland habitat types including Jackson Creek and its floodplain and upland slopes along the south side of Jackson Creek. The BSA contains four (4) vegetation communities or habitat types including perennial creek (Jackson Creek), emergent wetland, annual grassland, and ruderal/disturbed (i.e., existing bridge structure and roadway). A map of the locations of these habitat types within the BSA is included in Section 3.1.3 below.

3.1.3.1 Vegetation Communities

3.1.3.1.1. Perennial Creek (Jackson Creek)

Approximately 0.103-ac of perennial creek (a portion of Jackson Creek) occurs within the BSA. This habitat consists primarily of open water but also supports fringe areas of emergent and floating wetland vegetation including Santa Barbara sedge (*Carex Barbarae*), broad-leaved cattail (*Typha latifolia*), water cress (*Nasturtium* sp), horsetail (*Equisetum arvense*), Baltic rush (*Juncus balticus*), and water primrose (*Ludwigia peploides*).

3.1.3.1.2. Emergent Wetland

A total of 0.143-ac of emergent wetland occurs within the BSA. This habitat occurs within and along the active creek channel of Jackson Creek. The emergent wetland community is characterized by herbaceous emergent and floating wetland plant species such as Santa Barbara sedge, broad-leaved cattail, water cress, horsetail, Baltic rush, water primrose, curly dock (*Rumex crispis*), and also includes maintained (trimmed) patches of Himalayan blackberry (*Rubus armeniacus*) and red willow (*Salix laevigata*).

3.1.3.1.3. Non-Native Annual Grassland

Approximately 0.148-ac of non-native annual grassland annual grassland vegetation occurs within the BSA. The slopes adjacent to Jackson Creek transition from low-lying wetland fringe areas to annual grassland habitat. The annual grassland community is comprised primarily of non-native, naturalized Mediterranean grasses. These include, slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), hedgehog dog-tail grass (*Cynosurus echinatus*), Italian ryegrass (*Festuca perennis*), velvet grass (*Holcus lanatus*), barley, (*Hordeum murinum*), and annual bluegrass (*Poa annua*). Other plant species observed in annual grassland habitat within the BSA include: Prickly lettuce (*Lactuca serriola*) , Bristly ox tongue (*Helminthotheca echiodes*), Black mustard (*Brassica nigra*), white goosefoot (*Chenopodium album*), Russian thistle (*Salsola tragus*), morning glory (*Convolvulus arvensis*), wild pea (*Lathyrus* sp), sweet clover

(*melilotus* sp), vetch (*Vicia* sp), goose grass (*Galium aparine*), and California poppy (*Eschsholzia californica*).

3.1.3.1.4. Ruderal/Disturbed

Approximately 0.003-ac of ruderal/disturbed habitat occurs within the BSA, and includes the existing Pitt Street Bridge structure and road surface.

3.1.3.2. Wildlife Migration and Movement Corridors/Areas

Despite the activities associated with adjacent residences and roadways, the Jackson Creek floodplain and associated wetland/riparian corridor provides a locally important movement corridor for a variety of wildlife species. Wildlife species most likely to use the BSA as a migratory or movement corridor include birds such as passerines, raptors, wading birds, and waterfowl. The perennial flows of Jackson Creek may support the movement of native and non-native fish species, and likely provide a movement route for amphibians and reptiles. Black-tailed deer (*Odocoileus hemionus*) and coyote (*Canis latrans*) was observed within the BSA and other mobile species such as gray fox (*Urocyon cinereoargenteus*) and raccoon (*Procyon lotor*) were not observed, but are expected to occasionally move along the stream course within the BSA.

3.1.3.3. Aquatic Resources

Approximately 0.246-ac of Waters of the U.S. occurs within the BSA, and includes the perennial flows of Jackson Creek and adjacent emergent wetlands located along the stream margins of Jackson Creek. The dominant vegetation found within and along the fringes of Jackson Creek supports several herbaceous wetland plants species including Santa Barbara sedge, broad-leaved cattail, water cress, horsetail, Baltic rush, water primrose, and curly dock. In addition, several clumps of recently cut red willow shrubs were observed along the stream margin. Jackson Creek is largely vegetated within the BSA, however, unvegetated open water areas caused by depth and scouring effects of flowing water occurs in the BSA.

3.1.3.4. Invasive Species

Several invasive plant species, identified by the California Invasive Plant Council (CalIPC) as being a serious problem in California, already occur within the BSA. These species are identified on the California Invasive Plant Inventory (CIPI) (CalIPC 2006) and the 2007 updated list. The CIPI is based on evaluation criteria (i.e., ecological impact, invasive potential, distribution) to assign plants to an overall inventory category of high, moderate, or limited. Invasive species located within the BSA are presented in Table 1.

Table 1. Invasive Plant Species Located Within the BSA[1]

Scientific Name	Common Name	CIPI List[2]
Avena barbata	Slender wild oat	Moderate
Brassica nigra	Black mustard	Moderate
Bromus diandrus	Ripgut brome	Moderate
Bromus hordeaceus	Soft brome	Limited
Convolvulus arvensis	Morning glory	Watchlist
Cynosurus echinatus	Hedgehog dog-tail grass	Moderate
Festuca bromoides	Brome fescue	Watchlist
Festuca perennis	Italian ryegrass	Moderate
Foeniculum vulgare	Sweet fennel	High
Helminthotheca echiodes	Bristly ox tongue	Limited
Holcus lanatus	Velvet grass	Moderate
Hordeum murinum	Barley	Moderate
Lactuca serriola	Prickly lettuce	Watchlist
Rubus discolor	Himalayan blackberry	High
Rumex crispis	Curly dock	Limited
Salsola tragus	Russian thistle	Limited
Verbascum thapsus	Common mullein	Limited

[1] This list does not include non-native species found within the BSA that are not identified on the CIPI List.
[2] High = widespread distribution; severe ecological impacts
Moderate = limited to widespread distribution; substantial and apparent, but not severe, ecological impacts
Limited = limited distribution; minor ecological impacts statewide, but still considered

3.1.3.5. Common Plant Species

The aforementioned vegetation communities in the BSA include a variety of common plant species. A list of common plant species that were observed during the April 3 and 14, 2014 habitat assessment of the BSA is presented in Appendix E. Representative photographs that illustrate the vegetation communities within the BSA are presented in Appendix F.

3.1.3.6. Common Wildlife Species

A list of wildlife species observed in the BSA during the April 3 and 14, 2014 habitat assessment was generated and is presented as Appendix G. These species are typical inhabitants within the region.

Most of the wildlife species directly observed were birds. These species include turkey vulture (*Cathartes aura*), red-tail hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), oak titmouse (*Baeolophus inornatus*), , American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), American goldfinch (*Carduelis tristis*), house finch (*Carpodacus cassinii*), Brewer's blackbird (*Euphagus cyanocephalus*), and European starling *Sturnus vulgaris*). No evidence of previous swallow nesting was observed underneath the bridge or elsewhere in the project.

One reptilian species, western fence lizard (*celoporus occidentalis*) was observed in the BSA. Evidence of two mammals was observed (i.e., scat, tracks), including coyote and black-tailed deer. No evidence of maternity night, and/or day roosting sites for bats were observed. The bridge underside does not appear to provide bat roosting habitat.

3.2. Regional Species and Habitats of Concern

A list of potentially occurring special-status species was compiled for the BSA. This list was compiled from the following resources:

- The USFWS official species list for Amador County (USFWS 2014, see Appendix A);
- CNDDB record search for the "Jackson, CA," 7.5-minute USGS topographic quadrangle and a 5 mi radius surrounding the BSA (CDFG 2003) (see Figure 5); and
- CNPS's Inventory of Rare and Endangered Plants record search for the "Jackson, California" 7.5-minute USGS topographic quadrangle and the eight surrounding quadrangles (CNPS 2014, Appendix C).

Table 2 is a list of all the species that were considered for this project. The list includes the name, status, and a general habitat description. During the site assessment, the potential for special-status species to occur within the BSA was evaluated for each species on this list. Each species that has the potential to occur within the BSA is further discussed in Chapter 4.

Table 2. Listed, Proposed Species, and Critical Habitat Potentially Occurring or Known to Occur in the Region.

Common Name	Scientific Name	Status[1]	General Habitat Description	Habitat Present/ Absent[2]	Rationale
Plants					
Henderson's bent grass	*Agrostis hendersonii*	CNPS List 3.2	Valley and foothill grasslands/vernal pool	Habitat Absent	The BSA lacks appropriate vernal pool habitat
Ione Manzanita	*Arctostaphylos myrtifolia*	FT CNPS List 1B.2	Chaparral, cismontane woodland within Ione formation.	Habitat Absent	The BSA lacks appropriate Ione formation habitat.
Big-scale balsamroot	*Balsamorhiza macrolepis*	CNPS List 1B.2	Cismontane woodland, Valley grasslands	Habitat present	Grassland habitat occurs in the BSA
Hoover's calycadenia	*Calycadenia hooveri*	CNPS List 1B.3	Rocky areas in cismontane woodlands and valley and foothill grasslands	Habitat Absent	Although grassland habitat occurs in the BSA, no open rocky areas occur in the BSA
Red Hills soaproot	*Chlorogalum grandiflorum*	CNPS List 1B.2	Chaparral, cismontane woodland, lower montane coniferous forest	Habitat Absent	The BSA lacks appropriate habitat
Sierra clarkia	*Clarkia virgata*	CNPS List 4.3	Cismontane woodland, lower montane coniferous forest	Habitat Absent	The BSA lacks appropriate habitat
Streambank stream beauty	*Claytonia parviflora ssp. grandiflora*	CNPS List 4.2	Rocky areas in cismontane woodland	Habitat Absent	The study area lacks appropriate habitat
Ione buckwheat	*Eriogonum apricum* var. *apricum*	FE CE CNPS List 1B.1	Chaparral, cismontane woodland within Ione formation.	Habitat Absent	The BSA lacks appropriate habitat (i.e., Ione formation habitat)
Irish Hill buckwheat	*Eriogonum apricum* var. *prostratum*	FE CE CNPS 1B.1	Chaparral, cismontane woodland within Ione formation.	Habitat Absent	The BSA lacks appropriate habitat (i.e., Ione formation habitat)
Tuolumne button celery	*Eryngium pinnatisectum*	CNPS List 1B.2	Cismontane woodland, lower montane coniferous forest, vernal pool/seasonal wetland	Habitat Absent	The BSA lacks appropriate vernal pool/seasonal wetland habitat
Bisbee Peak rush-rose	*Crocanthemum suffrutescens*	CNPS List 3.2	Chaparral, cismontane woodland, Ione formation.	Habitat Absent	The BSA lacks appropriate habitat (i.e., Ione formation habitat)
Parry's horkelia	*Horkelia parryi*	CNPS List 1B.2	Chaparral, cismontane woodland, and Ione formation soils.	Habitat Absent	The BSA lacks appropriate habitat (i.e., Ione formation habitat)
Legenere	*Legenere limosa*	CNPS List 1B.1	Vernal pools	Habitat Absent	The BSA lacks appropriate vernal pool habitat
Humboldt lily	*Lilium humboldtii* spp *humboldtii*	CNPS List 4.2	Openings in chaparral, cismontane woodland and lower montane coniferous forest.	Habitat Absent	The BSA lacks appropriate habitat
Pincushion navarretia	*Navarretia myersii* ssp. *myersii*	CNPS List 1B.1	Valley and foothill grasslands/ vernal pool/wetland	Habitat Absent	The study area lacks appropriate seasonal wetland habitat.
Bacigalupi's yampah	*Perideridia bacigalupii*	CNPS List 4.2	Chaparral, lower montane coniferous forest/serpentine	Habitat Absent	The BSA lacks appropriate vernal pool habitat

Common Name	Scientific Name	Status[1]	General Habitat Description	Habitat Present / Absent[2]	Rationale
Sanford's arrowhead	*Sagittaria sanfordii*	CNPS List 1B.2	Freshwater marsh/aquatic	Habitat present	Jackson Creek and associated emergent wetlands and open water provide potential habitat for this species within the BSA
Prairie wedge grass	*Sphenophilis obtusata*	CNPS List 2.2	Cismontane woodland, meadows and seeps	Habitat Absent	The BSA lacks appropriate habitat
Invertebrates					
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	FT	Occurs in association with blue elderberry (*Sambucus nigra* ssp. *cerulea*) in the Central Valley.	Habitat Absent	No elderberry shrubs were observed in the BSA. This species does not occur within the BSA.
Leech's skyline diving beetle	*Hydroporus leechi*	FSC	Permanent freshwater ponds	Habitat Absent	Pond habitat absent.
Fish					
Central Valley steelhead	*Oncorhynchus mykiss*	FT-NMFS SSC	Rivers, streams, and creeks.	Habitat Absent	Jackson Creek flows downstream to Lake Amador, which provides an upstream barrier for this species. In addition, the project site is within the San Joaquin basin where the species appears to have been extirpated (Moyle 2002).
Delta smelt	*Hypomesus transpacificus*	FT ST	Occurs within the Sacramento- San Joaquin Delta and seasonally within the Suisun Bay, Carquinez Strait and San Pablo Bay.	Habitat Absent	Project site is outside the Sacramento-San Joaquin Delta, Suisun Bay, Carquinez Strait, and San Pablo Bay and does not occur on site or in the project vicinity.
Amphibians					
California tiger salamander (Central Population)	*Ambystoma californiense*	FT	Occurs in Valley and foothill annual grassland habitats and in a variety of aquatic and upland environments. Breeding adults are often associated with stock ponds or other ephemeral waters near underground refugia (e.g., ground squirrel burrows) including vernal pools and seasonal wetlands. Found from sea level to 3,200 feet.	Habitat Absent	The BSA does not provide suitable ephemeral breeding habitat and the surrounding areas are highly developed making it unlikely that this species disperses through the project.
California red-legged frog	*Rana draytonii*	FT SSC	Lowlands and foothills in a variety of aquatic, riparian, and upland environments. Breeding adults are often associated with areas of dense, shrubby riparian vegetation and deep (greater than 2 feet) still or slow moving water (Hayes and Jennings 1988). Requires 11-20 weeks of permanent water for larval development.	Habitat present	Breeding habitat is not present within the site but may occur within one (1) mile of the project. Within the project's BSA, Jackson Creek provides potential movement/dispersal habitat.

Common Name	Scientific Name	Status[1]	General Habitat Description	Habitat Present / Absent[2]	Rationale
Foothill yellow-legged frog	*Rana boylii*	SSC	Highly aquatic species that typically occurs in shallow, flowing streams with cobble substrates.	Habitat Absent	Jackson Creek does not provide suitable breeding habitat for this species, and the on-site creek habitat lacks the open streamside habitat required by this species. As such, this species is not likely to occur.
Reptiles					
Western pond turtle	*Emys marmorata*	SSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation and basking sites.	Habitat Present	Habitat within the BSA is suitable. This species has been observed within Jackson Creek near the BSA (approx. 0.5 mile upstream) and is considered to potentially occur within the BSA.
Birds					
Tricolored blackbird	*Agelaius tricolor*	SSC	Nests primarily within cattail/tule marshes, although also known to use blackberries, willows, thistles, etc.	Habitat Present	Foraging habitat is present in the BSA. No suitable nesting habitat occurs in the BSA.

[1] Status

CE California Endangered
FE Federal endangered
FT Federal threatened
FPE Federal proposed endangered
FPT Federal proposed threatened
FC Federal candidate
FSC Federal species of concern
FD Federal delisted
NMFS National Marine Fisheries Service
SE CA State endangered
ST CA State threatened
SFP CA State fully protected
SR CA State rare
SSC CA State species of special concern

[2] **Habitat Present / Absent**

Absent - No habitat present and no further work needed.
Habitat Present - General habitat is or may be present.

CNDDB Tracked by the CNDDB CNPS
List 1A = Presumed Extinct
List 1B = Rare or Endangered in CA and elsewhe
List 2 = Rare or Endangered in CA common elsev
List 3 = Lack Information/Review List
List 4 = Plants of Limited Distribution

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Chapter 4. Results: Biological Resources, Discussion of Impacts and Mitigation

4.1. Natural Communities of Special Concern

4.1.1. Wetlands and Waters of the U.S.

4.1.1.1. Survey Results

A wetland delineation was conducted on April 3, 2014 (Appendix D). A total of 0.246 ac of Waters of the U.S. were mapped within the BSA (see Figure 6). Waters of the U.S. within the BSA include Jackson Creek and the adjacent floodplain of Jackson Creek located within the limits of the delineated Ordinary High Water Mark (OHWM). Jackson Creek is identified by the indication of a solid blue-line feature on the "Jackson, California" USGS 7.5-minute topographic quadrangle. The OHWM was identified in the field based on water marks, scour, shifts in vegetation, sediment deposits, and drift deposits, which were also supported by passage of the three parameter (vegetation, hydrology, and soils) wetland test (USACE 2008).

Jackson Creek is a perennial creek that is a composite of open water and fringe emergent wetland vegetation. Wetland plant species observed within the OHWM include: Santa Barbara sedge, broad-leaved cattail, water cress, horsetail, Baltic rush, water primrose, curly dock, and also includes maintained (trimmed) patches of Himalayan blackberry and red willow.

4.1.1.2. Avoidance and Minimization Efforts

This project has been designed to include the smallest footprint practicable to minimize temporary, indirect, and permanent impacts to Waters of the U.S. The following avoidance and minimization efforts will further reduce the potential impacts to these waters.

- Implementation of Best Management Practices (BMPs), including but not limited to: minimizing soil disturbance, inlet protection, stabilized construction access, covering of exposed areas with mulch, use of construction mats, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation or permanent seeding, and preservation of existing vegetation will be used to control sedimentation and erosion. These measures would be developed in a project-specific erosion control plan.
- Environmentally sensitive area (ESA) fencing shall be used to delineate the project boundaries to prevent encroachment of construction personnel and equipment into adjacent waters and wetlands.
- Temporarily disturbed areas will be restored to their pre-construction conditions and topography.
- Disturbed areas will be reseeded with a Caltrans-approved native seed mixture.
- An Environmental Monitor will be on site to ensure implementation of these measures during construction.

Unavoidable direct impacts to wetland vegetation during construction will require consultation with the appropriate jurisdictions (USACOE, RWQCB, and CDFW) and acquisition of permits (404, 401, and 1602). All permit conditions will be followed.

4.1.1.3. Project Impacts

Permanent impacts are anticipated within Jackson Creek where the new northern footing will be constructed, and include a total of approximately <0.001-ac of permanent impacts to Waters of the U.S.

A total of 0.058-ac of Waters of the U.S. will be temporarily impacted from the need to access the creek and through sewer removal and replacement activities that will require vegetation removal, dewatering, or other ground disturbances (see Table 3 below). The 0.058 ac of Waters of the U.S. consists of approximately 0.034-ac of perennial creek and 0.024-ac of emergent wetlands located within the OHWM of Jackson Creek. Anticipated permanent and temporary wetland impacts are illustrated on Figure 9 (*Proposed Wetland Impacts*), and anticipated vegetation community impacts are illustrated of Figure 10 (*Proposed Vegetation Impacts*).

Table 3. Proposed Impacts to Waters of the U.S.

	Permanent Impacts	Temporary Impacts	Avoided	Total Acreage
Other Waters of the U.S				
Emergent wetland	<0.001	0.024	0.119	0.144
Perennial creek	0.000	0.034	0.068	0.102

To permit all temporary and permanent impacts to Waters of the U.S., the City will obtain a CWA Section 404 authorization permit from the USACE (NWP 14 for Linear Transportation Projects), Section 401 Water Quality Certification from RWQCB, a Section 402 NPDES Permit regulated by the EPA, and a CDFW Code Section 1602 Streambed Alteration Agreement (SAA) from CDFW.

Figure 9.
Proposed Wetland Impacts

Map Features

- Biological Study Area - 0.□97 ac.
- Waters of the U.S.

Permanent □mpacts

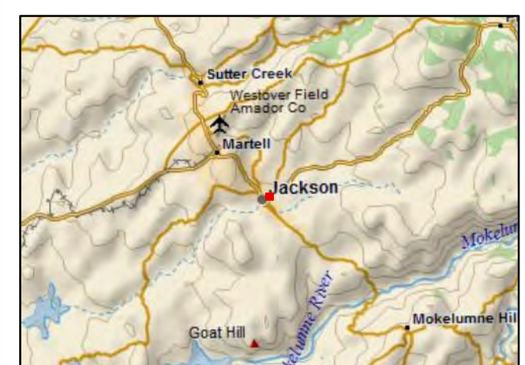
- New Abutments

Temporary □mpacts

- Construction Creek Access
- Sewer Replacement

	Permanent Impacts	Temporary Impacts	Avoided	Total Acreage
Waters of the U.S.	<0.001	0.058	0.188	0.246

[1] *Boundary Source: ECORP Consulting, Inc. and City of Jackson*



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Preserve_Impact\v1\PittStB_WetImpact.mxd (DW)-KOrtega 9/9/2014

Pitt Street Bridge Replacement

Scale in Feet

0 50 100

Map Date: 9/9/2014

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *9/9/2014*)

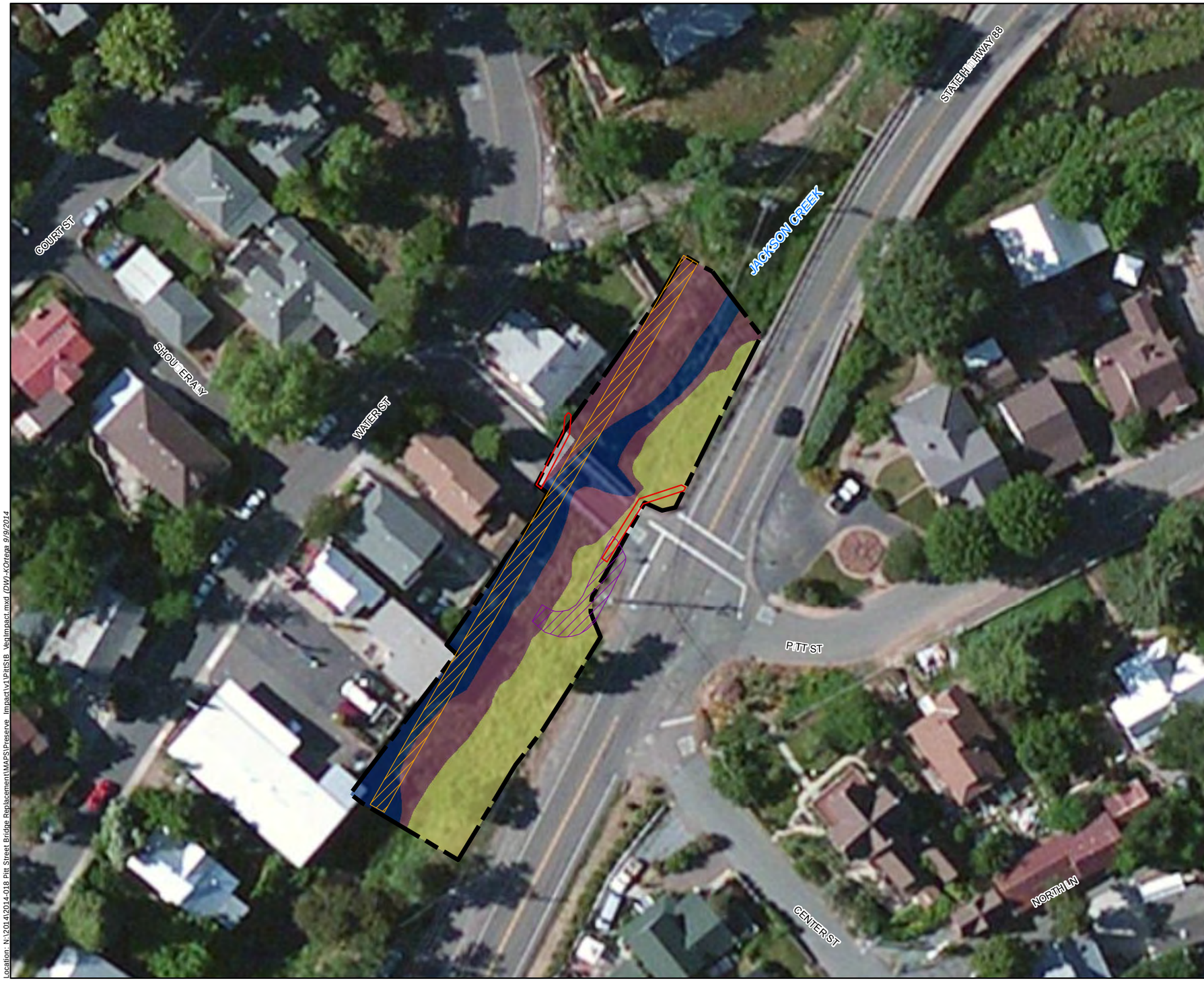


Figure 10.
Proposed Vegetation Impacts

Map Features

Biological Study Area - 0.□97 ac.

□and Cover Types

Non-native Annual □rassland - 0.148 ac.

Emergent Wetland - 0.14□ac.

Perennial Creek - 0.10□ac.

Ruderal/Disturbed - 0.00□ac.

Permanent □mpact Areas

New Abutments

Temporary □mpact Areas

Construction Creek Access

Sewer Replacement

	Permanent Impacts	Temporary Impacts	Avoided	Total Acreage
Waters of the U.S.				
Emergent Wetland	<0.001	0.024	0.119	0.144
Perennial Creek	0.000	0.034	0.068	0.102
Non-native Annual Grassland	0.004	0.011	0.134	0.149
Ruderal/Disturbed	0.002	0.000	0.001	0.003
Total	**0.006**	**0.069**	**0.323**	**0.398**

[1] *Boundary Source: ECORP Consulting, Inc. and City of Jackson*

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Preserve_Impact\v1\PittStB_VegImpact.mxd *(DW)-kOrtega 9/9/2014*

Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Map Date: 9/9/2014
Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *9/9/2014*)

4.1.1.4. Compensatory Mitigation

Mitigation is ultimately subject to the discretion of the agencies during the permitting process (i.e., USACE, RWQCB, and CDFW). The project's impacts, however, are minimal and will be compensated for through off-site purchase at a USACE and Caltrans-approved mitigation bank for permanent impacts, and vegetation of the site to preconstruction conditions for temporary impacts. Permanent impacts to Waters of the U.S. will be mitigated to comply with the Clean Water Act and the 404(b)(1) standard for non-net loss of Waters of the U.S. Planned acreage compensation will be at a 1:1 ratio. Cosumnes Floodplain Mitigation Bank, operated by Westervelt Ecological Services, provides Waters of the U.S. credits for projects located within Amador County, and currently has available credits. It is proposed to purchase credits at the Cosumnes Floodplain Mitigation Bank at a 1:1 ratio to compensate for the permanent loss of 0.001-ac of Waters of the U.S. Temporarily impacted areas, including areas that support "Waters of the U.S.", will be reseeded with a Caltrans-approved native seed mixture.

4.1.1.5. Cumulative Impacts

Ongoing maintenance activities that regularly remove wetland vegetation within Jackson Creek for flood control may contribute to cumulative wetland impacts. Construction of the proposed project could contribute to the loss of Waters of the U.S. in the region, but with implementation of avoidance, minimization, and re-vegetation measures, and the overall reduction of the extent of permanent footings placed in Waters of the U.S. with the new bridge design, cumulative impacts are not anticipated.

4.2. Special-Status Plant Species

Table 3 is a list of the special-status plant species that have potential to occur within the BSA and includes a summary of the impacts determination and the rationale to support the impact determination. A discussion of each species follows.

Table 4. Listed and Proposed Plants Potentially Occurring in the BSA

Special-Status Species	Protection Status Federal State Other	Impact/Effect Determination	Rationale
Plant Species			
Big-scale balsamroot (*Balsamorhiza macrolepis*)	CNPS List 1B.2	Potential impacts	The non-native annual grassland habitat within the BSA provides potential habitat for this species.
Sanford's arrowhead (*Sagittaria sanfordii*)	CNPS List 1B.2	Potential impacts	The perennial creek and adjacent emergent wetlands within the BSA provide potential habitat for this species.

4.2.1. Big-scale balsamroot (*Balsamorhiza macrolepis*), CNPS 1B.2

Big-scale balsamroot is not listed pursuant to either the FESA or the CESA; however, it is designated as a CNPS List 1B.2 species. This species is perennial herb that occurs in chaparral, cismontane woodland, and Valley grasslands, sometimes serpentine (CNPS 2014). This species blooms from March through June, and it is known to occur at elevations ranging from 300 to 5,000 ft above mean sea level (CNPS 2014). Big-scale balsamroot is endemic to California, and the current range of this species includes Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama, and Tuolumne counties (CNPS 2014).

The nearest documented occurrence of big-scale balsamroot is approximately 4 mi northwest of the BSA (Figure 5, CDFG 2003). The non-native annual grassland habitat within the BSA provides marginally suitable habitat for this species.

4.2.1.1 Survey results

This species was not observed within the BSA during field surveys. Focused rare plant surveys, however, have not been conducted.

4.2.1.2. Avoidance and Minimization Efforts

This project will largely avoid the non-native grassland habitat where this species has the potential to occur within the BSA. ESA fencing will be used to delineate the project limits and prevent encroachment into this area. If this species is found within the work area, the City will coordinate with CDFW to determine appropriate mitigation.

4.2.1.3. Project Impacts

A small area of non-native annual grassland will be temporarily impacted by the proposed project. If big-scale balsamroot is documented within the BSA, avoidance and minimization efforts described above will be implemented for this species.

4.2.1.4. Compensatory Mitigation

No compensatory mitigation is proposed.

4.2.1.5. Cumulative Impacts

Cumulative impacts to this species are not anticipated since only a small area of potential habitat for this species will be temporarily impacted by the proposed project**.**

4.2.4. Sanford's arrowhead (*Sagittaria sanfordii*), CNPS 1B.2

Sanford's arrowhead is not listed pursuant to either the FESA or the CESA; however, it is designated as a CNPS List 1B.2 species. This species is a rhizomatous, herbaceous perennial that occurs in shallow marshes and freshwater swamps (CNPS 2014). Sanford's arrowhead blooms from May through October, and it is known to occur at elevations ranging from sea level to 2,130 ft [0 to 649 m] above mean sea level (CNPS 2014). Sanford's arrowhead is endemic to California, and the current range of this species includes Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, San Bernardino, San Joaquin, Shasta, Solano, Tehama, and Ventura counties (CNPS 2014).

However, this species is believed to be extirpated from Orange and Ventura counties (CNPS 2014).

Sanford's arrowhead has not been documented within the project BSA (CDFG 2003). The aquatic habitats associated with Jackson Creek, however, provide suitable habitat for this species.

4.2.4.1 Survey results

This species was not observed within the BSA during field surveys. Focused rare plant surveys, however, have not been conducted.

4.2.4.2. Avoidance and Minimization Efforts

This species was not identified during the preliminary field surveys. If this species is found within the work area during preconstruction surveys, the City will coordinate with CDFW to determine appropriate mitigation.

4.2.4.3. Project Impacts

Sanford's arrowhead may occur within the BSA and could be impacted by project-related activities that impact Waters of the U.S. such as removal of old and replacement of new footings and the sewer line segment and temporary access into these areas. If Sanford's arrowhead is documented within the BSA, avoidance and minimization efforts described above will be implemented for this species.

4.2.4.4. Compensatory Mitigation

No compensatory mitigation is proposed.

4.2.4.5. Cumulative Impacts

Ongoing maintenance activities that regularly remove wetland vegetation within Jackson Creek for flood control may contribute to cumulative wetland impacts, and may, in turn, contribute to potential cumulative impacts on this species.

4.3. Special-Status Wildlife Species Occurrences

Table 4 lists the special-status wildlife species that have potential to occur within the BSA and includes a summary of the impacts determination and the rationale to support the impact determination. A discussion of each species follows.

Table 5. Potentially Occurring Special-Status Wildlife Species

Special Status Species	Protection Status Federal State Other	Impacts/Effects Determination	Rationale
Wildlife Species			
California red-legged frog (*Rana draytonii*)	FT SSC --	May Affect, but Not Likely to Adversely Affect	Breeding habitat is not present within the site but may occur within one (1) mile of the project. Within the project's BSA, Jackson Creek provides potential movement/dispersal habitat. However, the lack of nearby occurrence records, the absence of current and historic records within Amador County, the abundance of introduced predators, the marginal suitability of the stream reach for dispersal, and the narrowly confined streambed, it is considered extremely unlikely that CRLF occur within the BSA or the vicinity. Informal consultation will occur between Caltrans and the USFWS and Caltrans will seek concurrence with a May Affect, but Not Likely to Adversely Affect determination.
Western pond turtle (*Actinemys marmorata*)	SSC	Potential impacts	This species has been observed within Jackson Creek near the BSA and may occur on site. Avoidance and minimization measures, however, will be implemented to avoid/minimize potential impacts to this species.
Tricolored blackbird (*Agelaius tricolor*)	SSC	Potential impacts	This species may forage on site, but is unlikely to nest within the BSA due to the lack of mature emergent wetland/riparian vegetation. Avoidance and minimization measures, however, will be implemented to avoid/minimize potential impacts to this species.

4.3.1. California red-legged frog (*Rana draytonii*) FT, SSC

California red-legged frog (CRLF) is listed as threatened pursuant to the FESA and is a SSC. The historic range of the CRLF extended coastally from the vicinity of Elk Creek in Mendocino County, California and inland from the vicinity of Redding in Shasta County, California; southward to northwestern Baja California, Mexico (Fellers 2005; Jennings and Hayes 1985; Hayes and Krempels 1986). CRLF were historically documented in 46 counties; however, this species is now restricted to 238 streams or drainages within 23 counties. CRLF are still locally abundant within portions of the San Francisco Bay area and the central coast.

Adult CRLF prefer dense, shrubby or emergent riparian vegetation closely associated with deep greater than 2.3 ft [>0.7 m], still, or slow-moving water (Hayes and Jennings 1988). However, frogs have also been found breeding in ephemeral creeks and drainages and in ponds that may or may not have riparian vegetation, and depths less than 2.3 ft [0.7 m] (C. Seltenrich and A. Pool, personal observations). The largest densities of CRLF are typically associated with deep pools containing dense stands of overhanging willows (*Salix species*) and an intermixed fringe of cattails (Jennings 1988). CRLF disperse upstream and downstream of their breeding habitat, as well as across upland areas, to forage and seek sheltering habitat.

During the non-breeding season, habitat includes nearly any area within 1 to 2 mi of a breeding site that remains moist and cool through the summer (Fellers 2005). This can include vegetated areas with coyote bush (*Baccharis pilularis*), California blackberry thickets (*Rubus ursinus*), and root masses associated with willow and California bay trees (*Umbellularis californica*). Non-breeding habitat used by CRLF can be extremely limited in size [e.g. non-breeding CRLF have been found in a 6-ft [2-m] wide coyote bush thicket growing along a tiny intermittent creek surrounded by heavily grazed grassland (Fellers 2005)]. Sheltering habitat for CRLF potentially includes all aquatic, riparian, and upland areas within the range of the species. In addition, any landscape features that provide cover (such as existing animal burrows, boulders or rocks, organic debris such as downed trees or logs, and industrial debris) or agricultural features (such as drains, watering troughs, spring boxes, abandoned sheds, or hay stacks) may also be used by CRLF. Incised stream channels with portions narrower and depths greater than 1.5 ft [0.45 m] may also provide important summer sheltering habitat.

Adult CRLF are often associated with permanent bodies of water with some frogs remaining at breeding habitat all year while others disperse. Dispersal distances are typically less than 0.5 mi, with a few individuals moving up to 1 to 2 mi (Fellers 2005). Movements are typically along riparian corridors, but some individuals, especially on rainy nights, may move directly from one site to another through normally inhospitable habitats, such as heavily grazed pastures or oak-grassland savannas (Fellers 2005). Threats facing migrating CRLF include being run over by vehicles on roads (Gibbs 1998; Vos and Chardon 1998),

degradation of habitat (Vos and Stumpel 1995; Findlay and Houlahan 1997; Gibbs 1998), predation (Gibbs 1998), and desiccation (Rothermel and Semlistch 2002; Mazerolle and Desrochers 2003).

Sexual maturity normally is reached at three to four years of age (Storer 1925; Jennings and Hayes 1985), and frogs may live eight to 10 years (Jennings et al. 1992). Populations of CRLF fluctuate from year to year, and when conditions are favorable, this species can experience extremely high rates of reproduction and thus produce large numbers of dispersing young and a concomitant increase in the number of occupied sites. When conditions are stressful (e.g., drought), CRLF may temporarily disappear from an area.

On 23 May 1996, the USFWS established critical habitat for CRLF (USFWS 1996); and in 2002, the USFWS published the *Recovery Plan for the CRLF* (*Rana draytonii*) (USFWS 2002).

4.3.1.1. Survey Results

No documented CRLF sightings occur within 1.0 mi of the CRLF study area and none were observed during surveys of the site (CRLF Habitat Assessment survey, ECORP 2014, Appendix H). The CRLF study area encompasses the BSA and extends along Jackson Creek from Mission Blvd. (upriver of the BSA) downriver to the confluence of Jackson Creek with Northfork Jackson Creek. The closest extant population (record #671, 2003) is from approximately 9 mi west-south of the project site in the Valley Springs 7.5-minute United States Geological Survey topographic quadrangle. This site documents three adult red-legged frogs at Young's Creek in the Upper Calaveras watershed (HUC #18040011), near the town of Valley Springs. The next closest documented population (record #609, 2002) is from El Dorado County greater than 22 mi northeast of the project area in the Caldor 7.5-minute United States Geological Survey topographic quadrangle and documents three adult frogs observed at the site of a burst dam. Both nearest populations occur in different watersheds than that of the Pitt Street Bridge Replacement Project.

The project site is not located within or adjacent to CRLF critical habitat and no critical habitat is designated in Amador County. The closest critical habitat unit (Critical Habitat

Unit CAL-1) is located in Calaveras County in the vicinity of Valley Springs, approximately 7 mi south of the project site in the Valley Springs 7.5-minute United States Geological Survey topographic quadrangle.

Breeding habitat is very limited within the survey reach. Deep (>0.7 m) side-channel pools with silt or soil substrate, undercut banks, emergent and overhanging vegetation, and other necessary constituent habitat elements are lacking. Mid-channel pools tend to be shallow, have a low velocity but constant flow, and lack complexity. An abundance of introduced predators and competitors (mosquitofish, crayfish, and American bullfrogs) were noted during the survey, which gives further evidence as to its lack of suitability for breeding CRLF.

Five ponds occur within a 1.0 mi radius of the project site (ECORP 2014; Jackson, California 7.5-minute quadrangle, U.S. Department of the Interior, Geological Survey 1973), and could potentially provide breeding and foraging habitat for CRLF. However, no current records exist for the area. As well, no aquatic connectivity appears to join any of these sites with the Jackson Creek CRLF study area. Upland habitat between these ponded sites and the study area consists of urban infrastructure and roads.

Jackson Creek may serve as marginal dispersal, foraging, or sheltering habitat. As a linear dispersal corridor, habitat elements such as water, emergent and streamside vegetation, and bankside refugia are present. However, quality of the area is poor. Introduced predators are abundant, and the area is urban and tightly constrained by roadways, parking lots, and buildings, all of which lead to a high likelihood of road mortality.

Given the lack of nearby occurrence records, the absence of current and historic records within Amador County, the abundance of introduced predators, the marginal suitability of the stream reach for dispersal, and the narrowly confined streambed, it is considered extremely unlikely that CRLF occur within the project site or the vicinity.

Protocol presence/absence surveys would need to be conducted to establish whether or not CRLF occur near the project. This survey, however, is not warranted since CRLF is not

likely to occur and considering the project's proposed mitigation measures, which have been incorporated into the avoidance and minimization measures presented below.

4.3.1.2. Avoidance and Minimization Efforts

Informal consultation with USFWS will be initiated for concurrence with a may affect, not likely to adversely affect determination in order to comply with the FESA. Measures that will be implemented to minimize potential adverse effects to CRLF are described in detail below. These measures are based largely on those described in the *Programmatic Formal Endangered Species Act Consultation on Issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog* (USFWS 1999).

1. Construction activities will be conducted during the low flow season. In-Water work activities will be completed during a period least likely to impact CRLF (June 1 through November 1). If the City needs to conduct activities outside this period, the City will notify Caltrans District 10 Local Assistance environmental staff immediately so that Caltrans can reinitiate consultation with the USFWS, if necessary.
2. At least 15 days prior to the onset of activities, the City will submit to Caltrans the name(s) and credentials of biologists, experienced in identifying CRLF, who would conduct activities specified in the following measures so that Caltrans can get USFWS approval from USFWS's Sacramento office. No project activities will commence until Caltrans has received written approval from the USFWS that the biologist(s) is qualified to conduct the work.
3. The USFWS-approved biologist will survey the construction area 24 hours prior to the onset of vegetation removal and/or any activity that occurs in any vegetation community or aquatic community on-site. If CRLF frogs, tadpoles, or eggs are found, the approved biologist will contact Caltrans who will contact the USFWS to determine if relocating any of these life stages is appropriate. In making this determination, the USFWS will consider if an appropriate relocation site exists. If the USFWS approves relocation, the approved biologist will be allowed sufficient time to move CRLF from

the construction area before work activities begin. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of CRLF.

