RECLAMATION

Managing Water in the West

City of Hayward Recycled Water Project

Environmental Assessment

15-25-MP

U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region

April 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

City	City of Hayward
IS	Initial Study
ITA	Indian Trust Assets
MND	Mitigated Negative Declaration
Reclamation	United States Bureau of Reclamation
WPCF	Water Pollution Control Facility

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Section 1 Introduction

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) has prepared this Environmental Assessment to evaluate and disclose any potential environmental impacts associated with the City of Hayward's (City) proposed recycled water facility (Proposed Action). The Proposed Action is located in the City of Hayward in Alameda County, California (Figure 1).

1.1 Previous Environmental Documents

The Proposed Action was previously analyzed in the City's Initial Study (IS) for the Recycled Water Project. The Draft IS was released to the public in October 2014. The Final IS/Mitigated Negative Declaration (IS/MND) was released in December 2014. The 2014 IS/MND analyzed the following resources: Aesthetics, Agriculture Resources, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Hazards/Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Mineral Resources, Noise, Public Services, Population and Housing, Recreation, Socioeconomics, Transportation/Traffic, Utilities and Service Systems, and Mandatory findings of Significance. All resources analyzed in the 2014 IS/MND were found to either have no impact, less than significant, or less than significant with mitigation measures incorporated. A Mitigation Monitoring and Reporting Program was included in the final 2014 IS/MND which lists mitigation measures, timing, implementation, enforcement, and verification of compliance. The 2014 IS/MND is located at the City's website at https://www.hayward-ca.gov/your-government/departments/utilities-environmental-services/recycled-water.

Reclamation performed an independent review of the 2014 IS/MND and found it sufficient. The 2014 IS/MND environmental analyses and findings are incorporated by reference into this document. This Environmental Assessment will provide a discussion of resources that were not analyzed pursuant to California Environmental Quality Act but are required by Department of the Interior Regulations, Executive Orders, and Reclamation guidelines when preparing environmental documentation.

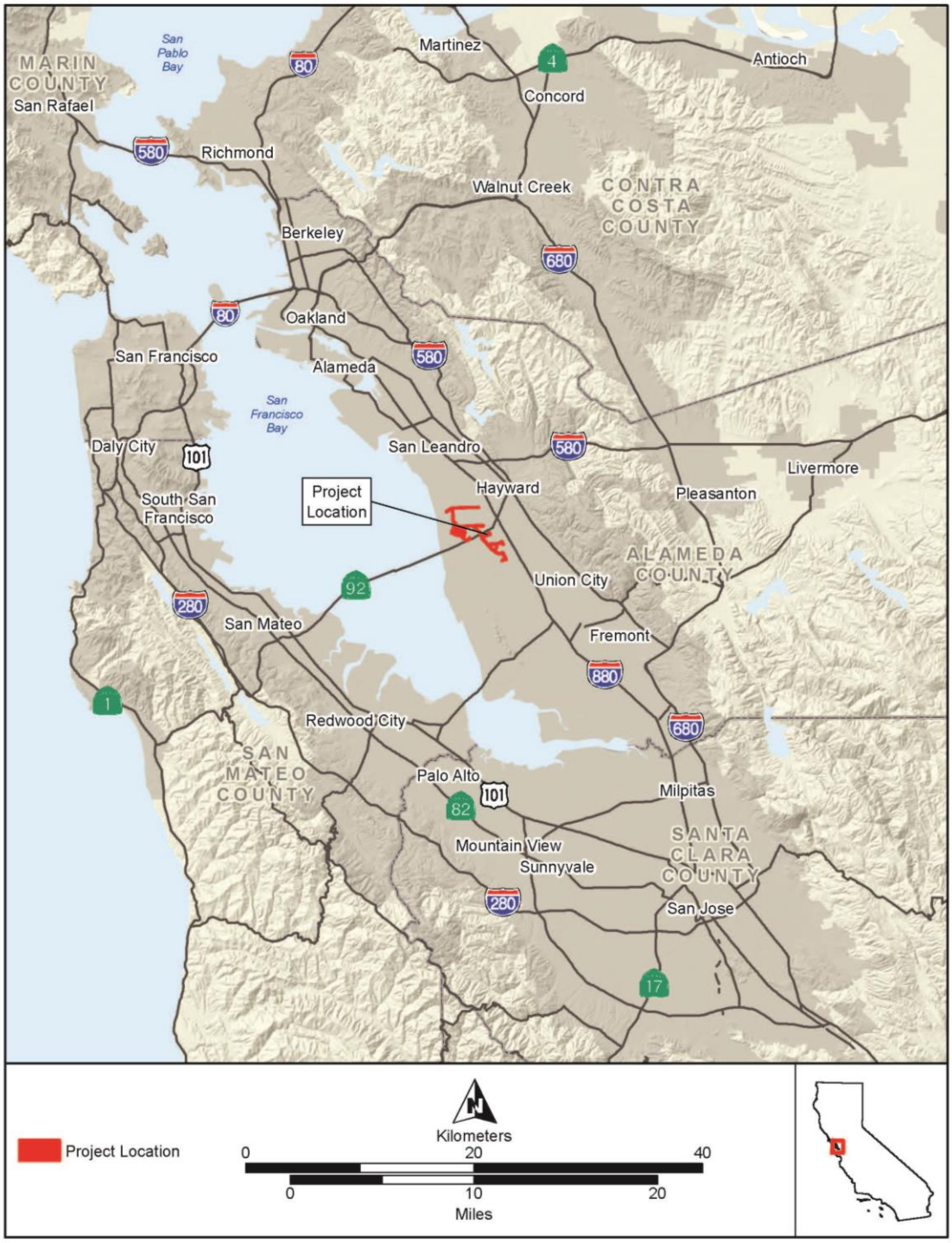


Figure 1. Vicinity of Proposed Recycled Water Project

1.2 Need for the Proposed Action

The City currently relies on surface water supplied under contract with the San Francisco Public Utility Commission for irrigation of landscaping and industrial uses. The price of surface water supplies is increasing, and the availability of potable water may be decreasing. The City needs a reliable, affordable, and sustainable source of water for non-potable applications to alleviate the demands on limited potable water supplies. The Proposed Action would provide tertiary treated wastewater for non-potable applications. Use of recycled wastewater would help to conserve potable water resources in the densely-populated San Francisco Bay Area (Hayward 2013).

