

# RECLAMATION

*Managing Water in the West*

## Environmental Assessment

## Stockton East Water District - Groundwater Recharge Basin, Southeast Recharge Basin

17-34-MP



U.S. Bureau of Reclamation  
Mid-Pacific Region  
Sacramento, California

February 2018

## **Mission Statements**

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# List of Abbreviations and Acronyms

ITA	Indian Trust Assets
North Site	North Site Groundwater Recharge Basins Project
Reclamation	United States Bureau of Reclamation
SEWD	Stockton East Water District

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# Section 1 Introduction

## 1.1 Background

In conformance with the National Environmental Policy Act of 1969, Council on Environmental Quality regulations (40 CFR 1500-1508), and Department of the Interior Regulations (43 CFR Part 46), the Bureau of Reclamation (Reclamation) prepared this environmental assessment to evaluate and disclose potential environmental impacts associated with providing funds to the Stockton East Water District (SEWD) in San Joaquin County, California to construct a new 73-acre groundwater recharge basin. Reclamation would provide \$300,000 through the Drought Response Program to SEWD for the development of a groundwater recharge basin. The Drought Response Program is a program designed to help water users develop drought contingency plans and build long-term drought resilience.

The SEWD purchased a 230 acre parcel north of their existing 73-acre groundwater recharge basin site and developed the North Site Groundwater Recharge Basins Program. SEWD’s goal is to develop additional groundwater recharge basins on the property. Due to funding restrictions, the SEWD is developing the North Site Groundwater Recharge Basins Project (North Site) in phases. Phase 1 would include design and construction of a 73- acre spreading basin on the northwest corner of the North Site (Figure 1).



**Figure 1. Project Location**

## 1.2 Previous Environmental Documents

The Proposed Action has completed environmental review and regulatory compliance under the California Environmental Quality Act. SEWD prepared the Calaveras River Integrated Stormwater Management Project – Groundwater Recharge Component at SEWD North Site Initial Study (IS) which analyzed the potential impacts of SEWD expanding its groundwater recharge facilities. The IS and Proposed Negative Declaration was released to the public in January 2013 and a Notice of Determination was filed with the State Clearinghouse March 4, 2013 (SCH# 2013012057). The 2013 IS evaluated the resources outlined in Appendix G of the California Environmental Quality Act and found effects to the following resources less than significant: land use, air quality, biological resources, transportation, hazards, noise, and cultural resources. The 2013 IS identified no impacts to population and housing, geology, water, energy, public services, utilities, aesthetics, and recreation. Reclamation performed an independent review of the 2013 IS and found the document to be sufficient. The environmental effects analyses on all the resources and the findings of the 2013 IS are incorporated by reference into this document. The 2013 IS is available at the California Department of Water Resources website. The link to the document is:

[https://www.water.ca.gov/LegacyFiles/irwm/grants/docs/Archives/PropIE/Submitted\\_Applications/PIE\\_Round2\\_SWFM/Stockton%20East%20Water%20District%20\(201243210017\)/Attachment%203%20-%20Att3\\_SWF\\_WorkPlan\\_3of3.pdf](https://www.water.ca.gov/LegacyFiles/irwm/grants/docs/Archives/PropIE/Submitted_Applications/PIE_Round2_SWFM/Stockton%20East%20Water%20District%20(201243210017)/Attachment%203%20-%20Att3_SWF_WorkPlan_3of3.pdf)

This EA will provide additional discussion of potential effects on Indian sacred sites, Indian trust assets (ITA), and environmental justice as required by Department of the Interior Regulations, Executive Orders, and Reclamation guidelines when preparing environmental documentation.

## 1.3 Need for the Proposed Action

The Eastern San Joaquin Groundwater Basin has been in decline for the last half century. On average, the decline has been 1.7 feet per year with some areas dropping to 100 feet below historic levels. Since the 1940's, the SEWD's primary goal is to secure additional surface water supplies in order to correct the severe groundwater overdraft problem within in its service area (SEWD 2013).