4. Vegetation within the areas to be removed shall be clipped to ground level and removed by hand (as approved by CDFW and USFWS). No mowers will be allowed. A USFWS-approved biologist experienced in identifying CRLF will be present during vegetation removal.
5. A Caltrans and USFWS-approved biologist will be present to ensure compliance with the project's environmental commitments during all vegetation removal and grading activities.
6. Before any construction activities begin within the BSA, a Caltrans/USFWS-approved biologist shall conduct a Worker Environmental Awareness Training Program for all construction personnel. At a minimum, the training shall include a description of CRLF and its habitat, the importance of this listed species and its habitat, general measures that are being implemented to conserve the species as they relate to the project, the ramifications and consequences including potential fines and penalties of taking threatened and endangered species, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training, provided that a qualified person is available to answer any questions.
7. The USFWS-approved biologist will be present at the construction site until such time as all removal of CRLFs, instruction of workers, and habitat disturbance have been completed. After this time, City staff will monitor and/or designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist will ensure that this individual receives training outlined in measure 6 and in the identification of CRLFs. The monitor and the USFWS-approved biologist will have the authority to halt any action that might result in impacts that exceed the levels anticipated by the City and USFWS during review of the proposed action. If CRLFs are found during construction, the City will notify the USFWS and Caltrans District 10 Local Assistance environmental staff immediately.

8. For temporary dewatering and/or pumping, intakes shall be completely screened with wire mesh no longer than five millimeters. Water shall be released or pumped downstream at a rate to maintain downstream flows during construction.
9. The number and size of access routes and/or staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. The proposed access route and boundaries will be clearly demarcated. Heavy equipment will be restricted to the approved access and work locations.
10. All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 100 ft from any aquatic habitat. The City shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, the City will ensure that the contractor has prepared a plan to allow a prompt and effective response to any accidental spills. All workers will be informed of the importance of spill prevention and of the appropriate measures to take should a spill occur.
11. During project activities, all trash that may attract predators will be properly contained, removed from the construction area, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.
12. The City and/or USFWS-approved biologist will ensure that the spread or introduction of invasive exotic plant species is avoided to the maximum extent possible. When practicable, invasive exotic plants in the BSA will be removed.
13. The project will administer BMPs to protect water quality and erosion. Erosion control BMPs will be implemented in accordance to the RWQCB and other agency permits.
14. Temporarily impacted areas within the BSA will be revegetated with an appropriate Caltrans approved mixture of native seeds for the upland annual grassland habitat upon project completion in the fall. Seeded areas will be blanketed with appropriate erosion-control material that will not trap amphibians or reptiles.

4.3.1.3. Project Impacts

The BSA contains approximately 0.394 ac of potentially suitable dispersal and aestivation habitat for CRLF, including 0.103 ac of perennial creek (Jackson Creek), 0.143 ac of

emergent marsh associated with (Jackson Creek), and 0.148 ac of non-native annual grassland habitat (Figure 7). Permanent impacts to potential CRLF dispersal/movement habitat total approximately 0.005 ac including impacts to approximately to < 0.001 ac of emergent marsh associated with Jackson where the new northern bridge footing will be constructed, and approximately 0.004 ac of non-native annual grassland where the new southern bridge footing will be constructed.

Temporary impacts to CRLF dispersal habitat may result from the need to access Jackson Creek and its floodplain for bridge replacement and through construction activities that require vegetation removal, dewatering, or other ground disturbances including the removal and replacement of the in-channel sewer line. These temporary impacts total 0.069 ac and include approximately 0.058 ac of perennial creek/emergent marsh within Jackson Creek and 0.011 ac of non-native annual grassland. The anticipated locations of permanent and temporary impacts to these habitats are illustrated on Figures 9 and 10 (Proposed Wetland and Vegetation Impact Maps, respectively).

4.3.1.4. Compensatory Mitigation

No impacts to CRLF are anticipated. Consequently, compensatory mitigation is not proposed.

4.3.1.5. Cumulative Impacts

Ongoing maintenance activities that regularly remove aquatic vegetation within Jackson Creek for flood control may contribute to cumulative wetland impacts, and may, in turn, contribute to potential cumulative impacts on CRLF.

Given the lack of nearby occurrence records, the absence of current and historic records within Amador County, the abundance of introduced predators, the marginal suitability of the stream reach for dispersal, and the narrowly confined streambed, it is considered unlikely that the project supports CRLF and that cumulative impacts to this species would result from the proposed project.

4.3.2. Western Pond Turtle (*Actinemys marmorata)* SSC

The western pond turtle (WPT) is not listed pursuant to either the FESA or the CESA; however, it is designated as SSC by CDFW, and is the only native freshwater turtle in California. It historically ranged throughout most of California, and can occur in a variety of waters, including ponds, lakes, streams, rivers, canals, stormwater ponds, and other features. The natural elevation range for the species extends to 4700 ft (Jennings and Hayes 1994). The WPT generally requires some slack- or slow-water aquatic habitat (Jennings and Hayes 1994) and appears to prefer areas that support suitable basking areas for thermoregulation. In most Central Valley and Northern California localities, WPT typically become active after water reaches 15° Celsius (C) (March/April) and they go dormant by October or November. Mating occurs during April and early May and eggs are deposited between late April and early August. Because they are infrequently seen, hatchling turtles are thought to overwinter in nests. Adults may overwinter or remain active year-round depending on specific location and climatic conditions. Nesting and overwintering can take place close to watercourses, although individuals have been known to move considerable distances up to 1150 ft in search of appropriate nesting and overwintering sites (Jennings and Hayes 1994).

WPT have not been documented from within BSA, but they have been reported within Jackson Creek approximately 0.5 mi upstream of the BSA (see Figure 5) (CDFG 2003). Jackson Creek provides potentially suitable basking, foraging, and dispersal habitat for WPT within the BSA. This species was not observed on-site but is considered to potentially occur within the BSA.

4.3.2.1. Survey Results

No WPT individuals were observed within the BSA during site reconnaissance surveys or during the CRLF habitat assessment survey.

4.3.2.2. Avoidance and Minimization Efforts

Where construction is to occur near potential habitat for WPT (i.e., within Jackson Creek or its floodplain), pre-construction surveys shall be conducted to determine the presence of this species. If this species if found on site during construction activities, Caltrans will be immediately be notified and will consult with the USFWS to remove any observed WPT from the construction site.

4.3.2.3. Project Impacts

The BSA contains approximately 0.354 ac of potentially suitable habitat for WPT, including 0.103 ac of perennial creek (Jackson Creek), 0.143 ac of emergent marsh associated with (Jackson Creek), and 0.148 ac of non-native annual grassland habitat (see Figure 7). Permanent impacts to potential habitat total approximately 0.005 ac including impacts to approximately < 0.001 ac of emergent marsh associated with Jackson where the new northern bridge footing will be constructed, and approximately 0.004 ac of non-native annual grassland where the new southern bridge footing will be constructed. Temporary impacts to WPT habitat may result from the need to access Jackson Creek and its floodplain for bridge replacement and through construction activities that require vegetation removal, dewatering, or other ground disturbances including the removal and replacement of the in-channel sewer line. These temporary impacts total 0.069 ac and include approximately 0.058 ac of perennial creek/emergent marsh within Jackson Creek and 0.011 ac of non-native annual grassland. The anticipated locations of permanent and temporary impacts to these habitats are illustrated on Figures 9 and 10 (Proposed Wetland and Vegetation Impact Maps, respectively).

4.3.2.4. Compensatory Mitigation

No compensatory mitigation is proposed.

4.3.2.5. Cumulative Impacts

Ongoing maintenance activities that regularly remove aquatic vegetation within Jackson Creek for flood control may contribute to cumulative wetland impacts, and may, in turn, contribute to potential cumulative impacts on this species**.**

4.3.3. Tri-Colored Blackbird (*Agelaius tricolor)* SSC

The tri-colored blackbird (TCB) is not listed pursuant to either the FESA or the CESA; however, it is designated as SSC by CDFW. This colonial nesting species is distributed widely throughout the Central Valley, Coast Range, and into Oregon, Washington, Nevada, and Baja California (Small 1994). TCB nest in colonies that can range from several pairs to several thousand pairs, depending on prey availability, the presence of predators, or level of human disturbance. This nomadic species typically nests in emergent marsh, riparian thickets, and blackberry brambles, usually with some nearby standing water or ground saturation. Open grassland and agricultural fields are typical foraging areas with nesting generally occurring from April through June.

TCB have not been documented from the BSA, but they have been reported from approximately 7.5 mi northwest of the project area (CDFG 2003). Small willows and blackberry shrubs were observed within the BSA and are generally considered potential nesting habitat for this species. The high level of vegetation control that occurs within the Jackson Creek channel, however, precludes nesting habitat from establishing in the BSA, and this species is not considered to potentially nest on-site.

4.3.3.1. Survey Results

No TCB were observed within the BSA during limited site reconnaissance surveys. This species, however, is considered to potentially forage on-site.

4.3.3.2. Avoidance and Minimization Efforts

In-water construction activities will be limited to the low flow period (June 1 – November 1) which is primarily outside the breeding period for TCB (April 1 – June 30). No pre-construction surveys for TCB will be required for activities that occur between from June 30 – March 31). If construction activities are required from April 1 – June 30, pre-construction surveys for TCB will be conducted by a qualified biologist to determine if TCB is present within the project limits. If nesting TCB are found within or adjacent to the BSA, appropriate temporal restrictions and/or buffer areas will be established to avoid the take of this species.

4.3.3.3. Project Impacts

Noise, dust, and other construction related activities could result in indirect impacts to TCB foraging.

4.3.3.4. Compensatory Mitigation

No compensatory mitigation is proposed.

4.3.3.5. Cumulative Impacts

Ongoing maintenance activities that regularly remove aquatic vegetation within Jackson Creek for flood control may contribute to cumulative wetland impacts, and may, in turn, contribute to potential cumulative impacts on this species**.**

Chapter 5. Results: Permits and Technical Studies for Special Laws or Conditions

5.1. Federal Endangered Species Act Consultation Summary

The project may have temporary and permanent impacts to CRLF if this species is determined to potentially occur on the project site. Project-related impacts May Affect, but Not Likely to Adversely Affectthis species provided that the proposed avoidance and minimization measures will be implemented to reduce this impact. Consultation with USFWS is required for their concurrence and jeopardy determination regarding this species.

5.2. Wetlands and Waters of the U.S. Coordination Summary

A wetland delineation was conducted for the project site (Appendix D), but has not yet been verified by the ACOE. Waters of the U.S. associated with Jackson Creek will be temporarily and permanently impacted. Permanent impacts are anticipated within Jackson Creek where the new northern footing will be constructed, and include a total of approximately <0.001-ac of permanent impacts to Waters of the U.S.

A CWA, Section 404 permit (NWP 14 for Linear Transportation Projects) will be obtained from the USACE and a Section 401 Water Quality Certification will be obtained from the RWQCB.

5.3. California Fish and Game Code (Administered by the CDFW) – Section 1602 – Streambed Alteration Agreement

The CDFW will be notified of the project, and a 1602 Streambed Alteration Agreement will be obtained from the CDFW.

5.4. Migratory Bird Treaty Act

Special-status birds protected by the MBTA have the potential to occur within the BSA. If construction activities are to occur between February 15 and September 1, pre-construction surveys for migratory birds (including raptors), shall be conducted by a qualified biologist 14 days prior to the start of construction. If nesting birds are found within or adjacent to the BSA, appropriate temporal restrictions and/or buffer areas will be established by the biologist.

5.5. Invasive Species

Management measures will be implemented to prevent the spread of weeds during construction and disturbed areas will be re-vegetated with native species appropriate to the area. Management measures may include (but are not limited to) the following:

- Use of only certified weed-free straw or rice straw mulch;
- Use of native, non-invasive species or non-persistent hybrids in erosion control plantings to stabilize site conditions and prevent invasive species from colonizing;
- Minimize disturbance to the greatest extent possible;
- Ensure construction equipment is cleaned to remove debris that could contain invasive species or their seeds prior to transport to and from the construction area; and
- Restrict washing of construction vehicles and equipment to approved maintenance facilities or staging areas.

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Appendix A. USFWS Official Species List

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the JACKSON (494D) U.S.G.S. 7 1/2 Minute Quad

Report Date: April 23, 2014

Listed Species

Invertebrates
Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish
Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Amphibians
Ambystoma californiense
California tiger salamander, central population (T)

Rana draytonii
California red-legged frog (T)

Plants
Arctostaphylos myrtifolia
Ione manzanita (T)

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.

- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Appendix B. CNDDB List for the “Jackson, California” 7.5 minute quadrangle

California Department of Fish and Game
Natural Diversity Database
CNDDB Wide Tabular Report

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks A	B	C	D	X	U	Population Status Historic >20 yr	Recent <=20 yr	Presence Pres. Extant	Poss. Extirp.	Extirp.
Agelaius tricolor tricolored blackbird	G2G3 S1S2	CDFG: SC	Fed: None Cal: None	429 S:4	1	0	0	0	0	3	3	1	4	0	0
Agrostis hendersonii Henderson's bent grass	G2Q S2	CNPS: 3.2	Fed: None Cal: None	26 S:1	0	0	0	0	1	0	1	0	0	1	0
Ambystoma californiense California tiger salamander	G2G3 S2S3	CDFG: SC	Fed: Threatened Cal: Threatened	1094 S:13	1	7	2	0	0	3	4	9	13	0	0
Antrozous pallidus pallid bat	G5 S3	CDFG: SC	Fed: None Cal: None	402 S:1	0	0	0	0	0	1	1	0	1	0	0
Arctostaphylos myrtifolia Ione manzanita	G2 S2	CNPS: 1B.2	Fed: Threatened Cal: None	15 S:14	1	6	0	0	0	7	7	7	14	0	0
Balsamorhiza macrolepis big-scale balsamroot	G2 S2	CNPS: 1B.2	Fed: None Cal: None	43 S:1	0	0	0	0	0	1	1	0	1	0	0
Banksula rudolphi Rudolph's cave harvestman	G1 S1	CDFG:	Fed: None Cal: None	1	0	0	0	0	0	1	1	0	1	0	0
Branchinecta lynchi vernal pool fairy shrimp	G3 S2S3	CDFG:	Fed: Threatened Cal: None	611 S:1	1	0	0	0	0	0	0	1	1	0	0
Calycadenia hooveri Hoover's calycadenia	G3 S3	CNPS: 1B.3	Fed: None Cal: None	35 S:1	0	0	0	0	0	1	1	0	1	0	0
Chlorogalum grandiflorum Red Hills soaproot	G3 S3	CNPS: 1B.2	Fed: None Cal: None	68 S:4	0	3	0	0	0	1	1	3	4	0	0
Chrysis tularensis Tulare cuckoo wasp	G1G2 S1S2	CDFG:	Fed: None Cal: None	5 S:1	0	0	0	0	0	1	1	0	1	0	0
Crocanthemum suffrutescens Bisbee Peak rush-rose	G2Q S2	CNPS: 3.2	Fed: None Cal: None	31 S:13	0	2	2	0	0	9	12	1	13	0	0
Desmocerus californicus dimorphus valley elderberry longhorn beetle	G3T2 S2	CDFG:	Fed: Threatened Cal: None	201 S:2	0	1	1	0	0	0	1	1	2	0	0
Emys marmorata western pond turtle	G3G4 S3	CDFG: SC	Fed: None Cal: None	1136 S:10	1	6	1	0	1	1	1	9	9	0	1
Eriogonum apricum var. apricum Ione buckwheat	G2T1 S1	CNPS: 1B.1	Fed: Endangered Cal: Endangered	6 S:5	0	4	0	0	1	0	1	4	4	0	1
Eriogonum apricum var. prostratum Irish Hill buckwheat	G2T1 S1	CNPS: 1B.1	Fed: Endangered Cal: Endangered	2 S:1	0	1	0	0	0	0	0	1	1	0	0

Name (Scientific/Common)	CNDDB Ranks	Other Lists	Listing Status	Total EO's	Element Occ Ranks A	B	C	D	X	U	Population Status Historic >20 yr	Recent <=20 yr	Presence Pres. Extant	Poss. Extirp.	Extirp.
Eryngium pinnatisectum Tuolumne button-celery	G2 S2	CNPS: 1B.2	Fed: None Cal: None	24 S:5	0	0	2	0	0	3	1	4	5	0	0
Falco mexicanus prairie falcon	G5 S4	CDFG:	Fed: None Cal: None	457 S:1	0	0	0	0	0	1	1	0	1	0	0
Haliaeetus leucocephalus bald eagle	G5 S2	CDFG:	Fed: Delisted Cal: Endangered	316 S:1	0	0	0	0	0	1	1	0	1	0	0
Horkelia parryi Parry's horkelia	G2 S2	CNPS: 1B.2	Fed: None Cal: None	36 S:8	0	2	2	0	0	4	5	3	8	0	0
Hydroporus leechi Leech's skyline diving beetle	G1? S1?	CDFG:	Fed: None Cal: None	13 S:1	0	0	0	0	0	1	1	0	1	0	0
Ione Chaparral 	G1 S1.1		Fed: None Cal: None	12 S:11	1	0	0	0	0	10	10	1	11	0	0
Legenere limosa legenere	G2 S2	CNPS: 1B.1	Fed: None Cal: None	78 S:2	1	1	0	0	0	0	0	2	2	0	0
Navarretia myersii ssp. myersii pincushion navarretia	G1T1 S1	CNPS: 1B.1	Fed: None Cal: None	14 S:2	0	0	0	0	0	2	1	1	2	0	0
Oncorhynchus mykiss irideus steelhead - Central Valley DPS	G5T2 S2	CDFG:	Fed: Threatened Cal: None	31 S:1	0	0	0	0	0	1	0	1	1	0	0
Rana boylii foothill yellow-legged frog	G3 S2S3	CDFG: SC	Fed: None Cal: None	805 S:1	0	0	1	0	0	0	0	1	1	0	0
Rana draytonii California red-legged frog	G2G3 S2S3	CDFG: SC	Fed: Threatened Cal: None	1335 S:1	0	0	1	0	0	0	0	1	1	0	0
Spea hammondii western spadefoot	G3 S3	CDFG: SC	Fed: None Cal: None	423 S:2	0	0	0	0	0	2	2	0	2	0	0
Sphenopholis obtusata prairie wedge grass	G5 S2.2	CNPS: 2B.2	Fed: None Cal: None	19 S:4	0	1	0	0	0	3	3	1	4	0	0
Stygobromus gradyi Grady's Cave amphipod	G1 S1	CDFG:	Fed: None Cal: None	5 S:3	0	0	0	0	0	3	2	1	3	0	0

Appendix C. CNPS Plant List

CNPS California Native Plant Rare and Endangered Plant Inventory

Plant List

17 matches found. *Click on scientific name for details*

Search Criteria

Found in 9 Quads around 38120C7

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Agrostis hendersonii	Henderson's bent grass	Poaceae	annual herb	3.2	S2	G2Q
Arctostaphylos myrtifolia	Ione manzanita	Ericaceae	perennial evergreen shrub	1B.2	S2	G2
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	1B.2	S2	G2
Calycadenia hooveri	Hoover's calycadenia	Asteraceae	annual herb	1B.3	S3	G3
Chlorogalum grandiflorum	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	1B.2	S3	G3
Clarkia virgata	Sierra clarkia	Onagraceae	annual herb	4.3	S3.3	G3
Claytonia parviflora ssp. grandiflora	streambank spring beauty	Montiaceae	annual herb	4.2	S3.2	G5T3
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Cistaceae	perennial evergreen shrub	3.2	S2	G2Q
Eriogonum apricum var. apricum	Ione buckwheat	Polygonaceae	perennial herb	1B.1	S1	G2T1
Eriogonum apricum var. prostratum	Irish Hill buckwheat	Polygonaceae	perennial herb	1B.1	S1	G2T1
Eryngium pinnatisectum	Tuolumne button-celery	Apiaceae	annual / perennial herb	1B.2	S2	G2
Horkelia parryi	Parry's horkelia	Rosaceae	perennial herb	1B.2	S2.2	G2
Legenere limosa	legenere	Campanulaceae	annual herb	1B.1	S2.2	G2
Lilium humboldtii ssp. humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G4T3
Navarretia myersii ssp. myersii	pincushion navarretia	Polemoniaceae	annual herb	1B.1	S1	G1T1
Perideridia bacigalupii	Bacigalupi's yampah	Apiaceae	perennial herb	4.2	S3	G3
Sphenopholis obtusata	prairie wedge grass	Poaceae	perennial herb	2B.2	S2.2	G5

Suggested Citation

CNPS, Rare Plant Program. 2014. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website http://www.rareplants.cnps.org [accessed 23 April 2014].

Appendix D. Wetland Delineation Report

Wetland Delineation

For

Pitt Street Bridge Replacement

Amador County, California

Federal Aid Number: BRL0 5141 (018)

8 September2014

Prepared by:

City of Jackson

33 Broadway

Jackson, California 95642

I approve this document to be submitted to the U.S. Army Corps of Engineers

_____ _____

Signature Date

Prepared For:

Caltrans

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1.0 INTRODUCTION

A wetland delineation was conducted for f the 0.397-acre (ac) Biological Study Area (BSA), centered at the Pitt Street bridge crossing over Jackson Creek within the City of Jackson, approximately 0.25 mile (mi) east of Old Highway 49 and at the intersection of Pitt Street and Highway 88, in Amador County, California (Figure 1. *Project Location and Vicinity*). The BSA includes the existing Pitt Street Bridge, portions of Jackson Creek and its floodplain, adjacent grassland on the creek channel slopes, and abuts several private parcels adjacent to Pitt Street and Jackson Creek (Figure 2. *Biological Study Area Map*). The site corresponds to Section 28, Township 6 North, and Range 11 East [(Mount Diablo Base and Meridian (MDBM)] of the "Jackson, California" 7.5-minute quadrangle United States Geological Survey (USGS) topographic quadrangle (U.S. Department of the Interior, Geological Survey 1973), and is within the Upper Mokelumne River Watershed (HUC 8# 18040012, U.S. Department of Interior, Geological Survey 1978).

This report describes potential Waters of the United States, including wetlands, identified within the site that may be regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. The information presented in this report provides data required by the USACE Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (USACE 2001). The potential Waters of the U.S. boundaries depicted in this report represent a calculated estimation of the jurisdictional area within the site, and are subject to potential modification following the USACE verification process.

1.1 Existing Site Conditions

The Pitt Street Bridge is located in a residential area of Jackson and provides one-way vehicular traffic and pedestrian access over Jackson Creek to State Route 88. The Pitt Street Bridge was constructed in 1925 and has not been updated. It is currently classified as structurally deficient for vehicle use and has no designated sidewalks. The existing bridge structure consists of a single-span steel Pratt pony truss with timber decking on steel floor beams supported by masonry abutments. The current bridge and associated features are eligible for listing on the National Register of Historic Places and the City desires to retain the bridge for pedestrian use

at a location as yet to be determined. The replacement bridge would be a similar profile, single-span bridge that would provide one 10-foot traffic lane, two 3-foot shoulders, a 6-foot separated sidewalk and concrete barriers. The proposed structure would be 53-feet long by 32-feet wide and would remain a one-way access for State Route 88.

The project is located in the Northern Sierra Nevada Foothills District of the Sierra Nevada floristic region of California (*The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin, et. al., *ed.* 2012). The approximate 0.397-ac BSA includes aquatic and upland habitat types including Jackson Creek and its floodplain and non-native annual grasslands located on the upper slopes along the south side of Jackson Creek. In addition, ruderal/disturbed areas associated with the bridge structure occur within the BSA.

Approximately 0.246-ac of Other Waters of the U.S. occurs within the BSA, and includes the perennial flows of Jackson Creek and adjacent emergent wetlands located along the stream margins of Jackson Creek. The dominant vegetation found within and along the fringes of Jackson Creek supports several herbaceous wetland plants species including Santa Barbara sedge (*Carex barbarae*), broad-leaf cattail (*Typha latifolia*), Italian ryegrass (*Festuca perennis*), velvet grass (*Holcus lanatus*), and horsetail (*Equisetum arvense*). Several clumps of recently cut red willow shrubs (*Salix laevigata*) were observed along the stream margin. Jackson Creek is largely vegetated within the BSA, however, unvegetated open water areas caused by depth and scouring effects of flowing water occurs in the BSA as well.

The site is situated at an elevational range of approximately 1,190 to 1,200 ft above mean sea level. The region is characterized by a Mediterranean climate with mild to moderately cold, wet winters, and hot, dry summers. Average annual temperatures range from 52-62 degrees (°) Fahrenheit (F) with a winter record low temperature of 17° F and summer high temperatures reaching over 100° F. Annual precipitation in the City is approximately 33.71 in (Caltrans 2012) and primarily falls in the form of rainfall, with very little snowfall.

The wetland delineation was conducted in early spring, prior to plant species blooming, but most were still identifiable to species. The most recent precipitation events prior to the field work were heavy rain storms that occurred 2 and 3 days before the initial field survey (March

31 and April 1, 2014). As such, observed flows were moderate to high with evidence of recent higher flows (e.g., debris lines, vegetation matting, and scouring). National Wetlands Inventory data/maps were not available for the project area.

According to the *Soil Survey of Amador County, California* (U.S. Department of Agriculture, Soil Conservation Service Amador Area 2012), one soil unit, or type, has been mapped within the BSA: (Pw) Placer diggings and Riverwash (Figure 3. *Natural Resources Conservation Service Soil Types*).

Jackson Creek is a tributary of the greater San Joaquin River basin. The proposed project is located within the Upper Mokelumne River Watershed (USGS 1978), and the Mokelumne River is a tributary of the San Joaquin River. The network of streams that collectively drain to the San Joaquin and Sacramento Rivers convene to form the Sacramento-San Joaquin Delta, which eventually drains into the San Francisco Bay and ultimately the Pacific Ocean. Approximately 5.5 miles downstream of the project, Jackson Creek flows into Lake Amador.

2.0 METHODS

A wetland delineation was conducted by qualified senior biologist, Tom Scofield, on 3 April 2014. Supplementary wetland data was collected by qualified senior biologist, Eric Stitt, on 12 April 2014. The wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Region Supplement) (USACE 2008). The boundaries of potential Waters of the U.S. were delineated through aerial photograph interpretation and standard field methods (i.e., paired data set analyses), and all wetland data were recorded on Arid West Region - Wetland Determination Data Forms. Potential Waters of the U.S., including wetlands, were mapped in the field using a global positioning system (GPS) unit capable of submeter accuracy (e.g., Trimble GeoXT) and/or georectified aerial photography. A color aerial photograph (1”=100’ scale, NAIP 2009) was used to assist with mapping and field verification. *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990) and the *Soil Survey of Amador County* (USDA-NRCS 2012) were used to aid in identifying hydric soils in the field. *The Jepson Manual: Vascular*

Plants of California, Second Edition (Baldwin, et. al., *ed.* 2012) was used for plant nomenclature and identification. The potential Waters of the U.S. discussed in this report represent a calculated estimation of the jurisdictional area within the BSA, and are subject to modification following the USACE verification process.

During the field surveys, Mr. Scofield walked the entire BSA to determine the location and extent of potential Waters of the U.S. Two paired data point locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported a determination of wetland or non-wetland status. At each paired location, one point was located within the estimated jurisdictional area, and the other point was situated outside the limits of the estimated jurisdictional area. The total area of jurisdictional area within the site was recorded in the field using GPS.

2.1 Waters Of The United States

This report describes potential Waters of the U.S., including wetlands, which may be regulated by the USACE under Section 404 of the Clean Water Act. Wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 CFR 328.3(b), 51 FR 41250, November 13, 1986]. Wetlands can be perennial or intermittent, and isolated or adjacent to other waters.

Other waters are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses [33 CFR 328.3(a), 51 FR 41250, November 13, 1986]. The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the "ordinary high water mark". The ordinary high water mark is defined as the "line on the shore established by the fluctuations of water and indicated by physical characteristics such as 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" [33 CFR 328.3(e), 51 FR 41250, November 13, 1986]. The bank-to-bank extent of the channel that contains the water-flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of USACE

jurisdiction. The upstream limits of other waters are defined as the point where the ordinary high water mark is no longer perceptible.

2.2 Routine Determinations

To be determined a wetland, the following three criteria should be met:

- A majority of dominant vegetation species are wetland associated species;
- Hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season; and
- Hydric soils are present.

2.2.1 Vegetation

Hydrophytic vegetation is defined as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanent or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). The definition of wetlands includes the phrase “a prevalence of vegetation typically adapted for life in saturated soil conditions.” Prevalent vegetation is characterized by the dominant plant species comprising the plant community (Environmental Laboratory 1987). The dominance test is the basic hydrophytic vegetation indicator and was applied at each data point location. The “50/20 rule” was used to select the dominant plant species from each stratum of the community. The rule states that for each stratum in the plant community, dominant species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprise 20 percent or more of the total cover in the stratum (HQUSACE 1992, U.S. Army Corps of Engineers 2010).

Dominant plant species observed at each data point were then classified according to their indicator status (probability of occurrence in wetlands) (Table 1), in accordance with the U.S. Fish and Wildlife Service's (USFWS) National List of Vascular Plant Species That Occur in

Wetlands: California (Region 0) (Lichvar 2012). If the majority (greater than 50 percent) of the dominant vegetation on a site are classified as obligate (OBL), facultative wetland (FACW), or facultative (FAC), then the site was considered to be dominated by hydrophytic vegetation. Pursuant to the Western Mountains Supplement, plus (+) and minus (-) modifiers were not used (e.g., FAC-, FAC, and FAC+ plants are all considered to be FAC). Plant species not listed in Reed 1988 were assumed to be upland (UPL) species.

Table 1 – Classification of Wetland-Associated Plant Species[1]

Plant Species Classification	Abbreviation	Probability of Occurring in Wetland
Obligate	OBL	>99%
Facultative Wetland	FACW	66-99%
Facultative	FAC	33-66%
Facultative Upland	FACU	1-33%
Upland	UPL	<1%
No indicator status	NI	Insufficient information to determine status
Plants That Are Not Listed (assumed upland species)	NL	Does not occur in wetlands in any region

[1] Source: Lichvar 2012

2.2.2 Soils

A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA-NRCS 2003). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, and redox depressions.

Where possible, soil pits were excavated to the depth needed to document an indicator, to confirm the absence of indicators, or until refusal at the data point. The soil was then examined for hydric soil indicators. Soil colors were determined while the soil was moist using the *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990). Alluvial soils associated with Jackson Creek were described where pits could not be excavated.

2.2.3 Hydrology

Wetlands, by definition, are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Primary indicators of wetland hydrology include, but are not limited to: visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks, drift deposits, and sediment deposits. The occurrence of one primary indicator is sufficient to conclude that wetland hydrology is present. If no primary indicators are observed, two or more secondary indicators are required to conclude wetland hydrology is present. Secondary indicators include, but are not limited to: drainage patterns, frost-heave hummocks, FAC-neutral test, and shallow aquitard. The occurrence of at least one primary indicator or two secondary indicators is required to confirm the presence of wetland hydrology.

3.0 RESULTS

A total of 0.246-ac of potential Waters of the U.S. was mapped within the BSA (Figure 4. *Wetland Delineation Map*). These include areas associated with Jackson Creek and the adjacent floodplain of Jackson Creek within the estimated ordinary high water mark (OHWM). The estimated OHWM was defined in the field based on a visible and definable line between hydrophytic and upland vegetation and three-parameter wetland data point data which supported this boundary line (Figure 4). Other indicators included bank shelving and debris lines along the estimated OHWM boundary line. These acreages represent a calculated estimation of the jurisdictional area within the BSA, and are subject to modification following the USACE verification process.

The wetland determination data forms are included in Attachment A, and a list of plant species observed on-site is included in Attachment B. A discussion of the wetlands and other waters is presented below, and a wetland delineation map is presented in Figure 4.

3.1 Other Waters

3.1.1 Perennial Creek (Jackson Creek and Adjacent Floodplain)

Approximately 0.246-ac of Waters of the U.S., which include open water portions of Jackson Creek and emergent wetland vegetation in the adjacent floodplain, occurs within the BSA (Figure 4). For the purposes of this delineation, Jackson Creek is identified by the presence of a solid blue-line feature on the "Jackson, California" 7.5-minute quadrangle (USGS 1962). The limits of this feature were delineated at the OHWM primarily by visible shifts in vegetation (described above), but also included water marks, scouring, sediment deposits, and drift deposits. Within the delineated OHWM, Jackson Creek is comprised of both open water and emergent wetland vegetation. Vegetation observed within the OHWM includes Santa Barbara sedge (*Carex barbareae*), Baltic rush (*Juncus balticus*), broadleaf cattail (*Typha latifolia*), horsetail (*Equisetum arvense*), Himalayan blackberry (*Rubus armeniacus*), common velvet grass (*Holcus lanatus*), and clumps of recently cut red willow (*Salix laevigata*).

3.2 Hydrology

Each of the wetland study points had primary indicators of wetland hydrology, including inundation and/or saturation found in association with the primary hydrologic feature within the BSA - Jackson Creek. Jackson Creek has been altered by past mining practices and modifications to its floodplain (i.e., bank modifications, flood walls, and bridge abutments).

3.3 Soils

The substrate observed at wetland study point location 1 was located on a combination of boulder, cobble, gravel, sand, and silty substrate along the active stream channel of Jackson Creek. Wetland study point location 3 was located in the floodplain of Jackson Creek upslope of the active stream channel. Observed soils at this location exhibited low chroma color values in sandy-gravelly soils with redox depressions, which are indicative of wetland soils.

4.0 CONCLUSION / JURISDICTIONAL ASSESSMENT

Pursuant to the U.S. Environmental Protection Agency (USEPA) and USACE memorandum regarding Clean Water Act jurisdiction, issued following the United States Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to as *Rapanos*), the agencies will assert jurisdiction over the following waters: "traditionally navigable" waters (TNW), all wetlands adjacent to TNWs, non-navigable tributaries of TNWs that are "relatively permanent" (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally), and wetlands that directly abut such tributaries (USEPA and USACE 2007).

Jackson Creek is a relatively permanent feature and a tributary to the Mokelumne River. The Mokelumne River downstream of the project has been identified by the USACE Sacramento District as a navigable water. Pursuant to the USEPA and USACE memorandum regarding Clean Water Act jurisdiction following the *Rapanos* decision (USEPA and USACE 2007), the agencies will assert jurisdiction over relatively permanent waters that are tributary to navigable waters, and wetlands that abut such waters. Therefore, the USACE is likely to assert jurisdiction over the waters on-site.

A total of 0.246-ac of potential Waters of the U.S. was mapped within the BSA. These acreages represent a calculated estimation of the jurisdictional area within the site, and are subject to modification following the USACE verification process. Fill within jurisdictional features would require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.

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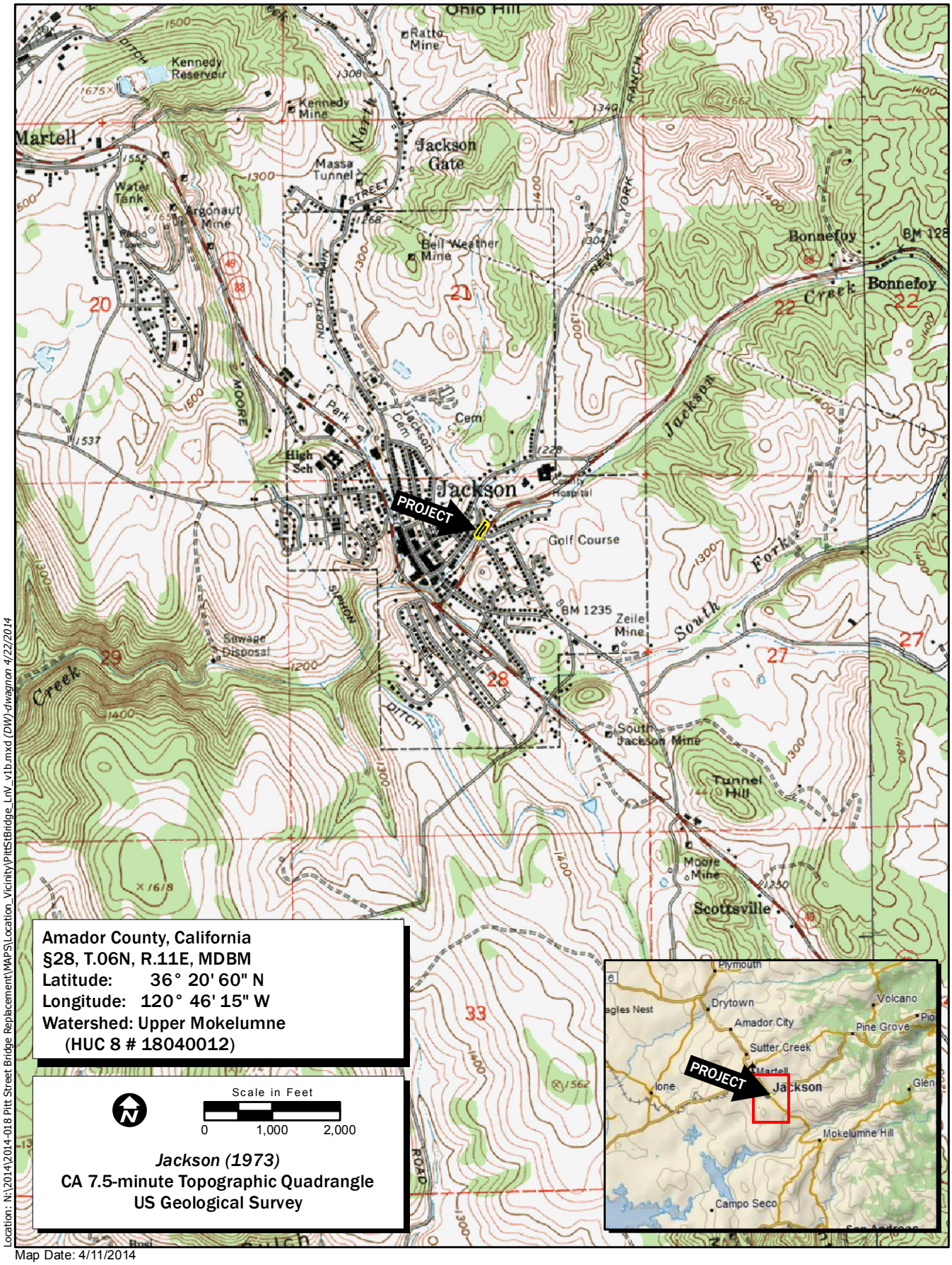
LIST OF FIGURES

Figure 1. Project Site and Vicinity

Figure 2. Biological Study Area Map

Figure 3. Natural Resources Conservation Service Soil Types

Figure 4. Wetland Delineation



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Map Date: 4/11/2014

Service Layer Credits: Copyright:© 2013 DeLorme

Figure 1. Project Location and Vicinity

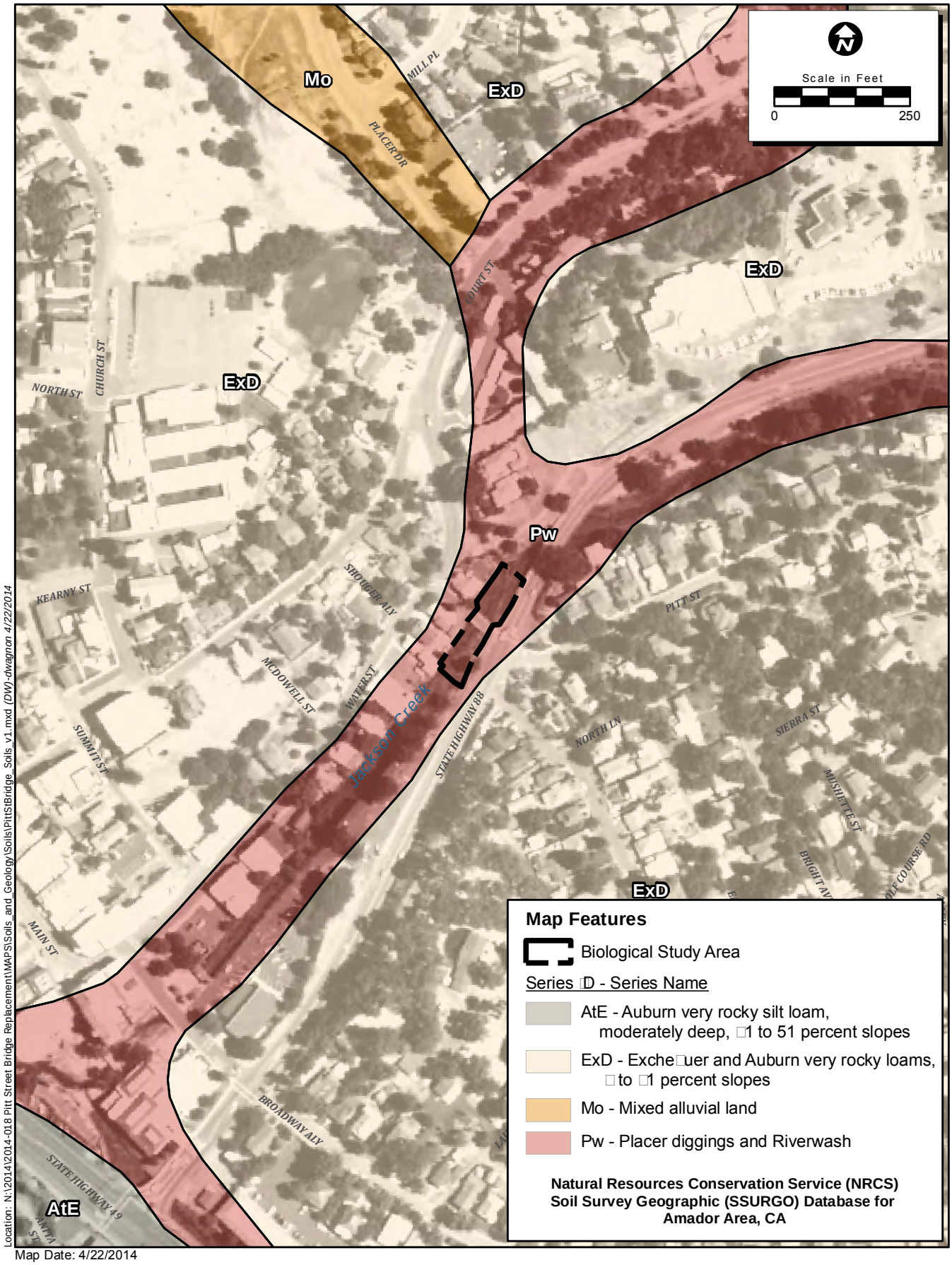
Pitt Street Bridge Replacement

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Meeting_Maps_and_Analysis\2014_04_09_SitePlan\PittStB_BSA.mxd (DW) dwagnon 5/19/2014

Map Date: 5/8/2014
Photo Source: Microsoft, June 2011 (World Imagery ESRI online accessed 5/19/2014)

Figure 2. Biological Study Area (BSA)

Pitt Street Bridge Replacement



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Map Date: 4/22/2014
Photo Source: NAIP 2012

Figure 3. Natural Resources Conservation Service Soil Types

Pitt Street Bridge Replacement

Figure 4.
Wetland Delineation

Map Features

- Biological Study Area - 0.□97 ac.
- Other Waters of the U.S. - 0.246 ac.
- Soil Points

SAMPLE POINTS

WATERS OF THE U.S.