Section 2 Alternatives Including Proposed Action

2.1 No Action Alternative

Under the No-Action Alternative, Reclamation would not award Title XVI funding to the City to construct a recycled water facility and distribution system. The City would either need to raise additional money from other public or private sources or increase customer water rates to continue with the project as described. However, if funding cannot be secured, the City would meet increased demands through more aggressive conservation measures or procure additional water supplies to meet the increased demands.

2.2 Proposed Action

Under the Proposed Action, Reclamation would award Title XVI money to partially fund the City to construct a recycled water facility and a distribution system at the City's Water Pollution Control Facility (WPCF) in Hayward, California. The City would provide the remaining funds to complete the project. The Proposed Action includes the construction of tertiary treatment facilities designed to treat a peak flow of 0.5 million gallons per day, and the installation of a one-million-gallon storage tank and pump station, and distribution pipelines to connect to customers. The Proposed Action would deliver an estimated 290 acre-feet per year of recycled water to 24 to 40 customers within the City. Most of the recycled water customers would utilize the recycled water for irrigation but some customers would use the recycled water for industrial uses. Figure 2 identifies the project's features.

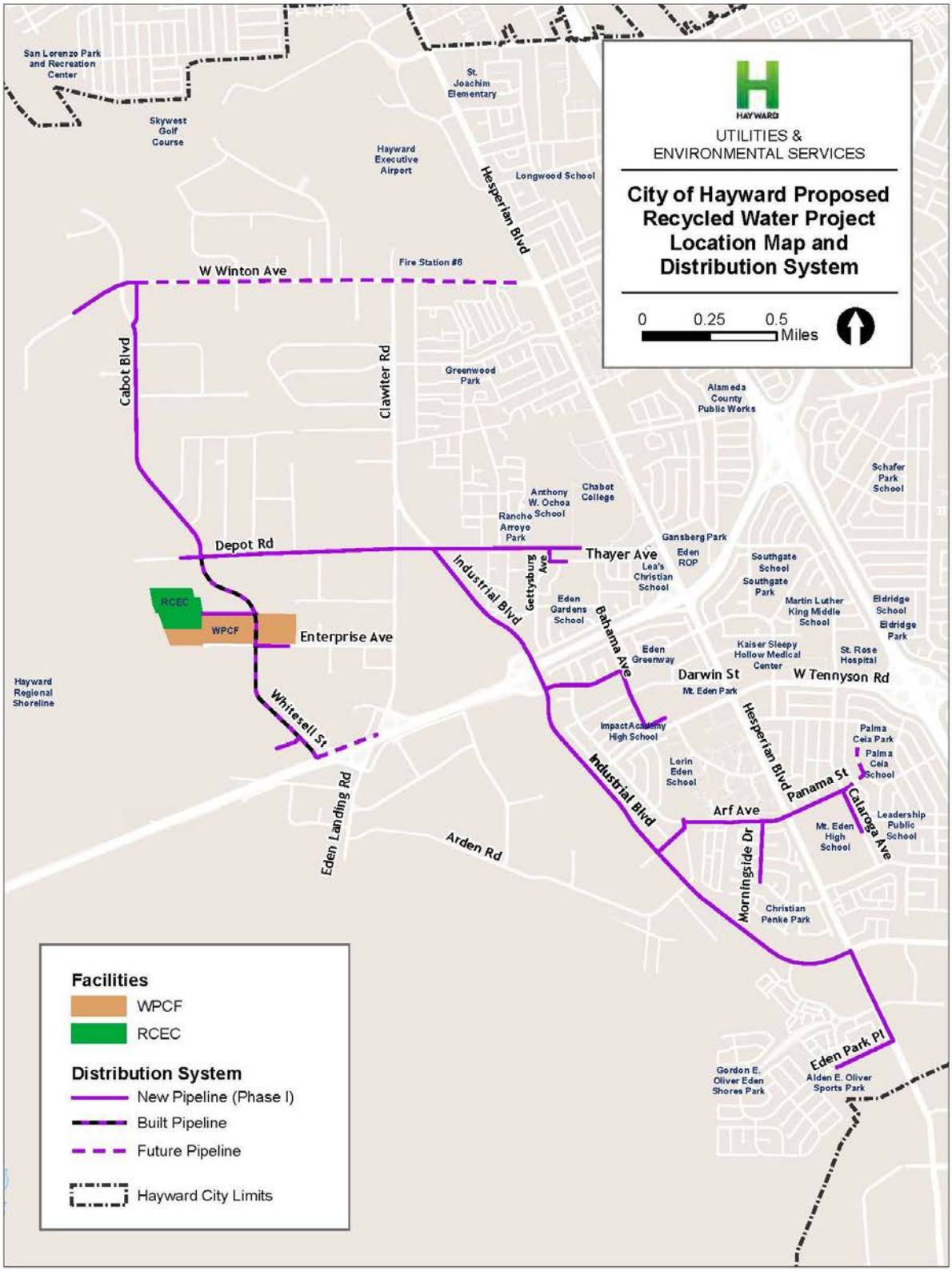


Figure 2. Project Features

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 utility 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. Staging areas for the storage of pipe, construction equipment, and other materials would be placed at previously disturbed locations on City owned empty lots at the WPCF and adjacent to the City's Hesperian Pump Station.

Recycle Water Facility.

Tertiary Treatment Facility. The new recycled water infrastructure includes the installation of a tertiary treatment facility. The tertiary treatment facility would connect to the existing WPCF secondary effluent supply.

Distribution System. The distribution system includes construction of a one-million-gallon storage tank and pump station at the WPCF and installation of approximately 8 miles of pipelines, ranging in diameter from 6-inch to 12-inch, that will deliver recycled water to customers. Some of the major streets through which the pipelines will be constructed include Whitesell Street, Cabot Boulevard, a small portion of West Winton Avenue, part of Depot Road, Industrial Boulevard, Arf Avenue, and a small portion of Hesperian Boulevard. The alignment of the proposed distribution system is shown on Figure 2.

