RECLAMATION DISTRICT NO. 1614
SMITH TRACT

BOARD OF TRUSTEES MEETING
MONDAY, JULY 1, 2019
2:00 PM
ENGINEER'S REPORT

I. WISCONSIN PUMP STATION NO. 7

A. Review status of alternative repair design for Wisconsin Pump Station.

EXHIBIT A: Email Memorandum from KSN Inc. dated June 20, 2019.

EXHIBIT B: Cultural Resources Inventory Report for Wisconsin Pump Station replacement Project dated April 29, 2019.

II. KLEINFELDER'S GEOTECHNICAL EVALUATION REPORT (GER) OF RD 1614 & RD 828 DATED 3/17/15.

A. Review Memo prepared by KSN Inc. regarding review of GER's Purpose and Findings.

EXHIBIT C: Memo prepared by Christopher H. Neudeck dated June 28, 2019

III. SMITH CANAL GATE STRUCTURE PROJECT - SAN JOAQUIN AREA FLOOD CONTROL AGENCY (SJAFCA)

A. Update on Smith Canal gate closure project.

EXHIBIT D: File Memorandum dated June 27, 2019 from SJAFCA

Exhibit A

Chris Neudeck

From: Erik Almaas
Sent: Thursday, June 20, 2019 8:19 AM
To: Chris Neudeck
Subject: Wisconsin Pump Station update

Chris, update on the Wisconsin Pump Station is as follows:

Civil:

- Civil plans are substantially complete (90%) and have been updated to reflect preliminary CVFPB comments.

Structural:

- Structural plans are substantially complete (90%) and CVFPB had no preliminary comments.

Electrical:

- PG&E is in the design phase.

Environmental:

- Done.

Permitting:

- CVFPB permit application has been deemed incomplete and CVFPB staff has provided some preliminary comments. The civil plans have been updated to address comments. The CVFPB staff also requested a geotechnical report, and Kleinfelder is wrapping up with geotechnical analysis and expects to have a report to us by end of this week. Upon receipt of geotechnical report, a full response to CVFPB preliminary comments with be finalized and forwarded to CVFPB staff.
- CDFW (1600) draft permit has been forwarded to us with very unreasonable conditions. A response to CDFW was provided last month with no feedback yet.
- RWQCB (401) permit has been received and is being reviewed.
- USACE (404) permit is being processed. Informal consultation is ongoing with USFWS and NMFS.

The schedule is currently being driven by the permitting effort. Unfortunately, as a result of the government shutdown earlier this year, the resource agencies are claiming major delays in their review of projects (i.e. up to six months). We are still pushing to have permits by the end of the summer, but there is a strong possibility of delay in obtaining all permits until fall or later.

KSN inc. KJELDSEN SINNOCK NEUDECK CIVIL ENGINEERS & LAND SURVEYORS
CELEBRATING 60 YEARS

Erik E. Almaas, P.E. CFM
Civil Engineer

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Exhibit B

CULTURAL RESOURCES INVENTORY REPORT
WISCONSIN PUMP STATION REPLACEMENT PROJECT

CITY OF STOCKTON, SAN JOAQUIN COUNTY, CALIFORNIA

—♦♦♦—

Prepared for

Moore Biological Consultants
10331 Twin Cities Road, Suite 30
Galt, CA 95632

and

U.S. Army Corps of Engineers
Sacramento District
1325 J Street
Sacramento, CA 95814

Submitted by:

Jason A. Coleman, M.A., R.P.A.
Principal Investigator

Solano Archaeological Services
131 Sunset Avenue, Suite E # 120
Suisun City, CA 94585
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April 2019

USGS 7.5' Stockton West, California
APE covers 0.4 Acre, T. 1 North, R. 6 East

MANAGEMENT SUMMARY

Reclamation District 1614 proposes to construct the Wisconsin Pump Station Replacement Project (the "Project") in the City of Stockton, San Joaquin County California. The Project Area of Potential Effects (APE) encompasses approximately 0.4 acre at the southeast end of a tributary slough to the Calaveras River adjacent to Wisconsin Avenue. The proposed improvements consist of the reconstruction of two drainage pipes, and the addition of two new pumps and discharge pipes. The Project also includes the construction of a new discharge structure and interior structural supports will be added to the existing pump house.

Waters of the United States have been identified within the APE necessitating a Clean Water Act Section 404 permit from the U.S. Army Corps of Engineers. Consequently, the Project is subject to the National Environmental Policy Act, and Section 106 of the National Historic Preservation Act (Section 106). In order to aid in the compliance with Section 106, Moore Biological Consultants contracted with Solano Archaeological Services (SAS) to identify cultural resources within the APE that could be subject to project-related adverse effects, and so that any Project planning could include avoidance or mitigation measures as necessary. SAS was tasked with updating information on previously-documented sites and features within the APE, identifying previously undocumented cultural resources, and evaluating potentially affected resources per National Register of Historic Places (NRHP) criteria.

A record search conducted through the California Historical Resources Information System and additional archival research indicated that no previously identified cultural resources are known to be present within the APE although five resources have been documented within 0.5-mile of the Project APE. Outreach to the Native American community did not result in the identification of any culturally significant properties within or near the APE. The SAS survey identified one historic-era resource in the APE – the Wisconsin Pump Station and associated levee segment. SAS recommended this resource not eligible for listing on the NRHP. As a result, the proposed Project would have no effect on this resource.

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1.0 Introduction

Reclamation District 1614 proposes to construct the Wisconsin Pump Station Replacement Project (the "Project") in the City of Stockton, San Joaquin County California. The Project Area of Potential Effects (APE) encompasses approximately 0.4 acre at the southeast end of a tributary slough to the Calaveras River adjacent to Wisconsin Avenue. The proposed improvements consist of the reconstruction of two drainage pipes, and the addition of two new pumps and discharge pipes. The Project also includes the construction of a new discharge structure and interior structural supports will be added to the existing pump house.

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1.1 Project Location

The APE is situated on the *Stockton West, California* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figures 1, and 2). The APE is located in and un-sectioned portion of Township 1 North, Range 6 East, just south of the south bank of the Calaveras River, and immediately adjacent to Wisconsin Avenue (Figure 3).

1.2 Project Description

The Project consists of major upgrades to an existing pump station and outfall structure near the southeast tip of the tributary slough to the Calaveras River. Two existing discharge pipes will be reconstructed as they cross an adjacent levee and two new pumps and discharge pipes will be added. The discharge pipes that will be reconstructed are 18 and 20 inches (in) in diameter. The reconstruction work will consist of removing the portion of the pipes that pass through the existing levee section. Two new 24-in-diameter pipes will then be installed through the existing levee at a suitable elevation above the 200-year water surface elevation and will reconnect to the remnant pipes at the landside levee toe. The new pipes that will connected to the two new pumps will also be installed through the existing levee at a suitable elevation above the 200-year water surface elevation. A new discharge structure will be constructed at the top of the waterside slope of the levee; an articulated concrete mat (Armorflex) will also be constructed at the waterside slope for erosion control purposes. The existing sump and pump house will remain, although interior structural supports will be added.

The Project will involve excavation of approximately 46 cubic yards of soil from the upper bank of the slough at the waterside hinge point in order to facilitate the construction of the new discharge structure. All of the excavation will be above the mean high water mark (MHW). The soil that is excavated is not suitable for re-use at the site and will be hauled off site for disposal. The existing pipes will be cut near the landside toe of the levee. The pipes will be lifted out of place with a long reach excavator, and may be cut in a few pieces prior to removal. The pipes will also be hauled off site for disposal. Clean fill dirt will then be placed on the landside of the levee slope, raising this area a few feet to support the new pipes.

Following excavation and construction of the new discharge structure, the four new pipes crossing the levee will be installed. The pipes will be lifted in to place and positioned in the previously excavated levee crown and on top of the new fill slope on the landside of the levee with a long reach excavator. A total of 344 cubic yards of clean imported levee fill dirt will be installed on the levee crown and landside slope of the levee. The new fill dirt will be placed in a manner to provide minimum cover over the top of the pipes and to provide a minimum levee crown width, and will be approximately 2 feet above the tops of the pipes. None of the fill dirt will be placed on the waterside slope of the levee or below the MHW.

To dissipate flows and to provide erosion protection to the waterside levee slope, a 974+/- square foot Armorflex mat will be installed on the bank of the slough, with 409+/- square feet (0.009 acre) being below the MHW and the remaining 565+/- square feet (0.013 acre) above. The mat will be approximately 16 cubic yards, with 15+/- cubic yards being installed below the MHW and the remaining 11+/- cubic yards above. Because of the direct and concentrated outfall flows that will impact the waterside slope, the Armorflex will serve as a better solution for erosion protection than riprap and will require little maintenance. The Armorflex mat will likely be placed with a long reach excavator; a small crane may be required if the mat is too heavy for the excavator.

The total footprint of work in the riparian corridor (i.e., waterside of the levee to outer edge of riparian vegetation) will encompass a total area of 1,600 square feet (0.04 acre). Of this total, 0.01 acre is below the MHW and 0.04 acre is above the MHW. No notable trees will be removed, although a few trees will need to be trimmed to complete the construction. Construction will not require dewatering; the Armorflex mat will be installed during a period of low tide. Optimally, construction will be scheduled for Fall 2019.

1.3 Area of Potential Effects

The APE has been established to encompass the maximum limits of potential ground-disturbing activities that would reasonably be expected from the proposed project, including but not limited to, all existing parcels, potential access routes, and equipment staging and laydown areas. The entire APE is subject to grading and other ground-disturbances associated with the construction of the Project and related utilities and transportation features. The vertical APE would extend to no more than approximately six feet below the present-day grade to accommodate the installation of the new drainage, discharge, and pump infrastructure.

Figure1. Project Vicinity Map.

● Wisconsin Pump Replacement Project APE

Sources: *USA Base Map* [layer],*Data and Maps* [CD]. ESRI, 2006.

1:250,000

0 3 Miles

0 6 Kilometers

Figure 2. Project Location Map.

● Wisconsin Pump Station Replacement Project APE

Wetlands Land Grant (Presumed T01N, R06E)
Stockton West 7.5' Series Quadrangle, USGS, 1978

1:24,000

0.5 Miles

1 Kilometers

Figure 3. APE Map.

Wisconsin Pump Replacement Project APE

1:1,000

0 50 Feet

0 25 Meters

1.4 Regulatory Context

Section 106 of the National Historic Preservation Act

This cultural resources inventory and evaluation effort was prepared by SAS to comply with Section 106 and its implementing regulations in Title 36 Code of Federal Regulations Part 800 (36 CFR 800). Projects that take place on federal property, or involve federal funding or permitting fall under the jurisdiction of Section 106.

This report addresses the identification of any discovered historic properties (cultural resources listed or recommended for listing on the NRHP) in the APE. As defined by Section 106, historic properties can include historic sites, structures, buildings, districts, and objects older than 50 years that are eligible, or potentially eligible, for listing on the NRHP. The Section 106 process mandates that foreseeable significant impacts to resources eligible for NRHP listing must be mitigated.

The NRHP is a register of historic properties that includes districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. The regulations provided in 36 CFR Part 60.4 describe the criteria to evaluate cultural resources for inclusion in the NRHP. Historic properties can be significant on the national, state, or local level. Properties may be listed in the NRHP if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A) are associated with events that have made a significant contribution to the broad patterns of our history;
B) are associated with the lives of persons significant in our past;
C) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess an artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D) have yielded, or may be likely to yield, information important in prehistory or history.

Most prehistoric archaeological sites are evaluated with regard to Criterion D of the NRHP, which refers to site data potential. Such sites typically lack historical documentation that might otherwise adequately describe their important characteristics. Archaeological methods and techniques are applied to gain an understanding of the types of information that may be recovered from the deposits. Data sought are those recognized to be applicable to scientific research questions or to other cultural values.

Site integrity is also a consideration for the NRHP eligibility of an archaeological locale. The aspects of integrity include location, setting, design, workmanship, feeling, and association. These may be compromised to some extent by cultural and post-depositional factors (e.g., highway construction, erosion, bioturbation, etc.), yet the resource may still retain its integrity for NRHP eligibility depending on the impacts the site has sustained.

2.0 NATURAL AND CULTURAL SETTING

2.1 Natural Environment

The APE is located in within an estuarine environment – specifically where the Sacramento-San Joaquin Delta meets the Pacific tidal waters. Prior to extensive land reclamation starting in the mid-late 19th century, the area was characterized by the presence of low-lying tule marshes interspersed with small sand hummocks often used by Native American groups for habitation and the interment of the deceased. During the historic period, the marshes were reclaimed for agricultural purposes and the sand mounds were graded for levee fill and to facilitate farming and development. Many areas in the immediate vicinity of the APE have been reclaimed and as a result are at or below mean sea level. The removal of peat, grading, and land subsidence due to reclamation and agricultural dewatering, has contributed to the lowering elevation of the lands encompassed by the levees. Current land use within and adjacent to the APE consists primarily of dense urban residential and commercial development.

On-site topography is level at an elevation of 10 feet above mean sea level. Numerous irrigation canals and drainage ditches are present in the area surrounding the APE along with the nearby channel of the Calaveras River, and the San Joaquin River/Stockton Deep Water Chanel. Vegetation communities that might have been present in the area prior to intensive developments that have occurred during the 20th century likely included annual grassland/ruderal habitat, interior dune communities, alkali meadows and grasslands, Great Valley riparian forest/willow scrub, and valley freshwater marsh/seasonal wetlands. Early explorers commented on the wealth of faunal and bird life and noted the presence of antelope by the thousands, numerous deer, large herds of elk, and droves of geese and ducks." Deer, elk, rabbit, squirrel and other small game, as well as acorns, seeds, etc. were available in nearby hills and valleys (Bard and Busby 1978; Bingham 2003; Paterson et al. 1978).

2.2 Prehistoric Context

A number of important investigations and discoveries have been made primarily to the west of the APE and Stockton that have resulted in the identification of prehistoric sites and materials instrumental in defining the cultural sequences seen in the archaeological record. Some of these sites include CA-SJO-17 on Mormon Slough (about 3 miles southeast of the APE) (Fenenga 1970), CA-SJO-91 on French Camp Slough (Johnson 1970) and CA-SJO-155/165 located to the southwest of the City of Stockton (Rolen 1981). These sites were apparently all found on landforms consisting largely of the Piper series soils representing relatively high knolls in the otherwise low and largely inundated Sacramento-San Joaquin Delta.

More recent investigations in the general region surrounding the APE have identified numerous and significant prehistoric deposits. Most notably, these include sites CA-SJO-93, CA-SJO-264, and CA-SJO-265 to the north, CA-SJO-158 and CA-SJO-160 just south of downtown Stockton, and CA-SJO-189 located to the southwest of Stockton. The investigations at CA-SJO-93, CA-SJO-264, and CA-SJO-265 (Delacorte 2001) were of particular interest in that the excavations there revealed numerous human interments, baked clay objects frequently overlooked in archaeological assemblages in the Central Valley, Napa obsidian from north of the Bay Area, and a diverse array of flaked lithic artifacts, faunal remains, and shell beads and ornaments. Werner and Flaherty's work on sites CA-SJO-158 and CA-SJO-160 (1997) recorded a number of milling features and lithic scatters that likely would be representative of sites documented in or near the APE. The findings resulting from several investigations at CA-SJO-189 (Emig et al. 1981, Lloyd 2006, Lloyd and Baolin 2005) indicated that this site was probably also situated on Piper soils and it contained 20 human interments and dense concentrations of flaked lithic materials, faunal remains, and shell beads.

Defining the prehistory of the APE and surrounding region relies on the classification of archaeological manifestations excavated and interpreted throughout much of the 20th century including those mentioned above. Not surprisingly, early attempts to construct a chronology of the northern San Joaquin Valley were based on the excavations in the Delta region, most notably by Elmer J. Dawson. Dawson recognized cultural

change in the strata at his mound site near Lodi and proposed a succession of periods (early, middle, and late) to categorize such change (Moratto 1984:177). Although the importance of his chronology was initially minimized by preeminent archaeologist W. E. Schenck, Dawson's sequence eventually was supported by studies in the Delta and lower Sacramento Valley during the 1930s.

The tripartite chronology has been reworked several times since Lillard, Heizer, and Fenenga (Moratto 1984) offered their sequence (Early, Transitional, and Late periods) for the Central Valley in the late 1930s. Subsequent chronologies have labeled the three eras differently. Each corresponding time period does display a common suite of characteristics (Moratto 1984:180–214). The seminal influence of Fredrickson's (1973, 1974) proposed sequence of cultural manifestations or patterns which was adjusted with the aid of recent radiocarbon dates is the standard used currently in describing the chronological framework of culture history in Central California.

Few archaeological sites have been found in the valley that date to the Paleo-Indian or the **Lower Archaic (8,000–5,000 years before the present day [BP])** time periods; however, archaeologists have recovered a great deal of data from sites occupied by the Middle Archaic Period. The lack of sites from earlier periods may be because of high sedimentation rates, leaving the earliest sites deeply buried and inaccessible. During the **Middle Archaic Period (5,000–2,500 BP)**, the broad regional patterns of foraging subsistence strategies gave way to more intensive procurement practices. Subsistence economies were more diversified, possibly including the introduction of acorn processing technology. Populations were growing and occupying more diverse settings. Permanent villages that were occupied throughout the year were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the **Upper Archaic Period (2,500 BP–1,300 BP)**. Exchange systems become more complex and formalized and evidence of regular, sustained trade between groups was seen for the first time.