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
01	38.350105, -120.770641
03	38.349823, -120.770927

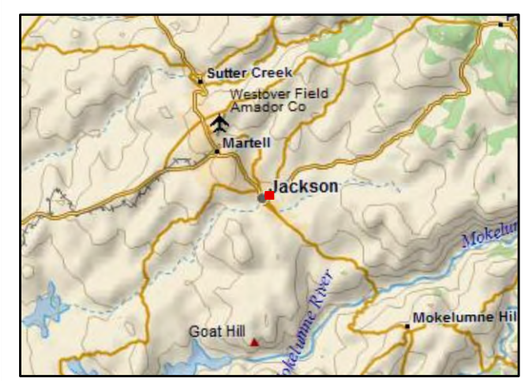
UPLAND

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
02N	38.350091, -120.770614
04N	38.349800, -120.770887

[1] ***Boundary Source: ECORP Consulting, Inc. and City of Jackson***

[2] *The summary values for each feature have been rounded to the nearest round number or 1/1000 decimal. Summation of these values in the table may not equal the total reported.*

[3] *Subject to U.S. Army Corps of Engineers verification*
This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.



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Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *5/19/2014*)

Map Date: 5/19/2014
Delineator: T. Scofield
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

LIST OF ATTACHMENTS

Attachment A – Wetland Determination Data Forms – Arid West Region

Attachment B – Plant Species Observed On-site

Attachment C – Aerial Photograph

Attachment D – Wetland Delineation Shape File

ATTACHMENT A

Wetland Determination Data Forms – Arid West Region

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt St. Bridge City/County: Jackson/Amador Sampling Date: 4/3/14

Applicant/Owner: Development Impact Inc / City of Jackson State: CA Sampling Point: 1wet

Investigator(s): T. Scofield Section, Township, Range: S 28, T.06N, R11E MDBM

Landform (hillslope, terrace, etc.): creek Local relief (concave, convex, none): — Slope (%): 5

Subregion (LRR): LRR Lat: 36° 20' 60" N Long: 120° 46' 15" W Datum: _____

Soil Map Unit Name: NRCS Amador – Placer diggings / Riverwash NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	Is the Sampled Area within a Wetland? Yes X No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

within OHWM of Jackson Creek

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Salix lasiolepis	5		FACW+
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Carex barbarae	40	✓	FACW
2. Equisetum arvense	25	✓	FAC
3. Fraxinus pennsylvanica	5		FAC+
4. Holcus lanatus	10		FAC
5.			
6.			
7.			
8.			
Total Cover: 80%			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

- willows appear to be cut/maintained for flow control. – Keeping veg. low

SOIL

Sampling Point: 1 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks: Riverine - cobble - Boulder - sand - silt - gravel - hot pit could be dug

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1) (Nonriverine)
- X Sediment Deposits (B2) (Nonriverine)
- X Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- X Water Marks (B1) (Riverine)
- X Sediment Deposits (B2) (Riverine)
- X Drift Deposits (B3) (Riverine)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Edge of active channel - within Jacker Ck. - perennial flows over alluvium

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt St. Bridge City/County: Jackson / Amador Sampling Date: 4/3/14

Applicant/Owner: Dev Impact Inc / City of Jackson State: CA Sampling Point: 2 (dry)

Investigator(s): T. Scofield Section, Township, Range: § 28, T.06N, R11E MDBM

Landform (hillslope, terrace, etc.): Aqueduct ck. swale Local relief (concave, convex, none): — Slope (%): 35

Subregion (LRR): LRRL Lat: Long: Datum:

Soil Map Unit Name: NRCS Amador – Rocky Disturbed NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No ____	
Wetland Hydrology Present?	Yes ____	No ____	

Remarks:

outside ordinary of pt. 1 (wet)

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Bromus diandrus	85	✓	N/L
2. Galium aparine	15	✓	FACU
3. Equisetum arvense	15	✓	FAC
4. Erodium botrys	15	✓	FACU*
5. Lathyrus species	10		N/L
6.			
7.			
8.			
Total Cover: 140			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

veg. factors outside/above OHWM

SOIL

Sampling Point: 2 Dry

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 3/3		–	–	–	–	sandy-SILTY-COBBLE MATRIX	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: UPLAND SOILS - located in non-native grassland above OHWM

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located on upland slope above OHWM.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt street Bridge City/County: Jackson / Amador Sampling Date: 4/17/14

Applicant/Owner: Dev. Impact Inc / City of Jackson State: CA Sampling Point: wet 3

Investigator(s): E Stitt Section, Township, Range: 28, T 06N, R 11E, MDBM

Landform (hillslope, terrace, etc.): streambed Local relief (concave, convex, none): None Slope (%): <1/0

Subregion (LRR): LRAL Lat: 694772 Long: 4246958 Datum:

Soil Map Unit Name: NRCS - Amador - Placer Diggings / Cyprenish NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		

Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		

Herb Stratum (Plot size: ____)			
1. Equisetum sp.	60%	✓	FACW
2. Epilobium sp.?	10%		
3. Holcus lanatus	35		FAC
4.			
5.			
6.			
7.			
8.			
	100% = Total Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	____	x 1 = ____
FACW species	____	x 2 = ____
FAC species	____	x 3 = ____
FACU species	____	x 4 = ____
UPL species	____	x 5 = ____
Column Totals:	____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: 3 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
12"	2.5yr 5/2	80	2.5yr 3/4	20	C	M/PL	Sandy Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ✓ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): ___

Water Table Present? Yes ✓ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt Street Bridge City/County: Jackson / Amador Sampling Date: 4/13/14
Applicant/Owner: Development Impact Inc / City of Jackson State: CA Sampling Point: 4 (up)
Investigator(s): E. Stitt Section, Township, Range: 28, T.6N, R11E MDB&B
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 40
Subregion (LRR): LRR C Lat: 0694775 Long: 4246957 Datum: _____
Soil Map Unit Name: NRCS Amador – Placer complex / Cumulas NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks: hillslope above streambed

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Vinca minor	5		NL
2. Vicia villosa	30	✓	NL
3. Bromus diandrus	35	✓	NL
4. Brassica sp.	30	✓	NL
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	_____	x 1 = _____
FACW species	_____	x 2 = _____
FAC species	_____	x 3 = _____
FACU species	_____	x 4 = _____
UPL species	_____	x 5 = _____
Column Totals:	_____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 4 up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
8"	7.5yr 3/3	100					Sandy loam	in graded zone for road

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No wetland hydrology

ATTACHMENT B

Plant Species Observed On-site

Appendix B. Plant Species Observed within the BSA

Plant Species Observed

The following plant species were observed within the project area during the site visits. An asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
ASTERACEAE	**SUNFLOWER FAMILY**
*Lactuca serriola**	Prickly lettuce
*Helminthotheca echiodes**	Bristly ox tongue
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	Black mustard
Nasturtium sp.	Water cress
*Sisymbrium irio**	Tumble mustard
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
*Chenopodium album**	White goosefoot
*Salsola tragus**	Russian thistle
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
*Convolvulus arvensis**	Morning glory
CYPERACEAE	**SEDGE FAMILY**
Carex Barbarae	Santa Barbara sedge
EQUISETACEAE	**HORSETAIL FAMILY**
Equisetum arvense	Horsetail
FABACEAE	**LEGUME FAMILY**
Lathyrus sp.	Wild pea
*Melilotus sp. **	Sweetclover
Vicia sp.	Vetch
GERANIACEAE	**GERANIUM FAMILY**
*Erodium botrys**	Long-beaked filaree
Erodium macrophyllum	California filaree/Round-leaved filaree
JUGLANDACEAE	**WALNUT FAMILY**
Juncus balticus	Baltic rush
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Epilobium sp.	Willow herb
Ludwigia peploides	Water primrose
	POPPY FAMILY

PAPAVERACEA	
Eschsholzia californica	California poppy
POACEAE	**GRASS FAMILY**
*Avena barbata**	Slender wild oat
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft brome
*Cynosurus echinatus**	Hedgehog dog-tail grass
*Festuca perennis**	Italian ryegrass
*Holcus lanatus**	Velvet grass
*Hordeum murinum**	Barley
*Poa annua**	Annual blue grass
POLYGONACEAE	**KNOTWEED/SMARTWEED FAMILY**
*Rumex crispis**	Curly Dock
ROSEACEAE	**ROSE FAMILY**
*Rubus discolor**	Himilayan blackberry
RUBIACEAE	**BEDSTRAW FAMILY**
Galium aparine	Goose grass
SALICACEAE cont.	**WILLOW FAMILY cont.**
Salix laevigata	Red willow
SCROPHULARIACEAE	**FIGWORT FAMILY**
Verbascum thapsus *	Common mullein
TYPHACEAE	**CATTAIL FAMILY**
Typha latifolia	Broad-leaf cattail

ATTACHMENT C

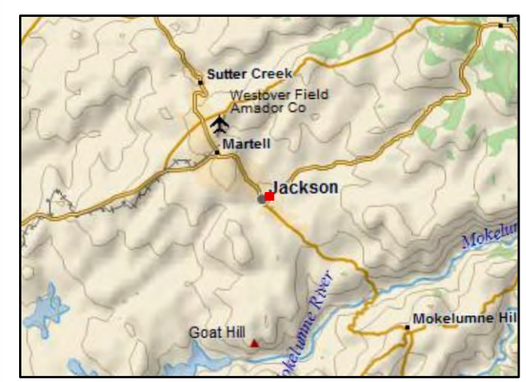
Aerial Photograph

Aerial Photograph

Map Features

Biological Study Area

Boundary Source: ECORP Consulting, Inc. and City of Jackson</bol>



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2014-018 Pitt Street Bridge Replacement

Scale in Feet

0 50 100

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *4/23/2014*)

Map Date: 4/23/2014

ATTACHMENT D

Wetland Delineation Shape File

(Shapefiles of wetland features to be included here for Corps submittal)

Appendix E. Plant Species Observed within the BSA

Plant Species Observed

The following plant species were observed within the project area during the site visits. An asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
ALISMATACEAE	**WATER-PLANTAIN FAMILY**
*Alisma lanceolatum**	Water plantain
APIACEAE	**CARROT FAMILY**
*Foeniculum vulgare**	Sweet fennel
APOCYNACEAE	**DOGBANE FAMILY**
*Vinca major**	Periwinkle
ASTERACEAE	**SUNFLOWER FAMILY**
*Lactuca serriola**	Prickly lettuce
*Helminthotheca echiodes**	Bristly ox tongue
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	Black mustard
Nasturtium sp.	Water cress
*Sisymbrium irio**	Tumble mustard
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
*Chenopodium album**	White goosefoot
*Salsola tragus**	Russian thistle
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
*Convolvulus arvensis**	Morning glory
CYPERACEAE	**SEDGE FAMILY**
Carex Barbarae	Santa Barbara sedge
EQUISETACEAE	**HORSETAIL FAMILY**
Equisetum arvense	Horsetail
EUPHORBIACEAE	**SPURGE FAMILY**
Euphorbia oblongata	Eggleak spurge

SCIENTIFIC NAME	COMMON NAME
FABACEAE	**LEGUME FAMILY**
Lathyrus sp.	Wild pea
Melilotus sp. *	Sweetclover
Vicia sp.	Vetch
*Robinia pseudoacacia**	Black locust
FAGACEAE	**OAK FAMILY**
Quercus lobata	Valley oak
GERANIACEAE	**GERANIUM FAMILY**
*Erodium botrys**	Long-beaked filaree
Erodium macrophyllum	California filaree/Round-leaved filaree
*Geranium dissectum**	Cut-leaved geranium
JUGLANDACEAE	**WALNUT FAMILY**
Juncus balticus	Baltic rush
Juglans californica	California walnut
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Epilobium sp.	Willow herb
Ludwigia peploides	Water primrose
PAPAVERACEA	**POPPY FAMILY**
Eschsholzia californica	California poppy
POACEAE	**GRASS FAMILY**
*Avena barbata**	Slender wild oat
*Avena fatua**	Wild oat
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft brome
*Cynosurus echinatus**	Hedgehog dog-tail grass
*Cynodon dactylon**	Bermuda grass
*Festuca bromoides**	Brome fescue
*Festuca perennis**	Italian ryegrass
*Holcus lanatus**	Velvet grass
*Hordeum murinum**	Barley
*Poa annua**	Annual blue grass
POLYGONACEAE	**KNOTWEED/SMARTWEED FAMILY**
*Rumex crispis**	Curly Dock
ROSEACEAE	**ROSE FAMILY**
Rubus armeniacus *	Himalayan blackberry
RUBIACEAE	**BEDSTRAW FAMILY**
Galium aparine	Goose grass
SALICACEAE cont.	**WILLOW FAMILY cont.**

SCIENTIFIC NAME	COMMON NAME
Salix laevigata	Red willow
SCROPHULARIACEAE	**FIGWORT FAMILY**
Verbascum thapsus *	Common mullein
SIMAROUBACEAE	**QUASSIA FAMILY**
*Ailanthus altissima**	Tree-of-heaven
TYPHACEAE	**CATTAIL FAMILY**
Typha latifolia	Broad-leaf cattail
VITACEAE	**GRAPE FAMILY**
Parthenocissus inserta	Woodbine
Vitis californica	California wild grape

Appendix F. Site Photographs

Pitt Street Bridge – Looking West (Downstream). April, 2014.

Pitt Street Bridge – Looking East From Bridge (Upstream). April, 2014.

Pitt Street Bridge – Looking West From Bridge (Downstream). April, 2014.

Looking East (Upstream) at Pitt Street Bridge. April, 2014.

Looking East (upstream from Pitt Street Bridge). April, 2014.

Looking West (Downstream) From Pitt Street Bridge. April, 2014.

Looking West (Downstream) at Pitt Street Bridge. April, 2014.

Looking at Underside of Pitt Street Bridge. April, 2014.

Looking West (Downriver) of Pitt Street Bridge – Adjacent Residences. April, 2014.

Looking South at Pitt Street Bridge Deck and Sidewalk. April, 2014.

Looking East (Upstream) From Deck of Pitt Street Road Bridge. April, 2014.

Appendix G. Wildlife Species Observed in the BSA

Wildlife Species Observed

The following species were observed within or close proximity to project boundaries during the site visits.

Species Name	Scientific Name
Amphibians	
American bullfrog	*Rana catesbeiana*
Reptiles	
Western fence lizard	*Sceloporus occidentalis*
Fish	
Mosquitofish	*Gambusia affinis*
Crayfish	*Pacifastacus leniusculus*
Birds	
Turkey Vulture	*Cathartes aura*
Red-tailed Hawk	*Buteo jamaicensis*
Mourning Dove	*Zenaida macroura*
Black Phoebe	*Sayornis nigricans*
Oak titmouse	*Baeolophus inornatus*
American Robin	*Turdus migratorius*
Northern mockingbird	*Mimus polygloitos*
European Starling	*Sturnus vulgaris*
Brewer's Blackbird	*Euphagus cyanocephalus*
House Finch	*Carpodacus cassinii*
American Goldfinch	*Carduelis tristis*
Mammals	
Coyote (scat)	*Canis latrans*
Black-tailed deer tracks	*Odocoileus hemionus*

Appendix H. California Red-Legged Frog Habitat Assessment Report

California Red-Legged Frog (*Rana draytonii*)

Habitat Assessment

For

Pitt Street Bridge Replacement Project

(Amador County, California)

Federal Aid Number: BRL0 5141 (018)

8 September 2014

Prepared by:
City of Jackson
33 Broadway
Jackson, California 95642

Prepared for:
Caltrans

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Attachment C. Pitt Street Bridge Habitat Assessment Datasheet
Attachment D. Representative Site Photographs

1.0 INTRODUCTION

1.1 Purpose of Assessment

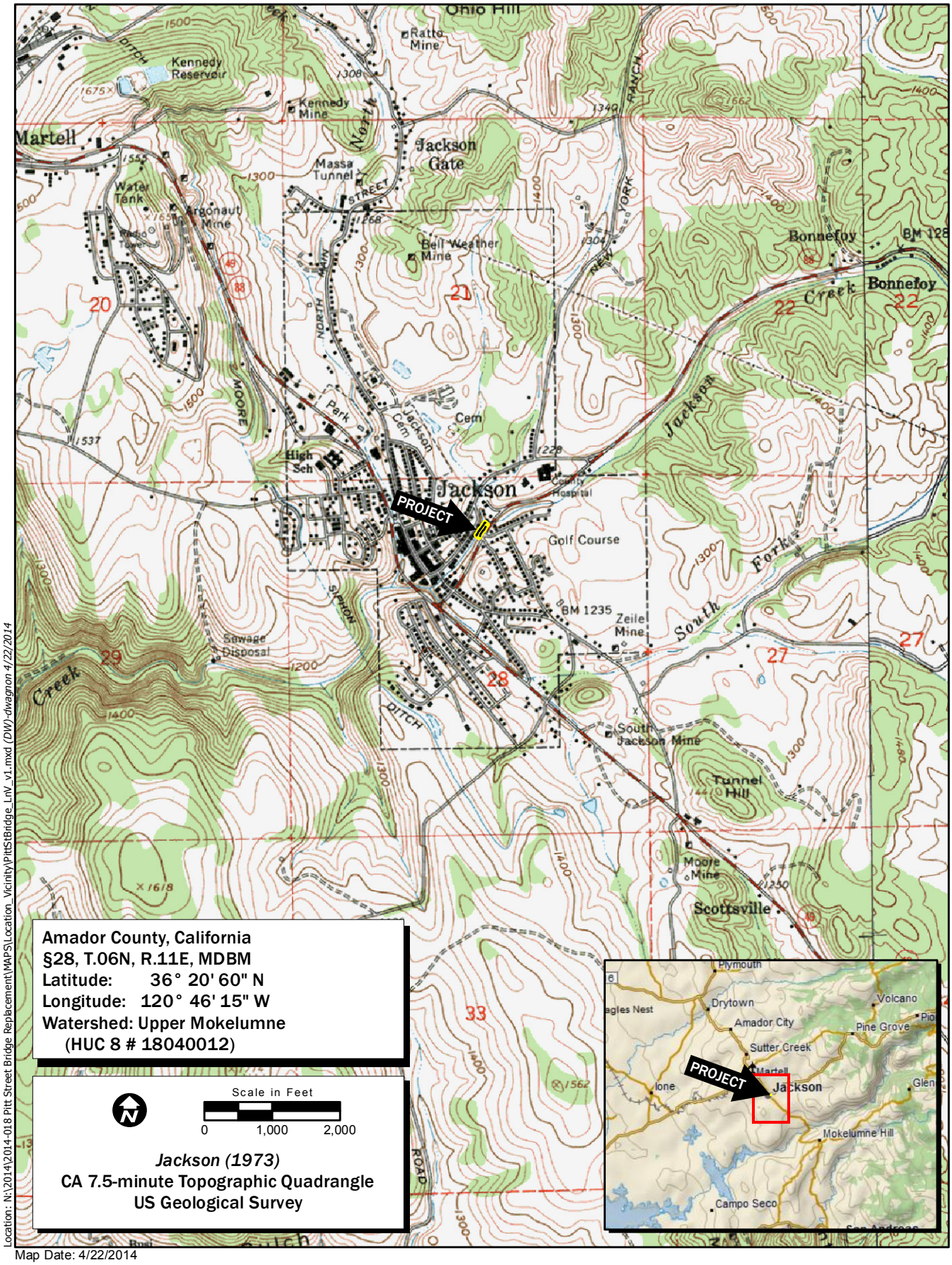
A habitat assessment was conducted for the federally threatened California red-legged frog (*Rana draytonii*) within the Pitt Street Bridge Replacement study area. The purpose of this assessment is to determine the potential for California red-legged frog habitat to occur on and adjacent to the Pitt Street Bridge Replacement project. As well, the possibility of California red-legged frogs occurring on the site was assessed qualitatively. This assessment was prepared in accordance with *USFWS Revised Guidance on Site Assessments and Field Surveys for the California red-legged frog* (2005). Determinate level surveys for this species were not conducted.

1.2 Study Area

The proposed project is located in the City of Jackson along Pitt Street, approximately 0.4 km (0.25 mi) east of Highway 49 in Amador County, California (Figure 1. *Project Location and Vicinity*). The site corresponds to a portion of Section 28, Township 6 North, and Range 11 East (MDBM) of the "Jackson, California" 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1973), and resides within the Upper Mokelumne River Watershed (Hydrologic Unit Code [HUC] #18040012, U.S. Department of Interior, Geological Survey 1978). The study area for the California red-legged frog habitat assessment encompasses Jackson Creek from Mission Blvd. at the northeast to Broadway Street at the southwest, an area approximately 12 meters (40 ft) in width and approximately 0.64 km (0.4 mi) in length and 0.78 ha (1.93 acre) in area. The study area includes the existing Pitt Street Bridge, Jackson Creek and its floodplain. The study area is within and/or abuts private residences and businesses adjacent to the creek.

1.3 Project Description

The Pitt Street Bridge is located in a residential area of Jackson and provides one-way vehicular traffic and pedestrian access over Jackson Creek to State Route 88. The existing bridge structure consists of a single-span steel Pratt pony truss with timber decking on steel floor beams supported by masonry abutments.



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Location_Vicinity\PittStBridge_LnV_v1.mxd (DW)-dwagnon 4/22/2014

Map Date: 4/22/2014

Service Layer Credits: Copyright:© 2013 DeLorme

Figure 1. Project Location and Vicinity

Pitt Street Bridge Replacement

The Pitt Street Bridge was constructed in 1925 and has not been updated. It is currently classified as structurally deficient for vehicle use, has no designated sidewalks, and carries a sufficiency rating of 22.5 out of 100. The bridge was closed in 1983 due to advanced deterioration; then underwent limited repairs in 1985 enabling the bridge to be reopened. The steel superstructure is bent and corroded. Based on the condition of the railings and the lack of designated sidewalks, the bridge is not considered safe for pedestrians by current standards. In addition, the footing for the abutment at the east end has been exposed due to water scouring, causing a stability concern. (City of Jackson 2013).

Pitt Street Bridge crosses Jackson Creek over a semi-channelized section of the creek. The creek bed is natural material with the banks lined with vertical rock walls attached to the bridge abutments, constricting the channel by several feet. Two privately owned residences occur at the top of a north-west rock wall, one on each side of the bridge. At the southeast end of the bridge, Pitt Street intersects State Route 88, which restricts the ability to lengthen the bridge and widen the channel. The preliminary plans for the new bridge may accommodate widening the existing channel and bridge by 2.4 - 3.0 m (8-10 ft) at the structure abutments; however, overtopping may still occur (City of Jackson 2013).

The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 0.76 m (2.5 ft) above the existing bridge. The last major storm overtopped the deck by approximately 0.3 m (1 ft).

The replacement bridge would be a similar profile, single-span that would provide one 3.0 m (10-ft) traffic lane, two 0.9 m (3 ft) shoulders, a 1.8 m (6 ft) separated sidewalk, railings and concrete barriers. The proposed structure would be 16.5 m (54 ft) long by 9.8 m (32 ft) wide (approximately 2.4 - 3.0 m [8-10 ft] wider and approximately 1 meter longer than the existing bridge) and would remain a one-way access to State Route 88. The proposed plan is to conform to the existing roadway elevation on the northwest end while the southeast end elevation would be slightly revised. The new abutments would likely be founded on spread footings or doweled directly into native bedrock. With the installation work of new abutments and footings, the creek channel would be re-contoured between the new abutments. A formal sidewalk may be added to the north side of Pitt Street from the bridge to Water Street and sidewalk extended

starting at the south end of the bridge toward the bridge on State Route 88 north of the Pitt Street intersection.

Approach roadways would be rehabilitated after the new bridge is placed and utilities are reconnected. Rehabilitation of the approaches would consist of re-paving the road, restriping, sidewalks, and curb ramps. At the bridge deck, improvements would include construction of shoulders and traffic barriers, railing, sidewalk, curb ramps, and signs. Alterations to the approach to State Route 88 may not be to the standard intersection taper and turning radii but they would accommodate Fire Truck and School Bus turning movements.

The Project includes relocating and/or replacing the following utilities: (1) The existing 10-inch sewer line buried in the creek channel would be removed and replaced, as part of the Project. A backhoe will be used to remove and replace the sewer line. Excavated material will be backfilled over the new sewer line and any excess soil will be removed from the BSA. Prior to the removal and replacement activities, the channel segment will be dewatered with the use of temporary coffer dams and a diversion pipe that will carry flows (via gravity) from immediately above the sewer removal/replacement segment to a point immediately downstream of this location (2) The existing eight inch water line that is buried in the roadway along Pitt Street extends out of the existing abutment 1 before making a 90^0 turn and continuing into the creek channel, would have portions removed during the demolition work. (3) The existing storm drain and inlet adjacent to the southern private driveway at abutment 1 would have portions removed during the demolition work. (4) The existing 30 cm (12 in) drainage pipe day lighting out of abutment 2 into the creek would require relocation through the new abutment. (5) The existing four inch abandoned water line would need to be removed. (6) Guy wires associated with the existing overhead electrical utility pole at abutment 2 would need to be temporarily relocated.

Equipment staging would be located on the existing paved Pitt Street roadway by using a temporary construction easement. The road within the Project area would be fully closed during the Project construction and detour routes would be made available to maintain access to the residences and businesses in the area. Temporary construction easements would also be

needed for three private parcels adjacent to the Project wing and retaining walls, and bridge abutment 1 on the north side of the Project area for access.

Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited workspace, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the City's Corporation Yard for storage and later reused. The construction of the Proposed Project is anticipated to commence in 2016 in middle to late May and continue through the end of September, and all pertinent permits will be obtained prior to any work in the stream channel. The replacement structure would maintain the nearly vertical slopes of the west side of the channel but the section opening would be widened by approximately 2.4 - 3.0 m (8-10 feet).

1.4 Environmental Setting

The Pitt Street Bridge project site is situated at an elevation range of approximately 363 to 367 m (1192 to 1206 ft) above mean sea level (MSL). The area is characterized by a Mediterranean climate with mild to moderately cold, wet winters, and hot, dry summers. Average annual low temperatures range from 34 to 56° F with a winter record low temperature of 12° F and summer high temperatures averaging in the 90's° F. Annual precipitation is approximately 79.0 cm (31.1 in), which generally falls as rainfall (http://www.weather.com/weather /wxclimatology/monthly/graph/95642).

Of the soil types mapped within the study area (U.S. Department of Agriculture NRCS, 1965), the most prevalent and that which underlies the floodplain is Placer Diggings and Riverwash (Pw). This soil type is found along stream channels and endures frequent flooding. Additional soils within the project area include Auburn Very Rocky Silt Loam (AtE), 31 to 50 percent slopes; Exchequer and Auburn Very Rocky Loam (ExD) with 3 to 31 percent slopes; and Mixed Alluvial Land (Mo).

The study area contains four habitat types including perennial creek, , emergent wetland, non-native annual grassland, and ruderal/disturbed (existing bridge structure and road surface) (Figure 2. *Vegetation Map*). The creek averages approximately 12 meters (40 ft) at bankfull width. Vegetation within the creek includes emergent plant species commonly found in still or

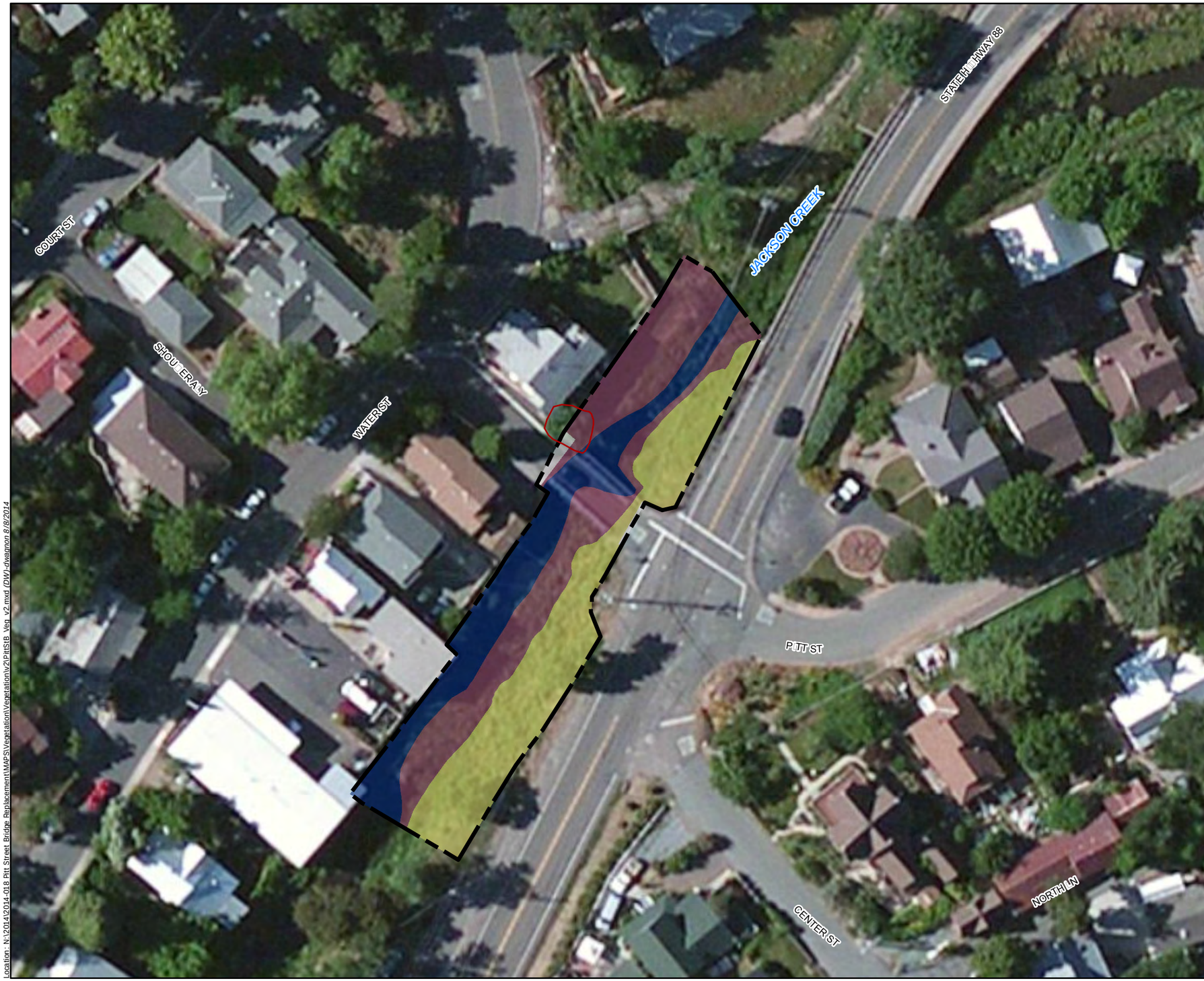
slow moving wetlands, including broadleaf cattail (*Typha latifolia*), common velvetgrass (*Holcus lanatus*), willow herb (*Epilobium cilatum*), sedge (*Cyperus barbarae*), water plantain (*Alisma lanceolatum*), water cress (*Nasturtium officionale*), Bermuda grass (*Cynodon dactylon*), and horsetail (*Equisetum arvense*). Much of the emergent vegetation is bunchy in growth form resulting in hummocks throughout the streambed. Banks were covered with a mix of upland vegetation including ripgut brome (*Bromus diandrus*), soft chess (*B. hordeaceaus*), oats (*Avena fatua*), barley (*Hordeum marinum*), dogtail grass (*Cynosurus echinatus*), eggleaf spurge (*Euphorbia oblongata*), fennel (*Foeniculum vulgare*), grapevine (*Vitus californicus*), woodbine (*Parthenocissus* sp.), Himilayan blackberry (*Rubus armeniacus*), cut-leaf geranium (*Geranium dissectum*), Long-beaked filaree (*Erodium botrys*), and periwinkle (*Vinca minor*). A complex riparian canopy is lacking from the study area; however, scattered California walnut (*Juglans californica*), valley oaks (*Quercus lobata*), black locust (*Robinia psuedoacacia*), and tree of heaven (*Ailanthus altissima*) occur along the upper bank of the creek.

Ruderal/disturbed vegetation occurs along the roadsides and among residential areas. This habitat type includes landscaped lawns, roadsides, graded parking areas, and spaces between buildings and houses, and features storksbill, mustards (Brassicaceae), Bermuda grass, ripgut brome, and other weedy plant species. Developed areas include Highway 88 to the east of the creek, adjacent buildings, and parking lots.

1.5 California Red-Legged Frog: Species Biology, Habitat, and Distribution

The California red-legged frog was listed as a threatened species by the USFWS on May 23, 1996 (USFWS 1996), and in 2002 the USFWS published the *Recovery Plan for the California Red-Legged Frog* (*Rana aurora draytonii*) (USFWS 2002). In 2008, the USFWS published a proposed rule to designate 7.3 x 10^5 ha (1.8 X 10^6 ac) of critical habitat (49 units in 28 California counties) for the frog (Fed. Reg. 73, No. 180; Tuesday, September 16, 2008). In 2010, critical habitat was revised (Fed. Reg. 75, No. 51; Wednesday, March 17, 2010). The California red-legged frog is also considered a Species of Special Concern by California Department of Fish and Wildlife.

Figure 2.
Vegetation Map



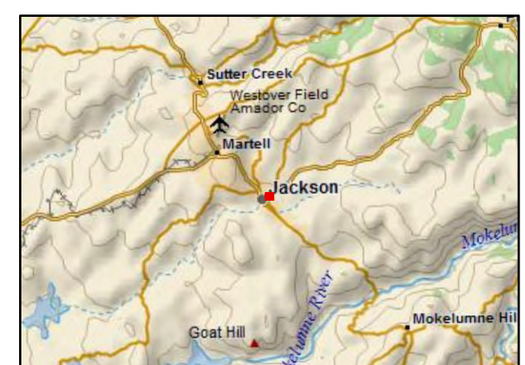
Map Features

- Biological Study Area - 0.□97 ac.
- Walnut Tree To Be Removed

□and Cover Types

- Non-native Annual □rassland - 0.148 ac.
- Emergent Wetland - 0.14□ac.
- Perennial Creek - 0.10□ac.
- Ruderal/Disturbed - 0.00□ac.

[1] *Boundary Source: ECORP Consulting, Inc. and City of Jackson*



Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Map Date: 8/8/2014
Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *8/8/2014*)

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Vegetation\Vegetation\v2\PittSt_Veg_v2.mxd *(DW)-dwagnon 8/8/2014*

The California red-legged frog is California's largest native true frog (Wright and Wright 1949), ranging from 4 to 13 cm (1.5 to 5.1 in) in length from the tip of the snout to the vent (Stebbins 2003), with females attaining a larger size than males. The dorsal surface of subadults and adults may be brown, gray, olive, red, or orange, and often has a pattern of dark spots with lighter centers (Stebbins 2003). The abdomen and hind legs of adults are usually red. Unlike some other native frogs, the skin does not usually look rough or warty. Prominent dorsolateral folds often run from the eye to the hip. The hind legs are well developed with large webbed feet. A cream, white, or orange stripe usually extends along the upper lip from beneath the eye to the rear of the jaw. The groin area may show a bold black mottling with a white or yellow background, and the hind legs have black bars above (Stebbins and McGinnis 2012).

A member of the globally distributed anuran family Ranidae, the California red-legged frog was once one of the most common frogs in the state, where it occurred in most ponded freshwaters throughout central and foothill regions of California (Stebbins and McGinnis 2012). The historic distribution of the California red-legged frog extended south in the Coast Ranges from Mendocino County, California, to Baja, Mexico, and in areas along the western slope of the Sierra Nevada at elevations generally below 1,220 m (4,000 ft) (Jennings and Hayes 1994). They were historically known from 46 counties; however, this species is now restricted to approximately 240 streams or drainages within 24 counties, representing a loss of 70 percent of its former range (USFWS 2002). Over the last 120 years, over-harvest for use as food, the widespread drainage of Central Valley marshes, the introduction of non-native competitors and predators, disease, upslope wafting of pesticides, and the interacting effects of these stressors have led to massive declines (USFWS 2002). The current range of the frog is greatly reduced, with most remaining populations occurring along California's coastal ranges from Marin County to Ventura County (Fellers 2005). Seven small relictual populations are known to occur in the Sierra Nevada (Fellers 2005; Barry and Fellers 2013). These populations are widely separated from each other, sometimes by hundreds of miles (Federal Register, Volume 75, No. 51; Wednesday, March 17, 2010).

1.5.1 Breeding Habitat

A true "pond frog," adult California red-legged frogs generally breed in deeper (>70 cm) (>28 in), still or slow moving water in the vicinity of dense, emergent riparian vegetation (Hayes and

Jennings 1988). A complex stand of overhanging willows and cattails may occur, and undercut banks and exposed roots are often an indicator of this frog's presence (Hayes and Jennings 1988). They breed from January through April, with males appearing at breeding sites weeks before females (Jennings and Hayes 1994). Individuals occurring in coastal drainages may be active year-round (Jennings *et al.* 1992), while those found in interior locations (e.g. Sierra Nevada foothills) are generally less active during the cold season. Eggs are laid in globular softball-sized clutches and attached to emergent vegetation such as bulrushes (*Scirpus* sp.) or cattails (Jennings *et al*. 1992), usually near the water's surface. The number of eggs per clutch averages approximately 2,000, and they hatch within 6 to 14 days (Jennings and Hayes 1994). The resultant tadpoles generally transform into froglets 3.5 to 7 months after hatching, although in some populations they do not transform until the next spring (Fellers 2005 and references therein).

1.5.2 Dispersal, Foraging, and Sheltering Habitat

California red-legged frogs disperse upstream and downstream of breeding habitat and across upland areas to forage and seek shelter (Bulger *et al.* 2003; Fellers and Kleeman 2007). Unlike some other ranid frogs, they do not have a distinct breeding migration (Fellers 2005, Fellers and Kleeman 2007, Tatarian 2008). Dispersal distances are generally less than 0.8 km (0.5 mi), with a few individuals making larger movements up to 3.2 km (2 mi) (Bulger *et al*. 2003, Fellers 2005). Movements are typically along riparian corridors, but some individuals, especially on rainy nights, may move directly from one site to another through normally inhospitable habitats such as heavily grazed pastures or oak-grassland savannas (Fellers 2005, Fellers and Kleeman 2007). In the only study to date of California red-legged frog movements in a Sierra Nevada population, where climatic conditions are much more xeric compared to the better-studied coastal populations, the importance of connectivity between breeding and nonbreeding habitat to provide migration and dispersal corridors was stressed (Tatarian 2008).

Upland areas are used extensively for migration and foraging (Stebbins and McGinnis 2012) and the frog aestivates in small mammal burrows and in deep leaf litter (Fellers 2005). Tadpoles generally graze on algae and diatoms, while juveniles and adults are carnivorous and often feed terrestrially on suitably sized arthropods and small vertebrates. Habitat complexity, including small mammal burrows, undercut banks, emergent vegetation, leaf litter, and deeper water is

important and necessary for predator avoidance for all size classes, and presumably allows for the coexistence of metamorphs and juveniles with larger adults, which would otherwise prey upon smaller frogs (Bobzien *et al*. 2000).