Creek and drainage crossings would be constructed using trenchless techniques and timed to be completed during the dry season. Trenchless techniques would also be used for crossing of railroads and flood control channels. Activities would not occur during inclement weather or between October 15 and April 1. Specifically, the existing Shell Oil Pipeline crosses a designated wildlife refuge in the northwestern portion of the Proposed Action area, near the intersection of Depot Road and West Winton Avenue.

Demobilization and Clean Up. Once the Proposed Action 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 of work-related debris and rubbish. Any roadway pavement or parking area damaged due to construction equipment would be repaired to pre-project conditions.

Construction Schedule. Construction activities are anticipated to begin in mid-2018 and completed in 18 months. At minimum, work hours would be limited to 7 a.m. to 7 p.m. during weekdays, 10 a.m. to 6 p.m. on Saturdays, and no work on Sundays. The City may also impose additional timing restrictions to minimize potential traffic disruptions in City streets.

Maintenance and Operation. The recycle water facility and irrigation systems would be operated in accordance with the applicable requirements of CCR Title 22, the State Board Recycle Water Policy, and any other applicable state or local legislation. The City would require and enforce an irrigation schedule among its users. The City developed an irrigation schedule that optimizes use of the distribution system. The irrigation schedule may be modified in the future, but the initial assumptions are outlined below. By irrigating under this schedule, peak flows are reduced and pipe sizing is optimized.

- Landscaping Demand Factor: 2.5 acre feet/ year
- Landscape Irrigation hours (Summer): 6 p.m. – 6 a.m.
- Summer storage filling: 6.p.m. – 6 a.m.
- Winter storage filling: 24 hours per day

Maintenance procedures would require one or two existing City workers to routinely inspect the pipeline alignment and connections for leaks and repair facilities on an as needed basis as well as conduct scheduled preventative maintenance procedures to keep the facilities in good working order.

2.3 Environmental Protection Measures

The City or its contractor will implement the mitigation measures included in the Mitigation Monitoring and Reporting Program (Appendix A).

Section 3 Affected Environment

Hayward is located in the San Francisco Bay Area in the southern portion of Alameda County. The City boundaries extend from the San Francisco Bay on the west to the East Bay hills on the east. The City operates the City-owned utilities, including water distribution and wastewater collection and treatment services, within the City boundaries. The project area is a commercial, highly urbanized area west of Highway 880 (Hayward 2014).

The project is located in the San Francisco Bay Area Air Basin which is under the jurisdiction of the Bay Area Air Quality Management District. This air basin is currently in non-attainment for the PM_{10} and $PM_{2.5}$ state standards, and the state 1-hour ozone standard. The Bay Area is in "attainment" or "unclassified" with the other ambient air quality standards (BAAQMD 1999).

Section 4 Environmental Consequences

4.1 No Action Alternative

Under the no action alternative, Reclamation would not award Title XVI money to the City to construct a recycled water facility at the WPCF and distribution system. It is possible the City may find alternate sources of funding for the project, but for the purposes of this Environmental Assessment, the consequences of Reclamation not providing funding for the Proposed Action would result in no construction of the project. The demand for water in the San Francisco Bay Area would continue to increase and the City would need to find alternatives to meet the increased demands.

4.2 Proposed Action

4.2.1 Air Quality

The Federal Clean Air Act requires Federal agencies to ensure that their actions conform to applicable implementation plans for the achievement and maintenance of the National Ambient Air Quality Status for criteria pollutants. To achieve conformity, a Federal action must not contribute to new violations of the National Ambient Air Quality Status, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern (for example, a state or a smaller air quality region).

Emissions generated by construction activities were calculated in the 2014 IS using the Road Construction Emission Model (version 7.1.5.1) (Hayward 2014). Emissions generated by operations were estimated to be less than 3 to5 pounds per day for ROG, NOx, and PM_{10}. As shown in Table 1 the estimated emissions would not produce emissions that are greater than the General Conformity Rule *de minimus* thresholds. Therefore, the Proposed Action falls into conformity with the EPA-approved State Implementation Plan and a written Conformity Determination is not required.

Table 1. Estimated Construction Emissions

	ROG	**CO**	**NO_x**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Grubbing/Land Clearing (lbs/day)	8.1	36.2	38.9	3.4	2.4	5,367
Grading/Excavation (lbs/day)	15	71.2	113.2	7.1	5.7	12,809
Drainage/Utilities/Subgrade (lbs/day)	13	62.2	88.9	6.2	4.9	10,719
Paving (lbs/day)	8.5	41.9	45.2	3.1	2.8	6,486
Total (tons/construction project)	2.5	17	12	1.2	0.9	2,056
Federal standards (tons/year)	100	100	100	100	100	N/A

ROG = reactive organic gases
NOx = nitrogen oxides
PM_{10} = particulate matter
CO = carbon monoxide
Note: Estimates rounded.
CO_2 = carbon dioxide

4.2.2 Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. There are no Indian reservations, rancherias or allotments in the project area. The nearest ITA is the Lytton Rancheria approximately 24 miles south, south-west of the project site. Based on the nature of the Proposed Action, the hunting or fishing resources or water rights would not be impacted nor is the Proposed Action on actual Indian lands. Therefore, the Proposed Action will not have any impacts on ITAs. (Appendix B).

4.2.3 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 that are on Federal lands. The Proposed Action would not be located on Federal lands and therefore would not affect access to or use of Indian sacred sites.

4.2.4 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.

4.3 Cumulative Effects

Per 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 impacts can result from individually minor but collectively significant actions taking place over a period of time* (40 CFR 1508.7).

The Proposed Action is exempt from General Conformity Regulations and will have no effect on ITAs, Indian sacred sites, or environmental justice. Therefore, are no adverse impacts associated with implementing the Proposed Action, and therefore there are no cumulative effects to consider.