The proposed project would act as a water supply reliability program by providing groundwater as a backup water supply when surface water is not available. Excess surface water from normal and wet years would be stored in the constructed basin to recharge the groundwater. The water would later be extracted and treated for municipal (potable) supplies in dry years. The development of the additional groundwater recharge basins would expand the volume of surface water being recharged to the overdrafted groundwater basin allowing sustainable conjunctive use, deterring salt water intrusion, and increasing the reliability of water supply. This would help SEWD be more resilient for the future impacts of droughts and climate change (SEWD 2013).

## **Section 2      Alternatives Including Proposed Action**

### **2.1    No Action Alternative**

Under the no action alternative, Reclamation would not provide \$300,000 from the Drought Response Program to SEWD for the development of a groundwater recharge basin. SEWD would need to obtain the \$300,000 from other public or private sources to continue with the project as described. The no action alternative assumes the SEWD would not proceed with the project absent Reclamation funding.

### **2.2    Proposed Action**

Reclamation would provide \$300,000 from the Drought Response Program to SEWD for the development of a 73-acre groundwater recharge basin. In normal to wet years, the new recharge basin would allow storage of between 5,500 and 6,500 acre-feet per year in excess surface water that could be made available during drought. Recharging excess water would alleviate groundwater overdraft and reduce the rate of saline water intrusion while maintaining current supplies.

Permits and Utilities. Prior to initiation of the project, the construction contractor would be required to obtain all Federal, State, and local permits and approvals necessary to perform the work, including those related to storm water discharge, air quality, and traffic safety. The contractor would be required to verify if any utilities exist in or near the project area and ensure that any found would not be damaged or disrupted. If utilities are found, potentially affected utility companies would be contacted by the contractor concerning the timing and scope of the proposed work.

Access and Staging. Access to the site would be along existing road ways and entry to the project area would be by way of East Main Street. Access to the project area would be through SEWD's property and controlled by their office. Due to the scope and nature of work involved, the need for vehicular parking, staging and laydown areas would be small. Staging area would be confined to the North Site.

#### Groundwater Recharge Basin.

Site preparation would include minor clearing and grubbing. Active construction areas would be fenced off using temporary or chain link fencing and gates for safety and security. Construction activities would include:

- Construction of monitoring wells,
- Grading and excavation,
- Installing water conveyance system of 50 feet of 24-inch diameter and 50 feet of 12-inch diameter pipeline,

- Construction of the recharge cell areas into either ridges or trenches layouts,
- Construction of berms and weirs between cells with excavated material from cells,
- Bank stabilization to prevent erosion, and
- Installation of pipes, valves, and gates.

Recharge activities would include:

- Diverting water from SEWD existing raw surface water conveyance system, with pipelines currently in place on the eastern and southern boundaries of the proposed project area,
- Monitoring and maintaining water depth between 0.5 and 4.5 feet above the recharge cells' finished grade,
- Monitoring recharge rates, source water quality for turbidity, pH, temperature and electrical conductivity, and groundwater levels and quality, and
- Implementing vector controls in cooperation with the San Joaquin County Mosquito and Vector Control District.

Demobilization and Clean Up. Once the groundwater recharge basin is completed, the contractor would remove all construction equipment, temporary fencing, and unused material from the project area. In addition, all work areas would be cleaned. Any roadway pavement or parking area gravel damages due to construction equipment would be repaired to pre-project conditions.

Construction Schedule. Construction activities are anticipated to begin in winter 2018 and be completed in 6 months. Work hours would be limited to 6 a.m. to 7 p.m. 7 days a week.

## **Section 3      Affected Environment**

The North Site is highly disturbed from ongoing agricultural activities. Annual crops produced on the North Site include corn, asparagus, and tomatoes. General farming practices result in monotypic stands of vegetation for the growing season and bare ground in the fall and winter. Irrigation ditches are adjacent to the agricultural fields. The SEWD maintains their property through the removal of vegetation by the use of herbicides. Frequent spraying or mowing of vegetation prevents the establishment of riparian species.