During the non-breeding season, habitat includes nearly any area within 1.6 to 3.2 km (1.0 – 2.0 mi) of a breeding site that remains moist and cool through the summer (Fellers 2005). Such areas may include vegetation such as coyote bush (*Baccharis pilularis*), California blackberry thickets (*Rubus ursinus*), and root masses associated with willow (*Salix* spp.) and California bay trees (*Umbellularia californica*) (Fellers 2005). In addition, any landscape feature that provides cover (animal burrows, boulders or rocks, organic debris such as downed trees or logs, industrial debris, and other cover objects) or agricultural features (such as drains, watering troughs, spring boxes, abandoned sheds, or hay stacks) may also be used as shelter (Tatarian 2008). Incised stream channels with depths greater than 45 cm (18 in) can also provide important summer refugia. In natural surroundings, terrestrial habitat use can be extensive and relatively long in duration during the rainy season (Tatarian 2008). One study documented a female frog that stayed in upland habitat from October until December (Tatarian 2008). Accessibility to shelter is essential for the survival of frogs within a watershed, and the lack of these habitats can be a limiting factor.

2.0 METHODS

This California red-legged frog habitat assessment follows the protocols described in the United States Fish and Wildlife Service *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frogs* (USFWS 2005). On April 17, 2014, qualified biologist Eric Stitt conducted this California red-legged frog habitat assessment within the Jackson Creek/Pitt Street Bridge study area and adjacent upland areas (Attachment A: Qualifications of the Surveyor). Potential habitat was evaluated by walking the Jackson Creek streambed while assessing in-water habitats, shoreline structure, and adjacent uplands. Parameters including aquatic habitat type, percentage, and location; vegetation assemblage; aquatic vertebrate species present; and upland information were recorded onto standardized datasheets. Aquatic habitats and adjacent uplands were evaluated relative to their potential to support breeding activities, foraging activities, refugia and hibernacula, and as dispersal corridors. Prior to the

site visits, the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB) (CDFW 2014) was queried for nearby occurrences and a literature review was completed to determine historic status of California red-legged frogs in Amador County. Photographs were taken during the site visit to document current conditions.

3.0 RESULTS

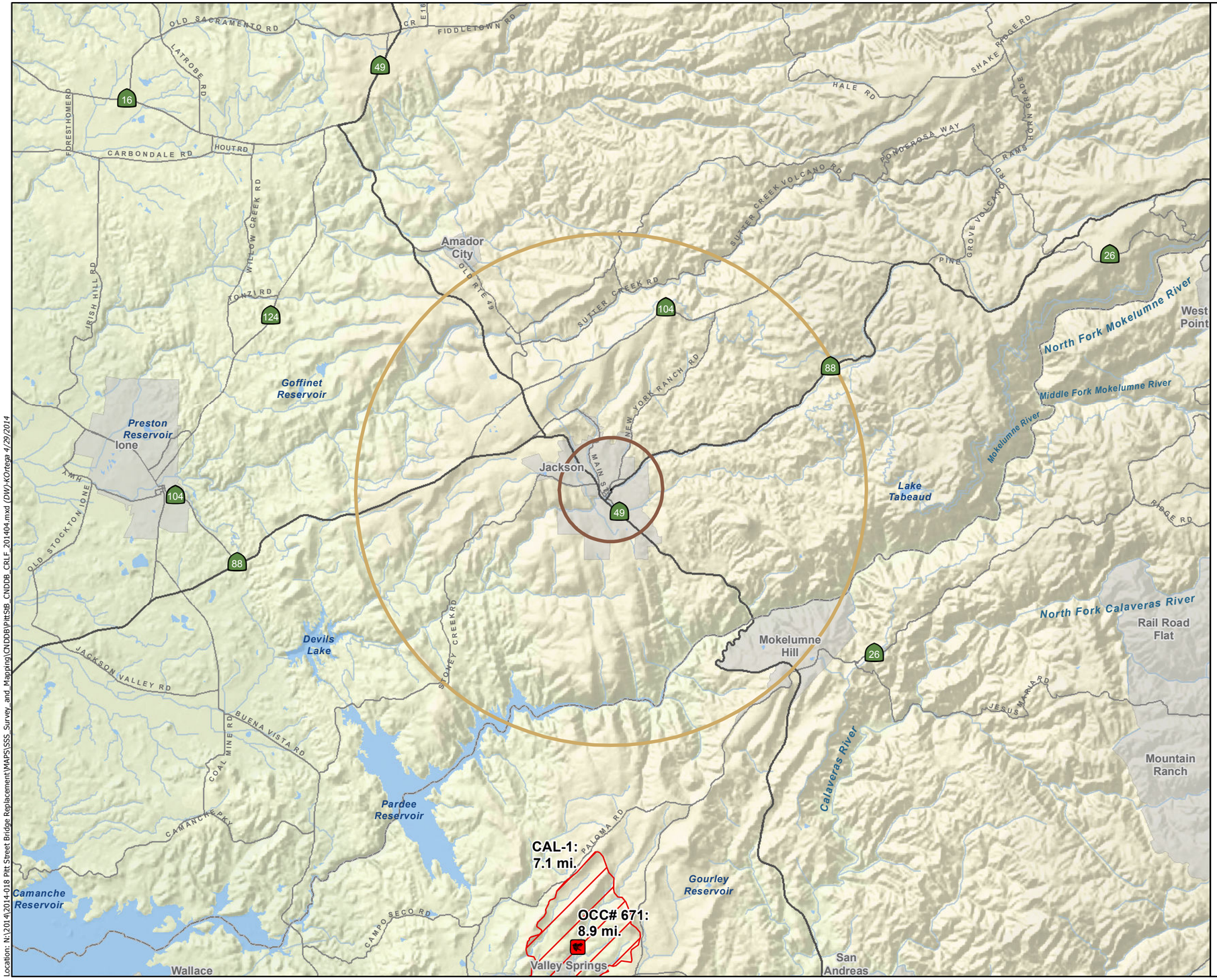
3.1 Range of California Red-Legged Frog

The project site falls within the historic range of the California red-legged frog. However, the project site is not within the current range of this species (USFWS 2002).

3.2 Documented Occurrences

A search for records of California red-legged frog by querying the Jackson 7.5-minute United States Geological Survey topographic quadrangle and eight surrounding quadrangles (Amador City, Ione, Irish Hill, Mokelumne Hill, Pine Grove, San Andreas, Valley Springs, and Wallace) in the California Natural Resources Database was conducted. No documented occurrences of California red-legged frog occur within 1.6 km (1.0 mi) of the project area (Figure 3. *CNDDB Occurrence Records for California Red-legged Frog* [*Rana draytonii*]). The closest extant population (record #671, 2003) is from approximately 14.3 km (8.9 mi) west-south of the project site in the Valley Springs 7.5-minute United States Geological Survey topographic quadrangle. This site documents three adult red-legged frogs at Young's Creek in the Upper

Figure 3. CNDDB Occurrences For California Red-legged Frog *(Rana draytonii)*



Distance From Project

- 1 mile
- 5 miles

Boundaries

- Project Boundary [1]
- CNDDB Polygon Extent [2]

CNDDB Occurrences [2]

- California Red-legged Frog

Critical Habitat [3]

- California Red-legged Frog

This map may include multiple species' occurrences at each location, some of which may not be visible on this graphic. The CNDDB occurrences shown may not reflect the actual location of the occurrence.

[1] Project Boundary: ECORP/City of Jackson (Approved by Caltrans)
[2] CDFW California Natural Diversity Database (CNDDB), Apr. 2014 Update (GIS Shapefile)
[3] USFWS Final Critical Habitat - 2010
CNDDB Occurrences Located on USGS 7.5' Quadrangle: Valley Springs.

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SSS_Survey_and_Mapping\CNDDB\PittStB_CNDDB_CRLF_201404.mxd (DW):KOrtega 4/29/2014

2014-018 Pitt Street Bridge Replacement

Miles
0 1 2

Map Date: 4/29/2014

Calaveras watershed (HUC #18040011), near the town of Valley Springs. The next closest documented population (record #609, 2002) is from El Dorado County greater than 35 km (22 mi) northeast of the project area in the Caldor 7.5-minute United States Geological Survey topographic quadrangle and documents three adult frogs observed at the site of a burst dam. Both nearest populations occur in different watersheds than that of the Pitt Street Bridge Replacement Project. Copies of CNDDB occurrence records are provided in Attachment B.

Recently, a comprehensive analysis of historic localities for California red-legged frogs in the Sierra Nevada was undertaken (Barry and Fellers 2013). Two historic localities and two additional localities were evaluated in Amador County by these experts between 1994 and 2012. A tributary to the North Fork Cosumnes River north of Plymouth was listed as a historic locality (Wright and Wright 1949), and a specimen from this locale is housed at Cornell University Museum of Vertebrates. Another locality 0.9 mile west of State Highway 49 at Middle Bar Road is represented by two specimens housed at the California State University-Sacramento vertebrate museum. A combination of daytime surveys, nighttime surveys, and habitat assessments were used to evaluate the current presence of the species at these historic locations and two other potential sites, and to determine whether habitat continued to exist. No California red-legged frogs were documented in Amador County (Barry and Fellers 2013).

3.3 Critical Habitat

The project site is not located within or adjacent to California red-legged frog critical habitat and no critical habitat is designated in Amador County. The closest critical habitat unit (Critical Habitat Unit CAL-1) is located in Calaveras County in the vicinity of Valley Springs, approximately 11.4 km (7.1 mi) south of the project site in the Valley Springs 7.5-minute United States Geological Survey topographic quadrangle (Figure 3). This unit is situated within an elevation range of approximately 213 to 396 m (700 to 1,300 ft) in oak savannah and non-native annual grassland habitat. This critical habitat unit was designated after the discovery of the Calaveras County population in Young's Creek (CNDDB record #671).

3.4 Habitats on the Project Site and Within 1.6 Km (1 Mile) of the Project Boundary

Jackson Creek and the adjacent uplands as well as habitats within 1.6 km (1 mile) of the project limits were evaluated in this California red-legged frog habitat assessment. Qualifed biologist Eric Stitt visited the project site and surrounding vicinity on 17 April 2014. Site and habitat characteristics are discussed below. A copy of the field data sheet is provided in Attachment C, and representative photographs of Jackson Creek are provided in Attachment D.

3.4.1 Jackson Creek

Jackson Creek originates to the east near Pine Grove at an elevation of about 792 m (2,600 ft). It flows westerly along Highway 88 to Jackson, California, and is dammed to form Lake Amador east of Ione. From its outlet at Jackson Creek Dam, it continues draining west through Ione and joining with Dry Creek. Dry Creek then joins with the Mokelumne River near Thornton, which in turn drains to the delta.

During the habitat assessment, the streambed at the Pitt Street Bridge was readily accessible. The creek flows due west and drops approximately 5 m (16 ft) in elevation within the survey area boundary. Stream width ranged from 6 to 12 m (20 – 26 ft) with gentle to steep banks ranging from 15 to 90 degrees (at in-stream building foundations). Banks were generally comprised of soil. At edgewater, banks were often convoluted with the presence of plant tufts and hummocks, and undercutting was limited. Very few rootwads were present, and those present tended to be associated with the northern bank in the vicinity of buildings encroaching into the streambed. Overhanging trees and shade were largely absent. Emergent and bent-over vegetation covered 70-75% of the aquatic habitat.

The streambed was comprised of cobble, rock, bedrock, and sand/gravel in that order of dominance. Fines, especially silt, covered most substrate with the result that there were no interstitial spaces among cobble and rock. In-stream habitat was comprised of runs, glides and mid-channel pools. Water velocity was low. Water was generally shallow, with an average depth of approximately 30 - 40 cm (11 - 16 in). One pool approximately 1.0 m (39 in) deep was at the upstream terminus of the study site. Small fish (*Gambusia affinis*, others), crayfish

(*Procambarus clarkii*) and American bullfrogs (*Lithobates catesbeianus*) all of which are predators of California red-legged frogs, their eggs, and tadpoles, were abundant.

Southwest of the Pitt Street Bridge Jackson Creek streambed is narrowly confined between roadways, housing and businesses, parking lots, and other infrastructure. Northeast of the bridge, surrounding uplands were a bit more naturalistic and featured a broader floodplain (to 30 m [100 ft]). Bank slope was more gradual here, and open, mowed backyards were contiguous with the terrace. Small mammal burrows (primarily pocket gopher (*Thomomys bottae*) were noted in the grasslands, which may provide potential shelter for dispersing or foraging frogs. Beyond the narrow confines of Jackson Creek and its associated greenbelt, abundant urban infrastructure is found including residences, driveways, heavily travelled roads, and landscaped yards. The surrounding area is populated and semi-urban in nature.

Breeding Habitat

Breeding habitat is very limited within the survey reach. Deep (>0.7 m) side-channel pools with silt or soil substrate, undercut banks, emergent and overhanging vegetation, and other necessary constituent habitat elements are lacking. Mid-channel pools tend to be shallow, have a low velocity but constant flow, and lack complexity. An abundance of introduced predators and competitors (mosquitofish, crayfish, and American bullfrogs) were noted during the survey, which gives further evidence as to its lack of suitability for breeding California red-legged frogs.

Dispersal, Foraging, and Sheltering Habitat

Jackson Creek may serve as marginal dispersal, foraging, or sheltering habitat. As a linear dispersal corridor, habitat elements such as water, emergent and streamside vegetation, and bankside refugia are present. However, quality of the area is poor. Introduced predators are abundant, and the area is urban and tightly constrained by roadways, parking lots, and buildings, all of which lead to a high likelihood of road mortality.

Given the distance to known populations of California red-legged frogs, the lack of breeding habitat on-site, the abundance of introduced predators, and the disturbed and urban nature of Jackson Creek it is extremely unlikely that California red-legged frogs occur within the project site.

3.4.2 Aquatic Habitats within 1.6 Km (1 Mile) of the Site

Five ponds occur within a 1.6 km (1.0 mi) radius of the project site (Google Earth, April 2014; Jackson, California 7.5-minute quadrangle, U.S. Department of the Interior, Geological Survey 1973; Figure 4a). No ponds were visited in person for this habitat assessment.

Pond 1 is a small pond of approximately 0.14 ha (0.35 ac) located approximately 1.4 km (0.9 miles) southeast of the project site (Figure 4b). The pond is located within annual grassland, and appears to be used for livestock. It appears to be shallow, with grass banks, and may dry completely in the summer of some years.

Pond 2 is a larger, unnamed pond of approximately 0.52 ha (1.28 ac) appears approximately 1.3 km (0.8 mi) south-southeast of the project site (Figure 4c). This pond appears to have a fringe of blackberry, shrubby vegetation, and a few oaks along its northern bank and appears to be more perennial than the first pond. Commercial buildings occur immediately west, north, and east of this site. Grassland occurs southwest, south, and southeast of the site, and the pond is probably used for cattle.

Pond 3/4 occurs approximately 0.84 miles northeast of the project site (Figure 4d). This is a complex of two ponds within an oak grassland that appear to be the result of borrow activity. Housing occurs to the north, and naturalistic oak grassland occurs to the west, south, and east. Banks are sunlit and in one pond appear free of vegetation. This area appears to be in a larger mesic depression that appears from aerial photography to have some marsh characteristics.

Pond 5 is approximately 0.5 mile north and appears to be shallow, with wetted marsh characteristics (Figure 4e). An aqueduct feature appears to constrain flow, and a large freshwater marsh with gentle banks and extensive mesic grassy areas is oriented south to north behind it. The immediate vicinity surrounding the feature is naturalistic, but a housing development occurs 0.25 miles northeast, and the Town of Jackson occurs 0.1 mile south.

Figure 4a.California Red-legged Frog Habitat Assessment Overview

Map Features

- Biological Study Area
- Habitat Survey Area
- Pond Location

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SSS_Survey and Mapping\CA_RLF\PSB_CARLF.mxd (KO):KOrtega 4/30/2014

2014-018 Pitt Street Bridge Replacement

Scale in Feet
0 1,400

Photo Source: NAIP 2012

Map Date: 4/30/2014

Figure 4b. California Red-legged Frog Habitat Assessment - Pond 1

Map Features

- Habitat Survey Area
- Pond Location

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SSS_Survey_and_Mapping\CA_RLF\PSB_CARLF_sheets.mxd (KO)-KOrtega 4/30/2014

2014-018 Pitt Street Bridge Replacement

Scale in Feet

0 200

Photo Source: NAIP 2012

Map Date: 4/30/2014

Figure 4c. California Red-legged Frog Habitat Assessment - Pond 2

Map Features

- Habitat Survey Area
- Pond Location

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SSS_Survey_and_Mapping\CA_RLF\PSB_CARLF_sheets.mxd (KO)-KOrtega 4/30/2014

2014-018 Pitt Street Bridge Replacement

Scale in Feet
0 200

Photo Source: NAIP 2012

Map Date: 4/30/2014

Figure 4d. California Red-legged Frog Habitat Assessment - Pond 3/4

Map Features

- Habitat Survey Area
- Pond Location

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SSS_Survey_and_Mapping\CA_RLF\PSB_CARLF_sheets.mxd (KO)-KOrtega 4/30/2014

2014-018 Pitt Street Bridge Replacement

Scale in Feet
0 200

Photo Source: NAIP 2012

Map Date: 4/30/2014

Figure 4e. California Red-legged Frog Habitat Assessment - Pond 5

Map Features

- Habitat Survey Area
- Pond Location

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SSS_Survey_and_Mapping\CA_RLF\PSB_CARLF_sheets.mxd (KO):KOrtega 4/30/2014

2014-018 Pitt Street Bridge Replacement

Scale in Feet
0 200

Photo Source: NAIP 2012

Map Date: 4/30/2014

These sites could potentially provide breeding and foraging habitat for California red-legged frogs. However, no current records exist for the area. As well, no aquatic connectivity appears Figure 4a. California Red-legged Frog Habitat Assessment-Overview to join any of these sites with the Jackson Creek study area. Upland habitat between these ponded sites and the study area consists of urban infrastructure and roads.

4.0 CONCLUSION

Jackson Creek, the adjacent uplands, and potential breeding habitats within 1.6 km (1.0 mi) of the project limits were evaluated in this California red-legged frog habitat assessment for the Pitt Street Bridge Replacement Project. The project site is within the historic range of the species, but not within the current range (USFWS 2002). There are no current records of California red-legged frog in Amador County or the Upper Mokelumne River Watershed. The closest current occurrence record is approximately 14.3 km (8.9 mi) south of the project site and represents a small, isolated population in Calaveras County in a different watershed. There is no designated critical habitat in Amador County. The nearest critical habitat is associated with the Calaveras County population, the nearest edge of which occurs 11.4 km (7.1 mi) south of the project area.

Jackson Creek lacks breeding habitat for California red-legged frogs. Calm, deep side-channel pools with streamside and emergent vegetation and in-water refugia such as convoluted undercut banks and root wads were generally lacking. Egg-laying and tadpole rearing sites with deep, ponded water were lacking. Bullfrogs, fish, and crayfish, known predators of California red-legged frogs, eggs, and tadpoles, were abundant in the stream, which further indicates poor habitat quality.

Although Jackson Creek does not provide breeding habitat, the creek could potentially serve as a dispersal corridor. However, the potentially suitable aquatic features within 1.6 km (1.0 mi) of the project site do not appear contiguous with Jackson Creek. Dispersal from those areas to the study site would require overland travel through extensively modified urban infrastructure and is quite unlikely.

Given the lack of nearby occurrence records, the absence of current and historic records within Amador County, the abundance of introduced predators, the marginal suitability of the stream reach for dispersal, and the narrowly confined streambed, it is considered extremely unlikely that California red-legged frogs occur within the project site or the vicinity.

5.0 REFERENCES

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Hayes, M.P., and M.R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylii*): implications for management. Pages 144-158 *in* R. Sarzo, K.E. Severson, and D.R. Patton (technical coordinators). Proceedings of the symposium on the management of amphibians, reptiles, and small mammals in North America. United States Department of Agriculture, Forest Service, Rocky Mountain Range and Experiment Station, Fort Collins, Colorado. General Technical Report (RM-166): 1-458.

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LIST OF ATTACHMENTS

Attachment A – Qualifications of the Surveyor

Attachment B – California Natural Diversity Database Results

Attachment C – Pitt Street Bridge Habitat Assessment Datasheet

Attachment D – Representative Site Photographs

ATTACHMENT A

Qualifications of the Surveyor

Eric W. Stitt, M.S.

Senior Biologist/Herpetologist

Eric Stitt is a non-game wildlife ecologist with over 1□ years of experience □6 years with ECORP□. Mr. Stitt has worked throughout California, Nevada, Ari□ona, New Mexico, and south Texas, and has provided biological services in support of transmission lines, gas pipelines, solar arrays, military lands, FERC-relicensing, wind power generation arrays, national parks and preserves, road and infrastructure projects□and for housing sector clients. Mr. Stitt is versed in vertebrate field inventory and survey techni□ues including avian point counts□raptor surveys□protocol-level burrowing owl surveys□small mammal live-trapping□acoustic monitoring and mine exit surveys for bats□herpetofauna visual encounter surveys□radio-telemetry□trapping of reptiles and amphibians□P□T-tagging□remote-cameras, dip-net surveys of larval amphibians, branchiopods, and vernal pool invertebrates□and vernal pool floristics. Of particular interest to Mr. Stitt are the population and community biology, habitat relations, and biogeography of reptiles and amphibians. Mr. Stitt is also interested in problems related to invasive herpetofauna, conservation of biodiversity, and threatened and endangered non-game species. He presently holds permits for California red-legged frog, California tiger salamander, giant garter snake, and salt-marsh harvest house, and is covered under a state MOU for Mohave ground s□uirrel.

Education

- M.S., Wildlife Ecology, School of Natural Resources, University of Ari□ona, Tucson, 2004.
- B.S., Biology, California State University, Sacramento, 1998.

Selected Registrations and Permits

- CDF□ Scientific Collecting Permit □SC-004168□ to Eric W. Stitt □covers non-game reptiles, amphibians, invertebrates, and mammals□allows take of California species of concern by hand and trap□contains MOU□s for federally listed species□. □n renewal □12/1□□
- □evel □surveyor for blunt-nosed leopard li□ard □25 survey days experience□
- USFWS Recovery Permit □□TE-01297□-9.2□ □**California tiger salamander, California red-legged frog, giant garter snake, salt-marsh harvest mouse**□
- USFWS Recovery Permit □□TE-022225-2□ □**California red-legged frog)**
- USFWS Recovery Permit □□TE-27460A-1□ □**mountain yellow-legged frog-**southern California DPS□
- USFWS-Authori□ed Biologist for desert tortoise, Coachella □alley fringe-toed li□ard, giant gartersnake, Sierra Madre yellow-legged frog, California red-legged frog, arroyo toad

Selected Professional Experience

Mariposa Road Bridge, San Joaquin County – Caltrans (BPMP-5929(227) (2013). □n support of this proposed bridge scour mitigation project, Mr. Stitt conducted a habitat assessment for giant garter snake and prepared draft and final survey reports.

EID Forebay Modification Project EIR (FERC project N. 184), El Dorado County – El Dorado Irrigation District as sub to AECOM (2013). ECORP was retained by AECOM to provide biological, environmental, and hydrological support services for the E□D Forebay Modification Project. Mr. Stitt prepared the biology section for the project E□R and conducted a protocol-level habitat assessment and subse□uent report for California red-legged frog. The E□R consisted of an evaluation of on-site habitats and an assessment of the presence of potential waters, potentially occurring special status species, and any other uni□ue biological resources that may be subject to Federal, State, or local regulations.

HCP support, Sacramento Valley (2013). In support of planning efforts for an HCP, Mr. Stitt was engaged as a contributing giant garter snake expert. Duties included literature searches for relevant literature, brainstorming and elucidating ideas and strategy.

Upper Jones Tract Levee Replacement Project – Caltrans (2013). As subconsultant to Moore Biological Services, Mr. Stitt performed a habitat assessment for giant garter snake on the Upper Jones Tract levee improvement project in Holt, California.

Badger Street Bridge Replacement (2013), Amador County– Caltrans (2013). Mr. Stitt conducted a habitat assessment for California red-legged frogs on this site in Amador County, California.

Rancho Esquan/Guiduci Property, Butte County - Century Management Company (2013). Mr. Stitt conducted a habitat assessment, preconstruction survey, and resultant letter report for giant garter snake at the Rancho Esquan property in Butte County, California.

Tehachapi Renewable Transmission Project, Los Angeles, Orange, Kern, and Riverside counties – Southern California Edison (2012-current). Mr. Stitt serves as SCE- and CPUC-authorized biological monitor on Segment 6 of the Tehachapi Renewable Transmission Project in Los Angeles County, California. He serves as USFWS-authorized arroyo toad, California red-legged frog, and western pond turtle monitor. Conducts daily biological monitoring to ensure project environmental compliance, and submits daily Field Reporting Environmental Documentation (FRED) reports via proprietary database. Performed one BO-approved relocation of arroyo toad from harm's way in 2010.

Central El Dorado Hills Specific Plan, El Dorado County-Serrano Associates, LLC. (2012). Westside is a 1,[illegible]5-acre project site in El Dorado Hills, California. Mr. Stitt performed habitat assessments, preliminary surveys, and project reports for California tiger salamander, California red-legged frog, western pond turtle, foothill yellow-legged frog, western spadefoot, and coast horned lizard.

O'Neil NTMP, Calaveras County - Graeling Resources (2012). Mr. Stitt conducted a habitat assessment for California red-legged frogs on this 244-acre site in Calaveras County, California.

The Village of Marble Valley Specific Plan, El Dorado County-Serrano Associates, LLC. (2012). Marble Valley is a 2,[illegible]41-acre project site situated three miles east of El Dorado Hills, California. Mr. Stitt performed habitat assessments, preliminary surveys, and project reports for California tiger salamander, California red-legged frog, western pond turtle, western spadefoot, foothill yellow-legged frog, and Blainville's horned lizard. Documented numerous new localities for western pond turtle, and presence of Blainville's horned lizard.

Camp Pendleton Exotic Species Control Program, San Diego County -- United States Marine Corps Base, Camp Pendleton (2011 - Present). Mr. Stitt is involved in an ongoing exotic aquatic species control program on Camp Pendleton in support of the federally endangered arroyo toad (*Anaxyrus californicus*) and tidewater goby (*Eucyclogobius newberryi*). He surveyed the Santa Margarita River, San Onofre Creek, and San Mateo Creek for exotic fish, amphibians, reptiles, and invertebrate species using a suite of methods. All suitable habitats containing non-native species are repetitively sampled and all toad and tidewater goby observations, collections, or detections are recorded. Captured bullfrogs are processed (length, weight, sexed, and gut content analyzed) and GPS coordinates are recorded.

Amoruso Property, Placer County —Brookfield California Land Holdings (2011). Mr. Stitt conducted a protocol-level survey for western spadefoot (*Spea hammondii*) on the 678-acre Amoruso Property.

El Dorado Irrigation District- Echo Lakes, Caples Lake, and Lake Aloha 5-year Amphibian Monitoring, El Dorado and Alpine counties (2011). Mr. Stitt performed visual encounter surveys and habitat assessments for Sierra Nevada yellow-legged frog (*Rana sierrae*) as part of a 5-year monitoring program. Hundreds of yellow-legged frogs of all age classes were documented.

Sierra Madre Yellow-Legged Frog Monitoring, Los Angeles County -- CalTrans District 7 (2011). In support of the Angeles Crest Highway (SR-2) reopening project in the Angeles National Forest, Mr. Stitt conducted construction monitoring for Sierra Madre yellow-legged frog (*Rana muscosa*) in Little Rock Creek within the Angeles National Forest. Suitable habitat areas within the project area were surveyed to document the species. More than 10 adults, juveniles, and tadpoles were documented.

I-5 North Stockton Corridor Improvement Project, San Joaquin County (2011-2012). Mr. Stitt was the lead USFWS-Authorized Biologist for giant gartersnake and western pond turtle (*Actinemys marmorata*) plants on this high profile, multi-year road widening in Stockton, California.

West Sacramento Area Levee Improvements Program - CHP Academy Early Implementation Project. – sub to ICF International and Teichert (2011). Mr. Stitt was a USFWS-Authorized Biologist for giant gartersnake (*Thamnophis gigas*) as required by ESA and California Environmental Quality Act (CEQA) on the rebuild of a major levee in west Sacramento.

Mokelumne River Project (FERC No. 137) Relicensing and Monitoring, Mokelumne River, Amador & Calaveras counties – HDR as subconsultant to Pacific Gas and Electric Company (2009 - 2010). Mr. Stitt was herpetologist for the Mokelumne River Project in 2009 and 2010. He performed habitat assessments and visual encounter surveys for foothill-yellow legged frog and western pond turtle.

Spring Gap-Stanislaus Project (FERC No. 2130) Relicensing, Calaveras & Tuolumne counties – Entrix as subconsultant to Pacific Gas and Electric Company (2010). Mr. Stitt performed visual encounter surveys and habitat assessments for foothill yellow-legged frog and western pond turtle in support of the Spring Gap-Stanislaus Project relicensing.

California Tiger Salamander, Western Spadefoot, Giant Gartersnake Site Assessment, Placer County – American Vineyard Village (2009). Mr. Stitt evaluated the American Vineyard Village site for suitable habitat for California tiger salamander (*Ambystoma californiense*), western spadefoot (*Spea hammondii*) and giant gartersnake and produced letter reports for the client.

Drum-Spaulding Hydroelectric Project (FERC No. 2266) and Yuba-Bear Hydroelectric Project (FERC No. 2310) Foothill Yellow-Legged Frog Study, Sierra, Nevada, & Placer counties – HDR as subconsultant to Nevada Irrigation District and Pacific Gas and Electric Company (2008 - 2009). Mr. Stitt conducted extensive surveys to document the presence, distribution, and habitat use of foothill yellow-legged frogs (*Rana boylii*) within the Middle Yuba, South Yuba, Bear, and North Fork of the North Fork American river drainages in support of the Federal Energy Regulatory Commission (FERC) relicensing of Pacific Gas & Electric Company's Drum-Spaulding and Nevada Irrigation District's Yuba-Bear hydroelectric projects. Field surveys included documentation of foothill yellow-legged frog life stages with GPS location information and data collection for all egg mass, tadpole, and post-metamorphic frog observations.

Riverview Development Project, Rancho Murrieta, El Dorado County —PCCP CSGF RB Fortfolio, LLC (2009 – 2010). Mr. Stitt conducted a California tiger salamander drift fence and pitfall trap survey around a potential breeding pond in Rancho Murrieta, California.

Yuba-Bear Hydroelectric Project (FERC No. 2310) Foothill Yellow-Legged Frog Study, Sierra, Nevada, & Placer counties – HDR as subconsultant to Nevada Irrigation District and Pacific Gas and Electric Company (2008 - 2009). Mr. Stitt conducted surveys to document the presence,

distribution, and habitat use of foothill yellow-legged frogs within American river drainages in support of Nevada Irrigation District's Yuba-Bear hydroelectric projects. Field surveys included documentation of foothill yellow-legged frog life stages with GPS location information and data collection for all egg mass, tadpole, and post-metamorphic frog observations.

Walltown Quarry, Sacramento County —Granite Construction (2008 – 2009). Mr. Stitt conducted biological resources surveys, and a protocol-level habitat assessment of potential California red-legged frog and California tiger salamander habitat on-site.

California Red-Legged Frog Surveys, Big Gun Mine, Placer County – Westervelt Ecological Services, Inc (2008 - 2009). Mr. Stitt conducted numerous protocol-level night surveys for the California red-legged frog (*Rana draytonii*) at an important relictual population in the Sierra Nevada.

Amphibian Assemblage Surveys, Pima County, Arizona—Pima County Conservation Commission (2006). Mr. Stitt performed amphibian surveys of the constructed wetlands at Kino Park, in southern Tucson.

Tarahumara frog reintroduction, Santa Rita Mountains, Santa Cruz County, Arizona—Arizona Game and Fish Department (2006). Mr. Stitt assisted Arizona Game and Fish Department on surveys for reintroduced Tarahumara frogs (*Rana tarahumarae*) in the Santa Rita Mountains of southern Arizona.

Black Wash Amphibian and Reptile Assemblage, Pima County, Arizona—Pima County Conservation Commission (2005). Mr. Stitt performed repeated monsoon season surveys for herpetofauna during a conservation assessment of Black Wash in western Tucson, Arizona.

Aquatic Herpetofauna Assemblage Parameters, Pima County, Arizona—The Rincon Institute and National Park Service (2004 – 2006). Mr. Stitt was primary investigator on a study evaluating the herpetofaunal community at middle Rincon Creek (Saguaro National Park) to determine potential effects of decreased surface- and groundwater availability. Methods included visual encounter surveys, radio-telemetry of Sonoran mud turtles (*Kinosternon sonoriense*), and several trap techniques. He employed .and mentored several students and received additional funding through grants.

Visitor Impacts to Chimenea Creek, Pima County, Arizona—The Rincon Institute and National Park Service (2004 – 2006). Mr. Stitt was lead investigator on a study of visitor impacts to biota of Chimenea Creek, an intermittent stream in Saguaro National Park's Rincon Mountains Unit. He supervised [illegible] biologists while conducting the work, conducted repeated visual encounter surveys for lowland leopard frog (*Rana yavapaiensis*), spadefoots (*Scaphiopus* sp.), canyon tree frog (*Hyla arenicolor*), and Sonoran Desert toad (*Bufo alvarius*).

Desert Monsoon Breeding Amphibians, Buenos Aries National Wildlife Refuge, Pima County, Arizona—USGS (2005). Mr. Stitt assisted with a USGS capture-mark-recapture study of monsoon breeding amphibians at Buenos Aires National Wildlife Refuge, Arizona.

***Nerodia* Working Group (2004 – ongoing).** Mr. Stitt is a member of a multi-agency (USGS, California Department of Fish and Wildlife, USFWS) coalition of biologists working to manage and eradicate introduced populations of watersnakes (*Nerodia* sp.) in California and other western states. Mr. Stitt coordinates with several agencies to schedule surveys, vet information, assess risk of invasions, and serve as a clearinghouse for information.

Barking Frog surveys, Cochise County, Arizona—US Army (2004). Mr. Stitt assisted with a radio-telemetry, mark, and recapture study of barking frogs (*Craugastor augusti*) on Fort Huachuca, in Cochise County, Arizona.

Southern Watersnake Study, Sacramento County (2003 - 2005). Mr. Stitt conducted a two year investigation funded by the Central Valley Project Improvement Act (CVPIA) studying Southern watersnakes (*Nerodia fasciata*) a non-native species documented by ECORP Consulting, Inc. as occurring in Folsom, California in the early 1990's. The two year study, initiated in 2001, involved an assessment of life history attributes and distribution as well as initial eradication efforts. Stitt employed various trapping techniques including modified minnow traps, coverboard arrays, and aquatic "mist nets," and used radio-telemetry to determine patterns of behavior and space use. Results of the study were summarized in a Final Report to the U. S. Fish and Wildlife Service, under Cooperative Agreement (11420-19XX-CMO2 titled *The Southern Watersnake (Nerodia fasciata) in Folsom, California: History, Population Attributes, and Relation to Other Introduced Watersnakes in North America (April 2005).*

Saguaro National Park, Tucson, Pima County, Arizona—National Park Service (2000 – 2005). Over a time-span of five years, Mr. Stitt assisted on a study of the effects of fire on the lowland leopard frog in the Rincon and Santa Catalina Mountains around Tucson, Arizona. To determine the status and distribution of lowland leopard frogs at Saguaro National Park's Eastern Unit, Mr. Stitt performed repeated surveys in drainages in the Rincon Mountains.

Creekside Greens, El Dorado County —Lennar Communities, LLC (1999). Mr. Stitt performed protocol-level surveys for California red-legged frog at the Creekside Greens Phase II site in El Dorado Hills.

Town Center West, El Dorado County —The Mansour Company (1999). Mr. Stitt performed protocol-level surveys for California red-legged frog, a preliminary wetland assessment, and SWPPP monitoring at this 1XX-acre development site in El Dorado Hills.

USFWS Kingsbury, Rush, and Waters (Plumas National Forest), Butte and Plumas counties – US Forest Service (1999 - 2000). Mr. Stitt was field lead and coordinator on extensive surveys with 6-8 biologists for mountain yellow-legged frog and California red-legged frog in more than 500 linear miles of streams and creeks on National Forest lands.

California Red-legged Frog Surveys, San Mateo County —Ox Mountain Landfill (1998). Mr. Stitt performed protocol-level surveys at Pilarcitos Creek in Half Moon Bay for the presence of the federally threatened California red-legged frog.

Dixon Naval Transmitting Station (DNTS), Yolo County —US Department of Defense and the University of Arizona (1998 – 1999). Mr. Stitt used visual encounter surveys and pitfall trapping to document amphibians and reptiles on-site. Mr. Stitt conducted monthly surveys for Western burrowing owl across the transmitting station, and documented an average of 40 burrowing owls per survey. Mr. Stitt performed weekly avian point-counts and seasonal nocturnal owl playback surveys across the transmitting station.

Concord Naval Weapons Station (CNWS), Contra Costa County —US Department of Defense and the University of Arizona (1997 – 1999). Mr. Stitt performed repeated, seasonal surveys, and used drift fences and pitfall traps for California tiger salamander (*Ambystoma californiense*) and California red-legged frog (*Rana draytonii*), documenting high numbers of each. Stitt trapped for the federally endangered salt marsh harvest mouse (*Reithrodontomys raviventris*) (5460 trap-nights of small mammal trapping) and to document small mammal diversity on the base.

ATTACHMENT B

California Natural Diversity Database Results

Rana draytonii

California red-legged frog

Element Code: AAABH01022

Status	NDDB Element Ranks	Other Lists
Federal: Threatened	**Global:** G2G3	**CDFG Status:** SC
State: None	**State:** S2S3	

Habitat Associations

General: LOWLANDS & FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.

Micro: REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT.

Occurrence No. 671 **Map Index:** 53199 **EO Index:** 53199

Occ Rank: Fair
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2003-10-21
Site: 2003-10-21

Record Last Updated: 2003-11-06

Quad Summary: Valley Springs (3812027/477A)

County Summary: Calaveras

Lat/Long: 38.21990° / -120.78496°
UTM: Zone-10 N4232533 E693903
Mapping Precision: SPECIFIC
Symbol Type: POLYGON
Area: 9.1 acres

Township: 04N
Range: 11E
Section: 08 **Qtr:** NW
Meridian: M
Elevation: 800 ft

Location: YOUNGS CREEK, 0.9 MILE UPSTREAM FROM THE CONFLUENCE WITH SPRING VALLEY CREEK, 2.5 MILES SE OF PARDEE RESERVOIR

Location Detail:

Ecological: HABITAT SURROUNDING THE SPRING-FED STREAM CONSISTS OF RIPARIAN AND GRAZED OAK/SAVANNA; STREAM SUBSTATE CONSISTS OF COURSE SEDIMENT (GRAVEL FROM ADJACENT ROAD), SAND, AND SILT, WITH A STREAM GRADIENT OF LESS THAN 1%.

Threat: THREATENED BY PROPOSED INFRASTRUCTURE IMPROVEMENTS AND URBANIZATION.

General: 3 ADULTS OBSERVED ON 21 OCT 2003.

Owner/Manager: PVT

Rana draytonii

California red-legged frog

Element Code: AAABH01022

Status	NDDB Element Ranks	Other Lists
Federal: Threatened	**Global:** G2G3	**CDFG Status:** SC
State: None	**State:** S2S3	

Habitat Associations

General: LOWLANDS & FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.

Micro: REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT.

Occurrence No. 609 **Map Index:** 50057 **EO Index:** 50057

Occ Rank: Good
Origin: Natural/Native occurrence
Presence: Presumed Extant
Trend: Unknown

Dates Last Seen
Element: 2002-11-18
Site: 2002-11-18

Record Last Updated: 2003-01-30

Quad Summary: Caldor (3812054/508C)
County Summary: El Dorado

Lat/Long: 38.53713° / -120.43970°
UTM: Zone-10 N4268521 E723155
Mapping Precision: SPECIFIC
Symbol Type: POINT
Radius: 80 meters

Township: 08N
Range: 14E
Section: 21 **Qtr:** NW
Meridian: M
Elevation: 4,200 ft

Location: SOPIAGO CREEK, 0.8 MILE NNW OF COOKS STATION, NORTH OF HIGHWAY 88
Location Detail: FROGS WERE LOCATED AT THE SITE OF AN OLD, DAM THAT HAD BURST.
Ecological: HABITAT CONSISTS OF WILLOW/ALDER RIPARIAN.
Threat: THREATENED BY THE LANDOWNERS PLANS TO REBUILD THE DAM.
General: 3 ADULTS OBSERVED ON 18 NOV 2002.
Owner/Manager: PVT

ATTACHMENT C

Pitt Street Bridge Habitat Assessment Datasheet

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: 4/17/14
(mm/dd/yyyy)

Site Assessment Biologists: Stitt Eric
(Last name) (first name) (Last name) (first name)

(Last name) (first name) (Last name) (first name)

Site Location: Pitt St. Bridge, Amador County - Jackson, Calif.
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: Pitt street Bridge Replacement project
Brief description of proposed action:
Replacement of Pitt street Bridge over Jackson creek, in Jackson, Ca.