Section 5 Consultation and Coordination

Reclamation has consulted with the following regarding the Proposed Action:

- City of Hayward
- SMB Environmental, Inc.
- California Office of Historic Preservation

5.1 Public Involvement

The 30-day public review period for the draft 2014 IS/MND was held from October 24, 2014, through November 24, 2014. Comment letters were received from State Water Resources Control Board and California Fish and Wildlife Service during the public comment period. In the comment letters the agencies stated their jurisdiction and requested clarification on effects to an airport, operation emissions, and vegetation and wildlife. In addition, the agencies requested additional maps, corrected typos, and clarified mitigation measure requirements. The Final IS was updated to address the comments and responses to the comments were included in an appendix. The Final IS was distributed December 2014 and a Mitigated Negative Declaration was signed on December 22, 2014. The State Clearing House number is 2014102065.

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

The State Water Resources Control Board's (State Water Board) requested informal consultation on August 12, 2015, with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act on the proposed City of Hayward Recycled Water Project (Service file number CWSRF No. C-06-8091-110). The State Water Board acts as a non-Federal representative for USEPA to conduct informal consultations under the Clean Water State Revolving Fund Program. Consultation was requested for the effects on the federally threatened Alameda whipsnake *(Masticophis lateralis euryxanthus)*, endangered California Clapper Rail *(Rallus longirostris obsoletus)*, and endangered California least tern *(Sternula antillarum browni)*. The Service concluded that project may affect, but is not likely to adversely affect the Alameda whipsnake, California clapper rail, and California least tern based on the information provided in the biological assessment and the implementation of the avoidance and minimization measures. The State Water Board received a concurrence letter Dec 15, 2015 (Appendix C).

Reclamation has determined that providing funding to implement project activities would have no additional adverse effects as detailed in Service's concurrent letter. However, if new information is made available, the project description changes, or State Water Board and the City do not fully comply with the measures prescribed in the 2015 concurrence letter, then Reclamation would revisit its Endangered Species Act responsibility.

5.3 National Historic Preservation Act (54 U.S.C. § 300101 et seq.)

54 U.S.C. § 304108, commonly known as Section 106 of the National Historic Preservation act (NHPA), requires that Federal agencies take into consideration the effects of their undertakings on historic properties. Historic properties are cultural resources that are included in, or eligible for inclusion in, the National Register. The 36 CFR Part 800 regulations implement Section 106 of the NHPA and outline the procedures necessary for compliance with the NHPA. Compliance with the Section 106 process follows a series of steps that are designed to identify if significant cultural resources are present in the Proposed Action project area and to what level they would be affected by the proposed Federal undertaking.

Based on a review of the available information, Reclamation initiated consultation with the SHPO on February 21, 2018 and requested concurrence on a finding that the Proposed Action would not affect any historic properties, pursuant to 36 CFR § 800.3(a) (Appendix D). Reclamation received concurrence on the finding of no adverse effect on historic properties on March, 23, 2018.

Section 6 References

Bay Area Air Quality Management District (BAAQMD). *CEQA Guidelines*. December 1999.

City of Hayward (Hayward). 2013. *Updated Recycled Water Facility Plan, Recycled Water Project*.

City of Hayward (Hayward). 2014. City of Hayward Recycled Water Project. Initial Study/Mitigated Negative Declaration.

Appendix A

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

City of Hayward
Recycled Water Project
Final Initial Study / Mitigated Negative Declaration

SCH #2014102065

Prepared for:
City of Hayward
777 B Street
Hayward, CA 94541

Prepared by:

SMB Environmental, Inc.

December 2014

INTRODUCTION

Pursuant to the California Environmental Quality Act (CEQA; Public Resources Code Section 21000, et seq. and CEQA Guidelines), the City of Hayward, California (City) prepared a Public Draft Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate potential environmental impacts associated with the City's proposed Recycled Water Project (Proposed Project/Action).

The City proposes to construct and operate a recycled water project located within the City of Hayward. The City has prepared a Recycled Water Facility Plan to identify potential users for recycled water within the City, including a conceptual distribution system and an estimate of project costs. The initial phase of the project consists of installing a new Recycled Water Facility (RWF) located at the City's Water Pollution Control Facility (WPCF) at 3700 Enterprise Avenue, Hayward, California. The RWF would deliver an estimated 290 acre-feet per year of recycled water to 24 customers within the City of Hayward. The RWF will be served by approximately 1.5 miles of new distribution lines (ranging in diameter from 6 to 8 inches) to the north and south of the WPCF, rehabilitation and connection to an existing and abandoned Shell Oil Pipeline, and over 3 miles of laterals to customers, including installation of customer connections. The majority of recycled water customers will utilize the recycled water for irrigation, with some industrial uses for cooling towers and boilers. The City is pursuing an agreement with Shell Oil to purchase and use the existing abandoned 8-inch diameter pipeline that runs through the City. However, the environmental document assumes both the reuse of the existing abandoned 8-inch Shell Oil Pipeline as well as the construction of a new recycled water pipeline (in the event an agreement with Shell Oil is not reached or the use is otherwise determined infeasible). As a result, we have assumed a worst-case scenario and assumed approximately 3 miles of a new 8-inch pipeline paralleling portions of the Shell Oil Pipeline in existing roadways.

CEQA Guidelines require public agencies to adopt a Mitigation Monitoring and Reporting Program (MMRP) for changes to the project, which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. A MMRP is required for the proposed project because the IS/MND identifies potentially significant adverse impacts related to project implementation, and mitigation measures have been identified to reduce those impacts.

On October 24, 2014, to initiate public review of the Draft IS/MND, the City filed a Notice of Completion (NOC) for the project with the Governor's Office of Planning and Research (State Clearinghouse or SCH) and Notice of Availability (NOA) with the County of Alameda and released the Draft IS/MND for a 30-day public review. The State Clearinghouse identified the project with SCH #2014102065. The 30-day public review period was established between October 24 and November 24, 2014, with copies of the Draft IS/MND available for review on the City's website at www.hayward-ca.gov and at the City's office of the City Clerk, 777 B Street Hayward, CA 94541, the City of Hayward Main Library, 835 C Street, Hayward, CA 94541, and at the Weekes Library, 27300 Patrick Avenue, Hayward, CA 94544.