Several technological and social changes characterized the **Emergent Period (1,300 BP–200 BP)**. The bow and arrow were introduced, ultimately replacing the dart and atlatl. Territorial boundaries between groups became well established. Exchange of goods between groups became more regularized, with more goods, including raw materials, entering into the exchange networks. In the latter portion of this period (500 BP–200 BP), exchange relations became highly regularized and sophisticated. The clamshell disk bead became a monetary unit for exchange, and increasing quantities of goods moved greater distances while specialists arose to govern various aspects of production and exchange.

Fredrickson's Middle and Upper Archaic and Emergent Periods are further broken down according to distinctive patterns of material cultural and practices. The manifestations discussed below are well represented in archaeological assemblages in the general vicinity of the APE. These assemblages are discussed in detail in Bennyhoff and Fredrickson (1969) and Moratto (1984) and summarized here:

- The **Windmiller Pattern (5,000 BP–2,500 BP)** of archaeological assemblages included an increased emphasis on acorn use as well as a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay artifacts, and worked shell and bone were hallmarks of Windmiller culture. Widely ranging trade patterns brought goods in from the Coast Ranges and trans-Sierran sources as well as closer trading partners. Distinctive burial practices (ventrally extended, oriented westward) identified with the Windmiller Pattern also appeared in the Sierra foothills, indicating possible seasonal migration into the Sierra.

- The **Berkeley Pattern (Ragir's [1972] Cosumnes Culture [2,200 BP–1,300 BP])** represented a greater reliance on acorns as a food source than was seen previously. Distinctive stone and shell artifacts distinguished it from earlier or later cultural expressions. Burials were predominantly placed in a tightly flexed position and frequently included red ochre. Dating of the Berkeley Pattern varies across central California; in the Stockton region, the Windmiller Pattern continued longer than in other areas, gradually giving way to the changes that marked the Berkeley Pattern and which might represent the emergence of the Northern Valley Yokuts in this area.

- The **Augustine Pattern (1,300 BP– 200BP)** was marked by increasing populations resulting from more intensive food procurement strategies, as well as a marked change in burial practices and increased trade activities. Intensive fishing, hunting and gathering, complex exchange systems, and a wider variety in mortuary patterns were all hallmarks of this period. Mortars and pestles were more carefully shaped; bow and arrow technology was present. Fishing implements became more common, trade increased, and cremation was used for some higher status individuals.

2.3 Ethnographic Context

Ethnographically, the Northern Valley Yokuts occupied an area on either side of the San Joaquin River from the Delta to south of Mendota. The Diablo Range probably marked the Yokuts' western boundary (Wallace 1978); the eastern edge would have lain along the Sierra Nevada foothills. Milliken (1997) places the *Yatchicumne* Yokut group in the area now encompassed by the City of Stockton, and the *Passasime* Yokuts in the French Camp and Duck Creek slough areas.

According to Milliken (2001:23), the Yokuts and other groups in California were typically organized into "autonomous political communities of intermarried families" that engaged in a variety of activities, including cooperative dances, labor coordination, dispute resolution, and defense of territories. These political communities were first described by Kroeber (1925) as tribelets, consisting of perhaps 300 people, each guided by a headman. These tribelets were composed of various family and household groups, including "parents, children, collateral, lineal, or affinal relatives, and sometimes non-relatives" (Bean 1978:673). The tribal members congregated into one main settlement, although smaller communities, "some mere hamlets containing two or three houses," were also common (Wallace 1978:466).

While it is not clear what impact the earliest Spanish explorations had on the native populations of the valley, the effects on native groups by later Spanish, Mexican, and American incursions are much better known and documented. One of the most devastating periods for native populations in California occurred as the result of the establishment of Spanish missions in Alta California beginning in 1769. This process actually commenced during the 16th century when Spanish friars first established missions in Baja California (Aschmann 1959). Although the larger goal was to cement economic and political control over the California territory, religious conversion was also a major consideration.

The effects of missionization on Native Americans are evidenced by the drastic population decline during the mission period. The factors that contributed to this decline included disease and chronic ailments, food shortages, and cultural, physical, and psychological disruption. Among the deadliest diseases chronicled during the mission period were measles, smallpox, dysentery, various fevers, malaria, typhus, pleurisy, and pneumonia (e.g., Archibald 1978, Cook 1976, Stodder and Martin 1992). In addition, as native populations became physically exhausted, the missionaries "gathered converts from farther and farther inland," and many natives from the northern valley were taken to the San Jose, Santa Clara, Soledad, San Juan Bautista, and San Antonio missions. To acquire more converts and to reduce the supposed threat of non-converted native peoples, it was proposed at one time to extend the mission system inland, but these efforts never materialized (Beattie 1929).

While mission recruitment and disease had severe impacts on the native populations of the San Joaquin Valley, the subsequent American occupation (beginning in 1848) proved to be even more disastrous. Especially during the Gold Rush years, native populations were quickly overwhelmed. Although the northern San Joaquin Valley was not gold country, thousands of miners bound for southern gold fields crossed through it, "relentlessly pushing aside any natives in their path" (Wallace 1978:469). Subsequently, the rich soils of the Sacramento–San Joaquin Delta and the Central Valley began to be used for farming and ranching, causing the remaining Yokuts to be driven away from their traditional hunting and gathering lands. Ultimately, the destruction of native peoples in parts of the San Joaquin Valley "was so complete and done so early that many groups, especially on the west side, are almost totally unrecorded ethnographically" (Riddell 2002:55).

As part of this "process of dispossession" (Wallace 1978:469), a reservation system was developed in 1850, with the leaders of surviving groups signing treaties stripping them of their traditional territories in return for reservation lands. Three Northern Valley Yokuts tribes, the *Hewchi*, *Chawchila*, and *Pitkachi*, signed the treaty. However, these treaties were rejected by the new government of California, which "left nothing for the unfortunate little tribes to do except drift about, scrabbling for a living as best they could, since they had already been moved off the surrendered land" (Wallace 1978:469). Eventually many found work as ranch and farm laborers, for which they were poorly paid and housed. Conditions finally became so bad that federal authorities set aside some land for them on the Fresno and Tule River reserves. By the 1970s, most Northern Valley Yokuts were living among the general population or with other Indian groups.

Currently, the Nototonme/North Valley Yokut Tribe, Inc. represents the Northern Valley Yokuts in the Stockton region. The group is dedicated to the preservation of the Tribe's cultural heritage, including the documentation, and interpretation of their past through research on archaeological and human remains.

2.4 Historic Context

The earliest recorded journey into the San Joaquin Valley and the Stockton area by Europeans was that of Spanish explorer Captain Pedro Fages (governor of Alta California from 1782 to 1791), who entered the valley from the south in 1772, searching for native people who escaped the coastal missions (Magruder 1950:13; Smith 1939:1). Fages maintained a detailed journal of his journey that occurred several years before the better-known Anza and Garces expeditions that also extended into the present-day Stockton region (Bolton 1930, 1935, 1966; Magruder 1950:13). Despite these expeditions during the latter decades of the 18th century, no permanent settlements had been established in the valley by the Spanish. This was due to the generally arid climate, the comparatively remote location, and periodic hostilities with the native populations (Smith 1939:1).

Few lasting Euro-American ventures occurred in the Stockton region until the early years of the 19th century. The first American known to have entered the valley was Jedediah Strong Smith; a trapper, explorer, and trader who traveled north from southern California to the American River in Sacramento in 1826 and 1827 (Magruder 1950:25-26). Subsequently, a number of trapping and mining expeditions were led into the valley by entrepreneurs such as Ewing Young, Joseph Walker, and Peter Lebec (Magruder 1950:26-31). Smith, Young, and Walker "trapped beaver and otter on every stream between Stockton and Grapevine Pass" (Smith 1939:1). Another well-known early explorer to the valley was Gen. John Charles Fremont, who made three major expeditions into California and the Central Valley in 1842, 1843, and 1845 (Magruder 1950:32; Wallace 1978:324, 362, 702), the latter of which culminated in the Bear Flag revolt against the Mexican authorities in Sonoma (e.g., see Hittell 1885).

French Camp, about seven miles southwest of the APE, was the site of the earliest sustained Euro-American settlement in San Joaquin County. French Camp was also known as Castoria, from the Latin word for "beaver", reflecting this creature's central role in the California-based fur trade (Mackie 1997). French Camp was established as the western terminus of the Oregon-California trail which was initially established by French-Canadian trappers employed by the Hudson's Bay Company from about 1832 to 1845. In 1843, William Gulnac was awarded the 48,000-acre *Rancho del Campo de Los Franceses* which included French Camp and the future site of the City of Stockton. With fur-bearing species being nearly trapped to extinction, the Hudson's Bay Company was no longer the prime economic force in the region. Gulnac and his partner, Charles Weber, encouraged settlement on their new grant and ultimately lay the groundwork for future and more intensive economic development on their lands and in the surrounding region (Prouty 1980).

One of the most prominent endeavors to develop after the fur trade was the raising of large herds of cattle for meat, hides, and tallow. The cattle industry in San Joaquin County and throughout California reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large, pastoral estates in California, and a high demand for beef during the Gold Rush led to a cattle boom that lasted from 1849 to 1855. In 1855, however, the demand for California beef began to decline as a

result of sheep imports from New Mexico, cattle imports from the Mississippi and Missouri valleys, and the development of stock breeding farms. When the beef market collapsed, the California ranchers were unprepared. Many had borrowed heavily during the boom, mortgaging their land at interest rates as high as ten percent per month. The collapse of the cattle market meant that many of these ranchos were lost through foreclosure, while others were sold to pay debts and taxes (Cleland, 1941:108-114). As cattle ranching declined, the production of row crops increased and Stockton and the surrounding region developed into a major agricultural center. Although agriculture remains a prime endeavor in the region, the economy has diversified throughout the 20th century and numerous industries are now based out of the Stockton area.

Land Reclamation

The history of land reclamation in California can be traced to the Swamp Land Act of 1850. This federal legislation authorized the transfer of federal swamplands to private ownership with the provision that they be drained and made productive. Operating at first under the State Board of Swamp Land Commissioners and, starting in 1867, under local boards of supervisors (i.e., reclamation districts) owners of reclaimed land were authorized to organize special districts to acquire, build, and operate reclamation works, which have included levees, drains, canals, bulkheads, sluices, water gates, embankments, pumping plants, dams, diversion works, irrigation ditches, bridges, and roads.

Settlements in the Delta were initially situated on naturally formed levees created by the merging of floodplains and tidal environments, and consisted of single-family farms and farm labor camps. However, in the central Delta (including present-day Victoria Island), sediments consisted primarily of peat, resulting in poorly developed natural levees. The earliest attempt at reclamation and levee construction in the Delta occurred in 1852 on Merrit Island on the east bank of the Mokelumne River (Thompson 1957:211). Most early levees, including the 1852 Merrit Island levees, were referred to as "shoestring" levees, a term which expressed their hasty and often inadequate construction that offered little protection beyond periodic high tides. The early shoestring levees and even later structures built in the 1860s and 1870s rarely remained intact for more than 1 or 2 years, and required frequent repairs and upgrades.

Apart from difficulties such as substandard materials and often inadequate engineering, the early years of levee construction in the Delta were disorganized. Higher levees on one tract would lead to flooding on a neighboring tract with lower levees. For example, the levees constructed on Union Island (southwest of Stockton and the APE) in the 1870s were very different from others in the area as they started out as fairly large structures, averaging 50 feet in width at the base, 8 feet in height, and were set back 200 feet from the rivers. Most early levees in the Delta, on the other hand, were initially much smaller and were only expanded and enhanced as the need arose on a virtually seasonal basis (Thompson 1957).

As economic investment in the Delta increased, a great period of land reclamation began in the late 1860s and peaked during the 1870-1880 period when some 92,000 acres of Delta land were leveed and reclaimed (Table 2-1).

Table 2-1. Delta Reclamation Growth by Acres (1860-1930)

Decade	Area Reclaimed (Acres)	Cumulative Area (Acres)
1860-1870	15,000	15,000
1870-1880	92,000	107,000
1880-1890	70,000	177,000
1890-1900	58,000	235,000
1900-1910	88,000	323,000
1910-1920	94,000	417,000
1920-1930	24,000	441,000

Source: Thompson 1957 (Table 2)

This number was not surpassed until the 1910-1920 period when an additional 94,000 acres were reclaimed. Key factors that led to the 1870s being such an active period of reclamation were the establishment of large reclamation companies and technological advances in pumping and dredging.

Dredges began to see extensive use in the Delta starting in the 1870s. These machines enabled the use of a wider variety of fill materials, such as fluid and compacted clays from channel floors underlying the peat. For some levees clay was used to build the entire embankment and for others clay was used as a core material with a covering of less pervious materials. However, during the late 1870s, levees were still being built primarily with peat blocks. For example, at Union Island these blocks were fitted into a wall that rose 10 feet from a 9-foot-wide base to a 3-foot-wide crown, and a duplicated wall was erected 8 feet to 12 feet inside the first, with the space between the walls filled with dredged sand.

Despite their efficiency in the excavation and placement of levee-building materials, the use of dredgers did not reduce the risk of levee failure. From around 1900 to 1957, every levee break that had occurred in the Delta was attributed to compression and the displacement of levee foundations. At first the ruptures occurred on the channel side as plastic clays oozed from under the levee into dredger cuts. However, as the subsidence of the Delta islands reduced the interior elevation of reclaimed tracts, the rupture of levee foundations became more common on the inward side of the levee. This potential for failure was eventually forestalled by covering the land side of the levee toe for about 50 feet with a blanket of sand or clay (Thompson 1957:247).

Flood protection levees for the former Smith Tract (within which the APE is located) is provided by Reclamation District (RD) 1614, an entity organized in 1914 under the California Water Code to maintain levees and provide drainage services to the landowners within the boundaries of reclamation districts. Reclamation District No. 1614 contains approximately 1,598 acres and is bounded by Smith Canal on the south, Riviera Cliffs Subdivision on the West, Calaveras River on the North and Pershing Avenue on the East (Figure 4). Currently, most of the land within the District is devoted to residential & commercial uses. There are approximately 4,813 parcels occupying 1,219.49 assessable acres of land in RD 1614. The parcels include 79 vacant parcels occupying 32.64 acres, 1 agricultural parcel occupying .16 acres, 4,640 resident parcels occupying 944.31 acres, 1 golf course parcel occupying 129.70 acres, and 92 commercial or other parcels occupying 112.68 acres (RD 1614 - 2019).

Figure 4. 1950 map of Reclamation District 1614 showing approximate location of APE

3.0 Native American Consultation

On March 12th, 2019 SAS emailed a letter and a map depicting the APE to the Native American Heritage Commission (NAHC). The letter requested a search of the NAHC Sacred Lands File database for cultural resources within the APE, and a list of Native American tribal representatives and groups who might have an interest in, or concerns with the Project (see Appendix B for a record of all Native American consultation correspondence). On March 19th, 2019, the NAHC replied stating that a culturally significant property was known to be present within or near the APE and the SAS should contact the North Valley Yokuts for additional information. The NAHC also provided contact information for the following tribal organizations and representatives:

- Ms. Katherine Erolinda Perez, Chair – North Valley Yokuts Tribe
- Rhonda Morningstar Pope, Chair – Buena Vista Rancheria of Me-Wuk Indians
- California Valley Miwok Tribe (Sheep Rancheria of Me-Wuk Indians of California)
- Sara Dutschke Setchwaelo, Chair – Ione Band of Miwok Indians
- Gene Whitehouse, Chair - United Auburn Indian Community
- Mr. Raymond Hitchcock, Chair – Wilton Rancheria

On March 21st, 2019, SAS sent contact letters to each of the individuals and organizations listed above inquiring as to whether or not they had any knowledge of sensitive properties or cultural resources in or near the APE, and if they had any questions about, or concerns with the proposed project. On March 23rd, Ms. Katherine Erolinda Perez replied to SAS via email stating that the APE was within a highly sensitive area and recommended tribal monitoring of all Project-related ground disturbing activities. SAS also followed up via email with all of the above-listed contacts on April 9th and 16th, 2019. Specifically, SAS informed each individual of the results of the investigation to date, inquired again if they knew of any potentially significant Native American cultural resources in the APE or vicinity, and asked for Project Recommendations. As of this report, no additional responses from the tribal representatives have been received. If significant correspondence regarding the Project and the cultural resources investigation are provided at a later date, it will be provided in an amendment to this report.