1) Is this site within the current or historic range of the CRF (circle one)? YES NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES NO
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: _____ Maximum depth: _____

Vegetation: emergent, overhanging, dominant species: _____

Substrate: _____

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: _____

Appendix D.
California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: ~8m

Depth at bank full: 1.5 m

Stream gradient: gentle

Are there pools (circle one)? YES NO

If yes,

Size of stream pools: 6m X 6m (average size)

Maximum depth of stream pools: 1.0 m

Characterize non-pool habitat: run, riffle, glide, other: primarily a lotic feature - Narrow, with runs, glides, few riffles, constrained by emergent vegetation & hummocks

Vegetation: **emergent**, overhanging, **dominant species:** much emergent veg - primarily Carex barbarae, Hotens lanatus. streamside veg overhangs in places - Vinca and Rhubus -

Substrate: Cobble, Rock, bedrock, silty and slimy covering over everything, No interstitial spaces

Bank description: South bank is earth, somewhat natural, constrained and narrow, bordered by Hwy 88 and parking lots, North bank abrupt if present at all, constrained by buildings

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: Appears perennial - interviewed with resident indicates it dries approx every 5 years.

Other aquatic habitat characteristics, species observations, drawings, or comments:
Bullfrogs abundant throughout, and hundreds of tadpoles @ Ponded area @ mission Blvd. Crayfish present and abundant. Numerous fish - Trout and mosquitofish? one western terrestrial gartersnake observed -
Ideal breeding habitat lacking - deepwater ponded areas fringed w/ salix and earthen, undercut banks lacking. Exposed root balls, other edgewater refugia largely lacking. Study area tightly constrained by development, roads, buildings, parking lots etc.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs

Maps with important habitat features and species location

ATTACHMENT D

Representative Site Photographs

View of Jackson Creek looking southwest (downriver) toward Pitt Street Bridge, April 17, 2014. Notice dense emergent vegetation.

Another view of stream, looking southwest (downriver), April 17, 2014, showing *Carex* hummocks prevalent throughout creek. Deep water was generally lacking.

Jackson Creek showing detail of northern bank, constructed wall encroaching into creek.

View from streambed looking west (downstream) showing still, shallow water, development up to water's edge, and sparse tree canopy.

Another view of creek looking west- earthen bank on south side (constrained above the bank by Highway 88), concrete wall at northern edge.

Overview of representative section of Jackson Creek in the study area with Pitt Street Bridge in background.

Looking southwest in Jackson Creek nearer to Highway 49 showing buildings built into streambed of creek.

View east of Highway 88 bridge looking east (upstream).

Ponded area at eastern extent of study area showing ponded area. Water was deepest here, at approximately 1.0 m. American bullfrog (*Lithobates catesbeianus*) adults and tadpoles were abundant here.

Special-Status Plant Survey

Pitt Street Bridge Replacement Project

Amador County, California

Prepared For:

Development Impact, Inc.

July 22, 2014

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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Attachment C – Plant Species Observed On-Site (12 June 2014)

1.0 INTRODUCTION

At the request of Development Impact, Inc., ECORP Consulting, Inc. (ECORP) conducted a special-status plant survey for the approximately 0.397±-acre Pitt Street Bridge Replacement Biological Study Area (BSA) in Amador County, California. The purpose of this survey was to identify and map the locations of special-status plant species observed within the BSA.

1.1 Project Location

The BSA is located at the Pitt Street bridge crossing over Jackson Creek within the City of Jackson, approximately 0.25 mile (mi) east of Old Highway 49 and at the intersection of Pitt Street and Highway 88, in Amador County, California (Figure 1. *Project Location and Vicinity*). The BSA corresponds to a portion of Section 28, Township 6 North, and Range 11 East (MDBM) of the "Jackson, California" 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey (USGS) 1973). The approximate center of the BSA is located at 36° 20' 60" North and 120° 46' 15" West within the Upper Mokelumne Watershed (#18040012, USGS 1978).

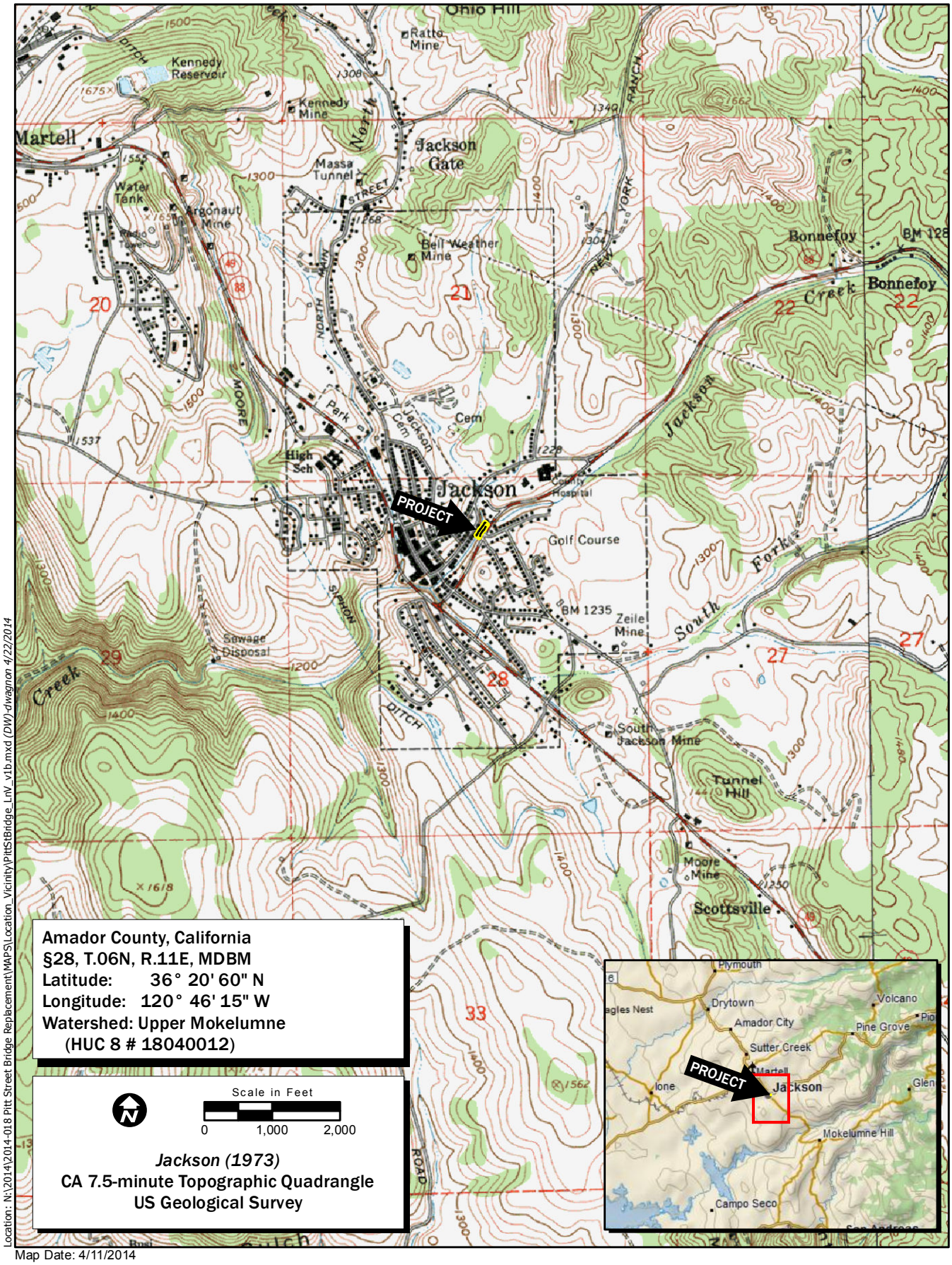
1.2 Definition of Special-Status Plant Species

For the purposes of this report, "special-status plants" are defined as plants that meet one or more of the following:

- Plants listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (FESA).
- Plants listed, proposed for listing, or candidates for future listing as threatened or endangered under the California Endangered Species Act (CESA).
- Plants that meet the definitions of endangered or rare under Section 15380 of the California Environmental Quality Act (CEQA) Guidelines.
- Plants listed as rare under the California Native Plant Protection Act (California Department of Fish and Game [CDFG] Code of California, Section 1900 et seq.).
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" [California Rare Plant Rank (CRPR) 1B and 2] (see Section 1.3).
- Plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4). CRPR 3 and 4 species are only included as "target-species" if it has been identified by local jurisdictions as having local significance or regional importance.

1.3 California Rare Plant Ranks

CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2014), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six ranks (i.e. CRPR). The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by the California Department of Fish



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Location_Vicinity\PittStBridge_LnV_v1b.mxd (DW)-dwagnon 4/22/2014

Map Date: 4/11/2014

Service Layer Credits: Copyright:© 2013 DeLorme

Figure 1. Project Location and Vicinity

Pitt Street Bridge Replacement

and Wildlife (CDFW) and the CNPS. The ranks are currently recognized in the California Natural Diversity Database (CNDDB). The following are definitions of the CNPS CRPR:

- CRPR 1A – presumed extirpated in California and either rare or extinct elsewhere;
- CRPR 1B – rare, threatened, or endangered in California and elsewhere;
- CRPR 2A – presumed extirpated in California, but more common elsewhere;
- CRPR 2B – rare, threatened, or endangered in California but more common elsewhere;
- CRPR 3 – a review list of plants about which more information is needed; and
- CRPR 4 – a watch list of plants of limited distribution.

Additionally, the CNPS has defined Threat Ranks that are added as part of the rank for plant species listed in the Inventory of Rare and Endangered Plants of California (CNPS 2014). Threat Ranks designate the level of threat on a scale of 0.1 through 0.3, with 0.1 being the most threatened and 0.3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat);
- Threat Rank 0.2 – Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) ; and
- Threat Rank 0.3 – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank, and differences in Threat Ranks do not constitute additional or different protection (CNPS 2014). Depending on the policy of the lead agency, substantial impacts to plants listed as CRPR 1A, 1B, or 2 (regardless of threat rank) are typically considered significant under CEQA Guidelines Section 15380. For CRPR 3 and 4 species (regardless of threat rank), significance under CEQA is typically evaluated if the lead agency has determined those plants to be of local significance or regional importance. Such plants may be identified in local Habitat Conservation Plans (HCPs) or City or County General Plans.

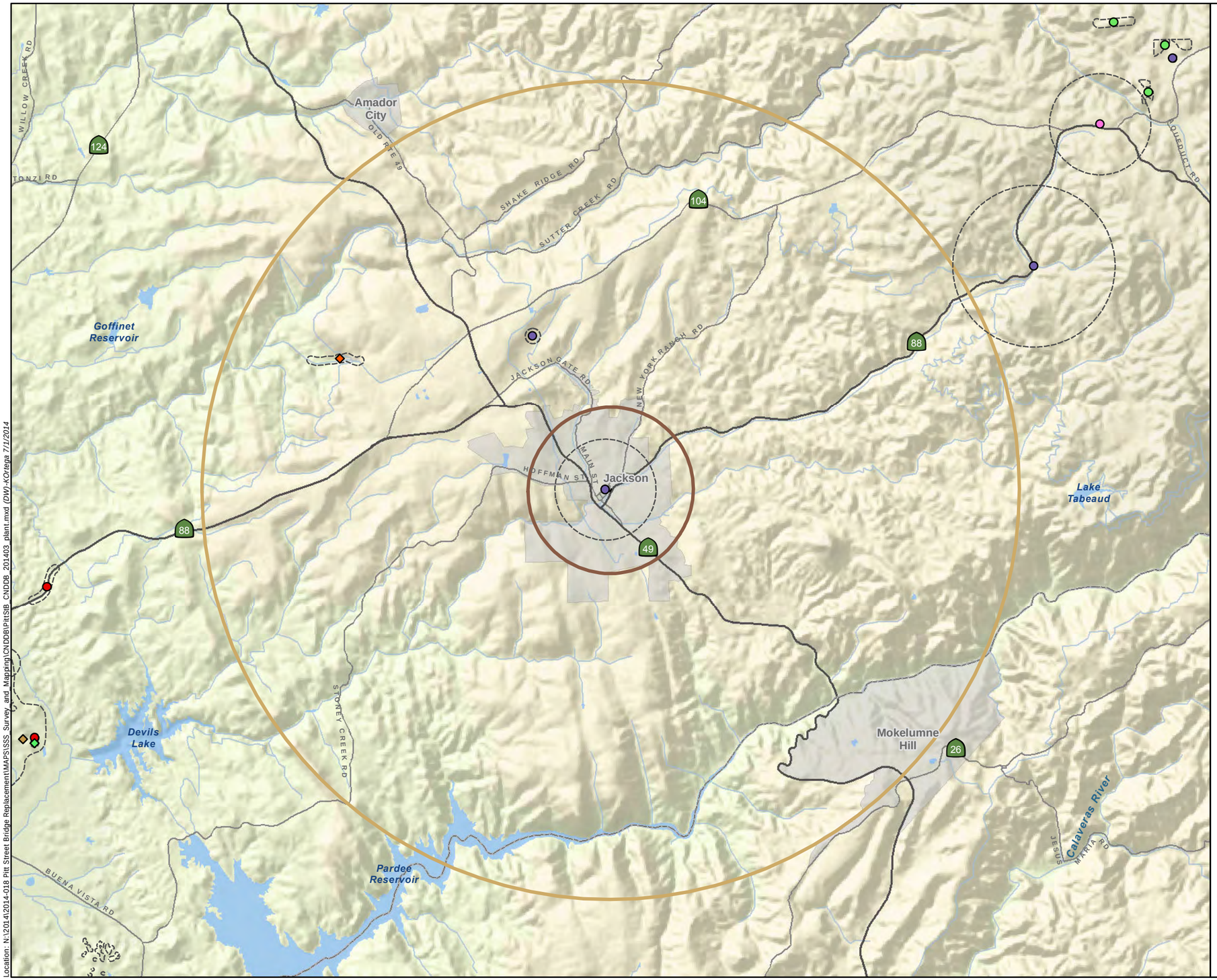
2.0 METHODS

2.1 Literature Review

Prior to conducting field surveys, background information was collected on the potential existence of special-status plants within or near the site from a variety of sources. This included a review of resource agency species lists, literature review, on-line database query, voucher specimen review, and reference population review. The following resources were used as part of the literature review:

- CDFW's CNDDB record search for the "Jackson, California" 7.5-minute quadrangle including a 5-mile radius around the site (CDFW 2014) (Figure 2. *California Natural Diversity Database Occurrences of Special-Status Plant Species*).
- CNPS's Inventory of Rare and Endangered Plants record search for the "Jackson, California" 7.5-minute quadrangle and the eight surrounding quadrangles (CNPS 2014).
- Species List for the "Jackson, California" 7.5-minute quadrangle created by the U.S. Fish and Wildlife Service (USFWS) (USFWS 2014).
- Soil Survey of the Amador Area, California (U.S. Department of Agriculture [USDA], Natural Resources Conservation Service [NRCS] 2014);
- Jurisdictional Delineation of Waters of the U.S. for the Pitt Street Bridge Replacement Project (ECORP 2014a); and
- Natural Environment Study for the Pitt Street Bridge Replacement Project (ECORP 2014b).

Figure 2.
CNDDB Occurrences of Special-Status Plant Species



Distance From Project

- 1 mile
- 5 miles

Boundaries

- Project Boundary [1]
- CNDDB Polygon Extent [2]

CNDDB Occurrences [2]

Plants

- Big-scale Balsamroot
- Bisbee Peak Rush-rose
- one Buckwheat
- one Man anita
- Parry s Horkelia
- Prairie Wedge rass
- Red Hills Soaproot
- Tuolumne Button-celery

This map may include multiple species' occurrences at each location, some of which may not be visible on this graphic. The CNDDB occurrences shown may not reflect the actual location of the occurrence.

**** Species occurrence is represented solely by a polygon. The centroid point is not visible within the map extents.***

[1] Project Boundary: ECORP (Approved by Caltrans)
[2] CDFW California Natural Diversity Database (CNDDB), Mar. 2014 Update (GIS Shapefile) CNDDB Occurrences Located on USGS 7.5' Quadrangles: Amador City, Ione, Jackson, Mokelumne Hill, Pine Grove.

Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\SS_Survey_and_Mapping\CNDDB\PittSB_CNDDB_201403_plant.mxd (DW)-KOrtega 7/1/2014

2014-018 Pitt Street Bridge Replacement

Miles
0 1 2

Map Date: 7/1/2014

2.2 Target Species

Based on the information listed above, knowledge of vegetation communities and conditions present within the BSA, and data on known species' distributions, a list of potentially occurring special-status plants (i.e., the "target" list) was developed. The target species list for this survey including the listing status, a brief habitat description, and bloom period for each species is shown in Table 1 (*Target List for Pitt Street Bridge Replacement Project*).

Table 1. Target List for Pitt Street Bridge Replacement Project

Common Name	Scientific Name	FESA Status	CESA Status	CRPR	Habitat Description	Bloom Period
Big-scale balsamroot	*Balsamorhiza macrolepis*	-	-	1B.2	Chaparral, cismontane woodland, Valley and foothill grasslands (300'-5100') (CNPS 2014).	March - June
Prairie wedge grass	*Sphenopholis obtusata*	-	-	2B.2	Mesic sites within cismontane woodland, meadows and seeps (985' – 6560') (CNPS 2014).	April - July
Sanford's arrowhead	*Sagittaria sanfordii*	-	-	1B.2	Marshes and swamps (assorted shallow freshwater) (0' - 2130') (CNPS 2014)	May - October

Status Codes:
1B - CRPR/Rare or Endangered in California and elsewhere.
2 - CRPR/Rare or Endangered in California, more common elsewhere.
0.2 - Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

2.2.1 Excluded Species

Based on the literature review and known site characteristics, certain species that are known to occur in the vicinity were excluded from this survey. Bisbee Peak rush-rose (*Crocanthemum suffrutescens*), Ione buckwheat (*Eriogonum apricum* var. *apricum*), Ione manzanita (*Arctostaphylos myrtifolia*), Parry's horkelia (*Horkelia parryi*), Red Hills soap root (*Chlorogalum grandiflorum*), and Tuolumne button-celery (*Eryngium pinnatisectum*) were not included as target species because suitable habitat types for these species, including chaparral, cismontane woodland, lower montane coniferous forest, and vernal pools do not occur within the site (CNPS 2014, ECORP 2014b).

2.3 Reference Site Visits

Reference populations for the target species were visited throughout the floristic season to assess bloom phenology and to observe species morphology. When reference populations were not available, mounted herbarium specimens were observed at the U.C. Davis Herbarium. Attachment A identifies the reference

source for each of the target species including the location of the population, dates of visits, and phenological stage of the species at the time of the field visits.

2.4 Field Survey

Field surveys were conducted in accordance with guidelines promulgated by USFWS (USFWS 2000), CDFG (CDFG 1983), and CNPS (CNPS 2014). The determinate-level field survey was conducted on 12 June 2014, which coincided with the optimum blooming period for each of the target species. ECORP botanist Clay DeLong walked meandering transects throughout the BSA to ensure complete coverage of all suitable habitat for all target species. A list of field personnel qualifications is included as Attachment B.

Throughout the survey, a complete plant list of all plants observed within the Project site was generated. All species were identified to the lowest possible taxonomic level, which allows rarity to be determined. Plant species identification, nomenclature, and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin *et al.* 2012). Vegetation community classification was based on the classification systems presented in *A Manual of California Vegetation* (Sawyer *et al.* 2009), *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), and *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer Jr. 1988).

3.0 RESULTS AND DISCUSSION

3.1 Existing Site Conditions

The BSA is comprised of gently sloping terrain along the banks and floodplain of Jackson Creek, and is located at an elevation range of approximately 1,190 feet to 1,200 feet above mean sea level. The BSA is dominated by emergent wetland vegetation growing in and along the fringes of Jackson Creek. Annual grassland dominates the sloped upland portions of the BSA, and a narrow band of ruderal areas border Pitt Street Bridge and Highway 88.

3.1.1 Emergent Wetland

The majority of the BSA is characterized by emergent wetland vegetation in and adjacent to the channel of Jackson Creek. The vegetated areas within the creek channel are dominated by a mixture of native aquatic species including broad-leaf cattail (*Typha latifolia*), Santa Barbara sedge (*Carex barbarae*), and rice cutgrass (*Leersia oryzoides*). The areas outside the channel but within the immediate floodplain of Jackson Creek are dominated by red willow (*Salix laevigata*), California wild grape (*Vitis californica*), sweet pea (*Lathyrus latifolius*), field horsetail (*Equisetum arvense*), and velvet grass (*Holcus lanatus*).

3.1.2 Annual Grassland

The upland slopes of the BSA are characterized by annual grassland, which is comprised almost entirely of non-native annual species. The dominant species include grasses such as ripgut brome (*Bromus diandrus*) and hedgehog dog-tail grass (*Cynosurus echinatus*), and forbs such as corn poppy (*Papaver rhoeas*), and prickly lettuce (*Lactuca serriola*).

3.1.3 Ruderal

A narrow band of ruderal vegetation exists on the relatively flat, sandy fringes of Highway 88, concentrated around the junction with Pitt Street Bridge. This community is dominated by non-native species including black mustard (*Brassica nigra*), ripgut brome, and spotted spurge (*Chamaesyce maculata)*.

3.1.4 Potential Waters of the U.S.

A wetland delineation was conducted at the site in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). Potential Waters of the U.S. mapped on-site include Jackson Creek and its adjacent floodplain (Figure 3. *Potential Waters of the U.S.*) (ECORP 2014). Dominant plants observed in the creek and floodplain are discussed in Section 3.1.1.

3.1.5 Soils

According to the Soil Survey of the Amador Area, California (USDA, NRCS 2014), one soil unit, or type, has been mapped within the site (Figure 4. *Natural Resources Conservation Service Soil Types*): Placer diggings and Riverwash. This soil unit consists of listed hydric components, or contains hydric inclusions, and is considered to be frequently flooded for long or very long duration during the growing season (USDA, NRCS 2007).

3.2 Previously Documented Special-Status Plant Occurrences

There are no previously documented occurrences of special-status plants within the BSA according to the CNDDB (CDFW 2014). However, several special-status plant species occurrences have been documented within an approximate 5-mile radius of the site (see Figure 2). All of these species were considered target species unless excluded as discussed in Section 2.2.1.

3.3 Target Species

3.3.1 Big-scale Balsamroot

Big-scale balsamroot (*Balsamorhiza macrolepis*) is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 1B species. This species is a herbaceous perennial that occurs in chaparral, cismontane woodlands, valley and foothill grasslands, and occasionally on serpentine soils (CNPS 2014). Big-scale balsamroot blooms from March through June, and is known to occur at elevations ranging from 300 to 5,100 feet above mean sea level (CNPS 2014). Big-scale balsamroot is endemic to California, and the current range of this species includes Alameda, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Solano, Sonoma, Tehama, Tuolumne counties (CNPS 2014).

One occurrence of big-scale balsamroot has been reported within 5 miles of the BSA (CDFW 2014). The annual grasslands throughout the BSA support suitable habitat for this species. During the survey in 2014, big-scale balsamroot was not observed on-site.

Figure 3.
Potential Waters of the U.S.

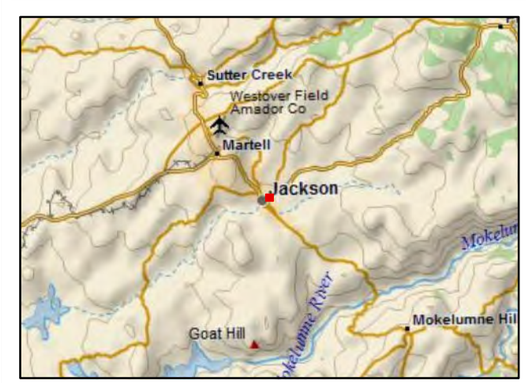
Map Features

Biological Study Area[1] - 0.□97 ac.

Other Waters of the U.S.[2] - 0.246 ac.

[1] ***Boundary Source: ECORP Consulting, Inc. and City of Jackson***

[2] *Subject to U.S. Army Corps of Engineers verification*
This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.



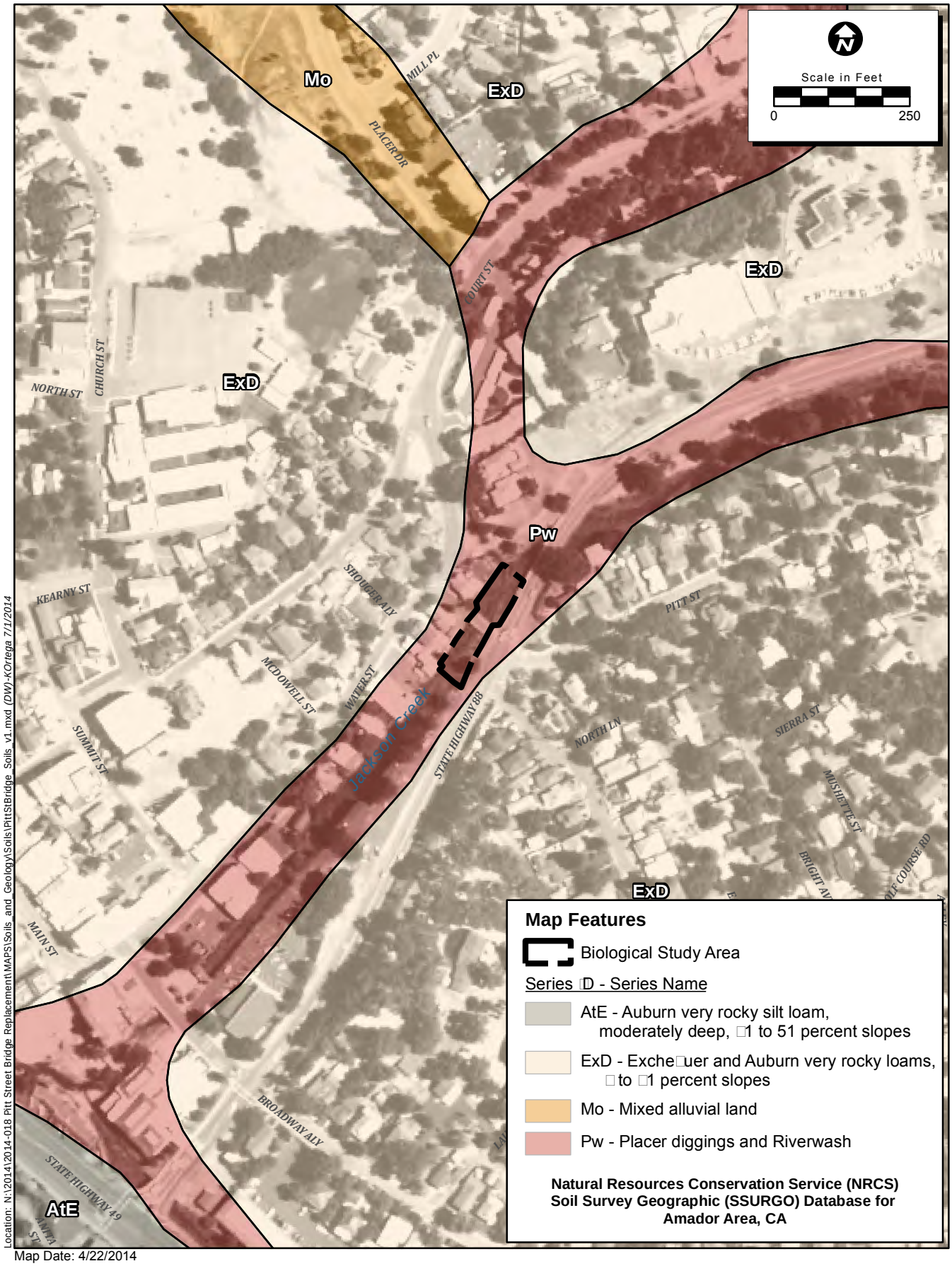
Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Wetland_Mapping\Wetland_Delineation\v2\PittStB_WDv2_11x17.mxd (DW)-KOrtega 7/1/2014

Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *7/1/2014*)

Map Date: 5/19/2014
Delineator: T. Scofield
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Soils_and_Geology\Soils\PittStBridge_Soils_v1.mxd (DW)-KOrtega 7/1/2014

Map Date: 4/22/2014
Photo Source: NAIP 2012

Figure 4. Natural Resources Conservation Service Soil Types

Pitt Street Bridge Replacement

3.3.2 Prairie Wedge Grass

Prairie wedge grass (*Sphenopholis obtusata*) is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 2B species. This species is an herbaceous perennial that occurs in mesic areas in cismontane woodland, meadows, and seeps (CNPS 2014). Prairie wedge grass blooms from April through July, and it is known to occur at elevations ranging from 958 to 6,560 feet above mean sea level (CNPS 2014). The current range of this species in California includes Amador, Fresno, Inyo, Mono, Riverside, San Bernardino, San Diego, Stanislaus, and Tulare counties (CNPS 2014). However, distribution or identity is uncertain in San Diego County.

Two occurrences of prairie wedge grass have been reported within 5 miles of the BSA (CDFW 2014). The mesic areas adjacent to Jackson Creek on-site support marginally suitable habitat for this species. During the survey in 2014, prairie wedge grass was not observed on-site.

3.3.3 Sanford's Arrowhead

Sanford's arrowhead (*Sagittaria sanfordii*) is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 1B species. This species is a rhizomatous, herbaceous perennial that occurs in shallow marshes and freshwater swamps (CNPS 2014). Sanford's arrowhead blooms from May through October, and it is known to occur at elevations ranging from sea level to 2,130 feet above mean sea level (CNPS 2014). Sanford's arrowhead is endemic to California, and the current range of this species includes Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, San Bernardino, San Joaquin, Shasta, Solano, Tehama, and Ventura counties (CNPS 2014). However, this species is believed to be extirpated from Orange and Ventura counties.

While no documented occurrence of Sanford's arrowhead have been reported within 5 miles of the BSA, (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The areas with emergent vegetation on-site in the channel of Jackson Creek support suitable habitat for this species. During the survey in 2014, Sanford's arrowhead was not observed on-site.

3.4 Field Survey Results

No special-status plants were observed within the BSA during the determinate-level field survey conducted on 12 June 2014. A complete list of plant species encountered during this survey is included as Attachment C.

4.0 CONCLUSION

ECORP conducted a determinate-level special-status plant survey for the Pitt Street Bridge Replacement site in Amador County, California on 12 June 2014. The target special-status plant species for this survey were big-scale balsamroot, prairie wedge grass, and Sanford's arrowhead. No special-status plants were observed on-site during the 2014 field surveys.

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LIST OF ATTACHMENTS

Attachment A – Target Species Reference Source

Attachment B – Statement of Qualifications

Attachment C – Plant Species Observed On-Site (12 June 2014)

ATTACHMENT A

Target Species Reference Source

Target Species Reference Source				
Name	**Location of Observation**	**Dates of Observation**	**Phenology**	**Remarks**
Big-scale balsamroot *Balsamorhiza macrolepis*	UC Davis Herbarium	11 June 2014	Mounted herbarium specimens.	Reference population not available.
Prairie Wedge Grass *Sphenopholis obtusata*	UC Davis Herbarium	11 June 2014	Mounted herbarium specimens.	Reference population not available.
Sanford's arrowhead *Sagittaria sanfordii*	Antelope Station Park, Sacramento County	11 June 2014	Several flowering plants were observed.	Distinctive triangular stems were noted.

ATTACHMENT B

Statement of Qualifications

<u>Clay DeLong B.S.</u>
Assistant Biologist, ECORP Consulting, Inc.

Clay DeLong is a botanist/biologist and trained wetland delineator specializing in special-status species surveys, general floristic surveys, and biological monitoring. Mr. DeLong has six years of professional experience conducting floristic surveys, including surveys for special-status plants throughout Northern and Central California. His botanical expertise extends throughout the Central Valley, Coast Ranges, and the Sierra Nevada, with an emphasis on vernal pool, annual grassland, oak woodland, and coniferous forest communities.

ATTACHMENT C

Plant Species Observed On-Site (12 June 2014)

Pitt Street Bridge Replacement: Plant Species Observed On-Site (12 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
ALISMATACEAE	**WATER-PLANTAIN FAMILY**
Alisma triviale	Broad-leaf water plantain
APIACEAE	**CARROT FAMILY**
*Conium maculatum**	Poison-hemlock
*Foeniculum vulgare**	Sweet fennel
*Torilis arvensis**	Torilis (hedge parsley)
APOCYNACEAE	**DOGBANE FAMILY**
*Vinca major**	Periwinkle
ARALIACEAE	**IVY FAMILY**
*Hedera helix**	English ivy
ASTERACEAE	**SUNFLOWER FAMILY**
Agoseris grandiflora	Giant mountain dandelion
Artemisia douglasiana	Mugwort
*Carduus pycnocephalus**	Italian thistle
*Lactuca serriola**	Prickly lettuce
*Silybum marianum**	Milk thistle
*Sonchus asper**	Prickly sowthistle
*Sonchus oleraceus**	Common sowthistle
*Taraxacum officinale**	Common dandelion
BETULACEAE	**BIRCH FAMILY**
Alnus rhombifolia	White alder
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	Black mustard
Nasturtium officinale	Water cress
CRASSULACEAE	**STONECROP FAMILY**
*Sedum album**	White stonecrop
CYPERACEAE	**SEDGE FAMILY**
Carex barbarae	Santa Barbara sedge
Cyperus eragrostis	Tall flatsedge

Pitt Street Bridge Replacement: Plant Species Observed On-Site (12 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
EQUISETACEAE	**HORSETAIL FAMILY**
Equisetum arvense	Field horsetail
EUPHORBIACEAE	**SPURGE FAMILY**
*Chamaesyce maculata**	Spotted spurge
Croton setigerus	Turkey mullein
*Euphorbia oblongata**	Eggleaf spurge
FABACEAE	**LEGUME FAMILY**
*Lathyrus latifolius**	Sweet pea
*Trifolium dubium**	Shamrock clover
*Trifolium hirtum**	Rose clover
*Vicia villosa**	Winter vetch
FAGACEAE	**OAK FAMILY**
Quercus lobata	Valley oak
GERANIACEAE	**GERANIUM FAMILY**
*Erodium cicutarium**	Filaree
*Geranium dissectum**	Cut-leaved geranium
IRIDACEAE	**IRIS FAMILY**
*Iris sp.**	Cultivated iris
JUGLANDACEAE	**WALNUT FAMILY**
Juglans californica	California black walnut
LAMIACEAE	**MINT FAMILY**
*Mentha spicata**	Spearmint
*Mentha x. piperita**	Peppermint
Stachys stricta	Hedge-nettle
ONAGRACEAE	**EVENING PRIMROSE FAMIL**
Epilobium ciliatum	Hairy willow-herb
Epilobium densiflorum	Dense-flower spike primrose

Pitt Street Bridge Replacement: Plant Species Observed On-Site (12 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
PAPAVERACEAE	**POPPY FAMILY**
Eschscholzia californica	California poppy
*Papaver rhoeas**	Corn poppy
PLANTAGINACEAE	**PLANTAIN FAMILY**
*Kickxia elatine**	Sharp-leaved fluellin
*Plantago lanceolata**	English plantain
POACEAE	**GRASS FAMILY**
*Avena sp.**	Wild oat
Bromus carinatus	California brome
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft brome
*Cynodon dactylon**	Bermuda grass
*Cynosurus echinatus**	Hedgehog dog-tail grass
*Dactylis glomerata**	Orchard grass
*Holcus lanatus**	Velvet grass
*Hordeum murinum**	Barley
Leersia oryzoides	Rice cutgrass
*Paspalum dilatatum**	Dallis grass
*Polypogon monspeliensis**	Annual rabbit-foot grass
POLYGONACEAE	**BUCKWHEAT FAMILY**
Persicaria hydropiperoides	Swamp smartweed
*Rumex crispus**	Curly dock
*Rumex pulcher**	Fiddle dock
ROSACEAE	**ROSE FAMILY**
*Rubus armeniacus**	Himalayan blackberry
RUBIACEAE	**MADDER FAMILY**
Galium aparine	Goose grass
SALICACEAE	**WILLOW FAMILY**
Salix laevigata	Red willow

Pitt Street Bridge Replacement: Plant Species Observed On-Site (12 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
SCROPHULARIACEAE	**FIGWORT FAMILY**
*Verbascum blattaria**	Moth mullein
TYPHACEAE	**CATTAIL FAMILY**
Typha latifolia	Broad-leaf cattail
URTICACEAE	**NETTLE FAMILY**
Urtica dioica	Stinging nettle
VITACEAE	**GRAPE FAMILY**
*Parthenocissus quinquefolia**	Virgina creeper
Vitis californica	California wild grape

Wetland Delineation

For

Pitt Street Bridge Replacement

Amador County, California

Federal Aid Number: BRL0 5141 (018)

8 September2014

Prepared by:

City of Jackson

33 Broadway

Jackson, California 95642

I approve this document to be submitted to the U.S. Army Corps of Engineers

_____ _____

Signature Date

Prepared For:

Caltrans

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Pitt Street Bridge Replacement

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1.0 INTRODUCTION

A wetland delineation was conducted for f the 0.397-acre (ac) Biological Study Area (BSA), centered at the Pitt Street bridge crossing over Jackson Creek within the City of Jackson, approximately 0.25 mile (mi) east of Old Highway 49 and at the intersection of Pitt Street and Highway 88, in Amador County, California (Figure 1. *Project Location and Vicinity*). The BSA includes the existing Pitt Street Bridge, portions of Jackson Creek and its floodplain, adjacent grassland on the creek channel slopes, and abuts several private parcels adjacent to Pitt Street and Jackson Creek (Figure 2. *Biological Study Area Map*). The site corresponds to Section 28, Township 6 North, and Range 11 East [(Mount Diablo Base and Meridian (MDBM)] of the "Jackson, California" 7.5-minute quadrangle United States Geological Survey (USGS) topographic quadrangle (U.S. Department of the Interior, Geological Survey 1973), and is within the Upper Mokelumne River Watershed (HUC 8# 18040012, U.S. Department of Interior, Geological Survey 1978).

This report describes potential Waters of the United States, including wetlands, identified within the site that may be regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. The information presented in this report provides data required by the USACE Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (USACE 2001). The potential Waters of the U.S. boundaries depicted in this report represent a calculated estimation of the jurisdictional area within the site, and are subject to potential modification following the USACE verification process.

1.1 Existing Site Conditions

The Pitt Street Bridge is located in a residential area of Jackson and provides one-way vehicular traffic and pedestrian access over Jackson Creek to State Route 88. The Pitt Street Bridge was constructed in 1925 and has not been updated. It is currently classified as structurally deficient for vehicle use and has no designated sidewalks. The existing bridge structure consists of a single-span steel Pratt pony truss with timber decking on steel floor beams supported by masonry abutments. The current bridge and associated features are eligible for listing on the National Register of Historic Places and the City desires to retain the bridge for pedestrian use

at a location as yet to be determined. The replacement bridge would be a similar profile, single-span bridge that would provide one 10-foot traffic lane, two 3-foot shoulders, a 6-foot separated sidewalk and concrete barriers. The proposed structure would be 53-feet long by 32-feet wide and would remain a one-way access for State Route 88.

The project is located in the Northern Sierra Nevada Foothills District of the Sierra Nevada floristic region of California (*The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin, et. al., *ed.* 2012). The approximate 0.397-ac BSA includes aquatic and upland habitat types including Jackson Creek and its floodplain and non-native annual grasslands located on the upper slopes along the south side of Jackson Creek. In addition, ruderal/disturbed areas associated with the bridge structure occur within the BSA.

Approximately 0.246-ac of Other Waters of the U.S. occurs within the BSA, and includes the perennial flows of Jackson Creek and adjacent emergent wetlands located along the stream margins of Jackson Creek. The dominant vegetation found within and along the fringes of Jackson Creek supports several herbaceous wetland plants species including Santa Barbara sedge (*Carex barbarae*), broad-leaf cattail (*Typha latifolia*), Italian ryegrass (*Festuca perennis*), velvet grass (*Holcus lanatus*), and horsetail (*Equisetum arvense*). Several clumps of recently cut red willow shrubs (*Salix laevigata*) were observed along the stream margin. Jackson Creek is largely vegetated within the BSA, however, unvegetated open water areas caused by depth and scouring effects of flowing water occurs in the BSA as well.

The site is situated at an elevational range of approximately 1,190 to 1,200 ft above mean sea level. The region is characterized by a Mediterranean climate with mild to moderately cold, wet winters, and hot, dry summers. Average annual temperatures range from 52-62 degrees (°) Fahrenheit (F) with a winter record low temperature of 17° F and summer high temperatures reaching over 100° F. Annual precipitation in the City is approximately 33.71 in (Caltrans 2012) and primarily falls in the form of rainfall, with very little snowfall.