In December 2014, the City prepared a Final IS/MND according to CEQA Guidelines and incorporated all comments received by the State Clearinghouse and the City during the 30-day public review period. As a result, some of the mitigation measures identified in the Public Draft IS/MND have been revised to reflect those comments. Based on the Final IS/MND, the Proposed Project/Action would not result in new significant impacts, substantially increase the severity of previously disclosed impacts, or involve any of the other conditions related to changed circumstances or new information that can require a subsequent or supplemental EIR under Public Resources Code section 21166 and CEQA Guidelines section 15162 beyond those impacts and conditions already identified in the City's Public Draft IS/MND.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation. The MMRP may be modified by the City during project implementation, as necessary, in response to changing conditions or other refinements. Table A (included at the end of this document) has been prepared to assist the responsible parties in implementing the mitigation measures. The table identifies individual

mitigation measures, monitoring/mitigation timing, responsible person/agency for implementing the measure, monitoring and reporting procedure, and space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the Public Draft IS/MND.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the City is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. The City, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent. The City would be responsible for overall administration of the MMRP and for verifying that City staff members and/or the construction contractor has completed the necessary actions for each measure.

The City would designate a project manager to oversee implementation of the MMRP. The City of Hayward's Department of Public Works – Utilities and Environmental Services is primarily responsible for implementing the mitigation measures for the Proposed Project as described in this MMRP. Duties of the project manager include the following:

- Ensure that routine inspections of the construction site are conducted by appropriate City staff; check plans, reports, and other documents required by the MMRP; and conduct report activities.
- Serve as a liaison between the City and the contractor or project applicant regarding mitigation monitoring issues.
- Complete forms and maintain reports and other records and documents generated by the MMRP.
- Coordinate and ensure that corrective actions or enforcement measures are taken, if necessary.

The responsible party for implementation of each item shall identify the staff members responsible for coordinating with the City on the MMRP.

REPORTING

The City's project manager shall prepare a monitoring report, upon completion of the project, on the compliance of the activity with the required mitigation measures. Information regarding inspections and other requirements shall be compiled and explained in the report. The report shall be designed to simply and clearly identify whether mitigation measures have been adequately implemented. At a minimum, each report shall identify the mitigation measures or conditions to be monitored for implementation, whether compliance with the mitigation measures or conditions has occurred, the procedures used to assess compliance, and whether further action is required. The report shall be presented to the City Council.

MITIGATION MONITORING AND REPORTING PLAN TABLE

The categories identified in Table A are described below.

- **Mitigation Measure** – This column provides the text of the mitigation measures identified in the IS/MND.
- **Timing** – This column identifies the time frame in which the mitigation will take place.
- Implementation – This column identifies the party responsible for implementing compliance with the requirements of the mitigation measure
- **Enforcement** – This column identifies the party responsible for enforcing compliance with the requirements of the mitigation measure.
- **Dated Signature for Verification of Compliance** – This column is to be dated and signed by the person (either project manager or his/her designee) responsible for verifying compliance with the requirements of the mitigation measure.

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
3.3 AIR QUALITY				
Mitigation Measure AIR-1: Basic Construction Mitigation Measures Recommended for ALL Proposed Projects. During all phases of construction, the following procedures shall be implemented: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. • Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.	Prior to construction of The Proposed Project/Action.	City of Hayward	City of Hayward Bay Area Air Quality Management District	
Mitigation Measure AIR-2: Additional Construction Mitigation Measures	Prior to	City of Hayward	City of Hayward	

[1] The City of Hayward's Department of Public Works – Utilities and Environmental Services is primarily responsible for implementing the mitigation measures for the Proposed Project/Action as described in this MMRP.

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
for Projects with Emissions over the Thresholds. During all phases of construction, the following procedures shall be implemented as appropriate: • All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. • All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. • Windbreaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Windbreaks should have at maximum 50 percent air porosity. • Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. • The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. • All trucks and equipment, including their tires, shall be washed off prior to leaving the site. • Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. • Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Minimizing the idling time of diesel powered construction equipment to five (5) minutes. • The project shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent Air Resources Board (ARB)	construction of The Proposed Project/Action.		Bay Area Air Quality Management District	

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available. • Use low volatile organic compounds (VOC) (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). • Requiring that all construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. • Requiring all contractors use equipment that meets the California Air Resources Board's (CARB) most recent certification standard for off-road heavy-duty diesel engines.				
3.4 BIOLOGICAL RESOURCES				
BIO-1: Conduct Pre-construction Protocol Level Plant Surveys. Prior to construction the City shall conduct two protocol-level rare plant surveys during the blooming period for these species during the months of May and June. These surveys shall be conducted by a CDFW-approved biologist within and surrounding the Project site according to the methodology described in the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Should any of the Congdon's tarplant or other special-status plant species be present within the construction footprint, CDFW and/or USFWS shall be consulted to develop appropriate mitigation and avoidance measures.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward California Department of Fish and Wildlife U.S. Fish and Wildlife Service	
BIO-2: Conduct Alameda whipsnake Pre-construction Surveys. Prior to construction, the City shall conduct focused pre-construction surveys for the Alameda whipsnake at all project sites/areas within or directly adjacent to areas identified as having high potential for whipsnake occurrence. Project sites within high potential areas shall be fenced to exclude snakes prior to project implementation. Methods for pre-construction surveys, burrow excavation, and site fencing shall be developed prior to implementation of any project located within or adjacent to areas mapped as having high potential for whipsnake occurrence. Such methods would be developed in consultation or with approval of USFWS for any development taking place in USFWS officially designated Alameda whipsnake critical habitat. Pre-construction surveys of such project sites shall be carried out by a permitted biologist familiar with whipsnake	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward California Department of Fish and Wildlife U.S. Fish and Wildlife Service	