4.0 RECORD SEARCH AND LITERATURE REVIEW RESULTS

4.1 Summary of Reviewed Sources and Findings

On March 12th, 2019 SAS requested a detailed record search of the APE and a surrounding 0.5-mile area from the Central California Information Center (CCIC) of the California Historical Resources Information System. The CCIC responded to SAS on March 15th, 2019 (I.C. File No. 11013L) noting that while no previously documented cultural resources were known to exist within the APE, five were known to exist within the 0.5-mile search area. The CCIC also provided information on ten cultural resources investigations that have occurred in the APE and within the 0.5-mile search area (Appendix C). The CCIC record search included, but was not necessarily restricted to a review of the following sources:

- *National Register of Historic Places – Historic Properties Directory* (California Office of Historic Preservation 2002);
- *California Register of Historic Places – Historic Properties Directory* (California Office of Historic Preservation 2002);
- *California Historical Landmarks* (California Office of Historic Preservation 1996);
- *California Points of Historical Interest* (California Office of Historic Preservation 1992);
- *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976);

The CCIC record search noted that five historic-era buildings and complexes were documented within 0.5-mile of the APE. These consisted of two residential buildings, two public school complexes, and a levee segment (Table 4-1). The CCIC research also noted that the ten cultural resources investigations that included the APE or that were conducted within the 0.5-mile search area occurred between 1980, and 2017. was conducted that incorporated at least a portion of the current APE (Table 4-2).

Table 4-1. Previously identified Cultural Resources within 0.5-Mile of the APE

Site Designation(s)	Association	Description
P-39-004269	Historic era	Residential building
P-39-004270	Historic era	Residential building
P-39-004984	Historic era	Herbert Hoover School Building
P-39-004985	Historic era	Daniel Webster Middle School
P-39-005320	Historic era	Calaveras River Levee

Table 4-2. Previously Conducted Studies in and within 0.5-Mile of the APE

Study No.	Researcher	Study Title	Date
SJ-00753	D. McGowan - Jones & Stokes Associates	Cultural Resources Investigation for the Proposed Brookside Pedestrian Path Project	1991
SJ-00838	U.S. Army Corps of Engineers	Fourteenmile Slough and Smith Levee Intensive Cultural Resources Survey, San Joaquin County.	1980
SJ-00846	R. Werner - Archaeological Services, Inc.	Cultural Resource Investigation Brookside Community Development Project, Stockton, California.	1988
SJ-04190	P. Jensen - Jensen & Associates	Archaeological Inventory Survey: Proposed Bruns Residential Development Project on the Stanislaus River, City of Stockton, San Joaquin County, California.	2001
SJ-05584	P. Jensen - Jensen & Associates	Archaeological Inventory Survey, Berolzheimer Annexation and Subdivision Project, c. 14 Acres Adjacent to Country Club Boulevard, San Joaquin County, California.	2004
SJ-06507	URS Corporation	Cultural Resources Report for Geotechnical Evaluations of the San Joaquin Area Flood Control Agency Project Levees	2007
SJ-06723	URS Corporation	Technical Report, Final: Cultural Resources Survey Report for the Urban Levee Project.	2008
SJ-06724	URS Corporation	Technical Report, Final: Cultural Resources Baseline Literature Review for the Urban Levee Project.	2008
SJ-06781	C. Losee - Archaeological Resources Technology	Cultural Resources Analysis For AT&T CN1841-A "Stockton" 3501 North Wisconsin Avenue, Stockton, San Joaquin County	2008
SJ-08849	J. Coleman - Solano Archaeological Services	Cultural Resources Inventory and Evaluation Report Brookside Cutoff Wall Project City of Stockton, San Joaquin County, California	2017

4.2 Additional Archival Research

In order to determine if any buildings, structures, features, or other potential cultural resources, built-environment in particular, could be located within or immediately adjacent to the APE, SAS conducted a review of historic USGS topographic maps and General Land Office (GLO) plat maps showing the APE and vicinity. Early regional maps typically date to the middle decades of the 19th century and often depicts natural and man-made features that could provide indications of developments not presently known in the archaeological and historical record. SAS also examined GLO land patent records focused on the APE and

immediate area to provide information on early land purchases and transfers of public property to private individuals.

The earliest available GLO plat map dates to 1879 and depicts the area around the APE. This map shows the channels of the Stockton River, the Calaveras River, and various other waterways and sloughs (Figure 5). Although the present-day USGS mapping does not designate a section within which the APE is located in Township 1 North, Range 6 East, on the 1879 plat, the APE is shown as being located in Section 6. No buildings or roadways are noted in the area where the APE is situated, but a segment of levee was depicted in the general vicinity of the current-day Wisconsin Pump Station (Figure 5). However, due to the resolution and approximate nature of the GLO map, it is not possible to discern if this levee segment is associated with the current-day levees in and near the APE.

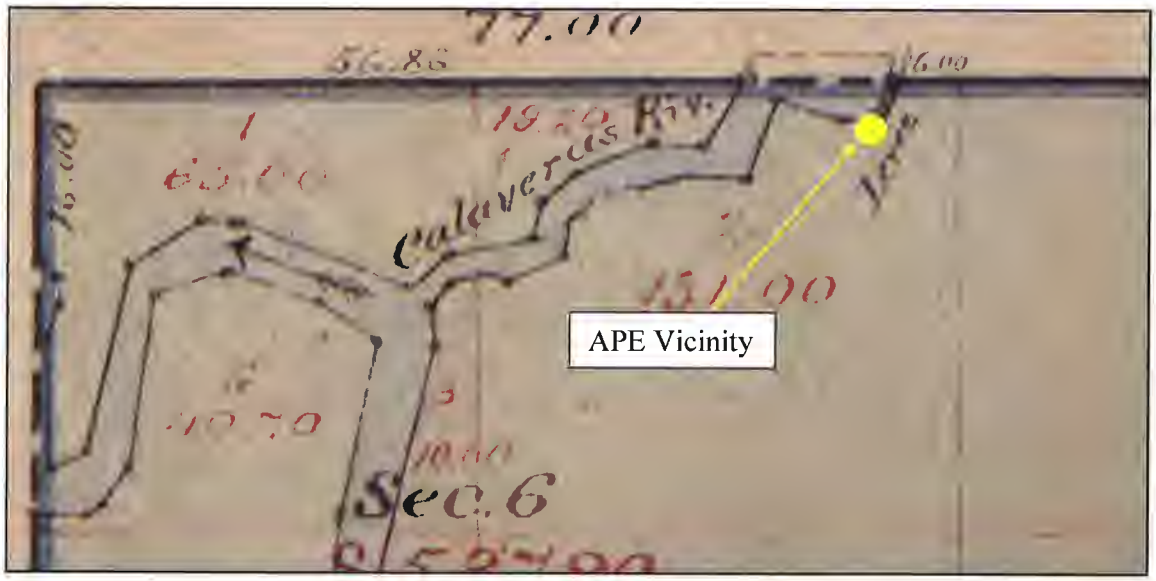
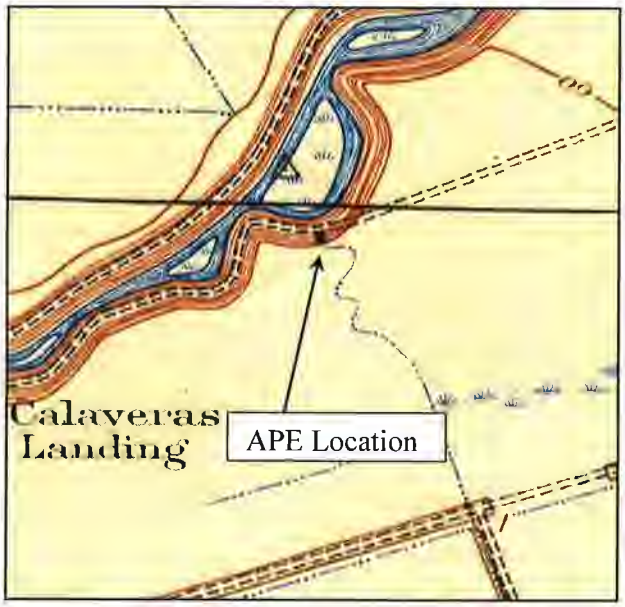


Figure 5. 1879 GLO plat map showing APE location vicinity and levee segment in Section 6



The earliest USGS topographic map depicting the area around the APE was drafted in 1913 (Figure 6). The Stockton quadrangle show significant development as having taken place in the Stockton area and far greater details is shown on this map than was provided on the 1879 GLO plat. The 1913 Stockton quad depicts a building or structure at about the location of the present-day Wisconsin Pump Station along with what appear to be well-established roadways, and a series of channelized drainage ditches. Also depicted is a well-developed series of levees along the Calaveras River (and along the San Joaquin River and other waterways in the area. A somewhat meandering drainage extends from the noted building/structure at about where the present-day pump station is located that appears to roughly follow the general alignment of present-day Wisconsin Avenue.

Figure 6. USGS 1913 Stockton quadrangle showing APE location and adjacent developments

The only documented transfer of lands out of federal administration in the immediate area surrounding the APE occurred in 1877. On April 9th of that year, the Southwest ¼ of Section 6 (the APE is located in the Northwest ¼ of the old Section 6 as noted on the 1879 GLO plat map), was granted to the State of California under the 1850 Swamp Lands Act (BLM 2019). This Act enabled states to construct the necessary levees and drains to reclaim swamp and overflowed lands unfit for cultivation. Lands were to be listed, plats made, and transmitted to the governor of the respective state who could request that a patent to be issued to that State. Proceeds of the sales or by direct appropriations were to be applied exclusively to the purpose of reclaiming said lands by means of levees and drains (CSU Monterey Bay 2019). The Southwest ¼ of Section 6 was only one small portion of a 73,000+ acre grant in multiple townships, ranges, and sections in the Delta area.

5.0 FIELD METHODS

On April 5th, 2019, SAS archaeologists Jason Coleman, M.A, and Susan Talcott, M.A., conducted an intensive pedestrian survey of the APE walking transects spaced less than 15 meters apart. Due to the limited size of the APE, transect spacing was typically less than 5 meters. Digital photographs were taken of the survey area, and observations were thoroughly documented. All ground disturbance caused by bioturbation was thoroughly examined, and vegetation was periodically scraped away to inspect the ground surface. Digital photographs were taken of the APE, and observations were recorded in detail. A Garmin Etrex GPS unit was also utilized to verify APE location (NAD 83).

6.0 SURVEY FINDINGS

SAS archaeologists identified a single historic-period cultural resource within the APE. This resource consists of the existing Wisconsin Pump House Station, and the immediately adjacent levee along the south westernmost extent of the nearby slough/Calaveras River (Figure 7).

SAS-001: Wisconsin Pump House Station and Levee

SAS-001 consists of the original Wisconsin Pump House Station and associated levee and canal located along North Wisconsin Avenue just as the road turns into River Drive. The pump house resides in a developed area with residential developments to east and south, the Calaveras River just 420 feet north, and the Stockton Country Club to the southwest. The resource is present on the historic 1954 *Stockton West*, USGS topographic quadrangle, making the pump house and original levee and canal at least 65 years old. Part of the Smith Canal levee system, the current 620-foot-long levee/canal segment was built to direct water to the pump house to drain excess storm water accumulation. By 1970, the levee appears to have been bolstered to include a new levee road and a more substantial design (according to the historic *Stockton West*, USGS topographic maps). This water conveyance system is currently owned, operated, and maintained by Reclamation District 1614, and consists of a gravity storm drain system.

As noted in Section 4.2, the 1913 USGS Stockton quadrangle shows a building or structure at or near the location of the present-day Wisconsin Pump House Station. A drainage appears to emanate from this depicted building suggesting that the built feature depicted on the 1913 quad may be some sort of irrigation pump station. Assuming there was a pump station there at the time, the construction of the current RD 1614 facility would have completely obliterated any traces of an earlier structure on this location. The existing Wisconsin Pump House Station does not exhibit any features, materials, or characteristics that appear to date any earlier than the mid-late 20th century. The levee adjacent to the pump station, however, does appear to have been in place at least as early as 1913 when well-established levee and road systems were depicted. The segment of "levee" noted on the 1879 GLO plat map suggests that levees in and/or near

the APE were already under construction but due to the generally rough nature of the GLO mapping, it is not possible to date the levee within the APE to such an early time period.

NRHP Evaluation

Archival research indicates that some form of levee and possibly a pump house have been located within and/or adjacent to the APE since at least the early 20th century. Levees have been constructed in the Delta since the middle decades of the 19th century and an 1879 GLO map may depict a levee segment in or near the APE. However, the levees segments that are located within the APE are only a very small portion of a much larger system that has almost certainly been rebuilt and modified numerous times since the original period of construction in the 19th century. In addition, the existing pump house and associated pipelines and other water conveyance infrastructure in the APE does not appear to date any earlier than 1960s. At the very least, it is not related to a possible early pump house depicted on the 1913 USGS quadrangle map. As such, although the pump house, levee, and related features may be important elements of the local water conveyance and flood control system, they do not retain any historical integrity nor are they directly associated with any historically significant event or individual. Consequently, SAS recommends the associated levees, pump house, and other features not eligible for NRHP listing under criteria A, or B.

Built environment features similar if not identical to those located within the APE (e.g., levee segments, pump house, pipes) can be found throughout the Delta region. The features in the APE are hardly unique, are not particularly early or notable examples of their kind, nor is there any evidence to suggest they were designed or built by a recognized master in the water conveyance and flood control fields. As such, SAS recommends the pump house, levees, etc. not eligible for NRHP listing under Criterion C.

While some additional archival research would likely refine the dates of construction and modification of the structures and building within the APE, it is unlikely that any data would be revealed that would suggest that the complex as a whole or any of the elements (i.e., pump house, pumps, levee segments, etc.) would be historically significant on a national, state, or local level. As such, the data potential of SAS-001 appears to have been largely exhausted through the current levels of documentation. Consequently, SAS recommends this site not eligible for NRHP listing under Criterion D.

Figure 7. Cultural Resources Location Map.

Wisconsin Pump Replacement Project APE

Cultural Resource Site

1:2,400

0 100 Feet

0 50 Meters

7.0 Discussion and Conclusions

One historic-era resource (SAS-001) was documented within the APE during the course of the SAS investigation. Data resulting from field and archival research does not suggest this resource is eligible for NRHP listing. Consequently, the Project would have no effect on historic properties.

The presence of historic-era features and sites in the surrounding region within, and in the immediate vicinity of the APE suggests that comparable resources could be present in surface and subsurface contexts in the APE. In addition, the presence of various early Native American sites elsewhere in the region suggests that sites related to early Native American occupation and activities could be present within the immediate area. However, given that no such sites have been identified at or near the APE and that much of the land in the area has been reclaimed, the probability of encountering them as a result of Project activities is considered low. Concerning historic-era resources, sites, features, and artifacts associated with the predominant historic themes of the APE and surrounding area such as agriculture, ranching, water conveyance, and land reclamation, could be present in subsurface contexts in the APE. However, since such activities typically result in deposits and occurrences that can be seen on the ground surface and none were noted during the SAS survey, the probability of encountering such resources during Project implementation is considered low.

8.0 Recommendations

Should buried, unforeseen archaeological deposits be encountered during any construction activity, work must cease within a 50-foot radius of the discovery. If a potentially significant discovery is made, it must be treated in accordance with 33 CFR 325, Appendix C which generally states that the lead federal agency (in this case the Corps) must be notified immediately of the find to ensure that mitigation/management recommendations are developed. In the event that human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the San Joaquin County Sheriff/Coroner must also be contacted immediately. If the remains are deemed to be Native American, the coroner must notify the NAHC, which will in turn appoint and notify a Most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with a qualified archaeologist to determine the proper treatment of the human remains and associated funerary objects. Construction activities will not resume until the human remains are exhumed and official notice to proceed is issued.

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APPENDIX A

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Key Project Personnel Resumes

Jason A. Coleman, M.A., R.P.A.

jason@solanoarchaeology.com

Highlights:

Founder of Solano Archaeological Services
Surveyed more than 60,000 acres throughout California
Field directed numerous large-scale data recovery projects
Active archaeologist for over 20 years
Conducted professional projects in 5 different states
Proficient in CEQA and Section 106 compliance
Six years college teaching experience (anthropology).

Education:

1996 M.A., Anthropology, California State University, Hayward.
1992 B.A., Anthropology, University of California, Berkeley, with Honors.

Certifications:

Registered Professional Archaeologist (ID 15338)

Professional Affiliation:

Society for California Archaeology
Archaeological Institute of America

Professional Archaeological Experience:

2005-present: Solano Archaeological Services (SAS), Suisun City, California.
Mr. Coleman founded SAS in March of 2005, and maintains the company by overseeing administrative duties including accounting, marketing, permitting, and licensing. Mr. Coleman serves as the main proposal and report writer, and is the lead principal investigator on most projects.