Water supplies for agricultural, and municipal and industrial uses in San Joaquin County are heavily dependent on groundwater. Long-term overdraft has resulted in an extensive area of depressed groundwater levels that draws groundwater toward the depression from all directions. This lowering of the groundwater table below sea level induced the movement of saline water from deposits under the Delta to the western portion of the aquifer below the City of Stockton.



As a result, elevated salinity and dissolved solids levels rendered the water to be unsuitable for continuous municipal supply purposes (SEWD 2013).

## **Section 4 Environmental Consequences**

This section identifies the potentially affected environmental resources and the environmental consequences that could result from the No Action Alternative and the Proposed Action.

### **4.1 No Action Alternative**

Under the no action alternative, Reclamation would not provide \$300,000 from the Drought Response Program to SEWD for the development of a groundwater recharge basin. There would be no changes in land use and the project area would continue to be farmed by the SEWD contract farm operator. The rate of groundwater withdrawal would continue to exceed the rate of replenishment and the saline water intrusion would become worse.

### **4.2 Proposed Action**

DOI Regulations, Executive Orders, and Reclamation guidelines require a discussion of Indian sacred sites, ITA, Environmental Justice and the environmental consequences of the proposed action when preparing environmental documentation. This section describes the potential effects of the Proposed Action on those resources.

#### **4.2.1 Indian Sacred Sites**

Executive Order 13007 (May 24, 1996) requires that federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and avoids adversely affecting the physical integrity of such sacred sites. The Proposed Action would not be located on Federal lands and therefore would not affect access to or use of Indian sacred sites.

#### **4.2.2 Indian Trust Assets**

ITA are legal interests in property or rights held in trust by the United States for Indian Tribes or individual Indians. The closest ITA to the project area is the Buena Vista Rancheria of the Me-Wuk Indians which is approximately 26 miles to the north/northeast. Given the nature of the proposed action, there will be no effect on ITAs (Appendix A).

#### **4.2.3 Environmental Justice**

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. Reclamation has not identified adverse human health or environmental effects on any population as a result of implementing the Proposed Action. Therefore, implementing the Proposed Action

would not have a significant or disproportionately negative impact on low-income or minority individuals.

#### **4.2.4 Environmental Consequences of Funding the Proposed Action**

The Proposed Action would increase groundwater recharge potential and is expected to positively impact groundwater quality at the project site. In normal to wet years, the groundwater recharge basin would allow storage between 5,500 and 6,500 acre-feet per year in excess surface water that could be made available during drought years. Recharging excess water would alleviate groundwater overdraft and reduce the rate of saline water intrusion while maintaining current supplies. The Proposed Action would use existing raw water intake systems and pipelines and would not result in any modification of irrigation systems. Source water and groundwater samples would be collected during the operations phase of the recharge project and analyzed for constituents of concern to assess effects to groundwater quality.

### **4.3 Cumulative Effects**

According to Council on Environmental Quality regulations for implementing the procedural provisions of National Environmental Policy Act, a cumulative impact is defined as *the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).*

The 2013 IS evaluated cumulative effects under the Mandatory Finding of Significance and determined there would be no impact. The Proposed Action will have no effect on Indian sacred sites, ITA or minority or low income populations. Therefore, there are no adverse impacts associated with implementing the Proposed Action and no cumulative effects to consider.

## **Section 5 Consultation and Coordination**

### **5.1 Agencies and Groups Consulted**

Reclamation has consulted with the following entities regarding the Proposed Action:

- Stockton East Water District
- State Historic Preservation Officer

## **5.2 Endangered Species Act (16 USC § 1531 et seq.)**

A listing of Federally listed endangered, threatened, proposed, and candidate species (listed species) and critical habitat was obtained for the Stockton East 7.5-minute USGS quadrangles on September 28, 2017 via the U.S. Fish and Wildlife Service website. In addition, a search of the California Natural Diversity Database conducted on September 28, 2017 indicated no state or federal listed species were reported within the project boundaries. Due to the lack of vegetation and SEWD maintenance practices, no suitable habitat exists within the project area to support special-status species. Based on the above analysis, Reclamation determined the proposed action would not affect any proposed or listed species or critical habitat under the Endangered Species Act of 1973, as amended (16 U.S.C. §1531 et seq.).