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
identification and ecology. These are not intended to be protocol-level surveys but designed to clear an area so that individual whipsnakes are not present within a given area prior to initiation of construction. At sites where the project footprint would not be contained entirely within an existing developed area footprint and natural vegetated areas would be disturbed any existing animal burrows shall be carefully hand-excavated to ensure that there are no whipsnakes within the project footprint. Any whipsnakes found during these surveys shall be relocated according to the Alameda Whipsnake Relocation Plan and may require obtaining a "take" permit. Snakes of any other species found during these surveys shall also be relocated out of the project area. Once the site is cleared it shall then be fenced in such a way as to exclude snakes for the duration of the construction activities. Fencing shall be maintained intact throughout the duration of the construction activities. All construction activities shall be performed during daylight hours, or with suitable lighting so that snakes can be seen. Vehicle speed on the construction site shall not exceed 5 miles per hour.				
Mitigation Measure BIO-3: Conduct Breeding and Nesting Surveys. For construction activities that occur between February 1 and August 31, preconstruction breeding bird surveys shall be conducted by a qualified biologist prior to and within 10 days of any initial ground-disturbance activities. Surveys shall be conducted within all suitable nesting habitat within 700 feet of the activity. All active, non-status passerine nests identified at that time shall be protected by a 50-foot radius minimum exclusion zone or a wide enough buffer to prevent nest abandonment. Active raptor or special-status species nests shall be protected by a buffer with a minimum radius of 500 feet. The following considerations apply to this mitigation measure: • Survey results are valid for 14 days from the survey date. Should ground disturbance commence later than 14 days from the survey date, surveys should be repeated. If no breeding birds are encountered, then work may proceed as planned. • Exclusion zone sizes may vary, depending on habitat characteristics and species, and are generally larger for raptors and colonial nesting birds. Each exclusion zone would remain in place until the nest is abandoned or all young have fledged. • The non-breeding season is defined as September 1 to January 31. During this period, breeding is not occurring and surveys are not required. However, if nesting birds are encountered during work activities in the non-breeding season, disturbance activities within a minimum of 50 feet (or wide enough prevent nest abandonment) of the	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward California Department of Fish and Wildlife U.S. Fish and Wildlife Service	

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
nest should be postponed until the nest is abandoned or young birds have fledged.				
3.5 CULTURAL RESOURCES				
Mitigation Measure CR-1: Halt work if cultural resources are discovered. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 100 feet of the resources shall be halted and after notification, the City shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant (CEQA Guidelines 15064.5[a][3] or as unique archaeological resources per Section 21083.2 of the California Public Resources Code), representatives of the City and a qualified archaeologist shall meet to determine the appropriate course of action. In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the lead agency shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out.	Upon discovery of cultural resources	City of Hayward	City of Hayward	
Mitigation Measure CR-2: Stop work if paleontological remains are discovered. If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City.	Before and during ground-disturbing activities.	City of Hayward	City of Hayward	
Mitigation Measure CR-3: Halt work if human remains are found. If human remains are encountered during excavation activities conducted for the Proposed Project/Action, all work in the adjacent area shall stop immediately and the Alameda County Coroner's office shall be notified. If the Coroner determines that the remains are Native American in origin, the Native American Heritage Commission shall be notified and will identify the Most Likely Descendent, who will be consulted for recommendations for treatment of the discovered human remains and any associated burial goods.	Upon the discovery of suspected human remains.	City of Hayward	City of Hayward For actions taken to satisfy the requirements of Section 106: the State Historic Preservation Office (SHPO)	
3.6 GEOLOGY AND SOILS				
Mitigation Measure GEO-1: Perform Geotechnical Investigation. The City shall require a design-level geotechnical study to be prepared prior to project implementation to determine proper design and construction methods, including design of any soil remediation measures as required to reduce hazards caused by landslides, liquefaction, and/or lateral spreading.	Prior to completion of engineering plans for the Proposed Project/Action.	City of Hayward	City of Hayward	

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
3.7 HAZARDS AND HAZARDOUS MATERIALS				
Mitigation Measure HAZ-1: Store, Handle, Use Hazardous Materials in Accordance with Applicable Laws. The City shall ensure that all construction-related and operational hazardous materials and hazardous wastes shall be stored, handled, and used in a manner consistent with relevant and applicable federal, state, and local laws. In addition, construction-related and operational hazardous materials and hazardous wastes shall be staged and stored away from stream channels and steep banks to keep these materials a safe distance from near-by residents and prevent them from entering surface waters in the event of an accidental release.	Prior to construction and operation of the Proposed Project/Action	City of Hayward	City of Hayward	
Mitigation Measure HAZ-2: Properly Dispose of Contaminated Soil and/or Groundwater. If contaminated soil and/or groundwater is encountered or if suspected contamination is encountered during project construction, work shall be halted in the area, and the type and extent of the contamination shall be identified. A contingency plan to dispose of any contaminated soil or groundwater will be developed through consultation with appropriate regulatory agencies.	Prior to construction and operation of the Proposed Project/Action	City of Hayward	City of Hayward	
Mitigation Measure HAZ-3: Properly Dispose of Hydrostatic Test Water. Dewatering of the pipeline during hydrostatic testing during construction, as well as any dewatering as a result of operations and maintenance activities, shall be discharged to land or the sanitary sewer system and not into any creeks, drainages, or waterways and shall require prior approval from the San Francisco Bay Regional Water Quality Control Board.	Prior to construction and operation of the Proposed Project/Action	City of Hayward	City of Hayward	
Mitigation Measure HAZ-4: Develop and Maintain Emergency Access Strategies. In conjunction with Mitigation Measure Traffic-1: Develop a Traffic Control Plan identified below in the Traffic and Transportation section, comprehensive strategies for maintaining emergency access shall be developed. Strategies shall include, but not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. Also, police, fire, and other emergency service providers shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures.	Prior to construction and operation of the Proposed Project/Action.	City of Hayward	City of Hayward	
Mitigation Measure HAZ-5 Fire Prevention and Control: The City shall comply with all federal, state, county and local fire regulations pertaining to burning permits and the prevention of uncontrolled fires. The following measures shall be implemented to prevent fire hazards and control of fires:	Prior to construction and operation of the Proposed Project/Action.	City of Hayward	City of Hayward	