Projects conducted as SAS Owner:

Archaeological Monitoring for the Menlo Park Project, San Mateo County, California (2013-present). Ongoing construction monitoring for five separate developments on the Veteran Affairs (VA) Palo Alto Health Care System at the Menlo Park Division. Projects include the Storm Drain Phase 2 Project, the Entranceway and Parking Lots Upgrade Phase 1A Project, the Seismic Correction of Building 323 and Infrastructure Enhancements Project, Building 205 Demolition, and the Building 361 Community Living Center Clinic Project. The contract involves coordination efforts with the VA, contractor superintendents, and Native American Amah Mutson monitors. As part of the field preparation, all field personnel underwent OSHA 10 safety training.
Position: Principal Investigator, Field Director
Client: Veteran Affairs

Archaeological Identification Surveys for the Farm Services Agency, California-wide (2015-2016). SAS, in tandem with GrassRoots Environmental were awarded a 5-year performance-based blanket purchase agreement with the U.S. Department of Agriculture – Farm Service Agency (USDA-FSA) to conduct a series of cultural resource studies as part of the Emergency Conservation Program (ECP). The ECP helps farmers and ranchers to put in place methods for water conservation and additional water supply during times of severe drought. The ECP provides cost-sharing funds for the construction of these new watering facilities, thus triggering Section 106 regulatory setting. As part of the 2014 Farm Bill passed by the U.S. Congress, the USDA-FSA is using the ECP to assist California farmers in developing permanent water sources and infrastructure (including wells, troughs, tanks, and pipelines) for livestock during the current drought. These water development projects involve a small-scale footprint (typically from three to

six well sites on 1-5 acres) located on private grazing lands. Twenty-four cultural resources inventories have already been completed in Plumas, Sierra, Yuba, Yolo, San Benito, Kern, and Siskiyou Counties as part of the ECP in 2015.
Position: Principal Investigator and Field Director
Client: GrassRoots Environmental prime contract holder

Lower Putah Creek Restoration Project Cultural Resources Inventory and Evaluation Report, Yolo County, California (2015). Located within the Yolo Bypass Wildlife Area (YBWA), a 16,800-acre wildlife preserve managed by California Department of Fish and Wildlife (CDFW), the project proposed to restore ecological functions and enhance fish passage in Lower Putah Creek, from the Putah Diversion Dam through the YBWA. Directed by the Yolo Basin Foundation (YBF) and CDFW, the proposed project would create a new 5.6-mile long Lower Putah Creek channel through the YBWA that would connect through and enhance an existing restored tidal channel on the YBWA, and provide a new connection with the Toe Drain, downstream of the Lisbon Weir. Due to Section 404 permitting with the USACE, the project involved CEQA and Section 106 regulatory settings. SAS conducted a records search at the Northwest Information Center, and extensive research of the project area. Consultation with the Native American community also took place. During survey two historic-era resources were identified, including the grade of the Sacramento Norther Railway and a 220 kilovolt (kv) electrical transmission line. Both resources were fully recorded, researched, and ultimately recommended ineligible for NRHP listing. SAS also prepared an EIR section for the client.
Position: Principal Investigator, Field Director
Client: Richard Grassetti Consulting

Cameron Hills Project, El Dorado County, California (2015). On behalf of Sycamore Environmental, a NEPA-level cultural resources study of a 20-acre parcel was conducted near the town of Shingle Springs. MCP Properties, LLC was proposing to construct a 41-unit residential subdivision of single-family homes at this location. The construction was to include the installation of utilities, a storm water detention basin, and a road network. As the project qualified under the USACE as a Nationwide 14 Linear Transportation Project, the project required the submission of a Section 404 permit to the USACE and compliance with Section 106 of the NHPA. Extensive Native American consultation was conducted, and a reconnaissance survey yielded no cultural resources on the parcel. The report was reviewed and accepted by the USACE and the project was completed successfully on time.
Position: Principal Investigator, Field Director
Client: Sycamore Environmental

Hope Valley Meadow Restoration Project, Alpine County, California (2015). Conducted a NEPA-level cultural study of a 7-acre parcel in Alpine County as part of a wetland restoration effort. American Rivers, a national non-profit conservation organization dedicated to protecting and restoring the rivers of the U.S., proposed to restore meadowlands along the West Fork of the Carson River in Hope Valley south of South Lake Tahoe. The purpose of the Project was to stabilize 130 feet of high, eroding bank along the stream channel on California Department of Fish and Wildlife land. The project was completed on time with no cultural resources discovered, and the report was successfully reviewed and accepted by the U.S. Army Corps of Engineers (USACE).
Position: Principal Investigator, Field Director
Client: American Rivers

Superior Self Storage Project, City of Vacaville, Solano County, California (2015). Conducted a CEQA-level cultural resources inventory on a 2.5-acre lot for the proposed construction of a 45,701 square foot single-story indoor public storage facility located at the southwest intersection of Piper Drive and E. Monte Vista Avenue. The Native American Heritage Commission Sacred Land review, Northwest Information Center records search, and reconnaissance survey were all negative for cultural resources. At the request of the client, the project was successfully expedited within three weeks to ensure deadlines were met with Solano County and the City of Vacaville planning departments.
Position: Principal Investigator, Field Director
Client: Sycamore Environmental

Archaeological Monitoring at the Veteran Affairs Medical Center for the Recreational Services Project, Santa Clara County, California (2014-2015). Archaeological monitoring for the construction a large recreational services center on the Palo Alto VA facility. The project involves coordination with Halbert Construction superintendents and project managers. The VA was contacted to gain information on existing sites previously recorded on the campus. CA-SCL-585, a burial site with associated cultural materials, was found to exist approximately 100 feet away from the ongoing construction. SAS coordinated closely with the client to establish protocols in case if human remains are discovered during subsurface activity.

Position: Principal Investigator, Field Director
Client: Halbert Construction

Archaeological Monitoring for the Willow Housing Project, San Mateo County, California (2014-2015). The VAPAHCS contracted the Core Companies to construct low income housing on the Menlo Park Division campus for retired veterans. SAS in conjunction with the Muwekma Ohlone Tribe monitored all subsurface construction activities, including utility trenching, grading, potholing, and elevator shaft boring. The contract involved coordination with project superintendents, foremen, and Native American monitors, and was completed successfully and on time.
Position: Jason Coleman (SAS), Principal Investigator, Field Director
Client: The Core Companies

Northern California Wetland Enhancement Projects (2013-2015). SAS, working on behalf of the California Waterfowl Association, conducted two stints of NEPA level inventories for proposed wetland restoration efforts involving the excavation of swales and potholes, building and repairing levees, installing water control structures, and planting vegetation. During 2013 SAS conducted studies for six different projects (*Ash Creek Wildlife Area, Dow Ranch, Goose Valley Ranch, Parady Ranch, Richards Ranch, and Soldier Mountain Farm*) in Lassen, Shasta, and Modoc Counties over an expanse of 918 acres. The inventories were under U.S. Fish & Wildlife review, and led to the identification and relocation of 9 sites and 5 isolates. In 2015 SAS conducted surveys for another five projects (*Butte Creek, CHHK, Dow Ranch, Harbert Ranch, and Madsen Ranch*) in Modoc and Lassen Counties for a total expanse of 140 acres. Several NRHP ineligible sites were found.
Position: Principal Investigator, Field Director
Client: California Waterfowl Association

Rockville Trails Project (2012-2015). As the result of a lawsuit settlement, the Solano Land Trust (SLT) acquired a 1500-acre property in located in the southern North Coast Ranges of Solano County, California, and proposed to build a series of recreational trails and access roads for public use. On behalf of SLT, SAS conducted a literature review and records search of the Rockville Trails Project area. SAS relocated all of the previously recorded cultural resources, updated site boundaries and location with sub-meter accurate GPS shapefiles, and made eligibility recommendations for listing in the California Register of Historical Resources. The site information became the focus for SAS' produced management plan, which made site specific recommendations for treatment, avoidance, and possible mitigation measures. Following the plan, SLT proposed a location of the trails and roads that avoided as much as possible known cultural resources. SAS conducted a subsequent full CEQA level inventory of the trail and road systems in which, during the survey, several isolated flaked obsidian fragments and an ineligible historic-era transmission line were identified and evaluated. The Project involved extensive consultation with Yocha Dehe Wintun Nation including several site visits to ensure Native American involvement with the Project.
Position: Principal Investigator, Field Director
Client: Solano Land Trust

Solano Irrigation District (2006-2016). Conducted 34 CEQA level inventories throughout Solano County for proposed irrigation line replacement, deep well construction, water tank facility construction, and property annexation. Several projects (Pierce Lateral B, Chadbourne, and Young) included mitigation for burial sites, subsurface archaeological testing, and construction monitoring. As many of the Solano Irrigation District (SID) lines exist in archaeologically sensitive areas of Solano County, Mr. Coleman helped SID develop protocols for handling projects with known cultural resources.
Position: Principal Investigator, Field Director
Client: Solano Irrigation District

Natural Resources Conservation Service, USDA (2006-2015). Since 2006 Mr. Coleman has personally field directed over 100 projects for the Natural Resources Conservation Service (NRCS). These NEPA level undertakings included studies for wetland restoration, floodplain easement, and fuels modification projects in 31 counties including Butte, Colusa, Contra Costa, Del Norte, Glenn, Humboldt, Kern, Kings, Lake, Lassen, Marin, Mendocino, Merced, Modoc, Plumas, Sacramento, San Bernardino, San Diego, San Joaquin, Santa Cruz, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Tulare, Yolo and Yuba. Spanning over 44,000 acres of survey in varied terrain including high desert, mountainous Sierra, and coastal regions of California, hundreds of cultural resources were recorded and evaluated for the National Register of Historic Places (NRHP). Historic ranch complexes, petroglyphs, massive lithic scatters, round houses, historic bridges, and road segments represent many of the sites recorded over the years. Mr. Coleman has worked closely with NRCS to make project-specific recommendations to bring the project undertakings to fruition while preserving recorded resources.

Position: Principal Investigator, Field Director
Client: Natural Resources Conservation Service

Tower Market #99 Data Recovery Project (2007-2014). Conducted large-scale investigation of CA-SOL-364/H, a multi-component site consisting of a historic re-deposit of 19th century cultural material, and an extensive prehistoric midden deposit of a Late Middle Period habitation site. Fieldwork was conducted over a two year period. Report included the analysis of 334 burials, 43 archaeological features, and over 50,000 prehistoric artifacts recovered from monitoring and scientific excavation of 18 cubic meters of control units. Full osteological analysis was conducted on the human remains, and a full battery of artifact analyses were employed to help define a new archaeological district (i.e., the Solano Archaeological District). Unique finds included never before seen *in situ* artiodactyl multi-element bone daggers, a charmstone manufacturing station, and evidence of treponemal infection in the prehistoric population. In agreement with Yocha Dehe Wintun Nation, a copy of the final report complete with burial pictures illustrating the mortuary complex and osteological findings has been submitted to the Northwest Information Center under restricted access.
Position: Principal Investigator, Field Director
Client: Tower Energy

White Rock Road Widening Project (2007-2014). Conducted a series of CEQA and NEPA inventories for segments of White Rock Road from Rancho Cordova to the El Dorado County Line. Projects involved oversight by agencies including the Army Corps of Engineers and Caltrans.
Position: Principal Investigator, Field Director
Client: Department of Environmental Review and Assessment, Sacramento County, and City of Rancho Cordova.

Cultural Resources Survey Report for the Manuel Campos Parkway Crossing of Putah South Canal Project, City of Fairfield, Solano County, California (2013). Under review by the Bureau of Reclamation, the project lead agency was the City of Fairfield, which planned to extend the existing Manuel Campos Parkway road segment from Dickson Hill Road to Mystic Drive. The proposed 2,000 linear feet of roadway conformed to the eastern edge of the Mystic Drive intersection, crossed the Putah South Canal, and ended at Dickson Hill Road. As the Putah South Canal lie under the jurisdiction of the Bureau of Reclamation, the City of Fairfield requested an easement to construct a 4-lane bridge crossing to reduce the traffic on residential streets. During this NEPA-level review, the Putah South Canal itself was recorded as an ineligible CRHR historic-era resource by Mr. Coleman.
Position: Principal Investigator, Field Director
Client: City of Fairfield

Cultural Resources Survey Report for the Blue Mountain Land Subdivision Project, Solano County, California (2013). CEQA-level study for a 10-acre parcel planned for subdivision.
Position: Principal Investigator and Field Director
Client: Blue Mountain Land, LLC

Cultural Resources Survey Report for the Rolling Hills Property Subdivision Project, Solano County, California (2013). CEQA-level study for a 40-acre parcel planned for subdivision.
Position: Principal Investigator and Field Director
Client: Blue Mountain Land, LLC

Mark Twain National Forest, MO, USDA (2009-2013). During an IDIQ contract with the Mark Twain National Forest, SAS conducted a total of seven task orders for cultural resources inventories. In 2009, a Full Coverage Methodological survey for the Chadwick II archaeological inventory of 2600 acres in the Ava District was conducted, complete with shovel test pits on appropriate landforms and recordation of two new sites and the relocation of two more. All of the cultural resources were evaluated for NRHP listing. During 2012-2013, SAS conducted six additional task orders totaling 5088 acres in multiple districts.
Position: Principal Investigator
Client: Mark Twain National Forest

APPENDIX B

— ♦ ♦ ♦ —

Native American Community Outreach

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

March 12, 2019

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

To Whom It May Concern:

Moore Biological Consultants has recently retained Solano Archaeological Services (SAS) to conduct a NEPA level cultural resources inventory of an approximate 0.5-acre Area of Potential Effect (APE) located in the City of Stockton, **Joaquin County**, for the proposed **Wisconsin Pump Station Replacement Project (Project)**.

The Project undertaking involves conducting major upgrades to an existing pump station and outfall structure near the southeast tip of a tributary slough to the Calaveras River. The existing two discharge pipes will be reconstructed as they cross the levee and two new pumps and discharge pipes will be added (Moore Biological Consultants 2018). As wetlands were identified in the APE, the client is applying for a Clean Water Act Section 404 permit with the U.S. Army Corps of Engineers, and hence the project needs to meet Section 106 of the National Historic Preservation Act compliance.

The project location lies along the western outskirts of the City of Stockton at the intersection of River Drive and Princeton Avenue. The APE lies in unsectioned land, Township 1 North, Range 6 East (projected), as depicted on the Stockton West, California USGS 7.5' topographic quadrangle map (see attached map).

The cultural resources inventory will include a pedestrian survey of the APE. Before we commence fieldwork, however, we would like to request a Sacred Land File (SLF) review for any known unrecorded cultural resources in the parcel. If you could also please send us a list of Native American individuals/organizations that may have knowledge of cultural resources in the vicinity, we would greatly appreciate it. We would like to request information from these individuals/entities about any positive SLF responses and/or other possible unrecorded cultural resources that may exist in the APE. Please know that this SLF review request and subsequent Section 106 consultation efforts with local tribal representatives is for planning purposes only, and is not part of official SB 18 or AB 52 consultation.

Please email results back to jason@solanoarchaeology.com.

If you have any questions, feel free to contact me at the numbers listed above. Thank you very much for your time.

Thanks,

Jason Coleman
Principal Investigator and Owner

Moore Biological Consultants
2018 Biological Assessment (Updated 2018). Army Corps Permit Application Attachments.

Enc. USGS topographic map

STATE OF CALIFORNIA — Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

March 19, 2019

Jason Coleman
Solano Archaeological Services

VIA Email to: jason@solanoarchaeology.com

RE: Wisconsin Pump Station Replacement Project, San Joaquin County

Dear Mr. Coleman:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the North Valley Yokuts on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Environmental Planner

Attachment

Native American Heritage Commission
Native American Contacts List
3/19/2019

Buena Vista Rancheria of Me-Wuk Indians
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 — Me-Wuk / Miwok
Sacramento ,CA 95811
rhonda@buenavistatribe.com
(916) 491-0011 Office
(916) 491-0012 Fax

California Valley Miwok Tribe
4620 Shippee Lane — Miwok
Stockton ,CA 95212
(209) 931-4567 Office
(209) 931-4333 Fax

California Valley Miwok Tribe
AKA Sheep Rancheria of Me-Wuk Indians of Ca
P.O. Box 395 — Miwok
West Point ,CA 95255
l.ewilson@yahoo.com
(209) 293-4179 Office

Ione Band of Miwok Indians
Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699 — Miwok
Plymouth ,CA 95669
sara@ionemiwok.org
(209) 245-5800 Office
(209) 245-6377 Fax

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 — Ohlone/Costanoan
Linden ,CA 95236 — Northern Valley Yokuts
canutes@verizon.net — Bay Miwok
(209) 887-3415

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road — Maidu
Auburn ,CA 95603 — Miwok
bguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street — Miwok
Elk Grove ,CA 95624
rhitchcock@wiltonrancheria-nsn.gov
(916) 683-6000 Office
(916) 683-6015 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

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

This list is only applicable for contacting local Native American Tribes for the proposed: Wisconsin Pump Station Replacement Project, San Joaquin County.

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

March 21, 2019

Wilton Rancheria
Raymond Hitchcock, Chairperson
9728 Kent Street
Elk Grove, CA 95624

Dear Mr. Hitchcock:

Moore Biological Consultants has recently retained Solano Archaeological Services (SAS) to conduct a NEPA level cultural resources inventory of an approximate 0.5-acre Area of Potential Effect (APE) located in the City of Stockton, **Joaquin County**, for the proposed **Wisconsin Pump Station Replacement Project (Project)**.