## **5.3 National Historic Preservation Act (Title 54 USC § 306108)**

The expenditure of Federal funds for the proposed project constitutes an undertaking by Reclamation requiring compliance with 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act. The Proposed Action is the type of activity that has the potential to affect historic properties. A records search, a cultural resources survey, and Tribal consultation identified no historic properties within the area of potential effects. Reclamation initiated consultation with the State Historic Preservation Officer on October 17, 2017 with a notification of a determination of no historic properties affected pursuant 36 CFR § 800.4(d)(1); Reclamation received concurrence with our determination on November 18, 2017. (Appendix B).

## **Section 6      References**

California Department of Fish and Game (CDFG). 2010. California Natural Diversity Database. Rarefind electronic database. <http://www.dfg.ca.gov/biogeodata/cnddb/rarefind.asp>. Accessed September 28, 2017.

Stockton East Water District (SEWD) 2013. Calaveras River Integrated Stormwater Management Project – Groundwater Recharge Component at SEWD North Site Initial Study and Proposed Negative Declaration.

U.S. Fish and Wildlife Service. (USFWS) 2015. IPaC Trust Resource Report [http://www.fws.gov/sacramento/es/spp\\_lists/auto\\_list\\_form.cfm](http://www.fws.gov/sacramento/es/spp_lists/auto_list_form.cfm). Accessed September 28, 2017.

# **Appendix A**

## **Indian Trust Assets Compliance**

## Indian Trust Assets Request Form

\*\*Please send your request to: Kevin Clancy [kclancy@usbr.gov](mailto:kclancy@usbr.gov)