The wetland delineation was conducted in early spring, prior to plant species blooming, but most were still identifiable to species. The most recent precipitation events prior to the field work were heavy rain storms that occurred 2 and 3 days before the initial field survey (March

31 and April 1, 2014). As such, observed flows were moderate to high with evidence of recent higher flows (e.g., debris lines, vegetation matting, and scouring). National Wetlands Inventory data/maps were not available for the project area.

According to the *Soil Survey of Amador County, California* (U.S. Department of Agriculture, Soil Conservation Service Amador Area 2012), one soil unit, or type, has been mapped within the BSA: (Pw) Placer diggings and Riverwash (Figure 3. *Natural Resources Conservation Service Soil Types*).

Jackson Creek is a tributary of the greater San Joaquin River basin. The proposed project is located within the Upper Mokelumne River Watershed (USGS 1978), and the Mokelumne River is a tributary of the San Joaquin River. The network of streams that collectively drain to the San Joaquin and Sacramento Rivers convene to form the Sacramento-San Joaquin Delta, which eventually drains into the San Francisco Bay and ultimately the Pacific Ocean. Approximately 5.5 miles downstream of the project, Jackson Creek flows into Lake Amador.

2.0 METHODS

A wetland delineation was conducted by qualified senior biologist, Tom Scofield, on 3 April 2014. Supplementary wetland data was collected by qualified senior biologist, Eric Stitt, on 12 April 2014. The wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Region Supplement) (USACE 2008). The boundaries of potential Waters of the U.S. were delineated through aerial photograph interpretation and standard field methods (i.e., paired data set analyses), and all wetland data were recorded on Arid West Region - Wetland Determination Data Forms. Potential Waters of the U.S., including wetlands, were mapped in the field using a global positioning system (GPS) unit capable of submeter accuracy (e.g., Trimble GeoXT) and/or georectified aerial photography. A color aerial photograph (1”=100’ scale, NAIP 2009) was used to assist with mapping and field verification. *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990) and the *Soil Survey of Amador County* (USDA-NRCS 2012) were used to aid in identifying hydric soils in the field. *The Jepson Manual: Vascular*

Plants of California, Second Edition (Baldwin, et. al., *ed.* 2012) was used for plant nomenclature and identification. The potential Waters of the U.S. discussed in this report represent a calculated estimation of the jurisdictional area within the BSA, and are subject to modification following the USACE verification process.

During the field surveys, Mr. Scofield walked the entire BSA to determine the location and extent of potential Waters of the U.S. Two paired data point locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported a determination of wetland or non-wetland status. At each paired location, one point was located within the estimated jurisdictional area, and the other point was situated outside the limits of the estimated jurisdictional area. The total area of jurisdictional area within the site was recorded in the field using GPS.

2.1 Waters Of The United States

This report describes potential Waters of the U.S., including wetlands, which may be regulated by the USACE under Section 404 of the Clean Water Act. Wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 CFR 328.3(b), 51 FR 41250, November 13, 1986]. Wetlands can be perennial or intermittent, and isolated or adjacent to other waters.

Other waters are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses [33 CFR 328.3(a), 51 FR 41250, November 13, 1986]. The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the "ordinary high water mark". The ordinary high water mark is defined as the "line on the shore established by the fluctuations of water and indicated by physical characteristics such as 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" [33 CFR 328.3(e), 51 FR 41250, November 13, 1986]. The bank-to-bank extent of the channel that contains the water-flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of USACE

jurisdiction. The upstream limits of other waters are defined as the point where the ordinary high water mark is no longer perceptible.

2.2 Routine Determinations

To be determined a wetland, the following three criteria should be met:

- A majority of dominant vegetation species are wetland associated species;
- Hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season; and
- Hydric soils are present.

2.2.1 Vegetation

Hydrophytic vegetation is defined as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanent or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). The definition of wetlands includes the phrase “a prevalence of vegetation typically adapted for life in saturated soil conditions.” Prevalent vegetation is characterized by the dominant plant species comprising the plant community (Environmental Laboratory 1987). The dominance test is the basic hydrophytic vegetation indicator and was applied at each data point location. The “50/20 rule” was used to select the dominant plant species from each stratum of the community. The rule states that for each stratum in the plant community, dominant species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprise 20 percent or more of the total cover in the stratum (HQUSACE 1992, U.S. Army Corps of Engineers 2010).

Dominant plant species observed at each data point were then classified according to their indicator status (probability of occurrence in wetlands) (Table 1), in accordance with the U.S. Fish and Wildlife Service's (USFWS) National List of Vascular Plant Species That Occur in

Wetlands: California (Region 0) (Lichvar 2012). If the majority (greater than 50 percent) of the dominant vegetation on a site are classified as obligate (OBL), facultative wetland (FACW), or facultative (FAC), then the site was considered to be dominated by hydrophytic vegetation. Pursuant to the Western Mountains Supplement, plus (+) and minus (-) modifiers were not used (e.g., FAC-, FAC, and FAC+ plants are all considered to be FAC). Plant species not listed in Reed 1988 were assumed to be upland (UPL) species.

Table 1 – Classification of Wetland-Associated Plant Species[1]

Plant Species Classification	Abbreviation	Probability of Occurring in Wetland
Obligate	OBL	>99%
Facultative Wetland	FACW	66-99%
Facultative	FAC	33-66%
Facultative Upland	FACU	1-33%
Upland	UPL	<1%
No indicator status	NI	Insufficient information to determine status
Plants That Are Not Listed (assumed upland species)	NL	Does not occur in wetlands in any region

[1] Source: Lichvar 2012

2.2.2 Soils

A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA-NRCS 2003). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, and redox depressions.

Where possible, soil pits were excavated to the depth needed to document an indicator, to confirm the absence of indicators, or until refusal at the data point. The soil was then examined for hydric soil indicators. Soil colors were determined while the soil was moist using the *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990). Alluvial soils associated with Jackson Creek were described where pits could not be excavated.

2.2.3 Hydrology

Wetlands, by definition, are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Primary indicators of wetland hydrology include, but are not limited to: visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks, drift deposits, and sediment deposits. The occurrence of one primary indicator is sufficient to conclude that wetland hydrology is present. If no primary indicators are observed, two or more secondary indicators are required to conclude wetland hydrology is present. Secondary indicators include, but are not limited to: drainage patterns, frost-heave hummocks, FAC-neutral test, and shallow aquitard. The occurrence of at least one primary indicator or two secondary indicators is required to confirm the presence of wetland hydrology.

3.0 RESULTS

A total of 0.246-ac of potential Waters of the U.S. was mapped within the BSA (Figure 4. *Wetland Delineation Map*). These include areas associated with Jackson Creek and the adjacent floodplain of Jackson Creek within the estimated ordinary high water mark (OHWM). The estimated OHWM was defined in the field based on a visible and definable line between hydrophytic and upland vegetation and three-parameter wetland data point data which supported this boundary line (Figure 4). Other indicators included bank shelving and debris lines along the estimated OHWM boundary line. These acreages represent a calculated estimation of the jurisdictional area within the BSA, and are subject to modification following the USACE verification process.

The wetland determination data forms are included in Attachment A, and a list of plant species observed on-site is included in Attachment B. A discussion of the wetlands and other waters is presented below, and a wetland delineation map is presented in Figure 4.

3.1 Other Waters

3.1.1 Perennial Creek (Jackson Creek and Adjacent Floodplain)

Approximately 0.246-ac of Waters of the U.S., which include open water portions of Jackson Creek and emergent wetland vegetation in the adjacent floodplain, occurs within the BSA (Figure 4). For the purposes of this delineation, Jackson Creek is identified by the presence of a solid blue-line feature on the "Jackson, California" 7.5-minute quadrangle (USGS 1962). The limits of this feature were delineated at the OHWM primarily by visible shifts in vegetation (described above), but also included water marks, scouring, sediment deposits, and drift deposits. Within the delineated OHWM, Jackson Creek is comprised of both open water and emergent wetland vegetation. Vegetation observed within the OHWM includes Santa Barbara sedge (*Carex barbareae*), Baltic rush (*Juncus balticus*), broadleaf cattail (*Typha latifolia*), horsetail (*Equisetum arvense*), Himalayan blackberry (*Rubus armeniacus*), common velvet grass (*Holcus lanatus*), and clumps of recently cut red willow (*Salix laevigata*).

3.2 Hydrology

Each of the wetland study points had primary indicators of wetland hydrology, including inundation and/or saturation found in association with the primary hydrologic feature within the BSA - Jackson Creek. Jackson Creek has been altered by past mining practices and modifications to its floodplain (i.e., bank modifications, flood walls, and bridge abutments).

3.3 Soils

The substrate observed at wetland study point location 1 was located on a combination of boulder, cobble, gravel, sand, and silty substrate along the active stream channel of Jackson Creek. Wetland study point location 3 was located in the floodplain of Jackson Creek upslope of the active stream channel. Observed soils at this location exhibited low chroma color values in sandy-gravelly soils with redox depressions, which are indicative of wetland soils.

4.0 CONCLUSION / JURISDICTIONAL ASSESSMENT

Pursuant to the U.S. Environmental Protection Agency (USEPA) and USACE memorandum regarding Clean Water Act jurisdiction, issued following the United States Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to as *Rapanos*), the agencies will assert jurisdiction over the following waters: "traditionally navigable" waters (TNW), all wetlands adjacent to TNWs, non-navigable tributaries of TNWs that are "relatively permanent" (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally), and wetlands that directly abut such tributaries (USEPA and USACE 2007).

Jackson Creek is a relatively permanent feature and a tributary to the Mokelumne River. The Mokelumne River downstream of the project has been identified by the USACE Sacramento District as a navigable water. Pursuant to the USEPA and USACE memorandum regarding Clean Water Act jurisdiction following the *Rapanos* decision (USEPA and USACE 2007), the agencies will assert jurisdiction over relatively permanent waters that are tributary to navigable waters, and wetlands that abut such waters. Therefore, the USACE is likely to assert jurisdiction over the waters on-site.

A total of 0.246-ac of potential Waters of the U.S. was mapped within the BSA. These acreages represent a calculated estimation of the jurisdictional area within the site, and are subject to modification following the USACE verification process. Fill within jurisdictional features would require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.

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LIST OF FIGURES

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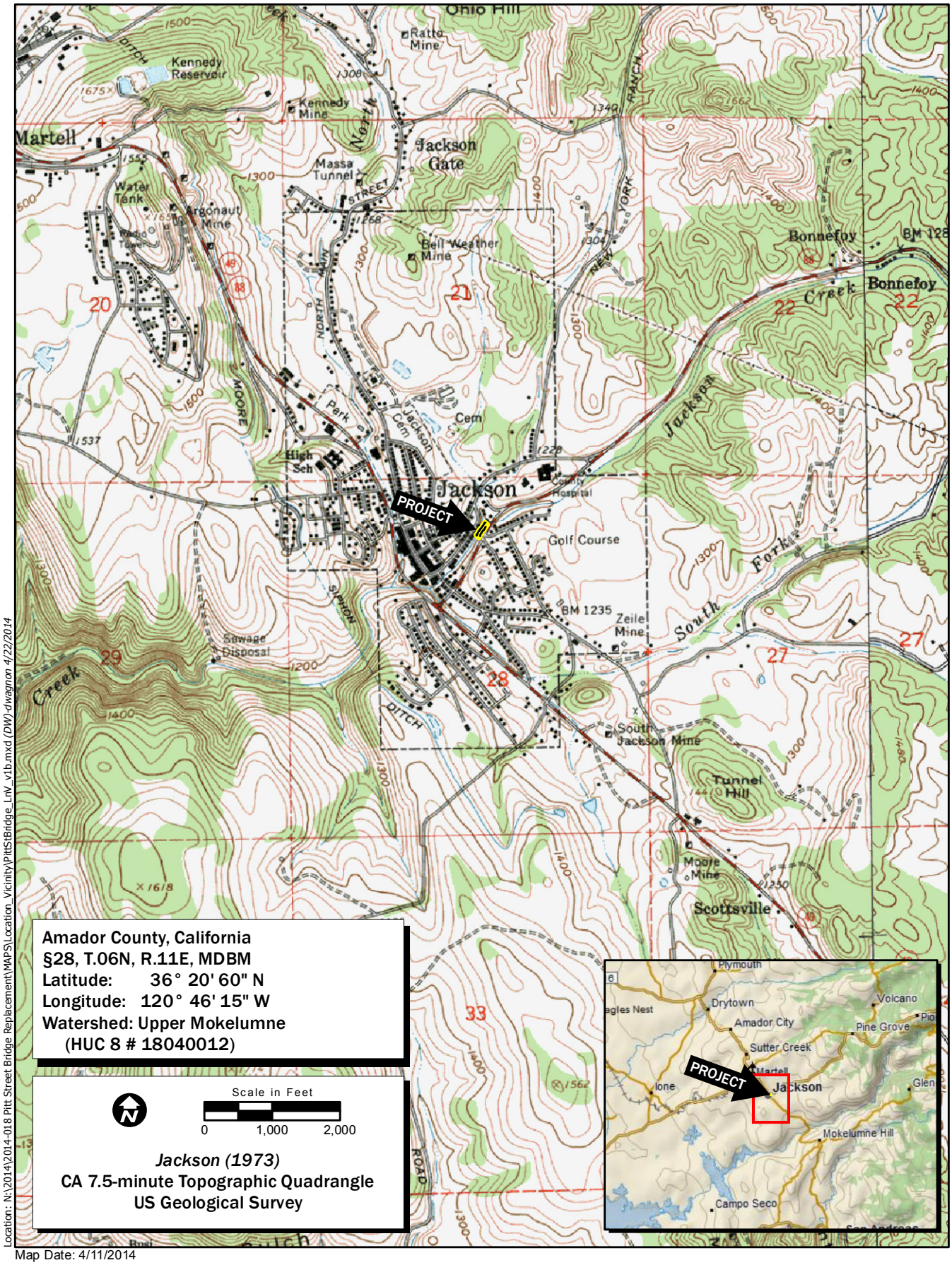

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Map Date: 4/11/2014

Service Layer Credits: Copyright:© 2013 DeLorme

Figure 1. Project Location and Vicinity

Pitt Street Bridge Replacement

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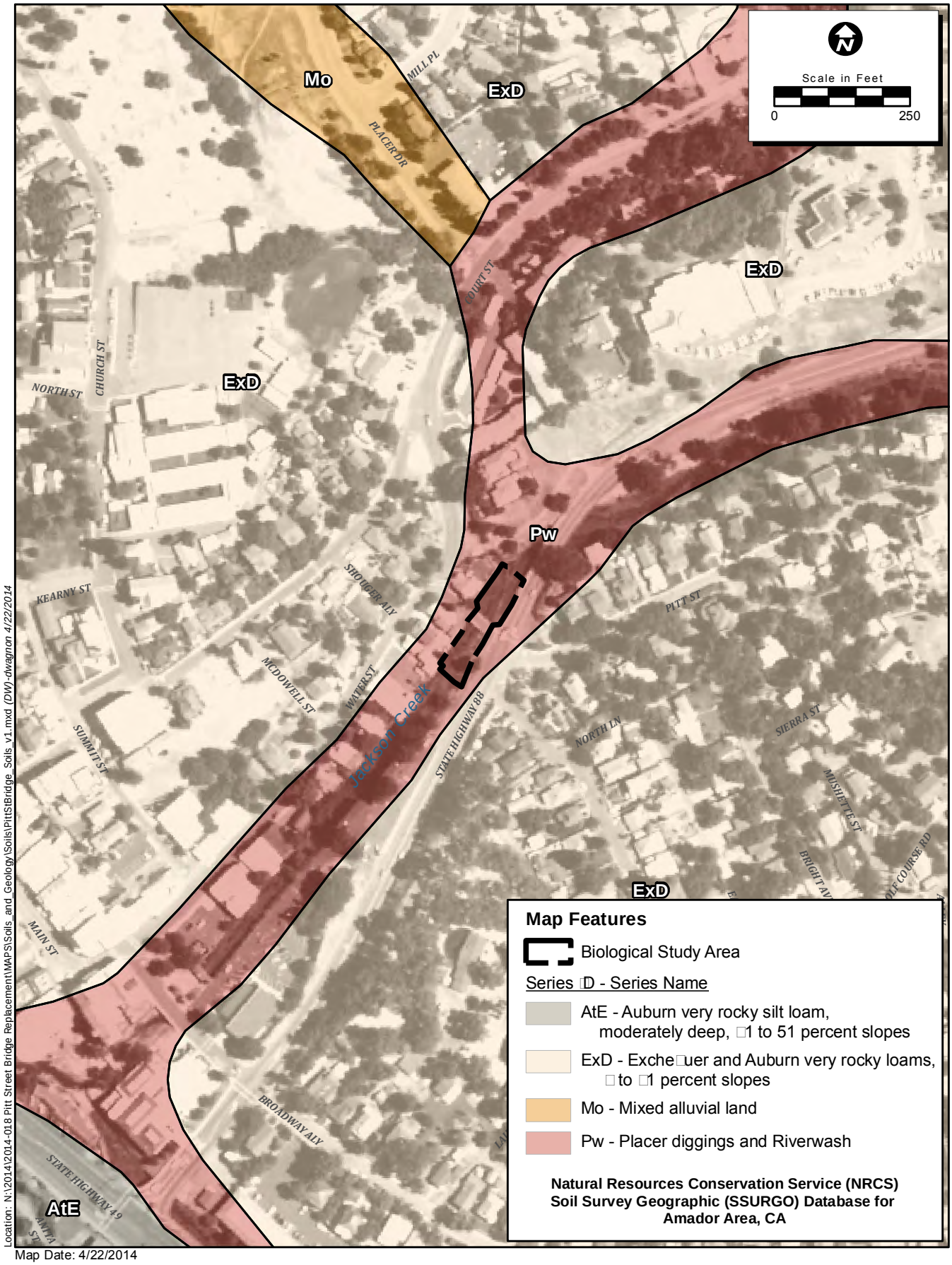
Map Date: 5/8/2014
Photo Source: Microsoft, June 2011 (World Imagery ESRI online accessed 5/19/2014)

Figure 2. Biological Study Area (BSA)

Pitt Street Bridge Replacement



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Map Date: 4/22/2014
Photo Source: NAIP 2012

Figure 3. Natural Resources Conservation Service Soil Types

Pitt Street Bridge Replacement

Figure 4.
Wetland Delineation

Map Features

- Biological Study Area - 0.□97 ac.
- Other Waters of the U.S. - 0.246 ac.
- Soil Points

SAMPLE POINTS

WATERS OF THE U.S.

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
01	38.350105, -120.770641
03	38.349823, -120.770927

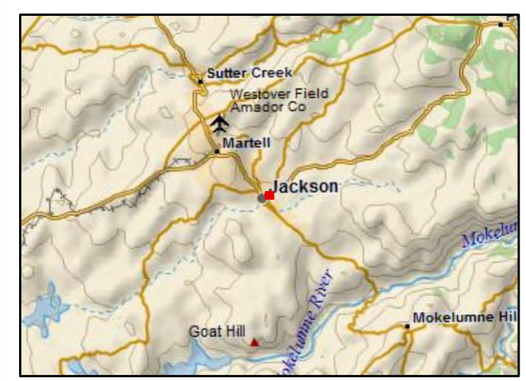
UPLAND

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
02N	38.350091, -120.770614
04N	38.349800, -120.770887

[1] ***Boundary Source: ECORP Consulting, Inc. and City of Jackson***

[2] *The summary values for each feature have been rounded to the nearest round number or 1/1000 decimal. Summation of these values in the table may not equal the total reported.*

[3] *Subject to U.S. Army Corps of Engineers verification*
This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.



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Pitt Street Bridge Replacement

Scale in Feet
0 50 100

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *5/19/2014*)

Map Date: 5/19/2014
Delineator: T. Scofield
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

LIST OF ATTACHMENTS

Attachment A – Wetland Determination Data Forms – Arid West Region

Attachment B – Plant Species Observed On-site

Attachment C – Aerial Photograph

Attachment D – Wetland Delineation Shape File

ATTACHMENT A

Wetland Determination Data Forms – Arid West Region

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt St. Bridge City/County: Jackson/Amador Sampling Date: 4/3/14

Applicant/Owner: Development Impact Inc / City of Jackson State: CA Sampling Point: 1wet

Investigator(s): T. Scofield Section, Township, Range: S 28, T.06N, R11E MDBM

Landform (hillslope, terrace, etc.): creek Local relief (concave, convex, none): — Slope (%): 5

Subregion (LRR): LRR Lat: 36° 20' 60" N Long: 120° 46' 15" W Datum: _____

Soil Map Unit Name: NRCS Amador – Placer diggings / Riverwash NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	Is the Sampled Area within a Wetland? Yes X No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

within OHWM of Jackson Creek

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Salix lasiolepis	5		FACW+
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Carex barbarae	40	✓	FACW
2. Equisetum arvense	25	✓	FAC
3. Fraxinus pennsylvanica	5		FAC+
4. Holcus lanatus	10		FAC
5.			
6.			
7.			
8.			
Total Cover: 80%			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

- willows appear to be cut/maintained for flow control. – Keeping veg. low

SOIL

Sampling Point: 1 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks: Riverine - cobble - Boulder - sand - silt - gravel - hot pit could be dug

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- X Water Marks (B1) (Nonriverine)
- X Sediment Deposits (B2) (Nonriverine)
- X Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- X Water Marks (B1) (Riverine)
- X Sediment Deposits (B2) (Riverine)
- X Drift Deposits (B3) (Riverine)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Edge of active channel - within Jacker Ck. - perennial flows over alluvium

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt St. Bridge City/County: Jackson / Amador Sampling Date: 4/3/14

Applicant/Owner: Dev Impact Inc / City of Jackson State: CA Sampling Point: 2 (dry)

Investigator(s): T. Scofield Section, Township, Range: § 28, T.06N, R11E MDBM

Landform (hillslope, terrace, etc.): Aqueduct ck. swale Local relief (concave, convex, none): — Slope (%): 35

Subregion (LRR): LRRL Lat: Long: Datum:

Soil Map Unit Name: NRCS Amador – Rocky Disturbed NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No ____	
Wetland Hydrology Present?	Yes ____	No ____	

Remarks:

outside ordinary of pt. 1 (wet)

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1.			
2.			
3.			
4.			
5.			
Total Cover:			
Herb Stratum			
1. Bromus diandrus	85	✓	N/L
2. Galium aparine	15	✓	FACU
3. Equisetum arvense	15	✓	FAC
4. Erodium botrys	15	✓	FACU*
5. Lathyrus species	10		N/L
6.			
7.			
8.			
Total Cover: 140			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

veg. factors outside/above OHWM

SOIL

Sampling Point: 2 Dry

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 3/3		–	–	–	–	sandy-SILTY-COBBLE MATRIX	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: UPLAND SOILS - located in non-native grassland above OHWM

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: located on upland slope above OHWM.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt street Bridge City/County: Jackson / Amador Sampling Date: 4/17/14

Applicant/Owner: Dev. Impact Inc / City of Jackson State: CA Sampling Point: wet 3

Investigator(s): E Stitt Section, Township, Range: 28, T 06N, R 11E, MDBM

Landform (hillslope, terrace, etc.): streambed Local relief (concave, convex, none): None Slope (%): <1/0

Subregion (LRR): LRAL Lat: 694772 Long: 4246958 Datum:

Soil Map Unit Name: NRCS - Amador - Placer Diggings / Cyprenish NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		

Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		

Herb Stratum (Plot size: ____)			
1. Equisetum sp.	60%	✓	FACW
2. Epilobium sp.?	10%		
3. Holcus lanatus	35		FAC
4.			
5.			
6.			
7.			
8.			
	100% = Total Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	____	x 1 = ____
FACW species	____	x 2 = ____
FAC species	____	x 3 = ____
FACU species	____	x 4 = ____
UPL species	____	x 5 = ____
Column Totals:	____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: 3 wet

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
12"	2.5yr 5/2	80	2.5yr 3/4	20	C	M/PL	Sandy Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ✓ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): ___

Water Table Present? Yes ✓ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pitt Street Bridge City/County: Jackson / Amador Sampling Date: 4/13/14
Applicant/Owner: Development Impact Inc / City of Jackson State: CA Sampling Point: 4 (up)
Investigator(s): E. Stitt Section, Township, Range: 28, T.6N, R11E MDB&B
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 40
Subregion (LRR): LRR C Lat: 0694775 Long: 4246957 Datum: _____
Soil Map Unit Name: NRCS Amador – Placer complex / Cumulas NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	Is the Sampled Area within a Wetland? Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks: hillslope above streambed

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Vinca minor	5		NL
2. Vicia villosa	30	✓	NL
3. Bromus diandrus	35	✓	NL
4. Brassica sp.	30	✓	NL
5.			
6.			
7.			
8.			
	100% = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0%

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	_____	x 1 = _____
FACW species	_____	x 2 = _____
FAC species	_____	x 3 = _____
FACU species	_____	x 4 = _____
UPL species	_____	x 5 = _____
Column Totals:	_____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 4 up

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
8"	7.5yr 3/3	100					Sandy loam	in graded zone for road

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No wetland hydrology

ATTACHMENT B

Plant Species Observed On-site

Appendix B. Plant Species Observed within the BSA

Plant Species Observed

The following plant species were observed within the project area during the site visits. An asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
ASTERACEAE	**SUNFLOWER FAMILY**
*Lactuca serriola**	Prickly lettuce
*Helminthotheca echiodes**	Bristly ox tongue
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	Black mustard
Nasturtium sp.	Water cress
*Sisymbrium irio**	Tumble mustard
CHENOPODIACEAE	**GOOSEFOOT FAMILY**
*Chenopodium album**	White goosefoot
*Salsola tragus**	Russian thistle
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
*Convolvulus arvensis**	Morning glory
CYPERACEAE	**SEDGE FAMILY**
Carex Barbarae	Santa Barbara sedge
EQUISETACEAE	**HORSETAIL FAMILY**
Equisetum arvense	Horsetail
FABACEAE	**LEGUME FAMILY**
Lathyrus sp.	Wild pea
*Melilotus sp. **	Sweetclover
Vicia sp.	Vetch
GERANIACEAE	**GERANIUM FAMILY**
*Erodium botrys**	Long-beaked filaree
Erodium macrophyllum	California filaree/Round-leaved filaree
JUGLANDACEAE	**WALNUT FAMILY**
Juncus balticus	Baltic rush
ONAGRACEAE	**EVENING PRIMROSE FAMILY**
Epilobium sp.	Willow herb
Ludwigia peploides	Water primrose
	POPPY FAMILY

PAPAVERACEA	
Eschsholzia californica	California poppy
POACEAE	**GRASS FAMILY**
*Avena barbata**	Slender wild oat
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft brome
*Cynosurus echinatus**	Hedgehog dog-tail grass
*Festuca perennis**	Italian ryegrass
*Holcus lanatus**	Velvet grass
*Hordeum murinum**	Barley
*Poa annua**	Annual blue grass
POLYGONACEAE	**KNOTWEED/SMARTWEED FAMILY**
*Rumex crispis**	Curly Dock
ROSEACEAE	**ROSE FAMILY**
*Rubus discolor**	Himilayan blackberry
RUBIACEAE	**BEDSTRAW FAMILY**
Galium aparine	Goose grass
SALICACEAE cont.	**WILLOW FAMILY cont.**
Salix laevigata	Red willow
SCROPHULARIACEAE	**FIGWORT FAMILY**
Verbascum thapsus *	Common mullein
TYPHACEAE	**CATTAIL FAMILY**
Typha latifolia	Broad-leaf cattail

ATTACHMENT C

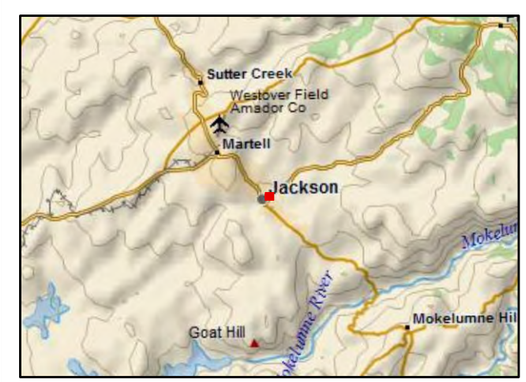
Aerial Photograph

Aerial Photograph

Map Features

Biological Study Area

Boundary Source: ECORP Consulting, Inc. and City of Jackson</bol>



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Aerial_Maps\Onsite\PittStB_Aerial.mxd (DW)-dwagnon 4/23/2014

2014-018 Pitt Street Bridge Replacement

Scale in Feet

0 50 100

Photo Source: Microsoft, 2011 (World Imagery, ESRI Online accessed *4/23/2014*)

Map Date: 4/23/2014

ATTACHMENT D

Wetland Delineation Shape File

(Shapefiles of wetland features to be included here for Corps submittal)

Appendix E

Water Quality Report

Draft Water Quality Assessment Report
Pitt Street Bridge Replacement Project

Pitt Street Bridge Replacement Project, Amador County
City of Jackson, CA
Pitt Street Bridge-Bridge No. 26C-0008

10-AMA-88-14.53
Federal Project No. BRLO 5141 (018)

April 2014

Caltrans

City of Jackson
California
"Preserving our Past, Enriching the Present, Building the Future."

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Water Quality Assessment Report

Pitt Street Bridge Replacement Project, Amador County
City of Jackson, CA
Pitt Street Bridge-Bridge No. 26C-0008

10-AMA-88-14.53
Federal Project No. BRLO 5141 (018)

April 2014

Submitted to:

City of Jackson
33 Broadway
Jackson, CA 95642

California Department of Transportation - District 10
1976 Dr. Martin Luther King Jr. Blvd,
Stockton, CA 95205

Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
2525 Warren Drive
Rocklin, CA 95677

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Executive Summary

The City of Jackson proposes to replace the Pitt Street Bridge (Proposed Project) in the City of Jackson. The Pitt Street Bridge is located in an urban area of Jackson and provides one-way vehicular traffic and pedestrian access over Jackson Creek to State Route 88. The Pitt Street Bridge was constructed in 1925 and has not been updated. It is currently classified as structurally deficient for vehicle use and has no designated sidewalks. The existing bridge structure consists of a single-span steel Pratt pony truss with timber decking on steel floor beams supported by masonry abutments. The current bridge and associated features are eligible for listing on the National Register of Historic Places and the City desires to retain the bridge for pedestrian use at a location as yet to be determined. The replacement bridge would be a similar profile, single-span bridge that would provide one 10-foot traffic lane, two 3-foot shoulders, a 6-foot separated sidewalk and concrete barriers. The proposed structure would be 53-feet long by 32-feet wide and would remain a one-way access for State Route 88.

The purpose of this water quality assessment report (WQAR) is to present a detailed discussion of the Proposed Project, the physical setting of the Project area, and the regulatory framework with respect to water quality to identify potential impacts. The WQAR provides discussion on Project design, regulatory setting, and water quality objectives of the Project area. The WQAR identifies data on existing conditions and impacts to the affected environment including impacts to surface water and groundwater resources, identifies and describes water quality impairments and beneficial uses, and potential impacts to riparian and aquatic habitat and water quality as a result of the Proposed Project. Based on these results, recommended avoidance/minimization measures and applicable Best Management Practices (BMPs) are identified to reduce potential adverse impacts to water quality. The water quality information disclosed within the WQAR may be used to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) and provide information, to the extent possible, for the National Pollution Discharge Elimination System (NPDES) permitting.

Jackson Creek is a tributary in the Upper Mokelumne watershed, a subbasin of the greater San Joaquin River basin. As part of Section 303(d) of the Clean Water Act, the State of California is required to maintain a list of surface water bodies that exceed applicable water quality standards. The list includes prioritization of these surface water bodies, descriptions of the impairment, and Total Maximum Daily Loads (TMDLs) information. Currently, Jackson Creek is not listed as an impaired water body, however, downstream several water bodies, including Amador Lake, Pardee Reservoir, and the Lower Mokelumne River to the San Joaquin Delta are listed as impaired water bodies. The impaired water bodies are located more than 5.5 miles downstream from the Proposed Project and more than 3.5 miles in the adjacent watershed.

The replacement of the existing Pitt Street Bridge and alterations to the approaching roadway is expected to cause short-term construction related impacts to surface water quality. Construction activities are anticipated to increase the amount of pollutants discharged into Jackson Creek. The compaction of soils from heavy construction machinery and the removal of vegetation may contribute to potential erosion, sedimentation, and runoff. Potential long-term water quality

impacts are related to the operation and maintenance of the Proposed Project. Alteration to stream hydraulics and the addition of impervious surfaces may increase the quantity of storm water runoff, and therefore, pollutants entering Jackson Creek. The BMP's identified in the WQAR would be implemented as part of Caltrans Storm Water Management Plan (SWMP) and would minimize these potentially short-term and long-term impacts to surface water quality.

The Proposed Project would be required to obtain specific regulatory permits as part of the Project approval process. The Proposed Project has the potential to cause adverse impacts to the Jackson Creek streambed and associated riparian habitat. Therefore, the Proposed Project would require the following permits to be obtained prior to construction: a Section 1602 Streambed Alteration Agreement (SAA), a Water Quality Certification (CWA Section 401) and a Nationwide Permit for Waters of the U.S. (CWA Section 404). Acquiring these permits would mitigate against potentially adverse impacts to water quality and the riparian habitat of Jackson Creek. Coordination with the California Department of Fish and Wildlife (CDFW), the Central Valley Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE) would be necessary to secure these permits. Other permits required would include the National Pollution Discharge Elimination System (NPDES) General Construction Permit for discharges of storm water associated with construction activities. Development of a Storm Water Pollution Prevention Plan (SWPPP) would be implemented as part of the General Construction Permit.

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1.0 INTRODUCTION

1.1 Project Description

1.1.1 Project Location

The City of Jackson is located southeast of Sacramento on the western slope of the Sierra Nevada and is the County seat for Amador County. The City of Jackson proposes to replace the Pitt Street Bridge (BRLO 5141 (018). The existing bridge carries Pitt Street over Jackson Creek and is situated on the north side of State Route 88. The Project vicinity and location are shown in **Figures 1 and 2**. Pitt Street is an urban one-lane road providing access to State Route 88 from a neighborhood in the City of Jackson Historical Corridor. The Project area would be limited to the bridge and roadway along Pitt Street with enough area to ensure adequate roadway tie-ins.

1.1.2 Existing Condition

The Pitt Street Bridge was constructed in 1925 and connects Pitt Street, a conventional 15-foot one-lane local roadway, to State Route 88. Due to the age and structure type, the bridge and associated structures are eligible for listing in the National Register of Historic Places (NRHP). A historic property Section 4(f) evaluation will need to be conducted to determine the bridge's eligibility to the NRHP. If the bridge is determined eligible, then a memorandum of agreement and a mitigation plan would be added to the Project.

The existing bridge is 43 feet long and 18 feet wide with one vehicle lane and a 4.5-foot sidewalk, configured as a local road. The bridge is a single span, steel Pratt pony truss with timber plank decking on timber stringers, supported on rolled steel floor beams, with steel eye bar tension members. The existing bridge has a wooden sidewalk (4'-6' wide) with timber decking cantilevered from the upstream side of the structure. Due to failure of the timber decking on the bridge, the City applied approximately six (6) inches of asphalt to the top of the bridge surface overlaying the wood planks in 2013. The existing foundations appear to be concrete or masonry block on unknown footings; presumably concrete spread footings.

The existing condition of the bridge is structurally deficient and carries a Sufficiency Rating of 22.5 out of 100. The bridge was closed in 1983 due to advanced deterioration; then had limited repairs in 1985 enabling the bridge to be reopened. The steel superstructure is bent and corroded with heavy rust. Based on the condition of the railings and the lack of designated sidewalks, the bridge is not considered safe for pedestrians by current standards. Also, the footing for the abutment at the east end has been exposed due to water scouring, thus causing a stability concern. (City of Jackson 2013)

Pitt Street Bridge crosses Jackson Creek over a semi-channelized section of the creek. The creek bed is natural material with the banks lined with vertical rock walls attached to the bridge

abutments, constricting the channel by several feet. Located at the top of the north-west rock wall, there are two privately owned residences one on each side of the bridge. At the south-east end of the bridge, Pitt Street intersects SR88, restricting the possibility to lengthen the bridge and widen the channel by a few feet. The preliminary plans for the new bridge may accommodate widening the existing channel and bridge by 8-10 feet at the structure abutments; however, overtopping may still be a hydraulics issue. (City of Jackson 2013)

1.1.3 Purpose and Need

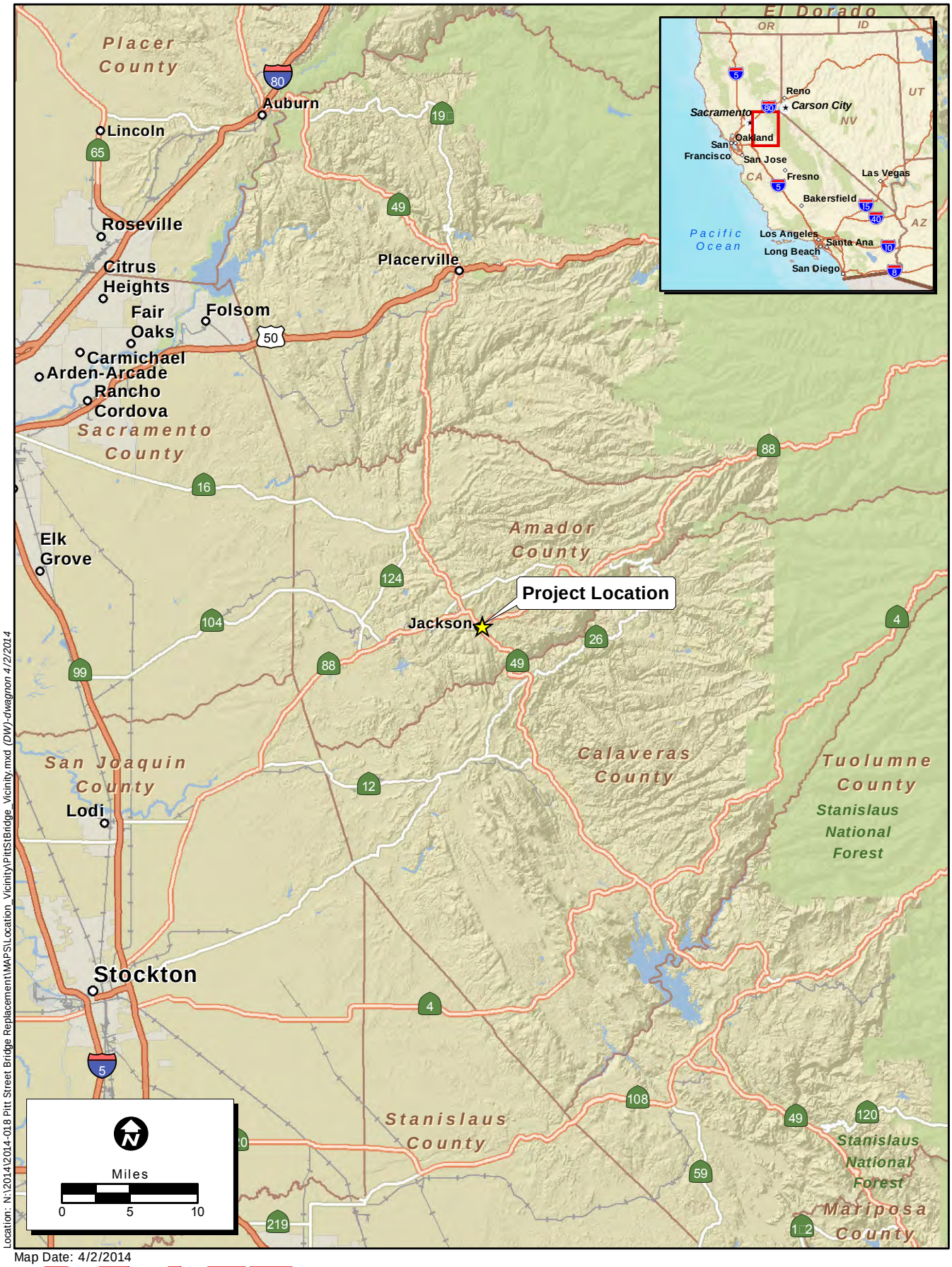
The Pitt Street Bridge provides for vehicular and pedestrian access from an urban area to a highway and residential areas across the highway. The bridge replacement Project is needed for the following safety concerns: width of the existing structure does not meet the minimum required width based upon the current average daily traffic, the existing structural conditions, and the Sufficiency Rating of this bridge. For these reasons, the Pitt Street Bridge replacement is proposed to support safe vehicular and pedestrian passage, and lower maintenance while retaining the historic character of the site.

1.1.4 Proposed Project

The replacement of the existing Pitt Street Bridge would be a similar profile, single-span bridge that would provide one 10-foot traffic lane, two 3-foot shoulders, a 6-foot separated sidewalk, railings and concrete barriers. The proposed structure would be 54-feet long by 32-feet wide (approximately 8-10 feet wider and a few feet longer than the existing bridge) and would remain a one-way access to State Route 88. The proposed plan is to conform to the existing roadway elevation on the northwest end and the southeast end vertical elevation would be slightly revised. The new abutments would likely be founded on spread footings or doweled directly into native bedrock. With the installation work of new abutments and footings, the creek channel would be re-contoured between the new abutments. It has also been proposed to add a formal sidewalk to north side of Pitt Street from the bridge to Water Street and extend the sidewalk starting on the south end of the bridge towards the bridge on SR88 just north of the Pitt Street intersection.