The Project undertaking involves conducting major upgrades to an existing pump station and outfall structure near the southeast tip of a tributary slough to the Calaveras River. The existing two discharge pipes will be reconstructed as they cross the levee and two new pumps and discharge pipes will be added (Moore Biological Consultants 2018). As wetlands were identified in the APE, the client is applying for a Clean Water Act Section 404 permit with the U.S. Army Corps of Engineers, and hence the project needs to meet Section 106 of the National Historic Preservation Act compliance.

The project location lies along the western outskirts of the City of Stockton at the intersection of River Drive and Princeton Avenue. The APE lies in unsectioned land, Township 1 North, Range 6 East (projected), as depicted on the Stockton West, California USGS 7.5' topographic quadrangle map (see attached map).

The archaeological records search at the Central California Information System at California State University, Stanislaus, indicated that five historic cultural resources have been previously recorded in the project area. In addition, the Native American Heritage Commission (NAHC) identified a Sacred Land resource in the vicinity of the involved property, and indicated that SAS should contact the North Valley Yokuts for help with the resource's identification and location. We are writing to see if you can provide any information on unrecorded precontact cultural resources in or in the vicinity of the APE. Any input or recommendations for the project would be greatly appreciated. Please know that this request is for informational purposes only, and is not part of SB 18 or AB 52 review. If you have any questions, feel free to contact me at the number listed above or the email listed below. Thank you in advance for your time.

Sincerely,

Jason Coleman
Principal Investigator and Owner
jason@solanoarchaeology.com

Moore Biological Consultants
2018 Biological Assessment (Updated 2018). Army Corps Permit Application Attachments.

Enc. USGS topographic map

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March 21, 2019

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717
Linden, CA 95236

Dear Ms. Perez:

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jason@solanoarchaeology.com

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March 21, 2019

Buena Vista Rancheria of Me-Wuk Indians
Attn. Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200
Sacramento, CA 95811

Dear Ms. Pope:

Moore Biological Consultants has recently retained Solano Archaeological Services (SAS) to conduct a NEPA level cultural resources inventory of an approximate 0.5-acre Area of Potential Effect (APE) located in the City of Stockton, **Joaquin County**, for the proposed **Wisconsin Pump Station Replacement Project (Project)**.

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March 21, 2019

Ione Band of Miwok Indians
Attn. Sara Dutschke Setchwaelo, Chairperson
P.O. Box 699
Plymouth, CA 95669

Dear Ms. Setchwaelo:

Moore Biological Consultants has recently retained Solano Archaeological Services (SAS) to conduct a NEPA level cultural resources inventory of an approximate 0.5-acre Area of Potential Effect (APE) located in the City of Stockton, **Joaquin County**, for the proposed **Wisconsin Pump Station Replacement Project (Project)**.

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jason@solanoarchaeology.com

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March 21, 2019

California Valley Miwok Tribe
Sheep Rancheria of Me-Wuk Indians of CA
P.O. Box 395
West Point, CA 95255

To Whom It May Concern:

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Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

March 21, 2019

California Valley Miwok Tribe
Attn. Cultural Resources Manager
4620 Shippee Lane
Stockton, CA 95212

To Whom It May Concern:

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Sincerely,

Jason Coleman
Principal Investigator and Owner
jason@solanoarchaeology.com

Moore Biological Consultants
2018 Biological Assessment (Updated 2018). Army Corps Permit Application Attachments.

Enc. USGS topographic map

131 Sunset Avenue, Suite E # 120
Suisun, CA 94585-2064

707-718-1416 ▲ Fax 707-451-4775
www.solanoarchaeology.com

March 21, 2019

United Auburn Indian Community of the Auburn Rancheria
Attn. Gene Whitehouse, Chairperson
10720 Indian Hill Road
Auburn, CA 95603

Dear Mr. Whitehouse:

Moore Biological Consultants has recently retained Solano Archaeological Services (SAS) to conduct a NEPA level cultural resources inventory of an approximate 0.5-acre Area of Potential Effect (APE) located in the City of Stockton, **Joaquin County**, for the proposed **Wisconsin Pump Station Replacement Project (Project)**.

The Project undertaking involves conducting major upgrades to an existing pump station and outfall structure near the southeast tip of a tributary slough to the Calaveras River. The existing two discharge pipes will be reconstructed as they cross the levee and two new pumps and discharge pipes will be added (Moore Biological Consultants 2018). As wetlands were identified in the APE, the client is applying for a Clean Water Act Section 404 permit with the U.S. Army Corps of Engineers, and hence the project needs to meet Section 106 of the National Historic Preservation Act compliance.

The project location lies along the western outskirts of the City of Stockton at the intersection of River Drive and Princeton Avenue. The APE lies in unsectioned land, Township 1 North, Range 6 East (projected), as depicted on the Stockton West, California USGS 7.5' topographic quadrangle map (see attached map).

The archaeological records search at the Central California Information System at California State University, Stanislaus, indicated that five historic cultural resources have been previously recorded in the project area. In addition, the Native American Heritage Commission (NAHC) identified a Sacred Land resource in the vicinity of the involved property, and indicated that SAS should contact the North Valley Yokuts for help with the resource's identification and location. We are writing to see if you can provide any information on unrecorded precontact cultural resources in or in the vicinity of the APE. Any input or recommendations for the project would be greatly appreciated. Please know that this request is for informational purposes only, and is not part of SB 18 or AB 52 review. If you have any questions, feel free to contact me at the number listed above or the email listed below. Thank you in advance for your time.

Sincerely,

Jason Coleman
Principal Investigator and Owner
jason@solanoarchaeology.com

Moore Biological Consultants
2018 Biological Assessment (Updated 2018). Army Corps Permit Application Attachments.

Enc. USGS topographic map

Wisconsin Pump Station

canutes <canutes@verizon.net>
Sat 3/23/2019 6:04 PM
To: Jason Coleman <jason@solanoarchaeology.com>

Jason,
We received your letter for AB 52 Consultation on the Wisconsin Pump Station Replacement Project. We reviewed the information. The proposed project is in a sensitive area. Because it's considered highly sensitive, it's the recommendation of the tribe (Northern Valley Yokut) to have us on board to monitor the proposed project.

Nototomne Cultural Preservation
Northern Valley Yokut
Katherine Perez
P.O Box 717
Linden, CA
Cell: 209.649.8972
Email: canutes@verizon.net

Sent from my iPad

NATIVE AMERICAN CONSULTATION LOG FOR THE WISCONSIN PUMP STATION REPLACEMENT PROJECT, SAN JOAQUIN COUNTY, CALIFORNIA

SAS Contact: Jason A. Coleman, M.A., R.P.A.

Native American Consultant	Date of Correspondence	Responses
California Valley Miwok Tribe	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	4/9/19	Emailed stating project results and asking for help with identifying unrecorded resources that may be in the APE. Also asked for Project recommendations.
	4/16/19	Emailed to request and questions or concerns about the project, and to state the project results.
California Valley Miwok Tribe/Sheep Rancheria of the Me-Wuk Indians of CA	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	4/9/19	Emailed stating project results and asking for help with identifying unrecorded resources that may be in the APE. Also asked for Project recommendations.
	4/16/19	Emailed to request and questions or concerns about the project, and to state the project results.
Dutchke Setchwaelo, Sara	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	4/9/19	Emailed stating project results and asking for help with identifying unrecorded resources that may be in the APE. Also asked for Project recommendations.
	4/16/19	Emailed to request and questions or concerns about the project, and to state the project results.
Hitchcock, Raymond	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	4/9/19	Emailed stating project results and asking for help with identifying unrecorded resources that may be in the APE. Also asked for Project recommendations.
	4/16/19	Emailed to request and questions or concerns about the project, and to state the project results.
Morningstar Pope, Rhonda	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	4/9/19	Emailed stating project results and asking for help with identifying unrecorded resources that may be in the APE. Also asked for Project recommendations.

NATIVE AMERICAN CONSULTATION LOG FOR
THE WISCONSIN PUMP STATION REPLACEMENT PROJECT,
SAN JOAQUIN COUNTY, CALIFORNIA

SAS Contact: Jason A. Coleman, M.A., R.P.A.

	4/16/19	Emailed to request and questions or concerns about the project, and to state the project results.
Perez, Katherine	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	3/23/19	SAS received an email from Ms. Perez stating that the APE is in a sensitive area. She stated that because it's considered highly sensitive, she recommends tribal monitoring during all subsurface activities.
Whitehouse, Gene	3/21/19	Mailed project introduction letter and maps depicting the APE. The letter invited consultation and asked for any information on unrecorded resources in the vicinity.
	4/9/19	Emailed stating project results and asking for help with identifying unrecorded resources that may be in the APE. Also asked for Project recommendations.
	4/15/19	Cherilyn Neider sent an email notifying SAS that the Wisconsin Project is under UAIC review and they will respond if they have any questions or concerns

APPENDIX C

— ♦ ♦ ♦ —

CCIC Record Search Results

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

Date: 3/15/2019

Records Search File No.: 11013L
Project: Wisconsin Pump Station,
River Road, Stockton

Jason A. Coleman
Solano Archaeological Services
131 Sunset Avenue, Suite E 120
Suisun City, CA 94585

jason@solanoarchaeology.com

Dear Mr. Coleman:

The Central California Information Center received your record search request for the project area referenced above, located on the Stockton West 7.5' quadrangle in San Joaquin County. The following reflects the results of the records search for the project study area and radius:

As per data currently available at the CCaIC, the locations of resources/reports are provided in the following format: ☒ custom GIS maps ☐ shapefiles ☐ hand-drawn maps

Summary Data:

Resources within project area:	None formally reported to the Information Center.
Resources within 1/2 mi radius:	5: P-39-004269, 4270, 4984, 4985, 5320
Reports within project area:	4: SJ-04190, 6507, 6723, 6724
Reports within 1/2 mi radius:	6: SJ-00753, 838, 846, 5584, 6781, 8849

Resource Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Database Printout (details):	☒ enclosed	☐ not requested	☐ nothing listed
Resource Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (list):	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☐ enclosed	☒ not requested	☐ nothing listed
Resource Record Copies:	☐ enclosed	☒ not requested	☐ nothing listed

Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed
OHP Historic Properties Directory:	☐ enclosed	☐ not requested	☒ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☐ not requested	☒ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☐ not requested	☒ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed

Shipwreck Inventory: ☒ not available at CCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp

Soil Survey Maps: ☒ not available at CCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Note: Billing will be transmitted separately via email by our Financial Services office *($376.50), payable within 60 days of receipt of the invoice.

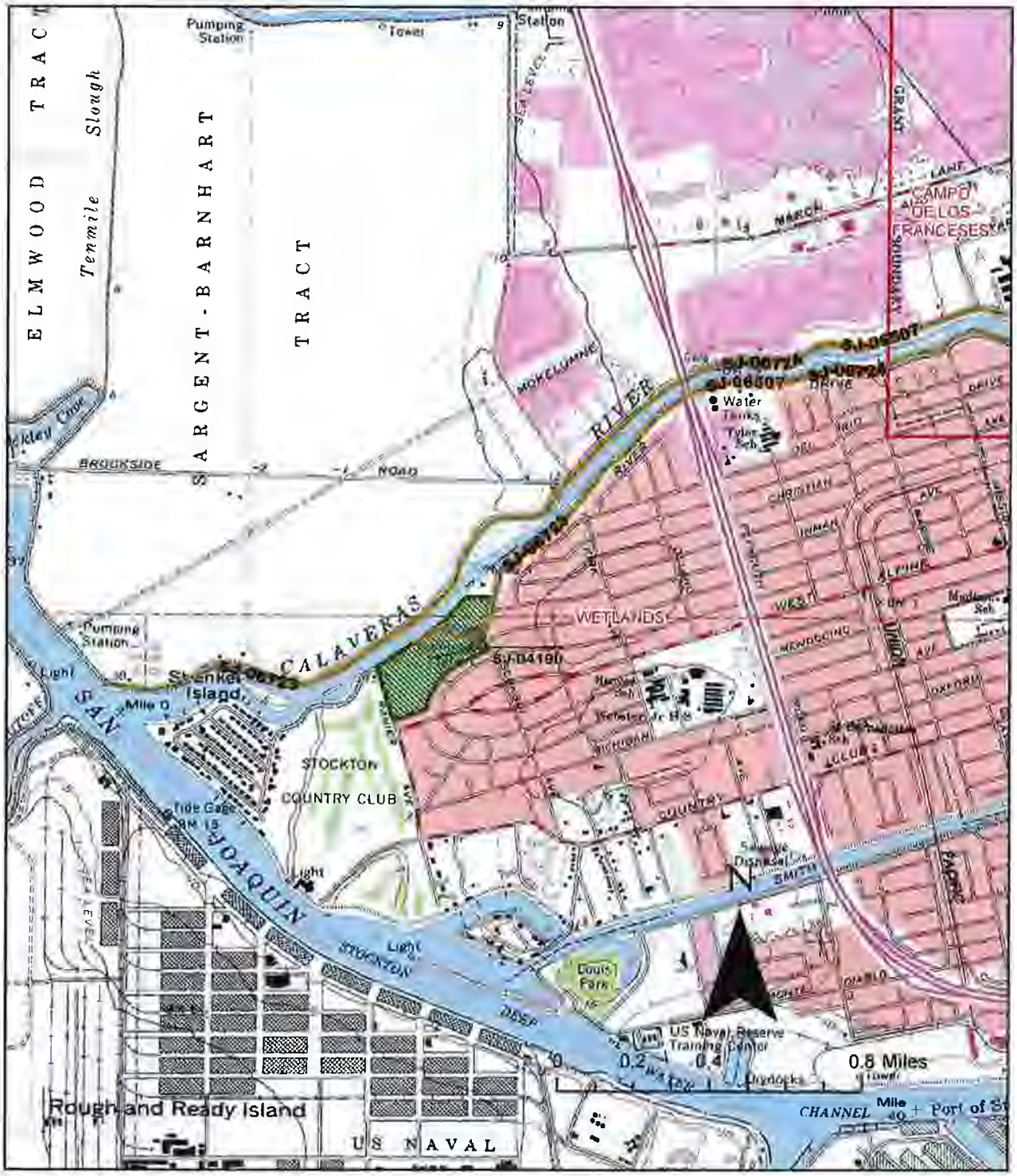
Sincerely,

E. A. Greathouse

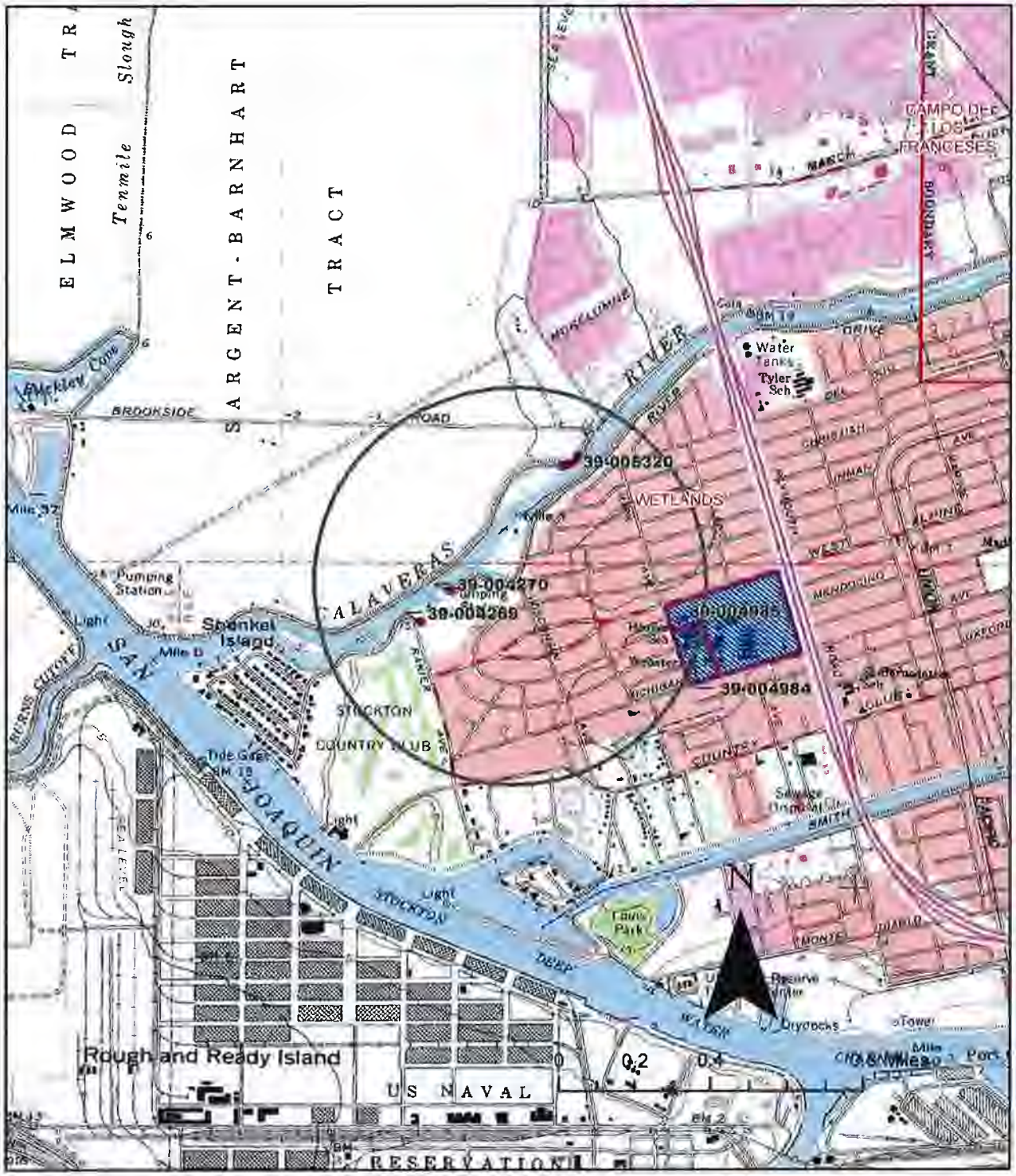
E. A. Greathouse, Coordinator
Central California Information Center
California Historical Resources Information System