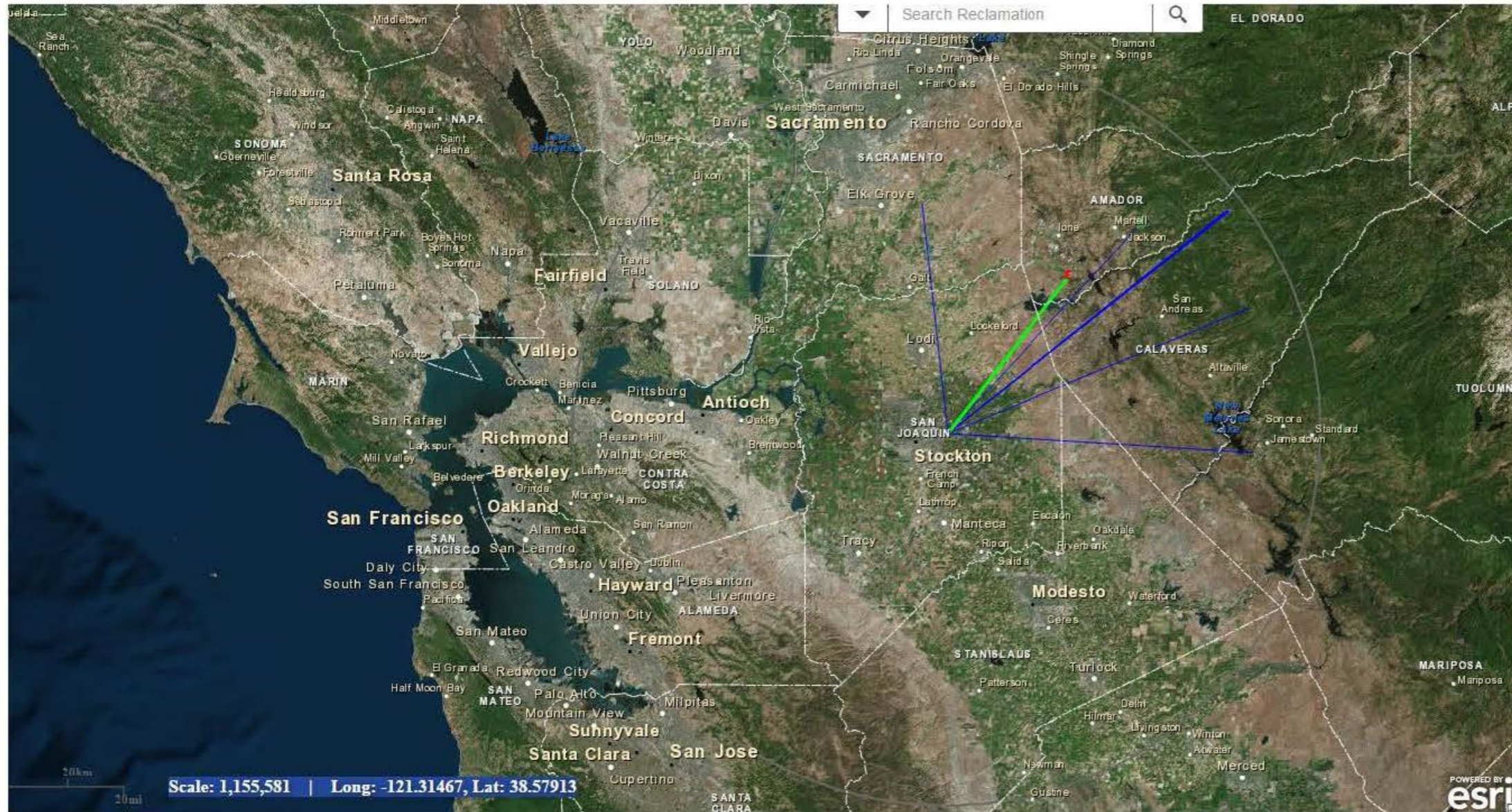
**Date:**

<b>Requested by</b>	Jamie LeFevre, x 5035
<b>Fund</b>	16XR0680A1
<b>WBS</b>	RX33080001150050E
<b>Cost Center</b>	2015200
<b>Region # (if other than MP)</b>	(NA)
<b>Project Name</b>	Stockton East Water District - Groundwater Recharge Basin Phase 1
<b>CEC or EA Number</b>	
<b>Project Description</b>	Reclamation proposes provide \$300,000 through the Drought Response Program to SEWD construct a new 60-acre groundwater recharge basin.
<b>*Project Location (Township, Range, Section, e.g., T12 R5E S10, or XY cords)</b>	The SEWD is located at 6767 E Main St, Stockton in San Joaquin County. The proposed project would be constructed on SEWD lands located north of the SEWD office. Specifically, the southeast recharge basin is located at 37.970046, -121.205404 (Figure 1).

\*Please include map with request, if available.

**Figure 1. Recharge Basin Site**





**Native American Lands**

Close App

**Step 1. Search radius in miles**

50

**Step 2. Longitude and latitude**

If you **CLICK** on the map, the lat/longs are inserted below!  
Or you can type them in.

Longitude:  
-121.205

Latitude:  
37.97

**Step 3.**

Find closest Native American Lands

Distance to closest native american land: 25.93 miles  
Name: Buena Vista  
Tribe: Buena Vista Rancheria of Me-Wuk Indians

[Help!](#)



**ITA Determination:**

The closest ITA to the proposed **construction of a new 60-acre groundwater recharge basin** activity is the **Buena Vista Rancheria of the Me-Wuk Indians** about **26 miles** to the **north/northeast** (see attached image).

Based on the nature of the planned work it **does not** appear to be in an area that will impact Indian hunting or fishing resources or water rights nor is the proposed activity on actual Indian lands. It is reasonable to assume that the proposed action **will not** have any impacts on ITAs.