Approach roadways would be rehabilitated after the new bridge is placed and utilities are reconnected. This would include the intersection of Pitt Street and Water Street. Rehabilitation of the approaches would consist of re-paving the road, restriping, sidewalks, and curb ramps. At the bridge deck, improvements would include construction of shoulders and traffic barriers, railing, sidewalk, curb ramps, and signs. Alterations to the approach to State Route 88 may not be the standard intersection taper and turning radii but they would accommodate Fire Truck and School Bus turning movements.

The Project includes relocating and/or replacing the following utilities: (1) The existing 10-inch sewer line buried in the creek channel would be replaced, as part of the Project. There is concern that the integrity of the existing sewer line would not be able to withstand construction equipment and activities. (2) The existing eight inch water line that is buried in the roadway



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Location_Vicinity\PittStBridge_Vicinity.mxd (DW)-dwagnon 4/2/2014

Map Date: 4/2/2014

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Figure 1. Vicinity

Pitt Street Bridge Replacement

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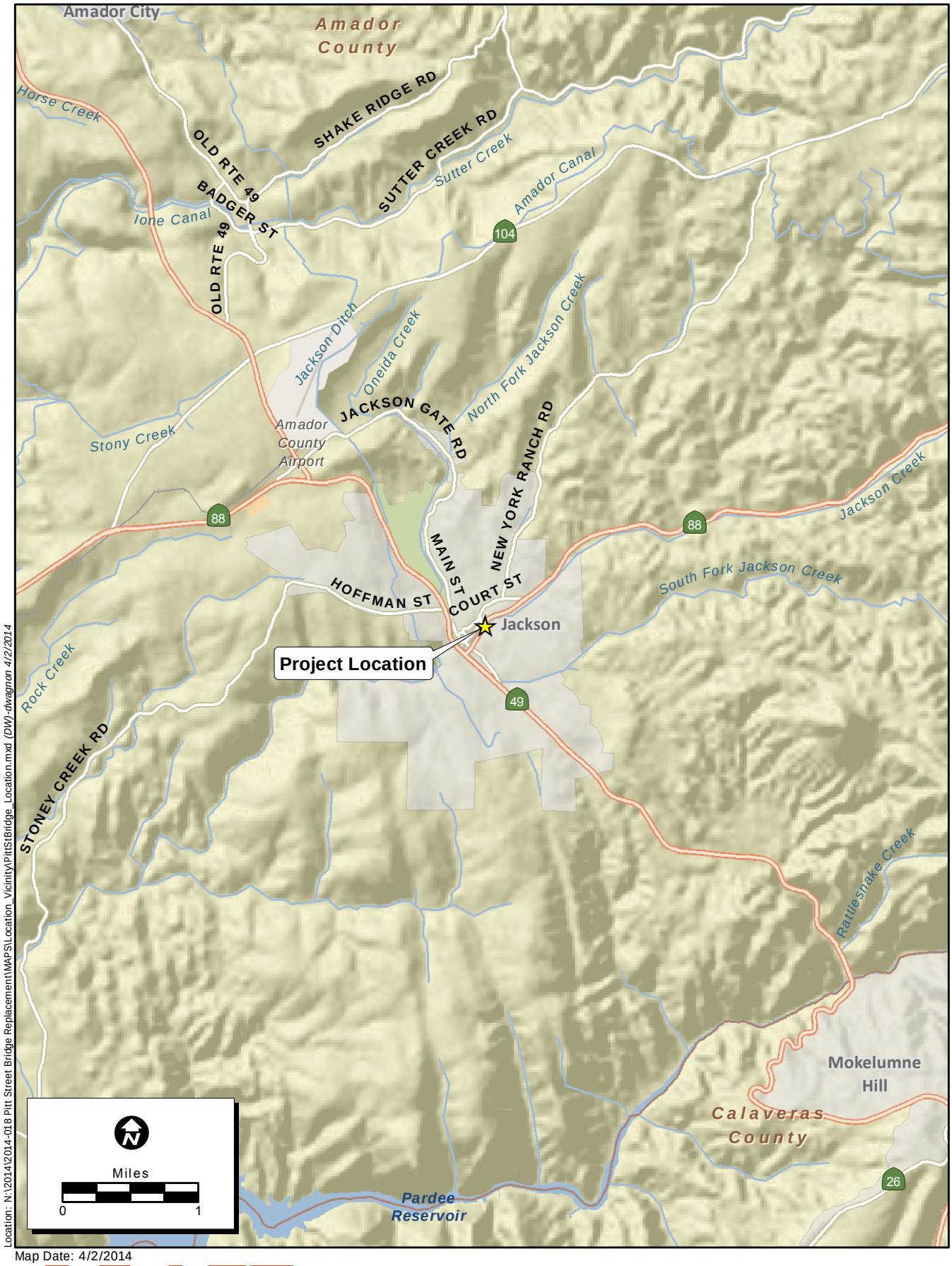

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Figure 2. Project Location

Pitt Street Bridge Replacement

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along Pitt Street extends out of the existing abutment 1 before making a 90^0 turn and continuing into the creek channel, would have portions removed during the demolition work. (3) The existing storm drain and inlet adjacent to the southern private driveway at abutment 1 would have portions removed during the demolition work. (4) The existing 12-inch drainage pipe day lighting out of abutment 2 into the creek would require relocation through the new abutment. (5) The existing four inch abandoned water line would need to be removed. (6) Guy wires associated with the existing overhead electrical utility pole at abutment 2 would need to be temporarily relocated.

As part of the Construction General Permit, the Proposed Project's overall risk is evaluated and prioritized. The risk level is made up of two elements, Project Sediment Risk and Receiving Waters Risk. Project Sediment Risk estimates the amount of sediment being discharged based on the Project characteristics and construction scheduling. Receiving Waters Risk is the potential erosion and sediment discharge into the subject water body(s) (Caltrans 2010). Jackson Creek is within a High Receiving Waters Risk area (Caltrans 2012). The proposed bridge is Risk Level 1 status and requirements are satisfied through implementation of the BMP's to be incorporated into the Storm Water Pollution Prevention Plan (SWPPP). Potential BMP's are summarized in section 5.0 Avoidance, Minimization, and/or Mitigation.

Equipment staging would be located on the existing Pitt Street roadway through the use of a temporary construction easement. The road within the Project area would be fully closed during the Project construction and detour routes would be made available to maintain access to the residences and businesses in the area. Temporary construction easements would also be needed for three private parcels adjacent to the Project wing and retaining walls, and bridge abutment 1 on the north side of the Project area for access.

Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited work space, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the City's Corporation Yard for storage and later reused. The construction of the Proposed Project will be performed during the summer time and all pertinent permits will be obtained prior to any work in the stream channel. The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge. The last major storm overtopped the deck by about 1 foot.

Pitt Street Bridge is within the City of Jackson Historical Corridor, if the Pitt Street Bridge is found to have significant historical character, the preservation mitigation, may include the aesthetic details to be incorporated into the replacement bridge plans. Another historic feature of the site to be considered would be the channel walls that have remained relatively unchanged since the early part of the twentieth century. The replacement structure would maintain the nearly vertical slopes of the west side of the channel but the section opening would be widened by 8-10 feet. The existing walls are constructed of stacked rock or rock masonry and contribute to the historic character of the surrounding area. The native rocks would be harvested and reused as an architectural facing for the new walls.

1.1.5 No Project Alternative

The No Project Alternative would result in no improvements to the existing bridge and its safety rating. The existing bridge would continue to deteriorate and likely close due to safety of the structure.

1.2 Approach to Water Quality Assessment

The purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and to provide information, to the extent possible, for National Pollution Discharge Elimination System (NPDES) permitting. Caltrans is the lead agency under NEPA and the City of Jackson is the Project proponent and the lead agency under CEQA. The environmental review, consultation, and any other action required in accordance with applicable Federal laws for the Proposed Project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 326.

The WQAR includes a discussion of the Proposed Project, the physical setting of the Project area, and the regulatory framework with respect to water quality; provides data on surface water and groundwater resources within the Project area and the water quality of these waters, describes water quality impairments and beneficial uses, and identifies potential water quality impacts/benefits associated with the Proposed Project, and recommends avoidance and/or minimization measures for potentially adverse impacts.

2.0 Regulatory Setting

2.1 Federal Laws and Requirements

Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge will comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request. See below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. RWQCB administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the USACE.

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

USACE issues two types of 404 permits: Standard and General permits. For General permits there are two types: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are also two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit, may be permitted under one of USACE’s Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (EPA) Section 404 (b)(1) Guidelines (U.S. EPA CFR 40 Part 230), and whether permit approval is in the public interest. The 404(b)(1) Guidelines were developed by the EPA in conjunction with USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that

USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA), to the proposed discharge that would have less effect on waters of the U.S., and not have any other significant adverse environmental consequences. Per Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures have been followed, and in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

2.2 State Laws and Requirements

Porter-Cologne Water Quality Control Act
California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the State. Waters of the State include groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA, and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If the State determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or WDRs), the CWA requires the establishment of TMDLs. TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB)
The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

1. **National Pollution Discharge Elimination System (NPDES) Program Municipal Separate Storm Sewer Systems (MS4)**

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water dischargers, including MS4s. The EPA defines an MS4 as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying storm water."

Issuance of MS4 permits are divided into two categories:

Phase I

Phase I requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges.

Phase II

Phase II requires regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges.

The Proposed Project is located within an urbanized area and therefore, SWRCB has identified the City of Jackson (City) as an owner/operator of a Phase II MS4 pursuant to federal regulations. The City's MS4 permit is covered by the general permit and includes all City rights-of-way, properties, and facilities. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The City, as operator of a Phase II small MS4 permit, is required to:

1. Apply for NPDES permit coverage
2. Develop a stormwater management program which includes the six minimum control measures:
   - Public education and outreach
   - Illicit discharge detection and elimination
   - Construction site runoff control
   - Post-construction runoff control
   - Pollution prevention/good housekeeping
3. Implement the stormwater management program using appropriate stormwater management controls, or best management practices (BMPs)
4. Develop measurable goals for the program
5. Evaluate the effectiveness of the program.

To comply with the permit, the City is required to develop and implement a Storm Water Management Plan (SWMP) to address storm water pollution controls to significantly reduce

contaminants from discharging into receivable water bodies. The SWMP assigns responsibilities within the City for implementing storm water management procedures and practices, which include the six minimum control measures listed above. The SWMP describes the minimum procedures and practices the City uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The Proposed Project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

A Construction General Permit (Final Order No. 2012-011-DWQ, NPDES No.CAS000003) regulates storm water discharges from construction sites which result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. For all projects subject to the CGP, applicants are required to develop and implement an effective SWPPP. In accordance with the DOT's Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with a DSA less than one acre.

By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the CGP.

The CGP separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and pre- and post-construction aquatic biological assessments during specified seasonal windows.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with State water quality standards. The most common federal permit triggering 401 Certification is a CWA Section 404 permit, issued by USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before USACE issues a 404 permit.

In some cases the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

California Department of Fish and Game (CDFG) Code Section 1602

The CDFW is responsible for ensuring the protection of fish, wildlife, and native plant resources. To fulfill this responsibility, the CDFG Code (Sections 1601-1603) grants authority to CDFW to issue agreements for any proposed activity that requires substantial alterations to a river, stream, or lake where there is a potential for adverse impacts to fish, wildlife, and or native plant resources. CDFW defines streams and rivers by the existence of a channel bed and banks and at a minimum, the recurrent seasonal flow of water. Streams and rivers that support riparian vegetation are subject to CDFW jurisdiction beyond the channel banks. In this circumstance the lateral extent of the water body would be defined by the boundary of growing riparian vegetation.

The CDFG Code 1602 requires notification of any proposed activity that will result in substantial modification to any river, stream, or lake. This may include the deviation or obstruction of the natural flow of a river, stream, or lake; change or use of material from the bed, channel, or bank of, a river, stream, or lake; or deposit or dispose of debris, waste or other material containing fragments of pavement that could pass into a river, stream, or lake. CDFG Code 1602 is applicable to all streams, rivers, and lakes within the State that are perennial or intermittent in nature.

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

An evaluation of the affected environment, including environmental factors such as the physical-geographical setting, regional and local hydrology, groundwater hydrology, geology and soils, and biological communities were used to determine the potential effects to water quality associated with implementation of the Proposed Project. A general description of these environmental factors within the Project area and local surroundings are provided below.

3.2 General Setting

3.2.1 Physical-Geographical Setting

The topography of the City of Jackson in Amador County is characteristic of the Sierra Nevada foothills and the historic Mother Lode region. The representative slope grade ranges typically between 15% and 20%. The streambed channels are relatively distinct and the local drainage basin is small in size. The Cosumnes River flows along the northern boundary of Amador County and the Mokelumne River along the southern boundary. Jackson Creek follows a median line east to west through Amador County and the City of Jackson, eventually draining into Dry Creek and subsequently the Mokelumne River. The regional vegetation is typical of an oak woodland habitat with various pine and oak species with the lower ground cover consisting of mixed shrubs and grassland.

The creek channel at the Pitt Street Bridge is a semi-channelized section of the creek, running parallel to SR88. The creek banks are lined with vertical rock walls attached to the bridge abutments, constricting the channel by several feet. At the top of the northwest rock wall, there are two privately owned residences, one on each side of the bridge.

3.2.2 Hydrology

3.2.2.1 Regional Hydrology

The entire network of streams that collectively drain from the San Joaquin and Sacramento Rivers convene to form the Sacramento-San Joaquin Delta, which eventually drains into the San Francisco Bay and ultimately the Pacific Ocean. Jackson Creek is a tributary in the greater San Joaquin river basin. The San Joaquin river basin is comprised of approximately 15,880 square miles of surface water resources that drain to the San Joaquin River. The primary tributaries that stem from the San Joaquin River includes the Cosumnes, Mokelumne, Calaveras, Stanislaus, Tuolumne, Merced, Chowchilla, and Fresno Rivers. Principal lakes and reservoirs include the Camanche, Pardee, New Hogan, Millerton, McClure, Don Pedro, and New Melones. There are

13 subbasins that make up the greater San Joaquin River Basin. The Proposed Project is located within the Upper Mokelumne Subbasin represented on **Figure 3**

3.2.2.2 Local Hydrology

The Upper Mokelumne Subbasin is composed of 11 hydrologic subbasins that are divided into watersheds and subwatersheds. The Proposed Project is located within the Upper Jackson Creek subwatershed/hydrologic unit of the greater Jackson Creek Watershed as illustrated in **Figure 4**.

Calwater 2.2.1 is a hierarchal watershed delineation system that consists of six levels of watershed designation with increasing specificity. Calwater 2.2.1 utilizes Geographical Information Systems data (GIS-Data) to generate unique codes to classify watersheds (CWP 2007). The Proposed Project is classified in the San Joaquin Hydrologic Region (HR), within the Middle Sierra Hydrologic Unit [HU (primary rivers)], in the Sutter Creek Hydrologic Area [HA (primary tributaries)] (CWP 2007). The Middle Sierra HU includes the Cosumnes, Sutter Creek, Campo Seco, and Upper Mokelumne HA's. The Middle Sierra HU western boundary is just east of the City of Ione and extends into the Sierra Nevada Mountains. The Sutter Creek HA is comprised of the primary tributaries which include the Dry Creek on the west, Sutter Creek, and Jackson Creek. As part of the Sutter Creek HA, the Proposed Project is located within the boundary of the Jackson Super Planning Watershed (SPWS), within the Jackson Creek Planning Watershed (PWS) (CWP 2007), and within the Upper Jackson Creek subwatershed (EPA 2014a).

The Jackson Creek channel is a natural trapezoidal shape with a sandy silt and grass bottom. The creek flow is from northeast to southwest, and is seasonally variable, originating from upstream springs and snowmelt. The existing FEMA data puts the 100-year flood event approximately 2.5 feet above the existing deck. The last major storm event witnessed about 1 foot of creek flow overtopping the deck. (City of Jackson 2013) The Project site is located in zone AE according to the FEMA Flood Insurance Rate Maps (FEMA 2010). Most precipitation occurs between November and April with the driest season between June and September. The average annual precipitation is 33.71 inches. (Caltrans 2012)

3.2.2.3 Groundwater Hydrology

The San Joaquin Valley Groundwater Basin (Basin) is located within the northeastern portion of the San Joaquin River HRs. The Proposed Project is situated within the northern area of the San Joaquin Valley Groundwater Basin and the Cosumnes Groundwater Subbasin (Subbasin). The Subbasin is composed of approximately 281,000 acres, largely contained within Sacramento and San Joaquin counties with a small fraction of the Subbasin located in western Amador County (DWR 2006). Groundwater resources, in the foothill region, are highly variable with respect to quantity, depth, dependability, and quality. The principal supply of groundwater recharge to the Subbasin is seepage from streams originating in the Sierra Nevada Mountains and irrigation water for applied agriculture use. The estimated total annual groundwater recharge is approximately 270,000 acre-feet. It is estimated that annually approximately 35,000 acre-feet of

groundwater resources are utilized for urban use and 94,000 acre-feet for agricultural use (DWR 2006).

The overall groundwater quality of the Subbasin is regarded as of good quality when analyzed for the presence of pesticides and inorganic constituents for municipal and irrigation usage. The major source of contaminants to groundwater is the deep percolation of water through the overlying sediments or through inadequately constructed water wells (CVRWQCB 2006). The EPA established the Sole Source Aquifer (SSA) Program to increase public awareness and assist local government in preventing contamination of groundwater resources caused by federally-funded projects. Federally financed projects may be examined for their potential to contaminate a SSA. A SSA designation is assigned to an area when the groundwater resource supplies 50% or more of the available drinking water and may have limited groundwater alternatives. The Proposed Project is not located near an identified SSA (EPA 2013).

3.2.3 Geology and Soils

The Project site is within a geologic area of Jurassic Marine sedimentary rocks comprised of shale, sandstone, minor conglomerate, chert, slate, limestone and minor pyroclastic rocks (Caltrans 2012).

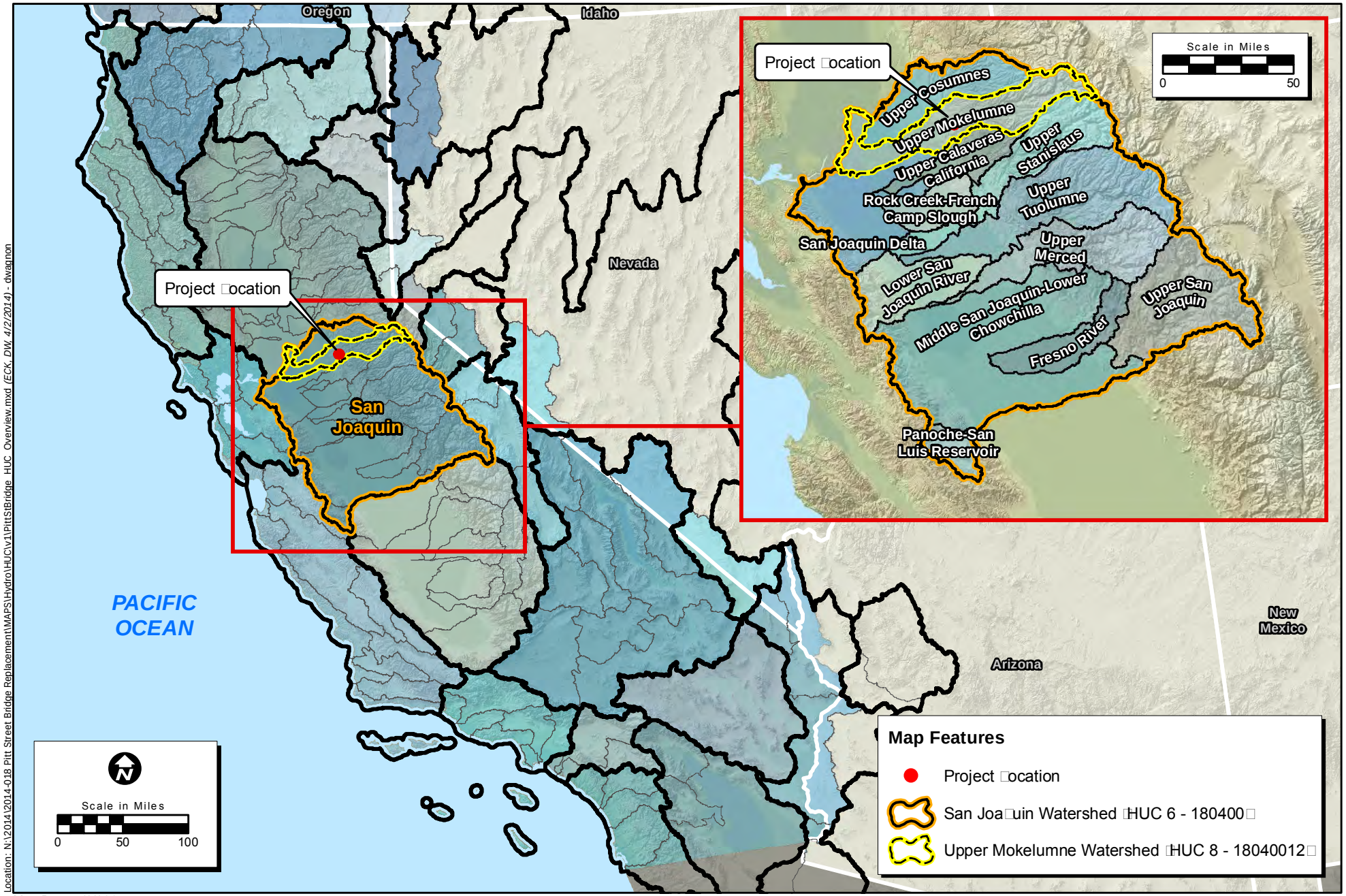
3.2.3.1 Soil Erosion Potential

According to the Natural Resources Conservation Service (NRCS) Soil Survey, the Project area consists primarily of one soil type, as shown in **Figure 5**. The most prevalent soil type at the Proposed Project site is Placer diggins and Riverwash (Pw). Additionally, the Exchequer and Auburn very rocky loams (ExD) with 3 to 31 percent slopes, soil type is within the Proposed Project area. Placer diggins and Riverwash are found along drainage channels and are characterized by 0 to 15 percent slopes, endure frequent flooding, and are excessively drained. The typical profile consists of gravelly sand in the top 0-6 inches and stratified extremely gravelly coarse sand to gravelly sand in the remaining 60 inches.

According to the NRCS Soil Survey for Amador County, the susceptibility of the primary soil type to sheet and rill erosion by water is 0.10; on a scale of 0.02 to 0.69 (K factor) (NRCS 2014). These soils have been established at elevations ranging from 170 to 3,500 feet with mean annual precipitation of approximately 18 to 40 inches and mean annual air temperatures of 55 to 61 degrees Fahrenheit.

3.2.4 Biological Communities

An evaluation of the biological communities including wetlands, aquatic, and riparian habitats representative of the Proposed Project area are documented within the Natural Environment Assessment (NES) prepared by ECORP Consulting, Inc. under a separate cover.



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Map Date: 4/2/2014
Source: USGS

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Figure 3. Hydrologic Unit Code (HUC) Watershed Overview

Pitt Street Bridge Replacement

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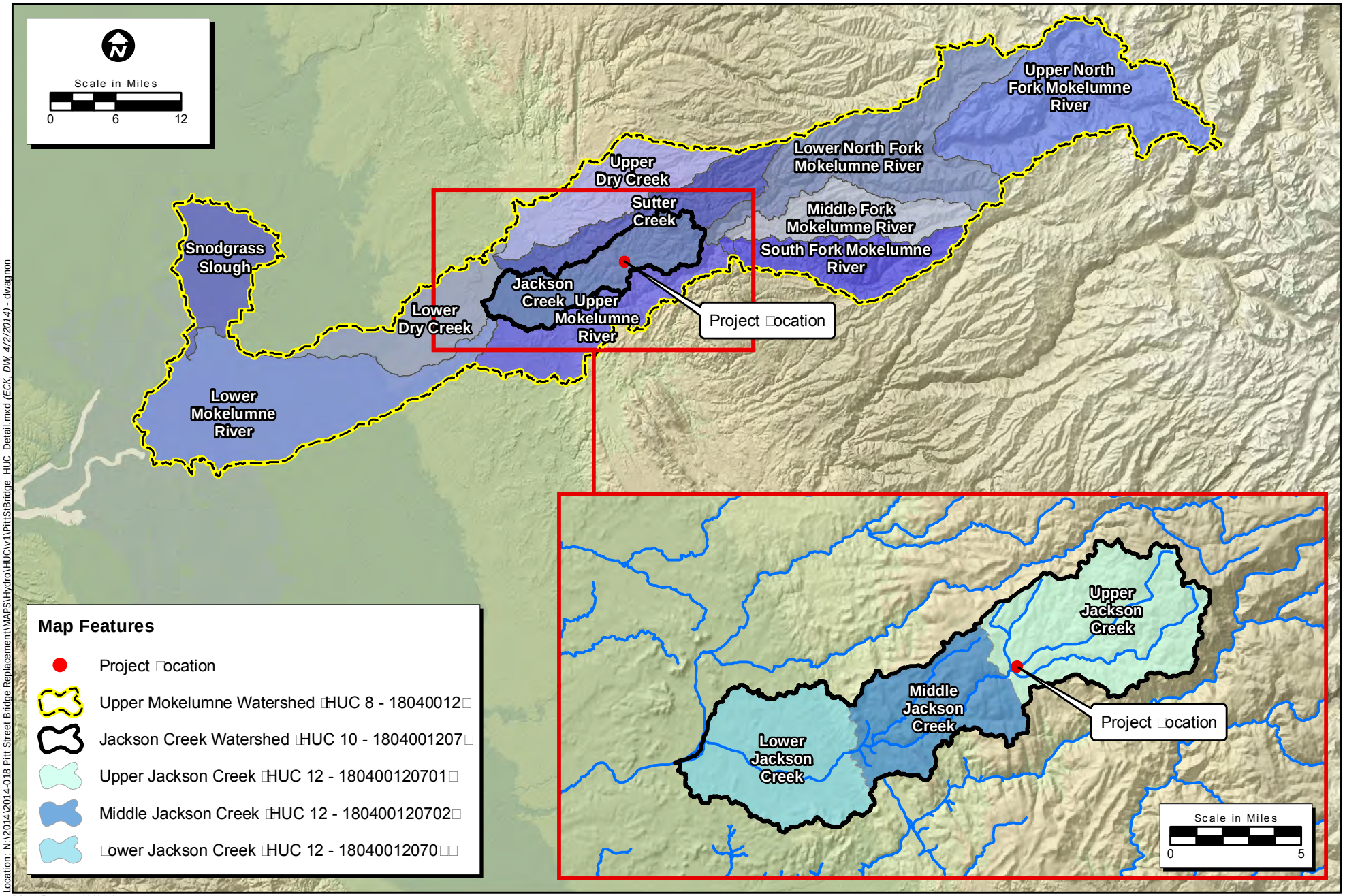

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Figure 4. Hydrologic Unit Code (HUC) Watershed Detail

Pitt Street Bridge Replacement

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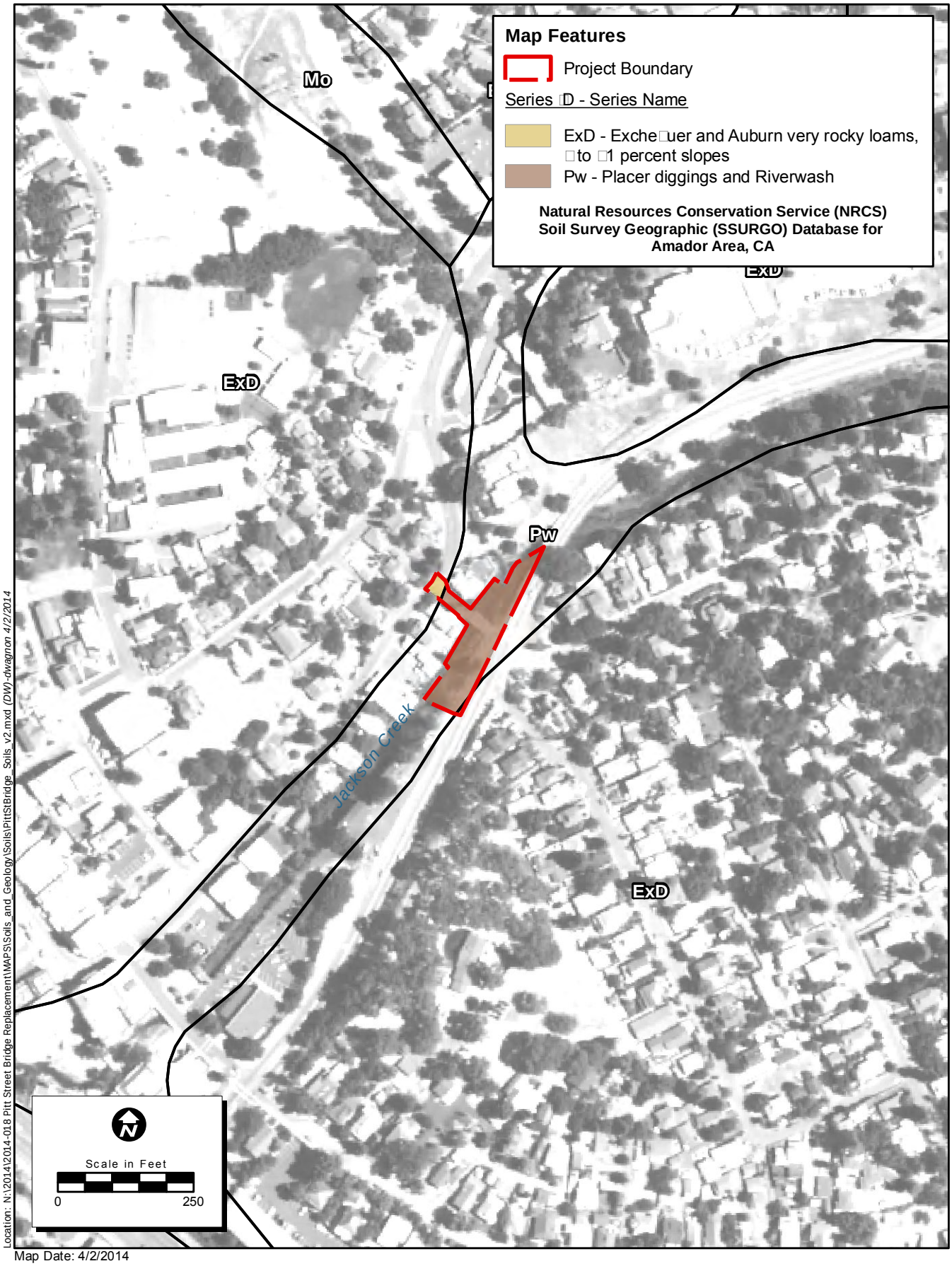

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Map Date: 4/2/2014
Photo Source: NAIP 2012

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Figure 5. NRCS Project Soil Types

Pitt Street Bridge Replacement

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3.3 Water Quality Objectives/Standards and Beneficial Uses

3.3.1 Surface Water Quality Objectives/Standards and Beneficial Uses

The Proposed Project is under the jurisdiction of the Central Valley RWQCB (Region 5) which encompasses all areas within the Sacramento River and San Joaquin River drainage basins. This includes a range that extends from the Sierra Nevada Mountains on the east to the Coast and Klamath Ranges on the west. The California-Oregon border represents the northern boundary of Region 5 and extends south toward the headwaters of the San Joaquin River. This region represents approximately 25% of the State's Land surface and is responsible for generating 51% of the State's water supply. The Sacramento River and San Joaquin River convene to create the Sacramento-San Joaquin Delta, which eventually flows into the San Francisco Bay and ultimately the Pacific Ocean.

A basin plan is developed for each RWQCB to identify beneficial uses and water quality objectives that may safeguard water resources and enhance water quality. On September 15, 1998 the Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Central Valley Region was adopted by the RWQCB. The most recent revision to the Basin Plan was in 2011. Table II-1 in the Basin Plan (April 2010), included here as Table 1, describes specific beneficial uses related to the San Joaquin River Basin and are identified as Existing (E), Proposed (P), or Non-Existent (-). The Basin Plan does not identify specific uses for Jackson Creek; however specific uses are identified for the Mokelumne River. Jackson Creek is a tributary to the Mokelumne River and it is appropriate to assume that specific beneficial uses for Jackson Creek would be comparable to those associated with the Mokelumne River. Specific beneficial uses are itemized in **Table 1** and are categorized below:

Municipal	Recreation	Spawning
Agriculture	Freshwater Habitat (2)	Wildlife Habitat
Industry	Migration	Navigation

Construction of the Proposed Project and its continued function are not expected to substantially affect these beneficial uses.

High Risk Receiving Watershed
The Project site is located within a high risk receiving watershed. High risk receiving watersheds are HUC Level 12 watersheds that drain to water bodies that are either:
1) 303(d) listed as being impaired for sediment/siltation or turbidity.
2) Have an EPA-approved, sediment-related TMDL.
3) Have the existing beneficial uses of Fish Spawning (SPWN), Fish Migration (MIGR), and Cold Freshwater Habitat (COLD) according to the most recent applicable Regional Board Basin Plan.

A project located within a High Receiving Water Risk Watershed is considered to have a high receiving water risk. Identifying High Receiving Water Risk Watersheds reduces the confusion over direct vs. indirect discharges and questions regarding upstream extent (Caltrans 2012).

3.3.2 List of Impaired Waters

3.3.2.1 Total Maximum Daily Loads

As part of Section 303(d) of the Clean Water Act, the State of California is required to maintain a list of surface water bodies that exceed applicable water quality standards. This includes prioritization of these surface water bodies and descriptions of the impairment sources to generate a TMDL. The TMDLs list was revised in 2006 and has been subsequently updated in 2008 and 2010.

The Jackson Creek watershed does include Amador Lake, a listed impaired water body. However, Amador Lake is downstream and in another HU subbasin than the Project site. Downstream from the Project site and in an adjacent HA, the Pardee Reservoir and the Lower Mokelumne River, tributaries to the San Joaquin Delta, are listed as impaired water bodies. Amador Lake is impaired by high pH (acidic) conditions; TMDL's and causes are being developed (EPA 2014b). Pardee Reservoir is impaired by mercury effecting commercial and sport fishing/fish intake levels, with the probable source of subsurface (hard rock) mining; TMDL's and causes are being developed (EPA 2014b). The Lower Mokelumne River (in Delta Waterways) impairment sources stem from mercury, copper, zinc, dissolved oxygen, chlorpyrifos, and unknown toxicity (SWRCB 2010). It is projected that the Lower Mokelumne River TMDL will be completed by the year 2020. The eastern region of the Delta Waterways are listed as impaired for unknown toxicity, mercury, invasive species, and pesticides (chorpyrifos, DDT, diazinon, and Group A pesticides) (SWRCB 2010). **Figure 6** shows the location of listed waters in relation to the Proposed Project.

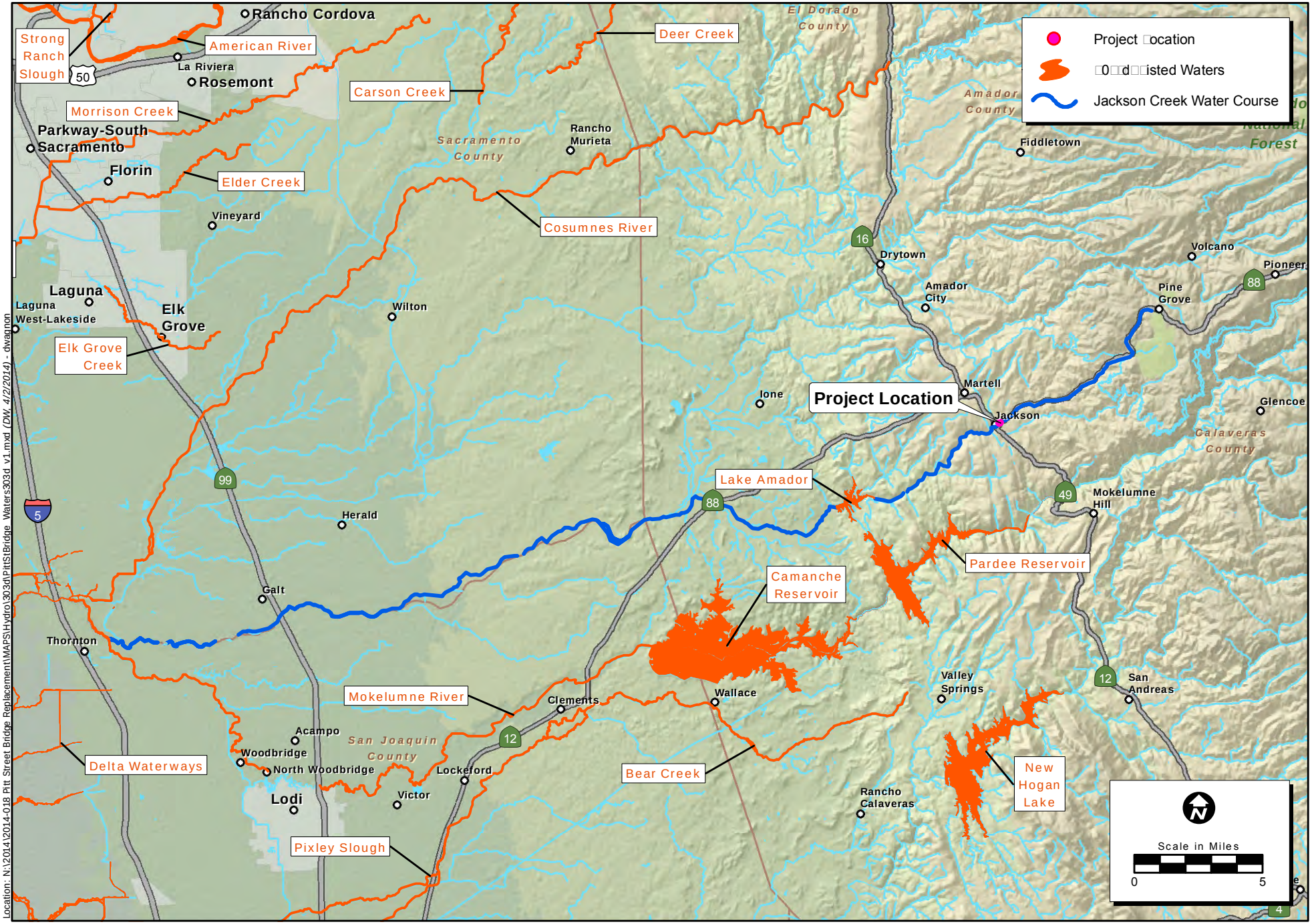
Table 1: San Joaquin River Basin Beneficial Uses

Beneficial Use			Definitions	SURFACE WATER BODIES (1) MOKELUMNE RIVER: SOURCES TO PARDEE RESRVOIR	SURFACE WATER BODIES (1) MOKELUMNE RIVER: PARDEE RESRVOIR (7)
	MUN	Municipal Domestic Supply	Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.	E	E
Agriculture	AGR	Irrigation	Uses of water for farming, horticulture, or ranching, including but not limited to, irrigation (including leaching of salts), or support of vegetation for range grazing.	-	-
		Stock Watering		-	-
Industry	PRO	Process	Uses of water for industrial activities that depend primarily on water quality.	-	-
	IND	Service Supply	Uses of water for industrial activities that do not depend primarily on water quality, including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.	-	-
	POW	Power	Uses of water for hydropower generation.	E	E
Recreation	REC-1	Contact	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, and use of natural hot springs.	E	E
		Canoeing (1) and Rafting		E	-
Recreation	REC-2	Other Noncontact	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.	E	E

Freshwater Habitat (2)	**WARM**	**Warm**	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.	E	E
	COLD	**Cold**	Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.	E	E
Migration	**MGR**	**Warm (3)**	Uses of water that supports habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.	E	-
		Cold (4)		-	-
Spawning	**SPAN**	**Warm (3)**	Uses of Water that support high quality aquatic habitats suitable for reproduction and early development of fish.	E	E
		Cold (4)		E	E
	WILD	**Wildlife Habitat**	Uses of water that support terrestrial or wetland ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats or wetlands, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.	E	E
	Nav	**Navigation**	Uses of water for shipping, travel or other transportation by private, military, or commercial vessels.	-	-

E= Existing Beneficial Use; P= Proposed Beneficial Use
(1) Shown for streams and rivers only with the implication that certain flows are required for this beneficial use.
(2) Resident does not include anadromous. Any Segments with both COLD and WARM beneficial use designations will be considered COLD water bodies for the application of water quality objectives.
(3) Striped bass, sturgeon, and shad.
(4) Salmon and steelhead
(7) Sport fishing is the only recreation activity permitted.