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
• A list of relevant fire authorities and their designated representative to contact shall be maintained on site by construction personnel. • Adequate firefighting equipment shall be available on site in accordance with the applicable regulatory requirements. • The level of fire hazard shall be posted at the construction office (where visible for workers) and workers shall be made aware of the hazard level and related implications. • The City or its contractor shall provide equipment to handle any possible fire emergency. This shall include, although not be limited to, water trucks; portable water pumps; chemical fire extinguishers; hand tools such as shovels, axes, and chain saws; and heavy equipment adequate for the construction of fire breaks when needed. Specifically, the City or its contractor shall supply and maintain in working order an adequate supply of fire extinguishers for each crew engaged in potentially combustible work such as welding, cutting, and grinding. • All equipment shall be equipped with spark arrestors. • In the event of a fire, the City or its contractor shall immediately use resources necessary to contain the fire. The City or contractor shall then notify local emergency response personnel. • Any and all tree-clearing activities (if any) are to be carried out in accordance with local rules and regulations for the prevention of forest fires. • Burning shall be prohibited. • Flammable wastes shall be removed from the construction site on a regular basis. • Flammable materials kept on the construction site must be stored in approved containers away from ignition sources. • Smoking shall be prohibited on the construction site.				
3.8 HYDROLOGY AND WATER QUALITY				

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
Mitigation Measure HWQ-1: Implement Construction Best Management Practices. To reduce potentially significant erosion and siltation, the City and/or its selected contractor(s) shall obtain a Stormwater Pollution Prevention Permit (SWPPP) and implement Best Management Practices and erosion control measures as required by the San Francisco RWQCB. Best Management Practices to reduce erosion and siltation shall include the following measures: Avoidance of construction activities during inclement weather; limitation of construction access routes and stabilization of access points; stabilization of cleared, excavated areas by providing vegetative buffer strips, providing plastic coverings, and applying ground base on areas to be paved; protection of adjacent properties by installing sediment barriers or filters, or vegetative buffer strips; stabilization and prevention of sediments from surface runoff from discharging into storm drain outlets; use of sediment controls and filtration to remove sediment from water generated by dewatering; and returning all drainage patterns to pre-existing conditions.	Develop SWPPP prior to and throughout construction.	City of Hayward	City of Hayward San Francisco Bay Regional Water Quality Control Board	
Mitigation Measure HWQ-2: Avoid cutting through the creeks. As described in the Proposed Project/Action description, all creek crossings will be crossed by using trenchless technologies such as micro tunneling, directional drilling, or suspending the pipeline on the downstream side of a bridge. Construction crews shall avoid entering the stream channels during installation. With these mitigation measures in place, the Proposed Project/Action is unlikely to have a direct and/or indirect adverse effect on water quality standards and/or waste discharge requirements. Once constructed, the operation and maintenance of the Proposed Project/Action will not adversely affect water quality standards and/or waste discharge requirements.	Incorporation measures into SWPPP prior to construction and implementation throughout construction, as appropriate	City of Hayward	City of Hayward San Francisco Bay Regional Water Quality Control Board	
Mitigation Measure HWQ-3: Implement Recycled Water Best Management Practices. In order to help reduce the potential effects of increased salt loading potential as a result of using recycled water, the City shall: • Apply water consistent with Title 22 requirements and in amounts (frequency and intensity) which meet the demands of the plant (agronomic rates), but not in excessive amounts such that salts buildup in the soil beyond the root zone and/or otherwise are leached to groundwater; • Ensure that adequate soil drainage is maintained; • Ensure that salt-sensitive plants (e.g. Colonial bentgrass) are not to be spray wet;	Prior to construction and operation of the Proposed Project/Action.	City of Hayward	City of Hayward San Francisco Bay Regional Water Quality Control Board	

Table A
Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND

Mitigation Measure	Timing	Implementation[1]	Enforcement[1]	Dated Signature for Verification of Compliance
• Replace salt-sensitive plants with salt-tolerant plants (e.g, Bermudagrass); • Addressing sodium and alkalinity concerns through addition of water and soil amendments, including addition of gypsum; and • Comply with the State Board's General Waste Discharge Requirements of Recycled Water Use (Water Quality Order 2014-0090).				
3.11 NOISE				
Mitigation Measure NOI-1: **Limit Construction Hours.** Construction activities will be limited to the least noise-sensitive times and will comply with the City's noise ordinances. Construction, alteration, and other related activities shall be allowed on weekdays between the hours of 7 a.m. and 7 p.m., and on Saturdays between the hours of 10 a.m. and 6 p.m. Construction activities shall not exceed the outdoor ambient sound level (dBA) of 86 dBA.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	
Mitigation Measure NOI-2: Locate Staging Areas away from Sensitive Receptors. The City's construction specification shall require that the contractor select staging areas as far as feasibly possible from sensitive receptors. Currently, planned staging areas are at the City's WPCF and the Hesperia Pump Station.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	
Mitigation Measure NOI-3: Maintain Mufflers on Equipment. The City's construction specifications shall require the contractor to maintain all construction equipment with manufacturer's specified noise-muffling devices.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	
Mitigation Measure NOI-4: Idling Prohibition and Enforcement. The City shall prohibit and enforce unnecessary idling of internal combustion engines. In practice, this would mean turning off equipment if it will not be used for five or more minutes.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	
Mitigation Measure NOI-5: Equipment Location and Shielding. Locate all stationary noise-generating construction equipment such as air compressors and standby power generators as far as possible from homes and businesses.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	
3.16 TRAFFIC AND TRANSPORTATION				
Mitigation Measure TRA-1: Prepare and Implement Traffic Control Plan. As is consistent with existing policy, the City shall require the contractor to prepare and implement effective traffic control plans in the areas of City and County streets to show specific methods for maintaining traffic flows. Examples of traffic control measures to be considered include: 1) use of flaggers to maintain alternating one-way traffic while working on one-half of the street; 2) use of advance construction signs and other public notices to alert drivers of	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	

Table A Mitigation Monitoring and Reporting Plan for the City of Hayward's Recycled Water Project IS/MND				
Mitigation Measure	**Timing**	**Implementation[1]**	**Enforcement[1]**	**Dated Signature for Verification of Compliance**
activity in the area; 3) use of "positive guidance" detour signing on alternate access streets to minimize inconvenience to the driving public; 4) provisions for emergency access and passage; and 5) designated areas for construction worker parking.				
Mitigation Measure TRA-2: Return Roads to Pre-construction Condition. Following construction, the City shall ensure that road surfaces that are damaged during construction are returned to their pre-construction condition or better.	Prior to and during construction of the Proposed Project/Action.	City of Hayward	City of Hayward	

Appendix B

Indian Trust Assets Compliance Memo

04/13/2015

Indian Trust Assets
Request Form (MP Region)

Submit your request to your office's ITA designee or to MP-400, attention Deputy Regional Resources Manager.