12/18/2015	<i>K. Clancy</i>	Kevin Clancy	
_____	_____	_____	_____
Signature	Printed name of approver	Date	

# **Appendix B**

## **Cultural Resources Compliance**

**CULTURAL RESOURCE COMPLIANCE**  
**Mid-Pacific Region**  
**Division of Environmental Affairs**  
**Cultural Resources Branch**

**MP-153 Tracking Number:** 15-SCAO-256

**Project Name:** Stockdale East Groundwater Recharge Project

**NEPA Document:** EA 17-34-MP

**MP 153 Cultural Resources Reviewer:** Mark Carper

**NEPA Contact:** Jamie Lefevre

**Determination:** No Historic Properties Affected

**Date:** November 20, 2017

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This proposed undertaking by the Stockton East Water District (SEWD) is to construct an approximately 73 acre recharge pond on their private property in Kern County, California. Reclamation is proposing to provide partial funding to SEWD for the construction. Reclamation determined that the expenditure of federal funds for the proposed project is an undertaking as defined in 36 CFR § 800.16(y) and a type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a).

Since 2003, the SEWD has operated the Farmington Groundwater Recharge Program (Program), which recharges surface water into the Eastern San Joaquin Groundwater Basin. This Program includes an existing recharge facility, which consists of two 15-acre recharge ponds with earthen berms, one 5-acre overflow pond, and one 19-acre dual-purpose storage/recharge pond with a capacity of 60-million gallons. Water is gravity fed through SEWD's Bellota and Peters pipelines. SEWD proposes to expand the Program by developing a new recharge area on approximately 73 acres within a 230-acre parcel. This parcel is owned by SEWD and is located directly north of its Dr. Joe Waidhofer Drinking Water Treatment Plant. The proposed project will include a pond basin, levee, inlet, and outlet.

The project will entail construction of a new percolation pond within an L-shaped area on SEWD property. Construction will require grading of up to 1 foot to level the pond area. The pond will be surrounded by a 7 foot high earthen levee construction which will require excavation down to 5 feet below the ground surface to construct the berm base. Finally

**CULTURAL RESOURCE COMPLIANCE**  
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inlet and outlet pipes will be constructed for the pond. Each will require access trenches into the property of down to 12 feet below surface.

In an effort to identify historic properties in the APE, SEWD contracted InContext to conduct a cultural resources inventory to satisfy both their California Environmental Quality Act as well as their Federal NHPA requirements for the proposed project. The report is included in this submission as Enclosure 2. Due to the document size and page count the report appendices are being submitted on a CD. InContext conducted a pedestrian survey over the APE and adjacent SEWD parcel. In addition, due to the depth of disturbance associated with the inlet/outlet pipes and the levee, InContext conducted a presence/absence hand auger protocol in these locations. Through these measures, InContext identified one historic-era site consisting of a sparse domestic artifact scatter as well as 6 isolated finds (2 historic-era and 4 prehistoric) within the APE. InContext evaluated the finds and recommended them all as not eligible for inclusion on the National Register of Historic Places.

Pursuant to the regulations at 36 CFR § 800.3(f)(2), Reclamation identified the Tachi-Yokut Tribe, the Tejon Indian Tribe, and the Tule River Indian Tribe as potentially having interests in the project area. Pursuant to 36 CFR § 800.4(a)(4), Reclamation contacted these tribes by letter dated October 21, 2016, and invited their participation in the Section 106 process. To date there have been no responses from the tribes. Reclamation will work with these tribes to address any concerns that may arise regarding the proposed undertaking and will notify your office as appropriate.

Reclamation initiated consultation with California the State Historic Preservation Officer (SHPO) on October 17, 2017 with a notification of a determination of no historic properties affected for the proposed project. SHPO concurred with the determination in a letter dated November 18, 2017.

The proposed action would have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places.

This memorandum is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly

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including consultation with the State Historic Preservation Officer, may be necessary.  
Thank you for providing the opportunity to comment.