* Invoice Request sent to: Laurie Marroquin CSU Stanislaus Financial Services
lamarroquin@csustan.edu

CCalC #11013L Wisconsin Pump Station
Reports on Project
Stockton West 7.5' Quadrangle



CCalC #11013L Wisconsin Pump Station
Resources
Stockton West 7.5' Quadrangle



Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
SJ-00753	NADB-R - 1361565	1991	McGowan, D.	Cultural Resources Investigation for the Proposed Brookside Pedestrian Path Project	Jones and Stokes Associates, Inc.	
SJ-00838	NADB-R - 1361658	1980	Staff Archaeologists, US Army Corps of Engineers	Fourteenmile Slough and Smith Levee Intensive Cultural Resources Survey, San Joaquin County.	Staff Archaeologists, Sacramento District, USACE	
SJ-00846	NADB-R - 1361670	1988	Werner, R.	Cultural Resource Investigation Brookside Community Development Project, Stockton, California.	Archaeological Services, Inc. (ASI); for Jones and Stokes Associates	
SJ-04190	NADB-R - 1364082	2001	Jensen, P. M.	Archaeological Inventory Survey: Proposed Bruns Residential Developement Project on the Stanislaus River, City of Stockton, San Joaquin County, California.	Jensen & Associates	39-004269, 39-004270
SJ-05584	NADB-R - 1365467	2004	Jensen, P.	Archaeological Inventory Survey, Berolzheimer Annexation and Subdivision Project, c. 14 Acres Adjacent to Country Club Boulevard, San Joaquin County, California.	Jensen and Associates	
SJ-06507	NADB-R - 1366739	2007	URS Corporation	Cultural Resources Report for Geotechnical Evaluations of the San Joaquin Area Flood Control Agency Project Levees	URS Corporation; for DWR	39-000220, 39-004639, 39-004640
SJ-06723	NADB-R - 1367019	2008	URS Corporation	Technical Report, Final: Cultural Resources Survey Report for the Urban Levee Project.	URS Corporation; for Department of Water Resources	
SJ-06724	NADB-R - 1367026	2008	URS Corporation	Technical Report, Final: Cultural Resources Baseline Literature Review for the Urban Levee Project.	URS Corporation; for Department of Water Resources	39-002513
SJ-06781	NADB-R - 1367021	2008	Losee, C.	Cultural Resources Analysis For AT&T CN1841-A "Stockton" 3501 North Wisconsin Avenue, Stockton, San Joaquin County	Archaeological Resources Technology	
SJ-08849		2017	Coleman, J. A.	Cultural Resources Inventory and Evaluation Report Brookside Cutoff Wall Project City of Stockton, San Joaquin County, California	Solano Archaeological Services for USACE & BaseCamp Environmental	39-005320

Resource Detail: P-39-004269

Identifying information

Primary No.: P-39-004269
Trinomial:
Name: Bruns #1
Other IDs:

Type	*Name*
Resource Name	Bruns #1

Cross-refs:

Attributes

Resource type: Structure, Site
Age: Historic
Information base: Survey
Attribute codes: AH15 (Standing structures) - standing structures
Disclosure:
Collections:
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
9/10/2001	Sean M. Jensen/Peter M. Jensen		

Associated reports

Report No.	*Year*	*Title*	*Affiliation*
SJ-04190	2001	Archaeological Inventory Survey: Proposed Bruns Residential Developement Project on the Stanislaus River, City of Stockton, San Joaquin County, California.	Jenson & Associates

Location information

County: San Joaquin
USGS quad(s): Stockton West
Address:

Address	*City*	*Assessor's parcel no.*	*Zip code*
	Stockton		

PLSS: T1N R6E Sec. MDBM
UTMs: Zone 10 644455mE 4203375mN NAD27

Management status

Database record metadata

	Date	*User*	
Entered:	9/30/2013		
Last modified:	2/26/2014	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.

Record status:

Resource Detail: P-39-004270

Identifying information

Primary No.: P-39-004270
Trinomial:
Name: Bruns #2
Other IDs:

Type	Name
Resource Name	Bruns #2

Cross-refs:

Attributes

Resource type: Site
Age: Historic
Information base: Survey
Attribute codes: AH15 (Standing structures) - standing structures
Disclosure:
Collections:
Accession no(s):
Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
9/10/2001	Sean M. Jensen/ Peter M. Jensen		

Associated reports

Report No.	Year	Title	Affiliation
SJ-04190	2001	Archaeological Inventory Survey: Proposed Bruns Residential Developement Project on the Stanislaus River, City of Stockton, San Joaquin County, California.	Jenson & Associates

Location information

County: San Joaquin
USGS quad(s): Stockton West
Address:
PLSS: T1N R6E Sec. MDBM
UTMs: Zone 10 644595mE 4203435mN NAD27

Management status

Database record metadata

	Date	User	
Entered:	9/30/2013		
Last modified:	2/26/2014	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.

Record status:

Resource Detail: P-39-004984

Identifying information

Primary No.: P-39-004984
Trinomial:
Name: Hoover (Herbert) School
Other IDs:

Type	*Name*
Resource Name	Hoover (Herbert) School

Cross-refs:

Attributes

Resource type: Building
Age: Historic
Information base: Survey
Attribute codes: HP15 (Educational building) - school
Disclosure:
Collections:
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
1/1/1991	San Joaquin County Superintendent of Schools	Public Schools of San Joaquin County 1852-1990 (1991)	

Associated reports

Location information

County: San Joaquin
USGS quad(s): Stockton West
Address:
PLSS:
UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	9/30/2013		
Last modified:	3/3/2014	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.

Record status:

Resource Detail: P-39-004985

Identifying information

Primary No.: P-39-004985
Trinomial:
Name: Weber School (rural)/ Webster (Daniel) Middle School
Other IDs:

Type	*Name*
Resource Name	Weber School (rural)/ Webster (Daniel) Middle School

Cross-refs:

Attributes

Resource type: Building
Age: Historic
Information base: Survey
Attribute codes: HP15 (Educational building) - school
Disclosure:
Collections:
Accession no(s):
Facility:

General notes

Recording events

Date	*Recorder(s)*	*Affiliation*	*Notes*
1/1/1991	San Joaquin County Superintendent of Schools	Public Schools of San Joaquin County 1852-1990 (1991)	

Associated reports

Location information

County: San Joaquin
USGS quad(s): Stockton West
Address:
PLSS:
UTMs:

Management status

Database record metadata

	Date	*User*	
Entered:	9/30/2013		
Last modified:	3/3/2014	Anthro	
IC actions:	*Date*	*User*	*Action taken*
	9/30/2013	jay	Added placeholder records to fill in primary number sequence.

Record status:

Resource Detail: P-39-005320

Identifying information

Primary No.: P-39-005320
Trinomial:
Name: SAS-001 Calaveras River Levee
Other IDs:

Type	Name
Resource Name	SAS-001 Calaveras River Levee

Cross-refs:

Attributes

Resource type: Site
Age: Historic
Information base: Survey
Attribute codes: HP20 (Canal/aqueduct); HP21 (Dam)
Disclosure: Not for publication
Collections: No
Accession no(s):
Facility:

General notes

Recording events

Date	Recorder(s)	Affiliation	Notes
6/21/2017	Coleman, J. and K. Skinner	Solano Archaeological Services	

Associated reports

Report No.	Year	Title	Affiliation
SJ-08849	2017	Cultural Resources Inventory and Evaluation Report Brookside Cutoff Wall Project City of Stockton, San Joaquin County, California	Solano Archaeological Services for USACE & BaseCamp Environmental

Location information

County: San Joaquin
USGS quad(s): Stockton West
Address:

Address	City	Assessor's parcel no.	Zip code
Brookside Road	Stockton		95207

PLSS: T2N R6E Sec. MDBM
UTMs: Zone 10 644957mE 4204240mN NAD83 (Western end)
Zone 10 645122mE 4204352mN NAD83 (Eastern end)

Management status

Database record metadata

	Date	User	
Entered:	9/12/2018	EGreathouse	
Last modified:	9/19/2018	EGreathouse	
IC actions:	*Date*	*User*	*Action taken*
	9/12/2018	EGreathouse	ASB

Record status:

APPENDIX D

— ♦ ♦ ♦ —

Newly Identified Cultural Resources - Site Forms

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code | Reviewer | Date

Page 1 **of** 3 *** Resource Name or #:** SAS-001 Wisconsin Pump House Station, Levee, and Canal

P1. Other Identifier:
***P2. Location:** ☒ **Not for Publication** ☐ **Unrestricted** ***a. County:** San Joaquin
and (P2b and P2c or P2d. Attach a Location Map as necessary.)
***b USGS 7.5' Quad:** Stockton West **Date:** 1987 **T** 1N **R** 6E
Unsectioned M.D. **B.M.**
c. Address: Wisconsin Avenue **City:** Stockton **Zip:** 95204
d. UTM: Zone: 10; 644,834 mE/ 4,203,711 mN Datum: NAD 83 Pump house
e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 3' asl
From the Country Club Blvd. exit off Highway 5 in Stockton, CA, head west on Country Club Blvd. for 0.7 mile, then veer right onto North Wisconsin Avenue. Travel for 0.6 mile then park. The pump house is approximately 70 feet west.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
This resource consists of the original Wisconsin Pump House Station and associated levee and canal located along North Wisconsin Avenue just as the road turns into River Drive in Stockton, CA. The pump house resides in a developed area with residential developments east and south, the Calaveras River just 420 feet north, and the Stockton Country Club to the southwest. The resource is present on the historic 1954 Stockton West, CA USGS topographic quadrangle, making the pump house and original levee and canal at least 65 years old. Part of the Smith Canal levee system, the current 620-foot long levee/canal segment was built to direct water to the pump house to drain excess storm water accumulation. By 1970 the levee appears to have been bolstered to include a new levee road and a more substantial design (according to historic Stockton West, CA USGS topographic maps). This water conveyance system is owned, operated, and maintained by Reclamation District 1614, and is a gravity storm drain system.

***P3b. Resource Attributes:** HP20. Canal/aqueduct; AH6. Water conveyance system; AH15. Standing structure.
***P34. Resources Present:** ☐ Building ☒ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other

P5a.

P5b. Description of Photo:
SAS-001 Wisconsin Pump House Station, facing south, March 27, 2019.

***P6. Date Constructed/Age and Sources:**
☒ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
Reclamation District 1614
711 N. Pershing Avenue
Stockton, CA 95203

***P8. Recorded by:**
J. Coleman and S. Talcott
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

P9. Date Recorded: March 27, 2019

P.10. Survey Type: Intensive pedestrian

***P11. Report Citation:**
Coleman, 2019 Cultural Resources Survey Report for the Wisconsin Pump House Replacement Project, San Joaquin County, California. Submitted to Moore Biological Consulting, Inc. by Solano Archaeological Services.

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

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code

*Resource Name or # SAS-001 Wisconsin Pump House Station, Levee, and Canal

B1. Historic Name: Wisconsin Pump House Station and Smith Canal Levee System

B2. Common Name: Wisconsin Pump House Station and Smith Canal Levee System

B3. Original Use: Gravity storm drain system

B4. Present Use: Gravity storm drain system

*B5. **Architectural Style:** n/a

*B6. **Construction History:** The pump house facility consists of a 40-foot by 40-foot fenced compound with a 12-foot long by 14-foot wide by 14-foot tall A-frame structure with corrugated metal roofing. There is a modern electrical power supply, and there is evidence of minor repair and renovation to some of the outside structure walls. Two large metal discharge pipes (18" and 20" wide) currently extend northward from the pump house for approximately 90-feet to the edge of the canal. The levee was completely enshrouded in vegetation and thus could not accurately be assessed, but the canal appears to average 40-wide in most areas. In 2010 FEMA declared the Smith Canal system and Country Club area to be high risk flood areas, and that the current Wisconsin pump house system was no longer adequate to protect the community. Current plans to reconstruct the pump house and associated outfall structures have been proposed and include two new additional 24" pipes and two new pumps.

*B7. **Moved?** ☒No ☐Yes ☐Unknown **Date:** **Original Location:**

*B8. **Related Features:** n/a

B9a. Architect: unknown

b. Builder: Reclamation District 1614

*B10. **Significance: Theme:** n/a **Area:** n/a

Period of Significance: **Property Type:** **Applicable Criteria:**

The structure is a simple shed with corrugated roofing that contains a pump to alleviate occasional flood waters. It has been modified and maintained over the years by Reclamation District 1614. Although at least 65 years old, the structure has no unique design and was not created by any historically significant people. Such pump houses along leveed river fronts are commonplace throughout California, and as such this resource does not add to the broad patterns of history. Additionally, the current pump system is inadequate and will be replaced/modified over the next several years, thus removing historic integrity of the original system. The Wisconsin Pump House Station does not have research value and is not recommended eligible for the National Register of Historic Places listing.

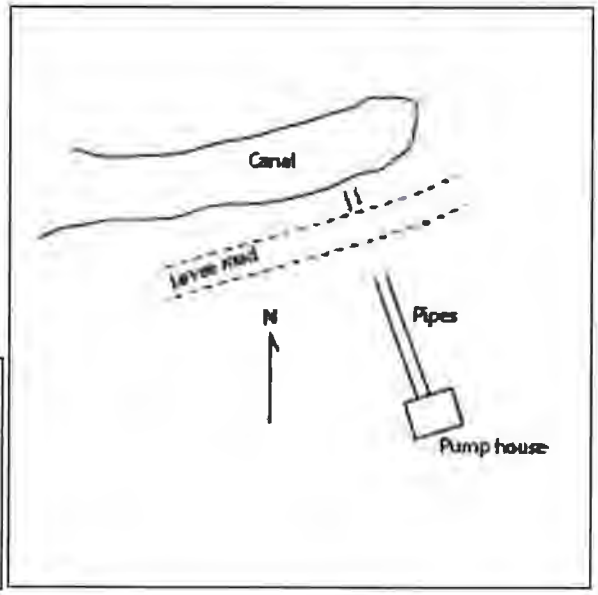
B11. Additional Resource Attributes: None

*B12. **References:** Coleman, 2019 Cultural Resources Survey Report for the Wisconsin Pump House Replacement Project, San Joaquin County, California. Submitted to Moore Biological Consulting, Inc. by Solano Archaeological Services.

B13. Remarks: None

*B14. **Evaluator:** J. Coleman and S. Talcott, Solano Archaeological Services

*Date of Evaluation: March 27, 2019



(This space reserved for official comments.)

*Required information

State of California ♘ Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

 ***Resource Name or #** SAS-001 Wisconsin Pump House Station, Levee, and Canal

***Map Name:** Stockton West ***Scale:** 1:24,000 ***Date of Map:** 1978

*Required information

APPENDIX E

— ♦ ♦ ♦ —

APE Photographs

Photograph 1. Wisconsin Pump Station - view to West

Photograph 2. Wisconsin Pump Station discharge pipes – view to North

Photograph 3. Levee segment along Calaveras River tributary slough - view to Northwest

Photograph 4. Wisconsin Pump Station - view to South from top of tributary slough levee

Exhibit C

KSN inc. KJELDSEN SINNOCK NEUDECK
CIVIL ENGINEERS & LAND SURVEYORS

Stephen K. Sinnock, P.E.
Christopher H. Neudeck, P.E.
Neal T. Colwell, P.E.
Barry O'Regan, P.E.
0806-001

FILE MEMORANDUM

June 28, 2019

To: Reclamation District No. 1614 – Smith Tract
Board of Trustees

Subject: Kleinfelder's Geotechnical Evaluation Report (GER) of RD 1614 & RD 828 dated 3/17/15 under the DWR Div. Of Flood Management's Urban Levee Evaluation (ULE) group.

Project: Review of GER's Purpose and Findings

From: Christopher H. Neudeck, District Engineer

Board of Trustees,

At our regularly scheduled Board meeting held on Monday June 3, 2109 I was asked to review the subject report and provide my opinion on what the study's purpose and findings were.