SOURCE: SWRCB 2011



Location: N:\2014\2014-018 Pitt Street Bridge Replacement\MAPS\Hydro\303d\PittStBridge_Waters303d_v1.mxd (DW, 4/2/2014) - dwagnon

Map Date: 4/2/2014

Source: EPA 2010/2012; ESRI Streetmap USA

DRAFT

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 6. 303(d) Listed Waters

Pitt Street Bridge Replacement

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4.0 WATER QUALITY FINDINGS

4.1 Introduction

This section below provides a discussion of the water quality findings associated with short-term impacts during construction and long-term impacts associated with the maintenance and operation of the Proposed Project.

4.2 Potential Impacts to Water Quality

4.2.1 Short Term Impacts During Construction

Short-term water quality impacts would be related to activities during construction, including the potential erosion of bare or disturbed soils and contaminating pollutants entering Jackson Creek. Disturbances to the ground surface from heavy construction machinery would potentially increase the quantity of sediments entering into Jackson Creek. Increases in runoff during periods of high rainfall may have substantial adverse effects to exposed or graded surfaces due to sediments conceivably being carried downstream. If the effects of runoff are not properly regulated, accumulation of harmful sediments could potentially impact downstream water quality and aquatic and/or riparian habitat. There is a potential for construction-related accidents, including the misuse of materials that could discharge contaminants into Jackson Creek. Construction materials, such as concrete curing compounds containing chemicals and petroleum based products used for operation of construction equipment, are potentially damaging to water quality and aquatic and/or riparian habitat. To inhibit the discharge of unwanted contaminants into Jackson Creek, a list of mitigation measures and BMPs are required to minimize any potentially adverse impacts. Implementation of BMPs and adherence to regulatory requirements would substantially reduce the short and long-term impacts to water quality and other aquatic and/or riparian habitat. Avoidance, Minimization, and/or Mitigation Measures are presented in Section 5. Further details describing erosion, turbidity, dissolved solids, oil, grease, and chemical contamination are discussed below.

4.2.1.1 Erosion, Turbidity, and Total Dissolved Solids

Suspended material is the predominant source of contamination to water quality due to increased erosion from exposed loose soil created during excavation, grading, and filling during construction activities. Temporary increased sediment load from the removal of the existing bridge’s concrete piers may increase turbidity and the presence of dissolved solids in the streambed. Until construction activities are completed, an increase of suspended solids, dissolved solids, and inorganic and organic pollutants entering Jackson Creek would likely occur until long-term erosion control measures could be implemented.

4.2.1.2 Oil, Grease, and Chemical Contamination

Unintentional release of fuels and petroleum oils, sanitary waste, and concrete waste into surface waters may occur during construction activities. These conditions could cause severe impacts to Jackson Creek's water quality and surrounding aquatic and/or riparian habitat in the short term, however are not expected to contribute to long-term impacts. The degree of the environmental consequences is dependent on several factors including the erosion potential of the Project area soil types, construction methods and duration of activities, the Project's potential area of affect, construction timing in relation to seasonal rainfall, and the Proposed Project's location relative to the proximity of drainage channels. Additional short-term impacts to water quality triggered by construction activities may have severe affects to fragile aquatic resources. This may include minor changes to water temperature and pH, dissolved oxygen, nutrient concentrations, toxicity, and ionic concentrations to surface waters.

4.2.2 Long-Term Impacts during Operation and Maintenance

Storm water runoff is the predominant long-term water quality impact associated with the operation of the Proposed Project. Contamination from storm water runoff transporting pollutants to Jackson Creek would not change the existing condition since the Proposed Project is designed to replace the existing bridge with a similar capacity bridge. Elements of design that may impact the amount of storm water runoff entering Jackson Creek would include a slight modification to stream hydraulics, with the new bridge abutments, re-contouring between the new abutments, expansion of bridge and channel width, and modification of the north retaining wall.

The existing single-span bridge would be replaced with a similar profile single-span bridge. With the widening of the channel, channel flow is expected to improve, however the modification would not be significant. Therefore, virtually no change to the flood carrying capacity of Jackson Creek would occur. Drainage modifications would be minor with no considerable alterations to the existing storm water drainage route.

To reduce negative long-term effects to water quality, the NPDES permit requires the development of a SWPPP prior to construction activities. Summarized below are the guidelines and recommendations for drainage systems provided by DOT. Storm water runoff systems should promote sheet flow through vegetation, utilization of open vegetated channels and conveyances, and minimization of curb, dike, and pipe. Where open vegetated conveyances are not possible or practical, concentrated conveyance systems would include:

- DOT or City Standard drain inlets (with inlet stenciling) and manholes
- Reinforced concrete pipes for storm water collection
- DOT or City Standard flared end section with rock slope protection backing to Jackson Creek

Permanent impacts resulting from planned fill/excavation to "Waters of the U.S." as defined by the USACE would occur. Permitting and regulatory approval would be obtained for impacts to

jurisdictional waters. With BMP's (outlined in Section 5), permanent impacts to water quality from disturbed soils within the streambed would be negligible.

4.3 Summary of Water Quality Impacts

Evaluation of the Proposed Project has concluded that short-term impacts to water quality, such as the adverse impacts from discharging sediment, and inorganic and organic pollutants, could occur during construction activities. Currently, the Jackson Creek HA is not listed as an impaired water body and the identified short-term impacts would not contribute to the impairment of Jackson Creek or exceed applicable water quality standards. To mitigate against these short-term impacts, applicable BMPs will be implemented during construction activities and are discussed in the following section.

The Proposed Project would require regulatory permits to minimize adverse impacts to water quality and ensure protection of the aquatic and/or riparian habitat. The Proposed Project would be required to obtain a NPDES Stormwater Construction General Permit with preparation of a SWPPP issued by the SWRCB, CWA Section 401 Water Quality Certification issued by the Central Valley RWQCB, a CWA Section 404 Nationwide Permit issued by the USACE, and a Section 1602 SAA issued by CDFW prior to construction activities to prevent permanent adverse impacts to Jackson Creek.

5.0 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

To mitigate against short-term construction and long-term operation and maintenance water quality impacts associated with the implementation of the Proposed Project, it has been determined by this WQAR that the following recommended Avoidance and Minimization Measures should be incorporated into the appropriate Project phases and implemented in consultation with regulatory agencies including the USACE, RWQCB, CDFW, and the City of Jackson.

5.1 Applicable Best Management Practices (BMP)

BMP-1 Work within the live channel of Jackson Creek would be limited to the period between April 15 and October 15 to avoid the rainy season.

BMP-2 Prior to work in or near Jackson Creek, coffer dams, culverts, and/or other temporary water diversion features will be installed to reduce sedimentation during construction; diverted or impounded water will not be discharged into the stream prior to treatment to remove sediment.

BMP- 3 Land disturbing activities and the installation of erosion and sedimentation control practices shall be coordinated to reduce on-site erosion and off-site sedimentation. These measures may include mulches (above the mean high water line only), soil binders and erosion control blankets, silt fencing, fiber rolls, sediment desilting basins, sediment traps, and check dams.

BMP-4 Existing vegetation shall be protected where feasible to provide an effective form of erosion and sediment control, as well as watershed protection, landscape beautification, dust and pollution control, noise reduction, and shade. Vegetation shall be preserved using methods such as implementation of year-round temporary fencing prior to clearing and grubbing operations or other soil-disturbing activities in areas where no construction activity is planned.

BMP-5 The area of construction and disturbance would be limited to as small an area as feasible.

BMP-6 Loose bulk materials may be applied to the soil surface as a temporary cover to protect bare soils from rainfall impact, increase infiltration, and reduce runoff and erosion.

BMP-7 Water shall be applied to surfaces to prevent the movement of dust at the Project site.

BMP-8 Area of construction and disturbance will be contoured and revegetated with native species. Hydroseeding would be implemented as a temporary measure, if feasible.

BMP-9 Provide berms along the tops of slopes to prevent water from running uncontrolled down the slopes.

BMP-10 Collect the water in these berms and take it down the slopes in an erosion-proof drainage system. Sediment that is collected within these berms would be allowed to "settle out" and would be removed from the site.

BMP-11 Provide energy dissipaters and erosion control pads at the bottom of slope drains. Other flow conveyance control mechanisms may include earth dikes, swales, or ditches. Stream bank stabilization measures should also be implemented.

BMP-12 All construction related materials would be hauled off-site after completion of construction.

BMP-13 All erosion control measures and storm water control measures would be properly maintained until the vegetation has been established according to the SWPPP.

BMP-14 All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution.

BMP-15 All vehicle and equipment maintenance procedures would be conducted off-site. In the event of an emergency, maintenance would occur away from the stream channel.

BMP-16 All concrete curing activities would be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.

BMP-17 All construction materials, vehicles, stockpiles, and staging areas would be situated outside of the stream channel as feasible. All stockpiles would be covered, as feasible.

5.2 Requirements for Water Pollution Control Plans (WPCP)

WPCP-1 The water pollution control plan shall include measures to avoid creating contaminants, minimize the release of contaminants, and water quality control measures to minimize contaminants from entering surface water or percolating into the ground.

WPCP-2 The water quality control measures shall address both construction and operation periods.

WPCP-3 Fluvial erosion and water pollution related to construction is controlled by a construction water pollution control program, which shall be filed with the appropriate agency and kept current throughout any site development phase.

WPCP-4 The water pollution control program shall include best management practices as appropriate, given the specific circumstances of the site and/or Project.

WPCP-5 The RWQCB may request to comment on and approve the Water Pollution Control Plan.

WPCP-6 A spill prevention and countermeasure plan would be incorporated into the Water Pollution Control Plan.

5.3 Permits

P-1 The Proposed Project would require a Section 1602 SAA through the CDFW to ensure protection from impacts to the streambed or associated riparian habitat.

P-2 The Proposed Project would require a CWA Section 404 Nationwide Permit from the USACE for dredging or filling.

P-3 The Proposed Project would require a CWA Section 401 Water Quality Certification from the Central Valley (Region 5) RWQCB for dredging or filling.

P-4 The Proposed Project would require a NPDES General Construction Permit for Discharges of storm water associated with construction activities (Construction General Permit 09-2009-DWQ). A SWPPP would also be developed and implemented as part of the Construction General Permit. Permit would be obtained from the Central Valley (Region 5) RWQCB.

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6.2 Preparers Qualifications

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Chris Stabenfeldt, AICP, Senior Environmental Planner/ Project Manager

B.A. Environmental Studies, University of California Santa Barbara. Mr. Stabenfeldt is a certified planner, team and project manager, and environmental analyst with over 30 years of professional environmental and planning consulting experience. He has managed comprehensive environmental documents including documentation and related compliance activities under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) and has extensive experience analyzing water resource impacts associated with infrastructure projects.

Tamara Gallentine, Environmental Planner

B.S. Environmental Science, Washington State University. Ms. Gallentine is an environmental professional with experience in biological, cultural, and water resources and California Environmental Quality ACT (CEQA)/National Environmental Policy Act (NEPA) compliance and documentation.

Appendix F

Visual Impact Assessment

VISUAL IMPACT ASSESSMENT
FOR THE
PITT STREET BRIDGE

Federal Aid No. 10-AMA-88-14.53
BRLO 5141 (018)

Prepared for:

City of Jackson
33 Broadway,
Jackson, CA 95642
(209) 223-1646

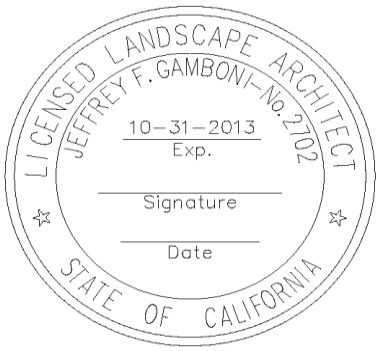
California Department of Transportation District 10
1976 East Dr. Martin Luther King Jr. Blvd.
Stockton, CA 95205

Approved by:

Brad Cole
License # _____
Caltrans District Landscape Architect
District 10

Prepared under the oversight of:

Jeffrey F. Gamboni
CA License # 2702
Landscape Architect



This Visual Impact Assessment was prepared using a process developed by the Federal Highway Administration (FHWA) in conjunction with the American Society of Landscape Architects. This process for assessing visual impacts satisfies the requirements of the National Environmental Policy Act (NEPA). The intent of this visual impact assessment is to substantiate findings presented within the environmental document by acting as a technical support document. The Pitt Street Bridge project scored a 12 on the Visual Impact Checklist, which according to Caltrans Visual Impact Assessment Guide, is within the rating score that states: "A brief Visual Assessment in memo form would likely be sufficient."

PROJECT DESCRIPTION

The City of Jackson proposes to replace the historical Pitt Street Bridge in the City of Jackson. The proposed project is for the replacement of the existing bridge structure and the resulting tie-in with the existing Pitt Street and State Route 88 (SR88) would be accomplished within the existing right-of-way of Pitt Street; therefore, no additional right-of-way would be needed for the project. The existing bridge approaches from Water Street to the north and continues in a one-way southbound direction that carries Pitt Street over the middle fork of Jackson Creek towards SR88. Pitt Street would remain a one-way bridge and no traffic would be exiting from SR88.

The existing Pitt Street Bridge was built in 1925. The structure consists of a single span steel Pratt pony truss with timber decking on steel floor beams, all supported by masonry abutments. The existing bridge is classified to be structurally deficient; however it is eligible for listing in the Nationals Register of Historic Places. The existing bridge has a steel sidewalk (4'-6' wide) with timber decking cantilevered from the upstream side of the structure. Due to failure of the timber decking on the bridge, the City replaced approximately six (6) inches of asphalt to the top of the bridge surface overlaying the wood planks in 2013.

The existing structure is constructed within a creek channel on sandy silt. The creek channel is natural; however, the sides of the creek are lined with vertical rock walls. Due to the fact that the bridge was built by an unknown agency, it is presumed that the abutments are constructed out of masonry block or concrete on unknown footings, presumably concrete spread footings.

The bridge, located in the Jackson City Historical Corridor, is within an urban area. Pitt Street is constrained between two privately owned residences at the northwest end of the bridge. Due to the limited work space, the existing bridge would be closed and completely removed prior to any new construction. The existing Pitt Street Bridge would be moved to the City's Corporation Yard for storage and later reused. The construction of the proposed project will be performed during the summer time and all pertinent permits will be obtained prior to any work in the stream channel. The creek is free flowing beneath the structure and FEMA data puts the 100-year flood event approximately 2.5 feet above the existing bridge. The last major storm overtopped the deck by about 1 foot.

The existing bridge would be removed and replaced with a widened bridge and northern roadway (approximately 8-10 feet wider) at the crossing of Jackson Creek. In addition, the proposed bridge would also increase in length by a few feet in order to improve hydraulics of the creek. Construction would also consist of new abutments, new wingwalls and new retaining walls to match the existing adjacent stacked rock walls.

The proposed bridge would be a one-lane Cast-in-Place (CIP) pre-stressed slab spanning fifty-four (54) feet in length and thirty-two (32) feet in width. In addition, there would be a 6' wide sidewalk along the upstream side of the bridge, spanning the length of Pitt Street from the intersection of Water Street and Pitt Street. The total project limits are less than 150 feet. The vertical alignment of the new bridge would not vary significantly from the existing profile. The existing bridge structure depth is estimated to be three (3) feet below the deck level. The proposed roadway conforms to the existing ROW alignment at the SR88 shoulder and at the intersection of Pitt Street and Water Street.

There is a ten (10) inch sewer line buried in the creek channel, slightly west of the middle of the bridge that would be replaced. Near the southern private driveway there is an eight (8) inch water line and storm drain integrated into the existing abutment one (1) structure, so portions will be removed as part of the demolition work. There are overhead electric lines to the east side, near abutment two (2), providing power to three (3) residences across the creek. During construction the guy wires would be temporarily relocated. There is also an existing twelve (12) inch drainage pipe day lighting out of abutment two (2) that would be relocated through the new abutment. On the downstream side of the existing bridge, there is a four (4) inch abandoned waterline that would be removed. There is an eight (8) inch waterline buried in the Pitt Street alignment and extending out of the existing abutment one (1) face. This waterline will be permanently relocated.

Equipment staging would be located on the existing Pitt Street roadway through the use of a temporary construction easement. The road within the project area would be fully closed during the project construction and detour routes would be made available to maintain access to all residential properties affected by the closure.

VISUAL IMPACTS

The bridge replacement will not compromise the neighborhood character and scale of the area. There are three (3) primary viewer groups that would be the viewers of the bridge site. Those associated with the adjacent residential properties, local motorists and users of the bridge. The visual impacts of the project include the removal, replacement and widening of the existing bridge to tie-in with the existing Pitt Street on either side of the bridge. The project would be on a similar scale as the existing bridge; therefore, no grading is necessary. The views of the bridge primarily occur from the same elevation as the bridge. This viewing pattern would continue after the proposed bridge replacement since the properties that have a direct view of the bridge would not be changed. The view of the proposed bridge and roadway tie-in would be visible from motorists in the area and the adjacent residents.

This area is located within the historical area of the City of Jackson, therefore, attention should be given to the design features of the bridge. Design features would ensure that the proposed bridge project would be compatible with surrounding architecture features that contribute to the historic nature of surrounding properties. The railings of the bridge need to be designed in a way that captures the historic sense of the surrounding area. With the removal of the existing bridge, the wooden planks will be removed which will impact the historic visual experience of the bridge. The surrounding roadways have a mixture of open ditches with limited curb and gutter. There is a tree growing directly next to the existing bridge on the east side that would be removed during construction. The project proposes the reconstruction of the existing stone retaining wall, keeping the historic sense of the wall intact. The creek has natural vegetation that grows along the creek and in the vicinity of the bridge. Although this vegetation is regularly maintained as part of the City's stormwater management plan.

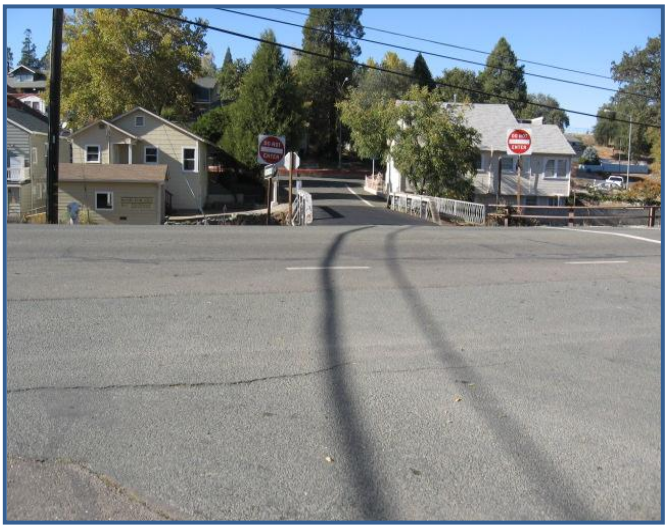
The following are the three (3) viewer groups affected by the proposed project:

- Neighbors who live adjacent
- Motorists
- Pedestrians

There are approximately 10 structures with direct views of the bridge. There are other properties with parking along the creek. Motorists using the State Route 88 (SR88) would see the bridge briefly when passing. This group views the bridge less than 60 seconds before approaching the bridge from the north. As motorists approach from the east, there is a curve in the road which prevents a long view of the bridge. Topography on the west side prevents views past 1/8 mile. Motorists stopping at the intersection across Pitt Street/SR88 and the intersection of Center Street/SR88 will have a view of the bridge while stopped. As shown in the pictures below the curves in the existing roadway prevent the motorists, and other users, from viewing the bridge until they are within close proximity to the bridge. Pedestrians use the existing bridge as it connects residential neighborhoods on the south side to the Downtown area. Pedestrians generally view the bridge for less than two (2) minutes while crossing.

East side of Pitt Street Bridge

West side of Pitt Street Bridge



View of Pitt Street Bridge from across Highway 88

View of Pitt Street Bridge from north approaching from Water Street

VISUAL MITIGATION

Caltrans and the FHWA mandate a qualitative-aesthetic approach to mitigate for loss of visual quality in the project area that is consistent with community concerns. This approach addresses the actual cumulative loss of visual quality that will occur in the project viewshed when the project is implemented. It also constitutes mitigation that can more readily generate public acceptance of the project.

Visual mitigation measures have been approached with budgetary constraints in mind while still adequately mitigating for visual impacts and addressing potential community concerns. With the implementation of the stated mitigation methods, the visual impacts of this project can be reduced and will not result in substantial changes in overall visual quality. The following visual mitigation would be required:

- In conjunction with the Storm Water Management Plan, hydroseeding of the affected slopes is required. The formula for the hydroseeding should include native perennials and annuals as well as fast-germinating annuals which may be non-native, but which will stabilize the slope quickly. The native perennials and native annuals will contribute to the long-term revegetation of the slope without introducing irrigation systems, etc.
- Locating any utility pipelines crossing the creek along the side / underside of the bridge out of sight from users of the bridge is necessary.
- Specifying that the pedestrian railings on the new bridge shall be of a type recalling the historical design features of the present bridge.
- Designing adjacent retaining walls to mimic the historical qualities of the existing stone walls.

CONCLUSION

Construction of the new bridge with the historic design features included and the associated roadwork would not result in a significant visual impact / substantially adverse effect because the replacement structure would include design features that provide a historic context to the bridge, the view of the bridge is limited and there is an existing bridge at the proposed location. The viewer groups of this project are limited and the duration of the view of the project is short. With the implementation of the standard mitigation measures outlined above, the proposed project would have a less than significant visual impact. The replacement of the removed tree and the re-vegetation of the native landscaping in the project area would bridge and repair the construction-related impacts to the adjacent stream banks. The proposed bridge design would include design features that maintain the historical context of the bridge. Therefore, as a result, no significant impacts or substantially adverse effects on visual resources or views within the visual setting of the project or adjoining area are anticipated.

Appendix G

Noise

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"Preserving Our Past, Enriching Our Present, Building Our Future"

33 Broadway, Jackson, California 95642-2301 • voice (209) 223-1646 • fax (209) 223-3141
E-mail: cinfo@ci.jackson.ca.us • Web site: http://ci.jackson.ca.us

To: Ms. Haiyan □hang
Caltrans District 10
1976 Dr. Martin □uther King, Jr. Blvd/East Charter Way
Stockton, CA 95205

Date: June 5, 2014

From: City of Jackson
□□ Broadway
Jackson, CA 95642

Subject: Pitt Street Bridge Replacement Project - Federal Project No. BRLO 5141 (018) located in Jackson, California.

Construction Noise Memorandum

Subject: Pitt Street Bridge Replacement Project – City of Jackson, California

Pursuant to your re□uest, the City of Jackson has assessed potential construction noise-related impacts for the Pitt Street Bridge Replacement Project □project□. This analysis was conducted to ensure that the construction related noise levels do not exceed the Caltrans or local noise standards. The project area is presented as Attachment A. The project concept plan is presented as Attachment B.

Project Description

The City of Jackson intends to replace the existing Pitt Street Bridge □Bridge No. 26C-0008□ that spans a portion of the middle fork of Jackson creek and runs adjacent to State Route 88. The bridge was constructed in 1925. The project includes removing and replacing the existing functionally obsolete 1-lane bridge with a single-lane, shouldered bridge with separated pedestrian walkway.

The bridge□s existing railing consists of a riveted steel truss that does not meet current standards, and there will be minor betterments to the State Route 88 connection and the existing guardrail.

State Route 88□s westbound shoulder east of the Pitt Street Bridge is narrow, confirmed by State Route 88 alignment and Jackson Creek, and construction of a standard intersection taper may not be possible. Since Pitt Street will remain a single southbound lane, there will be no traffic exiting State Route 88 onto Pitt Street.

The proposed bridge replacement project will rectify both of these conditions along with the structural deficiencies and will improve channel hydraulics. A □OMAR will be filed with FEMA through State office of CalEMA.

All deficiencies will be resolved by the replacement of the bridge. □n addition to correcting the structural deficiencies, this project will improve channel hydraulics by restoring the greater creek cross-sectional area with scour protection. Additionally, scour damage is evident on the north abutment. □engthening the bridge provides a wider channel to match the creek cross-section.

Criteria for Acceptable Noise Exposure

The City of Jackson General Plan Noise Element

The City of Jackson Noise Element contains noise level standards in terms of Day-Night □evels □□$_{dn}$□. Table 1 displays the land use compatibility noise level standards that would be applicable to the proposed project. The noise level standards are applicable at outdoor locations, as this is where the worst case noise levels would be experienced.

Table 1
Land Use Compatibility for Community Noise Environments
City of Jackson General Plan Noise Element

Land Use	Normally Acceptable Noise Level Limit, L_{dn} (dBA)
Residential □Single-Family	60
Residential □Multi-Family	65
Transient □odging	65

Source: City of Jackson □eneral Plan □1987□

Caltrans Standard Specifications (2010)

Section 14-8.02, Noise Control, of Caltrans standard specifications provides information that can be considered in determining whether construction would result in adverse noise impacts. The specification states:

- Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- E□uip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

Existing General Daytime Ambient Conditions

The noise environment in the project vicinity is defined by traffic noise emanating primarily from State Route 88. To □uantify existing ambient noise levels at the nearest residences to the proposed construction area, Bollard Acoustical Consultants, □nc. □BAC□ conducted a short-term noise survey at one location □Sites 1□shown on Attachment A on the afternoon of May 29, 2014. BAC also conducted a long-term noise survey at one location □Site A□on May 28, 2014. The noise level measurement results are summari□ed below in Tables 2 and □. Detailed noise long-term measurement results are provided as Attachments C and D.

□arson-Davis □aboratories □□D□□820 precision integrating sound level meters were used to complete the noise level measurement surveys. The meters were calibrated before use with a □D□ Model CA□200 calibrator to ensure the accuracy of the measurements. The e□uipment used meets all pertinent specifications of the American National Standards □nstitute for Type 1 sound level meters □ANS□S1.4□.

Table 2 Summary of Short-Term Ambient Noise Measurement Results Pitt Street Bridge Replacement Project – May 29, 2014					
		Measured Noise Levels (dBA)			
Site[A]	Time	L_{eq}	L_{50}	L_{90}	L_{max}
ST-1	□:27 PM	72	66	54	9□

Notes:

A. See Attachment A for noise measurement locations.

Source: Bollard Acoustical Consultants, □nc.

Table 3 Summary of Long-Term Ambient Noise Measurement Results Pitt Street Bridge Replacement Project – May 28, 2014									
	Measured Noise Levels (dBA)[B]								
	Daytime (7 AM – 10 PM)				Nighttime (10 PM to 7 AM)				
Site[A]	L_{eq}	L_{50}	L_{90}	L_{max}	L_{eq}	L_{50}	L_{90}	L_{max}	L_{dn}
□T-A	62	59	50	74-90	55	44	□9	70-77	64

Notes:

A. See Attachment A for noise measurement locations.

B. Detailed noise measurement results □hour by hour chart and graph□are provided as Attachments C □ D.

Source: Bollard Acoustical Consultants, □nc.

Evaluation of Construction Noise Generation

The Federal Highway Administration □FHWA□Roadway Construction Noise Model □RCNM□ was utili□ed to model the various project e□uipment noise levels at the nearest noise-sensitive locations. For modeling purposes, the project operations were divided into four separate construction phases. Phase 1 represents construction activities that typically occur during the dismantling of bridges. Phase 2 represents construction activities that typically take place during the start of construction. Phase □ represents construction activities that typically take place during the middle of construction. Phase 4 represents construction activities that typically take place towards the end of construction. The phase dependent project e□uipment modeling assumptions are provided in Table 4. Table 5 shows the predicted construction-related average and maximum noise levels at noise sensitive exterior □backyard□locations, with Table 6 showing predicted levels in terms of □$_{dn}$.

Table 4
Assumed Construction Equipment Operations During Various Project Phases
Pitt Street Bridge Replacement Project

Construction Equipment	Phase 1	Phase 2	Phase 3	Phase 4
Crane	□			
Excavator	□	□		
Jackhammer	□			
Dump Truck	□	□		
Pickup Truck	□	□	□	□
□rader			□	
Front End □oader			□	
Concrete Mixer Truck				□
Roller				□
Paver				□

Source: Bollard Acoustical Consultants, □nc.

Table 5
Summary of Predicted Construction Equipment Noise Levels at Outdoor Activity Areas[A]
Pitt Street Bridge Replacement Project

Receiver ID[B]	APN	Predicted Noise Levels (dBA)							
		Phase 1		Phase 2		Phase 3		Phase 4	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
R1	020-200-028	90	95	85	87	88	91	86	86
R2	020-246-005	95	90	85	87	88	91	86	86
R□	020-246-004	81	86	76	78	79	82	77	77
R4	020-271-017	75	80	70	72	7□	76	71	71
R5	020-27□-002	7□	78	68	70	72	74	69	69
R6	020-27□-001	74	79	69	71	72	75	69	70

Notes:
A. Backyard area of residences.
B. See Attachment A for receiver locations.
Source: Bollard Acoustical Consultants, □nc.

Table 6 Summary of Predicted Construction Equipment Noise Levels – Exterior/Interior Pitt Street Bridge Replacement Project									
		Predicted Noise Levels, L_{dn} (dBA)[A]							
		Phase 1		Phase 2		Phase 3		Phase 4	
Receiver ID[B]	APN	OAA[C]	Int.[D]	OAA	Int.	OAA	Int.	OAA	Int.
R1	020-200-028	86	61	81	56	85	60	82	57
R2	020-246-005	91	66	81	56	85	60	82	57
R□	020-246-004	77	52	72	47	76	51	7□	48
R4	020-271-017	71	46	66	41	70	45	67	42
R5	020-27□-002	69	44	64	□9	68	4□	65	40
R6	020-27□-001	70	45	65	40	68	4□	66	41

Notes:

A. Assumes construction activity occurring during the hours of 7 AM to 5 PM.

B. See Attachment A for receiver locations.

C. Outdoor Activity Area □OAA□, backyard of residence.

D. □nterior of residence. Assumes a 25 dB fa□ade noise level reduction.

Source: Bollard Acoustical Consultants, □nc.

Analysis of Construction Noise Impacts and Recommended Abatement Measures

Analysis of the project generated noise levels shown in Table 5 indicates that the Caltrans 86 dBA □$_{max}$ criteria would be exceeded at the nearby outdoor areas of fre□uent human use □i.e. backyards□. Specifically, the Caltrans 86 dBA □$_{max}$ criteria would be exceed at receiver locations 1 and 2 during project construction phases 1 through □. □iven the proximity of the nearest residences to the bridge replacement area, average and maximum construction-related noise levels are predicted to be elevated throughout the course of the project. □n addition, the Table 6 data indicate that construction-related noise levels would exceed the City of Jackson noise standards applicable to the exterior and interior areas of residential uses. Although project would be of limited duration, due to the potential for short-term noise impacts during project construction, the following specific noise mitigation measures are recommended to minimi□e intrusion to the local residents:

- Project construction activities should be limited to the daytime hours of 7 am to 7 pm.
- □ocal residents should be given advanced notice of project construction schedules, and should be notified that there will be substantial temporary increases in local noise levels during project construction at the nearest residences to the construction activities.
- To the extent feasible, separation between construction staging areas and the nearest residences should be maximi□ed.

- If concerns are expressed by local residents regarding excessive noise during project construction, the potential for installation of temporary, localized noise barriers should be discussed with the resident and implemented if feasible. Such barriers could take the form of hay bales, acoustic curtains, or temporary wood fencing.

- All internal combustion engines used for construction shall be fitted with mufflers.

- Generators and compressors required during project construction should be located as far as possible from existing residents and, if necessary, shielded from view of those residences by portable noise barriers.

Conclusions

Given the proximity of existing residences to the proposed construction areas, short term increases in both interior and exterior noise levels at those residences will occur during project construction. Although construction noise levels would still be elevated after implementation of the recommendations provided above, those recommendations would reduce the potential for adverse public reaction during project construction.

Mike Daly, City of Jackson Date

Attachment A

Pitt Street Bridge Replacement Project - Jackson, California

Ambient Noise Level Measurement Location & Nearest Noise-Sensitive Receiver Locations

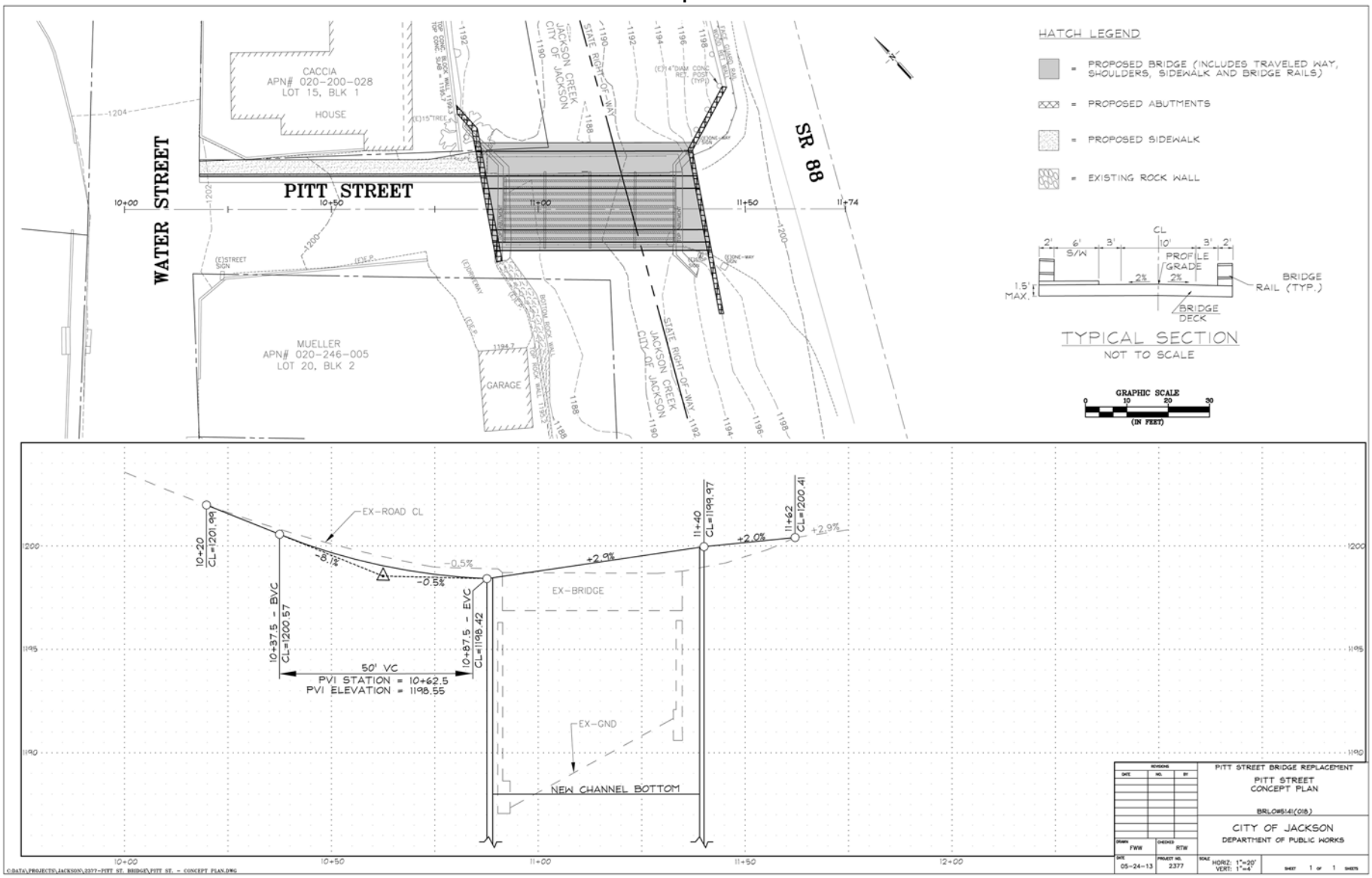
Scale (feet)

0 50 100

Attachment B

Pitt Street Bridge Replacement Project - Jackson, California

Concept Plan



Attachment C

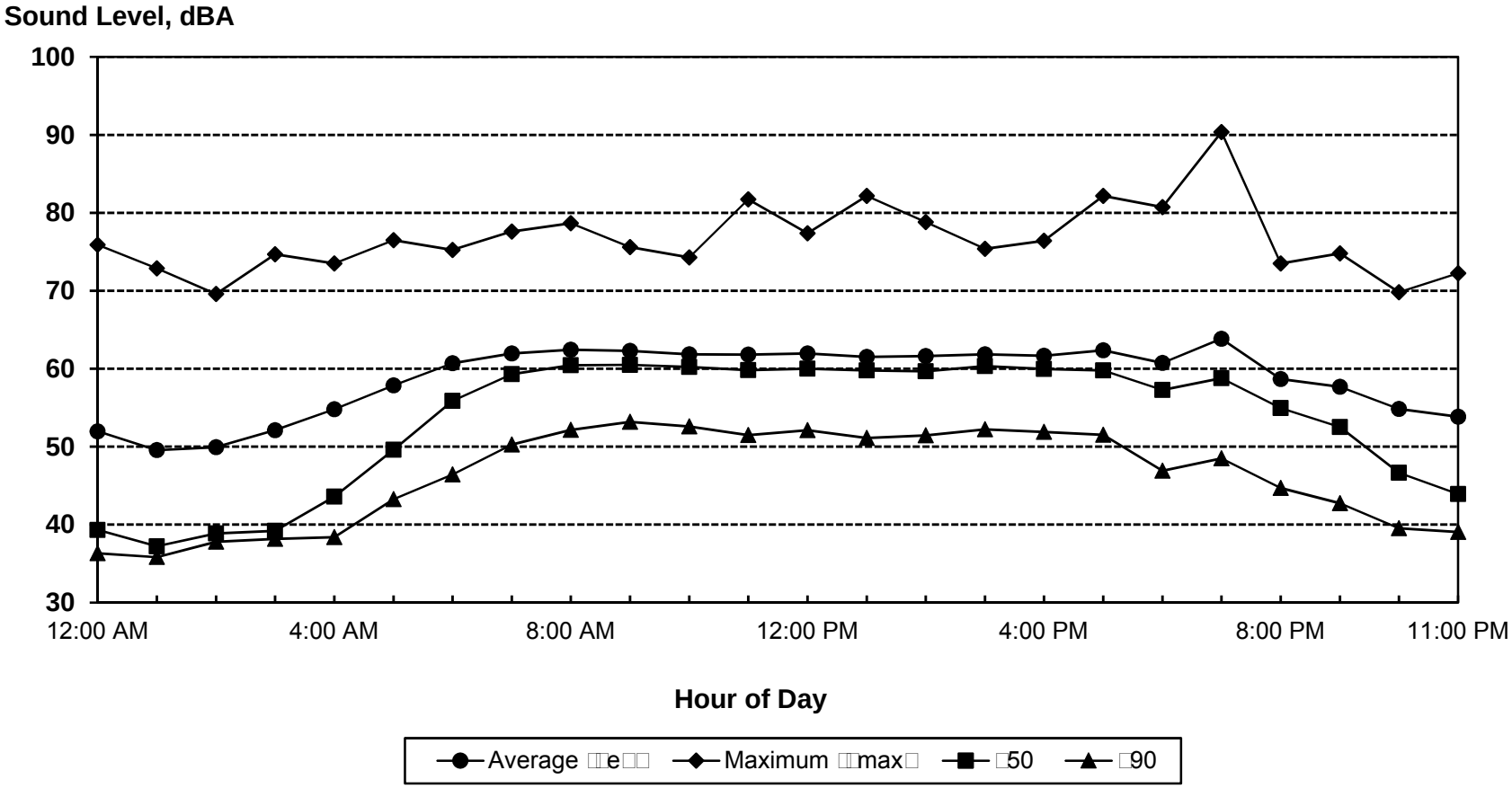
Pitt Street Bridge Replacement
24hr Continuous Noise Monitoring at Site A (Side Yard of 416 Water Street)
Wednesday, May 28, 2014

Hour	□e□	□max	□50	□90
0:00	52	76	□9	□6
1:00	50	7□	□7	□6
2:00	50	70	□9	□8
□:00	52	75	□9	□8
4:00	55	74	44	□8
5:00	58	76	50	4□
6:00	61	75	56	46
7:00	62	78	59	50
8:00	62	79	60	52
9:00	62	76	61	5□
10:00	62	74	60	5□
11:00	62	82	60	51
12:00	62	77	60	52
1□:00	62	82	60	51
14:00	62	79	60	51
15:00	62	75	60	52
16:00	62	76	60	52
17:00	62	82	60	52
18:00	61	81	57	47
19:00	64	90	59	49
20:00	59	74	55	45
21:00	58	75	5□	4□
22:00	55	70	47	40
2□:00	54	72	44	□9

	Statistical Summary					
	Daytime □7 a.m. - 10 p.m.□			Nighttime □10 p.m. - 7 a.m.□		
	High	□ow	Average	High	□ow	Average
□e□ □Average□	6□.9	57.7	61.7	60.7	49.6	55.4
□max □Maximum□	90.4	7□.5	78.6	76.5	69.6	7□.4
□50 □Median□	60.5	52.5	58.9	55.9	□7.2	4□.8
□90 □Background□	5□.2	42.8	50.2	46.4	□5.8	□9.4

Computed □dn, dB	6□.5
□ Daytime Energy	88□
□ Nighttime Energy	12□

Attachment D
Pitt Street Bridge Replacement
24hr Continuous Noise Monitoring at Site A (Side Yard of 416 Water Street)
Wednesday, May 28, 2014



Ldn: 63 dB