The overall Urban Levee Evaluations Project (ULE), under the direction of the California Department of Water Resources (DWR) Division of Flood Management and through numerous Geotechnical Consulting Firms evaluated hundreds of miles of existing urban levees in the Sacramento - San Joaquin Basin in terms of their anticipated performance during various high-water and flood events. Evaluation results were then compared to specific performance criteria uniquely developed and adopted by ULE. The investigations were limited in scope and relied on geological conditions (local and regional), available data about geomorphic features, limited exploration and testing data, and records of historical levee performance to characterize the levee's condition.

The methodologies used in the ULE engineering analyses are considered *screening-level* evaluations. The report qualifies the data within it and the evaluation results generated by ULE, to possibly not be "*suitable or sufficient alone for design purposes of either new levees or for remediation of existing levees.*"

This report makes it abundantly clear "*that when considering the implementation of remedial recommendations presented in ULE Geotechnical Evaluation Reports (GERs), it is the responsibility of the local agencies having jurisdiction over the levees and their designers to perform their own investigations and analyses to verify and supplement the results of ULE investigations as appropriate to define the limits of needed remediation and to develop site-specific design and construction requirements.*" This ULE report is continually referred to as a screening level study with the intent of identifying potential deficiencies but highly recommends more comprehensive and detailed investigations for design level studies in order to improve the probability of identifying all of the deficiencies.

The evaluations performed as part of the ULE evaluation used specific ULE criteria to determine whether the levees studied met or did not meet this performance criteria. The basis of the ULE performance criteria is a Guidance Document (Version 14, URS, 2014a).

The Guidance Document was developed based on input from:

- □ URS
- □ DWR Staff
- □ DWR Independent Consultant Board (ICB)
- □ DWR Independent Consultants
- □ United States Army Corps of Engineers (USACE)
- □ Urban Levee Design Criteria (ULDC) (DWR, 2012)

Below is a tabular form and summary of that ULE Performance criteria.

Table ES-1. Analyses Criteria[1]

Evaluation	Analysis	Analysis Case/ Condition	Evaluation Criteria
Freeboard	Freeboard	Riverine and channel	200-year WSE + 3 feet
		Bypass	200-year water surface elevation + 5 feet or 6 feet, as appropriate. See Section 3.1.2 of the Guidance Document (Version 14; URS, 2014a).
Erosion causing Levee Breach	Erosion risk	Waterside slope	High risk (i.e., ≥ 25 percent erosion of levee width at the 200-year WSE), medium risk (i.e., < 25 percent to ≥ 5 percent erosion of levee width at 200-year WSE), or low risk (i.e., < 5 percent erosion of levee width at 200-year WSE)
Seepage	Underseepage	Hydraulic top of levee(HTOL)[2] WSE	Average vertical exit gradient at the landside levee toe ≤ 0.8
			≤ 0.8 to ≤ 0.9 at 150 foot offset from landside levee toe, including berm toe, topographic depressions and ditches. Allowable gradient at an intermediate location from the landside levee toe will be based on a linear interpolation within the allowable gradients; see Section 4.2 of Guidance Document (Version 14; URS, 2014a)
		200-year WSE	Average vertical exit gradient at the landside levee toe ≤ 0.5
			≤ 0.5 to ≤ 0.6 at 150 foot offset from landside levee toe, including berm toe, topographic depressions and ditches. Allowable gradient at an intermediate location from the landside levee toe will be based on a linear interpolation within the allowable gradients; see Section 4.2 of Guidance Document (Version 14; URS, 2014a).
	Through seepage	Same WSE analysis conditions as underseepage	If phreatic surface breakout point during steady state seepage is above the landside levee toe and the landside slope contains erodible material, the levee does not meet criteria, see Section 4.6.2 of the Guidance Document (Version 14; URS, 2014a)
Landside Stability	Steady-state seepage	Hydraulic top of levee[2] WSE	Factor of safety ≥ 1.2 (intermittently-loaded levees) Factor of safety ≥ 1.3 (frequently-loaded levees)
		200-year WSE	Factor of safety ≥ 1.4 (intermittently-loaded levees) Factor of safety ≥ 1.5 (frequently-loaded levees)
	"Soft" Soil[3] Conditions	200-year WSE	Factor of safety ≥1.4
Waterside Stability	Rapid drawdown	River system	Factor of safety > 1.1 (intermittently-loaded levees) Factor of safety > 1.2 (frequently-loaded levees)
		Tributaries and channels	Factor of safety > 1.0

[1] For further information refer to the Guidance Document (Version 14; URS, 2014a)
[2] Hydraulic top of levee (HTOL) is defined in the ULE project as the lesser of the physical top of levee, 200-year mean WSE plus 3 feet, or the 500-year mean WSE.
[3] Refer to the Guidance Document (Version 14; URS, 2014a) for the definition of "Soft" Soil

This GER summarized below the areas of levee that met or did not meet the ULE criteria. Keep in mind while reviewing this summary that the findings are screening level in nature and that the criteria used to evaluate the levees are unique, specifically designed for this study and not entirely aligning with the Federal Emergency Management Agency (FEMA - 100 Yr.) or the Urban Levee Design Criteria (ULDC – 200 year) standards

Table ES-4
Summary of Evaluation Findings for 200-Year Water Surface Elevation

Reach	Seismic Vulnerability[1]	Erosion Risk[2]	Freeboard[3]	Through Seepage	Underseepage	Landside Slope Stability[4]	Waterside Slope Stability
A	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Does Not Meet Criteria	Meets Criteria	Does Not Meet Criteria	Meets Criteria
B1	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria
B2	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria
C1[5]	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria
C2	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Does Not Meet Criteria
C3[5]	Meets Criteria	Meets Criteria	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria
D	Meets Criteria	Meets Criteria	Does Not Meet Criteria	NA	NA	NA	NA
E	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria[5]	Meets Criteria[5]	Meets Criteria[5]	Meets Criteria
F	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria[5]	Meets Criteria[5]	Meets Criteria[5]	Meets Criteria
G	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Does Not Meet Criteria	Meets Criteria	Does Not Meet Criteria	Meets Criteria
H	Meets Criteria	Meets Criteria	Does Not Meet Criteria	Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria

Notes:

[1] Seismic vulnerability may affect a part of a reach, a full reach, or multiple reaches. See the Seismic Vulnerability Classification Figure 5-6 in main text for extents.

[2] Erosion is evaluated at the 200-year WSE and is typically a limited length in a reach. See the Erosion Analysis Results Figure 5-3 in main text for extents. Sites with a low to medium erosion risk are considered to meet criteria.

[3] Freeboard areas that do not meet criteria are typically a limited length in a reach. See Figure 5-2 in main text for extents.

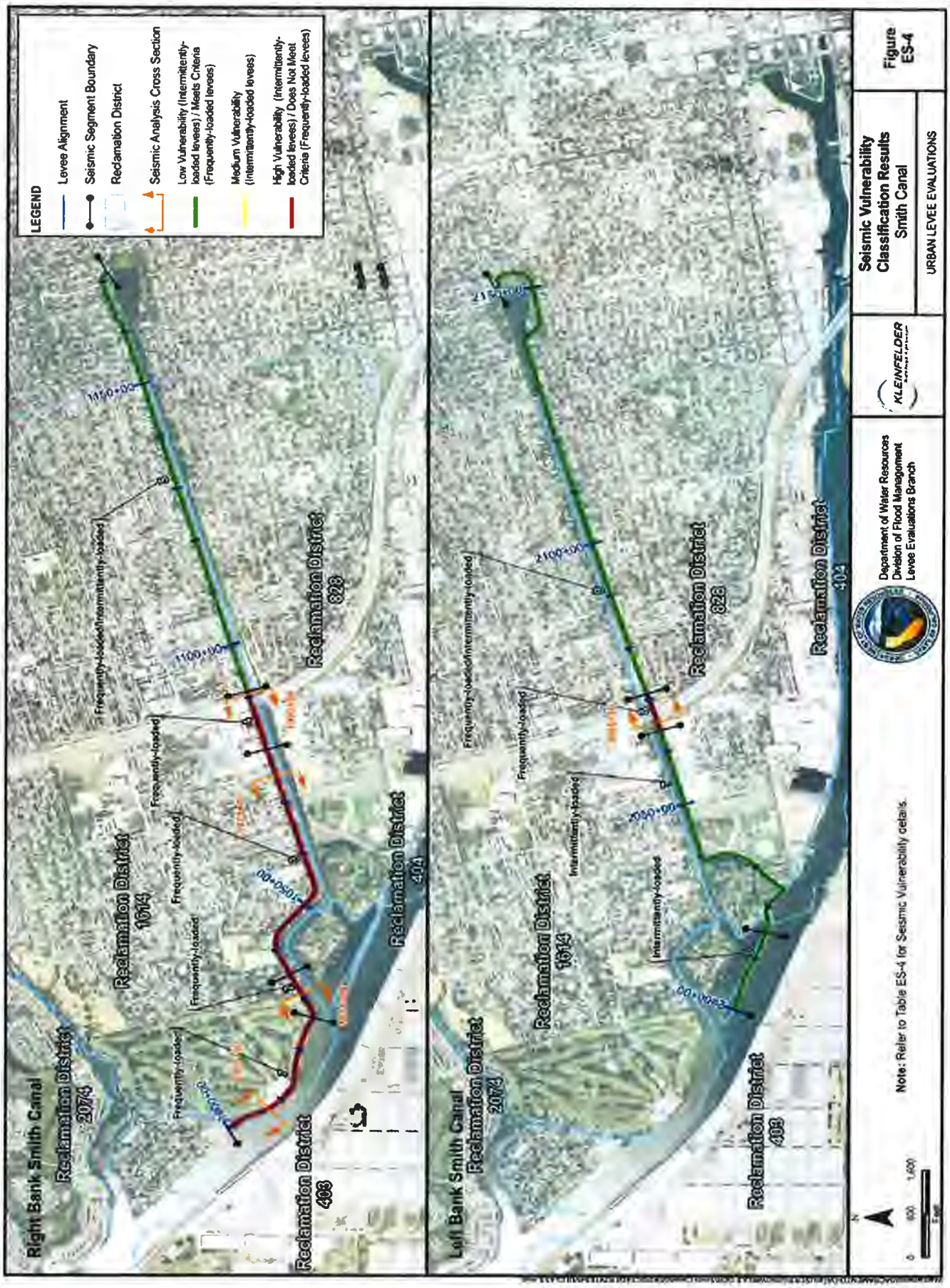
[4] Landside stability assessments address steady-state (drained) conditions only, as no "soft" soil (undrained) analysis was done in the Smith Canal Study Area.

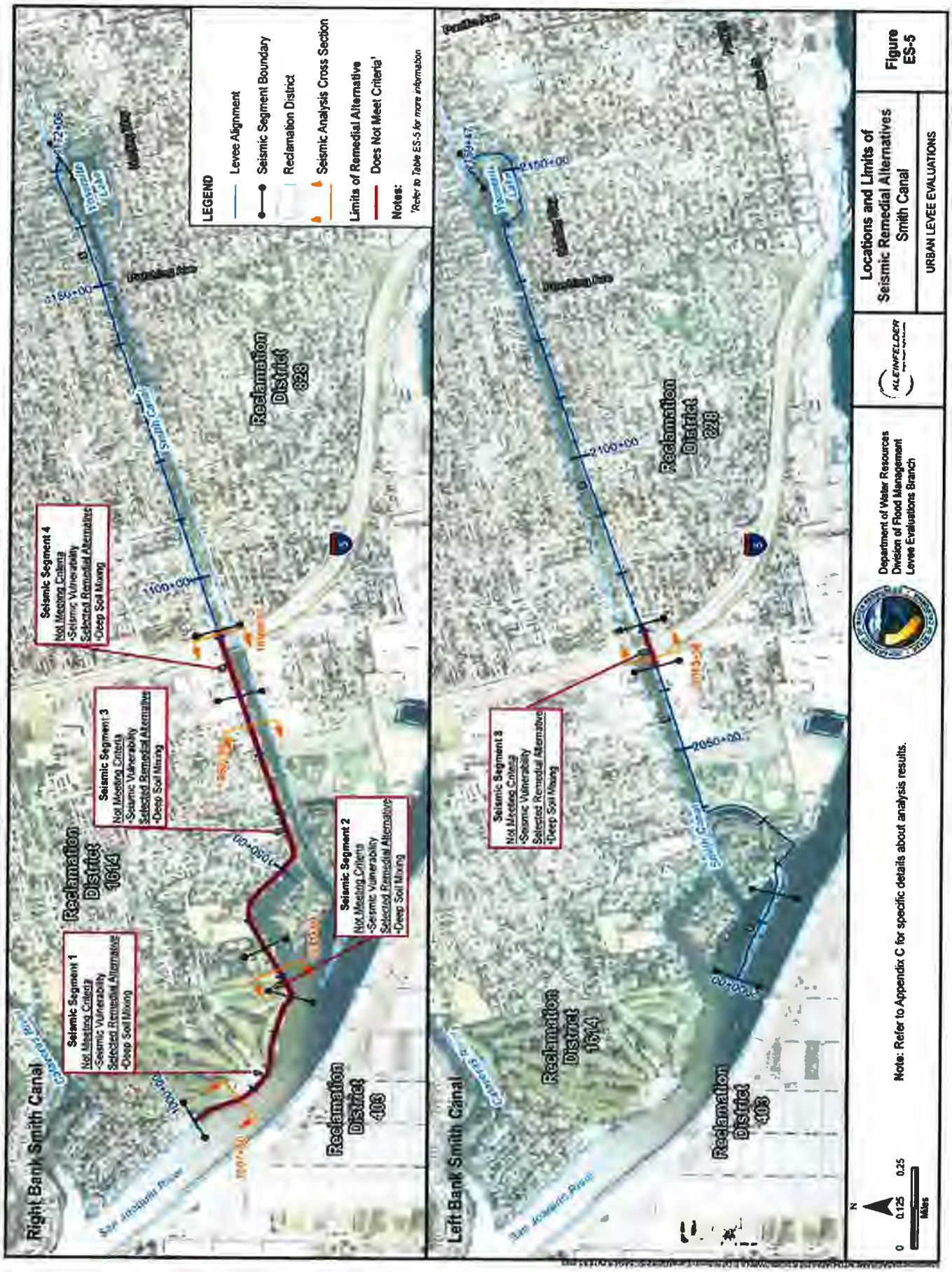
[5] Formal analysis was not performed Reach meets criteria as assessment WSE is below the landside toe.

Below are the District Base Maps depicting the levee reaches set forth in the above Summary of Evaluation:


LEGEND
Reach Boundary
Levee Alignment
Reclamation District
Right Bank Smith Canal
Left Bank Smith Canal
Reclamation District 828
Reclamation District 1614
Reclamation District 408
Yosemite Lake
San Joaquin River
Reach 8B
Reach 8A
Reach 8
Reach 7
Reach 6
Reach 5
Reach 4
Reach 3
Reach 2
Reach 1
1150+00
1100+00
2100+00
2050+00
0+00
Department of Water Resources
Division of Flood Management
Levee Evaluations Branch
KLEINFELDER
Reach Boundaries
Smith Canal
URBAN LEVEE EVALUATIONS
Figure
ES-2
0
0.125
0.25
Miles
Note: Refer to Appendix B for latitude and longitude information.


LEGEND
Reach Boundary
Analysis Cross Section
Levee Alignment
Reclamation District
Limits of Remedial Alternative
Does Not Meet Criteria1
Notes:
1Refer to Table ES-2 for more information
Right Bank Smith Canal
Left Bank Smith Canal
Reclamation District 1614
Reclamation District 828
Reclamation District 403
San Joaquin River
Reach A
Not Meeting Criteria
•Through Seepage
•Steady State Stability
Selected Remedial Alternative
•Do not remediate
Reach C2
Not Meeting Criteria
•Rapid Drawdown Stability
Selected Remedial Alternative
•Do not remediate
Reach C3
Not Meeting Criteria
•Freeboard
Selected Remedial Alternative
•Do not remediate
Reach D
Not Meeting Criteria
•Freeboard
Selected Remedial Alternative
•Do not remediate
Reach G
Not Meeting Criteria
•Through Seepage
•Steady State Stability
Selected Remedial Alternative
•Flatten Landside Slope
Reach H
Not Meeting Criteria
•Freeboard
Selected Remedial Alternative
•Do not remediate
1150+00
1100+00
2100+00
2050+00
0
0.125
0.25
Miles
N
Note: Refer to Appendix B for specific details about analysis results.
Department of Water Resources
Division of Flood Management
Levee Evaluations Branch
KLEINFELDER
Locations and Limits of Static Remedial Alternatives
Smith Canal
URBAN LEVEE EVALUATIONS
Figure ES-3


LEGEND
Levee Alignment
Seismic Segment Boundary
Reclamation District
Seismic Analysis Cross Section
Low Vulnerability (Intermittently-loaded levees) / Meets Criteria (Frequently-loaded levees)
Medium Vulnerability (Intermittently-loaded levees)
High Vulnerability (Intermittently-loaded levees) / Does Not Meet Criteria (Frequently-loaded levees)
Right Bank Smith Canal
Left Bank Smith Canal
Reclamation District 2074
Reclamation District 1614
Reclamation District 828
Reclamation District 404
Reclamation District 403
Frequently-loaded
Intermittently-loaded
Note: Refer to Table ES-4 for Seismic Vulnerability details.
Department of Water Resources
Division of Flood Management
Levee Evaluations Branch
KLEINFELDER
Seismic Vulnerability Classification Results
Smith Canal
URBAN LEVEE EVALUATIONS
Figure ES-4


Right Bank Smith Canal
Left Bank Smith Canal
Reclamation District 1614
Reclamation District 828
Reclamation District 408
Seismic Segment 1
Not Meeting Criteria
•Seismic Vulnerability
Selected Remedial Alternative
•Deep Soil Mixing
Seismic Segment 2
Not Meeting Criteria
•Seismic Vulnerability
Selected Remedial Alternative
•Deep Soil Mixing
Seismic Segment 3
Not Meeting Criteria
•Seismic Vulnerability
Selected Remedial Alternative
•Deep Soil Mixing
Seismic Segment 4
Not Meeting Criteria
•Seismic Vulnerability
Selected Remedial Alternative
•Deep Soil Mixing
LEGEND
Levee Alignment
Seismic Segment Boundary
Reclamation District
Seismic Analysis Cross Section
Limits of Remedial Alternative
Does Not Meet Criteria1
Notes:
1Refer to Table ES-5 for more information
Department of Water Resources
Division of Flood Management
Levee Evaluations Branch
KLEINFELDER
Locations and Limits of Seismic Remedial Alternatives Smith Canal
URBAN LEVEE EVALUATIONS
Figure ES-5
Note: Refer to Appendix C for specific details about analysis results.
N
0
0.125
0.25
Miles

Based upon this GER report it is clear there are large reaches of RD 16114 and RD 828's levee that do not meet their unique ULE criteria and therefore they do not meet Standard levee accreditation criteria either. As amply mentioned throughout this report, the analysis is screening level only and cannot be considered an accreditation analysis in accordance with either the FEMA or ULDC accreditation process. I have included below for reference sake the criteria used in FEMA's evaluation and accreditation and the ULDC criteria for 200-year protection:

Levee Accreditation – FEMA vs. ULDC

FEMA (CFR 65.10) (b) Design Criteria (100 year)

1. Freeboard
2. Closures
3. Embankment Protection (Erosion)
4. Embankment and Foundation Stability Analyses
5. Settlement Analyses
6. Interior Drainage
7. Other Design Criteria

ULDC (200 Year)

7.1 Design Water Surface Elevation
7.2 Minimum Top of Levee
7.3 Soil Sampling, Testing, and Logging
7.4 Slope Stability for Intermittently Loaded Levees*
7.5 Underseepage for Intermittently Loaded Levees*
7.6 Frequently Loaded Levees
7.7 Seismic Vulnerability
7.8 Levee Geometry
7.9 Interfaces and Transitions
7.10 Erosion
7.11 Right-of-Way
7.12 Encroachments
7.13 Penetrations
7.14 Floodwalls, Retaining Wall, and Closure Structures
7.15 Animal Burrows
7.16 Levee Vegetation
7.17 Wind Setup and Wave Runup
7.18 Security
7.19 Sea Level Rise
7.20 Emergency Actions
8.0 Operations and Maintenance

*Frequently loaded Levees should include seepage control and crack stopping features.

*In addition, a higher factor of safety is required for landside slope stability and rapid drawdown slope stability, and the requirements for seismic stability are more extensive

It is important to note that neither the FEMA or ULDC levee accreditation process can be completed by one engineer. Both accreditation processes require the concurrence of other independent experts. So even if one engineer can be found to "sign off" on an accreditation evaluation, independent experts would also have to agree. And then, as a third layer, a completely separate decision body actually makes the accreditation decision in each case. Flood protection provided by levees is a critical life safety concern throughout our state and nation, with tremendous consequences at stake. The agencies responsible for flood protection take their mission very seriously, and multiple layers of expert review and approvals is a key way to guard against falling victim to the mistakes or mis-judgements of one individual. This memo should serve the request of the Boar df Trustees to better understand the purpose and findings of Kleinfelder's 2015 GER.

If the Board of Trustees has any questions once they have had a chance to review this Memo please let me know and I will do my best to get answers to your questions.

RECLAMATION DISTRICT NO. 1614
SMITH TRACT

BOARD OF TRUSTEES MEETING
MONDAY, JULY 1, 2019
2:00 PM
ENGINEER'S REPORT

I. WISCONSIN PUMP STATION NO. 7

A. Review status of alternative repair design for Wisconsin Pump Station.

EXHIBIT A: Email Memorandum from KSN Inc dated June 20, 2019.

EXHIBIT B: Cultural Resources Inventory Report for Wisconsin Pump Station replacement Project dated April 29, 2019.

II. KLEINFELDER'S GEOTECHNICAL EVALUATION REPORT (GER) OF RD 1614 & RD 828 DATED 3/17/15.

A. Review Memo prepared by KSN Inc. regarding review of GER's Purpose and Findings.

EXHIBIT A: Memo prepared by Christopher H. Neudeck dated June 28, 2019

III. SMITH CANAL GATE STRUCTURE PROJECT - SAN JOAQUIN AREA FLOOD CONTROL AGENCY (SJAFCA)

A. Update on Smith Canal gate closure project.

EXHIBIT C: File Memorandum dated _____, 2019 from SJAFCA

Exhibit D

SMITH CANAL GATE PROJECT UPDATE (6/27/19)

DESIGN

- 100% design documents
  - In progress – Final comments from State are being addressed. Documents undergoing a constructability review
- CM Contract is under negotiations with the highest ranked consultant.

- PERMITS
  - Continue final negotiations with regulatory agencies
    - State Lands Commission lease has been approved
    - Delta Stewardship Council Certification of Consistency has been approved
    - Clean Water Act Section 401 permit has been received.
    - Central Valley Flood Protection Board Encroachment Permit has been approved; request for reconsideration submitted by Dominick Gulli
    - NHPA Section 106 letter of concurrence has been received

ROW

- Real Estate Plan (REP)
  - Addressing final changes from City and State
- Acquisition
  - Stockton Golf & Country Club
    - Offer letter, and ROE presented to SG&CC, RON approved by the Board, Continue negotiations
  - Dad's Point portion owned by City
    - Continue negotiations with the City
  - Dad's Point portion owned by USACE
    - Continue negotiations with the USACE for a 50-year lease on this property

LEGAL

- *Atherton Cove Property Owners Association v. SJAFCA II* -The Third Circuit Court of Appeals affirmed the trial court's judgement in favor of SJAFCA.
  - *ACPOA motion for the Court to reconsider the ruling on the appeal was denied.*
- Atherton Cove Property Owners Association is appealing the Smith Canal Gate Project Certification of Consistency with the Delta Stewardship Council. At the March 21 meeting the DSC Board Denied the Appeal
- *Dominick Gulli v. SJAFCA* - Appeal -ongoing. – Opposition brief in the appeal is due July 1. Once brief is completed, the Court will set the case for hearing, likely within 3-6 months.

The Guidance Document was developed based on input from:

- □ URS
- □ DWR Staff
- □ DWR Independent Consultant Board (ICB)
- □ DWR Independent Consultants
- □ United States Army Corps of Engineers (USACE)
- □ Urban Levee Design Criteria (ULDC) (DWR, 2012)

Below is a tabular form and summary of that ULE Performance criteria.

Table ES-1. Analyses Criteria[1]

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Freeboard	Freeboard	Riverine and channel	200-year WSE + 3 feet
		Bypass	200-year water surface elevation + 5 feet or 6 feet, as appropriate. See Section 3.1.2 of the Guidance Document (Version 14; URS, 2014a).
Erosion causing Levee Breach	Erosion risk	Waterside slope	High risk (i.e., ≥ 25 percent erosion of levee width at the 200-year WSE), medium risk (i.e., < 25 percent to ≥ 5 percent erosion of levee width at 200-year WSE), or low risk (i.e., < 5 percent erosion of levee width at 200-year WSE).
Seepage	Underseepage	Hydraulic top of levee(HTOL)[2] WSE	Average vertical exit gradient at the landside levee toe ≤ 0.6
			≤ 0.6 to ≤ 0.9 at 150 foot offset from landside levee toe, including berm toe, topographic depressions and ditches. Allowable gradient at an intermediate location from the landside levee toe will be based on a linear interpolation within the allowable gradients; see Section 4.2 of Guidance Document (Version 14; URS, 2014a).
		200-year WSE	Average vertical exit gradient at the landside levee toe ≤ 0.5
			≤ 0.5 to ≤ 0.8 at 150 foot offset from landside levee toe, including berm toe, topographic depressions and ditches. Allowable gradient at an intermediate location from the landside levee toe will be based on a linear interpolation within the allowable gradients; see Section 4.2 of Guidance Document (Version 14; URS, 2014a).
	Through seepage	Same WSE analysis conditions as underseepage	If phreatic surface breakout point during steady state seepage is above the landside levee toe and the landside slope contains erodible material, the levee does not meet criteria, see Section 4.6.2 of the Guidance Document (Version 14; URS, 2014a).
Landside Stability	Steady-state seepage	Hydraulic top of levee[2] WSE	Factor of safety ≥ 1.2 (intermittently-loaded levees) Factor of safety ≥ 1.3 (frequently-loaded levees)
		200-year WSE	Factor of safety ≥ 1.4 (intermittently-loaded levees) Factor of safety ≥ 1.5 (frequently-loaded levees)
	"Soft" Soil[3] Conditions	200-year WSE	Factor of safety ≥1.4
Waterside Stability	Rapid drawdown	River system	Factor of safety > 1.1 (intermittently-loaded levees) Factor of safety > 1.2 (frequently-loaded levees)
		Tributaries and channels	Factor of safety > 1.0

[1] For further information refer to the Guidance Document (Version 14; URS, 2014a)
[2] Hydraulic top of levee (HTOL) is defined in the ULE project as the lesser of the physical top of levee, 200-year mean WSE plus 3 feet, or the 500-year mean WSE.
[3] Refer to the Guidance Document (Version 14; URS, 2014a) for the definition of "Soft" Soil.

Reclamation District 1614
June 2019 District Superintendent Report
July 1st 2019 Board Meeting[1]

The month of June station inspections found no abnormal conditions. I was finally able to have the #2 pump at Franklin removed for inspection on the 27th. The lower end and line bearings all appeared in good condition. There was a sizeable amount of debris in the suction which was cleaned out. The next pump to be inspected will be #2 at Buena Vista.

On the 24th of June, P.G.&E. notified me that Lake Ct. station was re-instated on our monthly bill. The station had been shut down during the re-hab of the station and never restarted in the billing department. It was agreed that the District would only be billed back to April of this year.

The District has also hired on a new temporary employee that will begin during the third week of July.

This concludes my report.

Respectfully Submitted,
Orlando Lobosco
R.D. 1614 Superintendent

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[1]

RECLAMATION DISTRICT 1614
FINANCIAL REPORT July 2019 MEETING
% OF FISCAL YEAR ELAPSED THROUGH END OF JUNE, 2019 - 100%

	Budget Item	Budget Amount	Expended MTD	Expended YTD	% YTD
	GENERAL FUND				
	Administrative				
G1	Annual Audit	$ 4,500.00	$0.00	$4,550.00	101.11%
G2	Public Communication & Noticing	15,000.00	$0.00	7,234.30	48.23%
G3	Election Expense	32,000.00	$0.00	21,248.28	66.40%
G4	Superintendent	45,000.00	$3,030.57	35,786.35	79.53%
G4a	Secretary	9,000.00	$1,112.50	11,825.67	131.40%
G5	Workers' Compensation	7,800.00	$763.25	3,302.75	42.34%
G6	Trustee Fees	2,400.00	$200.00	2,250.00	93.75%
G7	County Assessment Administration	6,000.00	$0.00	6,196.15	103.27%
G7A	General Assessment Administration (Engineers)	3,000.00	$0.00	4,123.58	137.45%
G8	Office Supplies	700.00	$234.35	660.35	94.34%
G9	Communication (phones, radios, etc.)	2,400.00	$223.56	2,555.15	106.46%
G12	Education	2,550.00	$0.00	2,175.00	85.29%
G13	Non Management Staff	0.00	$0.00	1443.82	0.00%
	TOTAL	**$130,350.00**	**$5,564.23**	**$103,351.40**	**79.29%**
	Consultants				
G14	General Engineering	$ 45,000.00	$0.00	$31,155.29	69.23%
G15	General Legal	45,000.00	$4,923.45	46,566.48	103.48%
	TOTAL	**$ 90,000.00**	**$4,923.45**	**$77,721.77**	**86.36%**
	Property & Equipment				
G16	Operation & Maintenance	$ 3,000.00	$260.91	$501.05	16.70%
G16A	District Vehicle Expenses	4,000.00	$281.87	3,611.51	90.29%
G17	Acquisitions	0.00	$0.00	0.00	0.00%
	TOTAL	**$ 7,000.00**	**$542.78**	**$4,112.56**	**58.75%**
	Other				
G18	Insurance	$ 15,000.00	$0.00	$11,703.76	78.03%
G19	Reserve Contingency (Per 2006 O&M Assessment)	0.00	$0.00	0.00	0.00%
	TOTAL	**$ 15,000.00**	**$0.00**	**$11,703.76**	**78.03%**
	TOTAL GENERAL FUND	**$ 242,350.00**			
	RECURRING EXPENSES				
	Levee				
R1	General Maintenance	$ 15,000.00	$0.00	$30.00	0.20%
R1A	Engineering - General	30,000.00	$0.00	17,121.13	57.07%
R1C	Riprap and Levee Repair	200,000.00	$10.78	145,810.14	72.91%
R1D	Reserved	40,000.00	($211.25)	312.50	0.78%
R1E	2017-2018 DWR 5-Year Plan	5,000.00	$211.25	1,215.39	24.31%
	TOTAL	**$ 290,000.00**	**$10.78**	**$164,489.16**	**56.72%**
	Drainage				
R2	Electricity	$ 15,000.00	$1,541.24	$15,319.97	102.13%
R3	Sump Cleaning	50,000.00	$0.00	1,860.00	3.72%
R4	Plant O&M	75,000.00	$164.87	31,987.46	42.65%
R4A	Pest Control	3,000.00	$0.00	2,420.00	80.67%
R5	Wisconsin Pump Station Grant Management	0.00	$0.00	0.00	0.00%
R6	Wisconsin Pump Station Design	100,000.00	$0.00	116,809.57	116.81%
	TOTAL	**$ 243,000.00**	**$1,706.11**	**$168,397.00**	**69.30%**
	TOTAL RECURRING EXPENSES	**$ 533,000.00**	**$12,747.35**	**$0.00**	**0.00%**
	TOTAL EXPENSE BUDGET	**$ 775,350.00**			

INCOME

Anticipated				
Assessment - Existing	$ 433,300.00	-$126,071.96	$429,010.58	99.01%
Assessment - Wisconsin	97,090.00	$0.00	100,652.35	103.67%
Interest	15,000.00	$0.00	28,857.00	192.38%
Property Tax	150,000.00	$0.00	64,841.53	43.23%
Subvention Reimbursement	151,750.00	$0.00	126,240.00	83.19%
2017-2018 DWR 5-Year Plan	40,000.00	$26,250.00	26,250.00	65.63%
TOTAL	**$ 887,140.00**	**($99,821.96)**	**$775,851.46**	**87.46%**
TOTAL NET INCOME (LOSS)	**$ 111,790.00**			

O&M Fund Balance (as of June 28, 2019)	$ 1,972,325.72
Wisconsin Fund Balance (as of June 28, 2019)	465,172.25
Proposed Expenses	**12,747.35**
TOTAL CASH	**$ 2,424,750.62**
Checking Account Balance (as of June 28, 2019)	16,074.46
TOTAL CASH ON HAND	**$ 2,440,825.08**

Reclamation District 1614
June, 2019 Bills

NAME	INVOICE #	AMOUNT	TOTAL $	WARRANT #	CHECK #	SUBVENTION FUND
Kevin Kauffman		$100.00		5736		
			$100.00			
Ben Koch		$50.00		5737		
			$50.00			
Christian Gaines		$50.00		5738		
			$50.00			
Rhonda Olmo		$1,112.50		5739		
			$1,112.50			
Neumiller & Beardslee	300024	$4,923.45		5740		
			$4,923.45			
Business Printing Service	1684	$234.35		5741		
			$234.35			
Orlando Lobosco -June Payroll		$2,665.00			2511	
			$2,665.00			
State of California Payroll Taxes - June		$19.73			online	
			$19.73			
Federal Government Payroll Taxes - June		$345.84			online	
			$345.84			
Sprint		$108.71			online	
			$108.71			
Comcast		$114.85			online	
			$114.85			
Visa		$718.43			online	
			$718.43			

Reclamation District 1614
June, 2019 Bills

PG&E		$1,414.36			online	
		$126.88				
			$1,541.24			
State Fund		$763.25			online	
			$763.25			

WARRANT TOTAL:	**$6,470.30**
CHECKING TOTAL:	**$6,277.05**
TOTAL BILLS PAID	**$12,747.35**