Date:

Requested by (office/program)	Kylene Lang MP-152/Environmental Compliance & Conservation
Fund	15XR0687NA
WBS	RY.18527938.3000000
Fund Cost Center	2015200
Region # (if other than MP)	
Project Name	City of Hayward Recycled Water Project
CEC or EA Number	15-25-MP
Project Description (attach additional sheets if needed and include photos if appropriate)	Under the Proposed Action (Project), Reclamation would award Title XVI money to partially fund the City of Hayward (City) to construct and operate a recycled water pipeline within the city. The Project includes construction of a new Recycled Water Facility located at the City's Water Pollution Control Facility at 3700 Enterprise Avenue, Hayward, California. The Project would deliver approximately 290 acre-feet of recycled water annually to 24 customers. The Project would require installation of three miles of distribution lines (8 inches in diameter), and over three miles of lateral lines to connect to customers. Pipelines would be installed in existing roadways wherever possible.
***Project Location** (Township, Range, Section, e.g., T12 R5E S10, or Lat/Long cords, DD-MM-SS or decimal degrees). Include map(s)	Latitude: 37.64007 Longitude: -122.12850

Signature | Kylene Lang — Printed name of preparer | 9-10-15 — Date

04/13/2015

ITA Determination:

The closest ITA to the proposed **Recycled Water a**ctivity is the **Lytton Rancheria** about 24.26 miles to the northwest (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.

Signature	Richard M. Stevenson	9/16/15
	Printed name of approver	Date

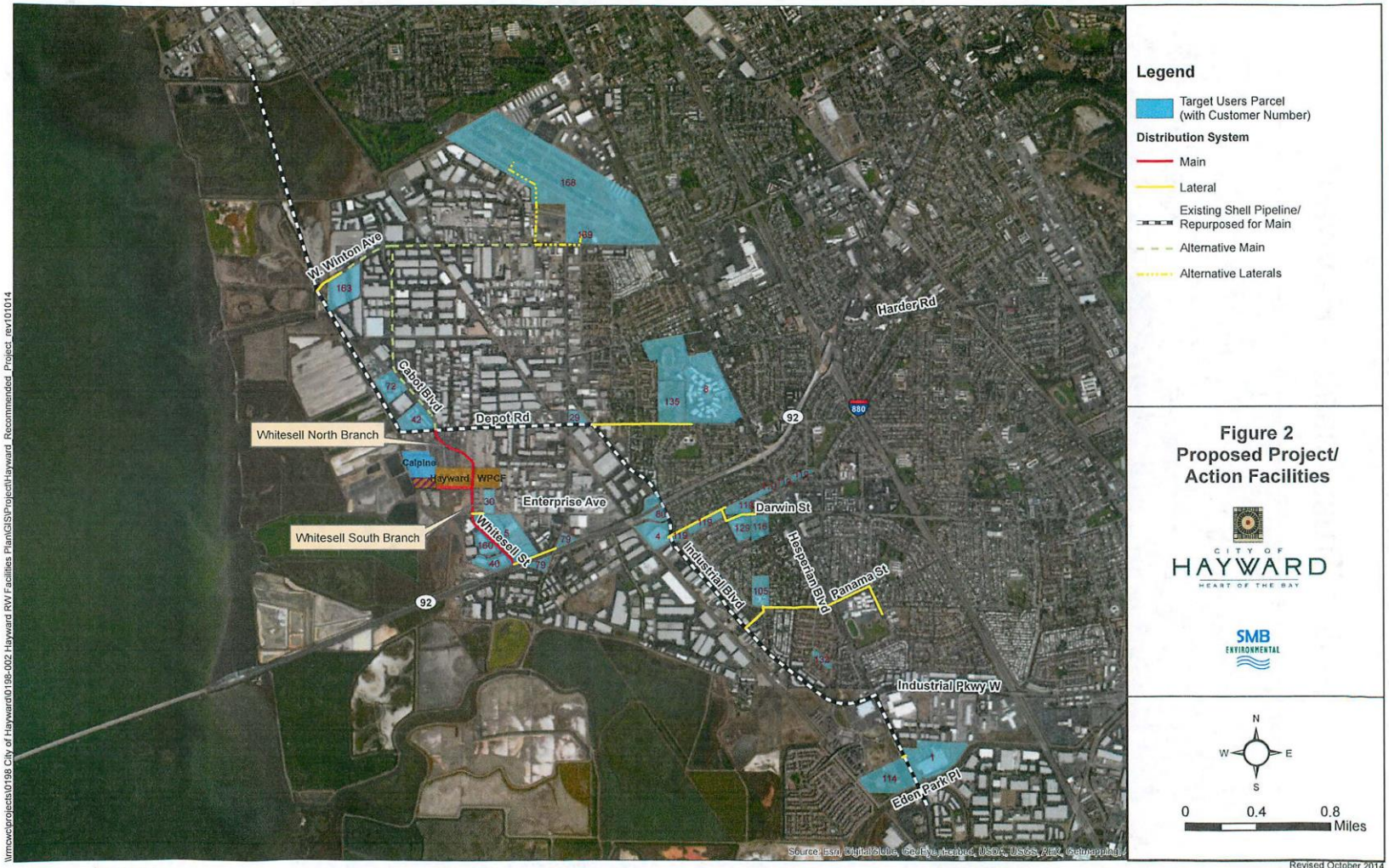
Indian Trust Assets - Hayward

Native American Lands FL

Rancheria

1:577,791

RECLAMATION
Managing Water in the West



\\rmcwc\projects\0198 City of Hayward\0198-002 Hayward RW Facilities Plan\GIS\Project\Hayward_Recommended_Project_rev101014

Figure 2
Proposed Project/ Action Facilities

CITY OF HAYWARD
HEART OF THE BAY

SMB ENVIRONMENTAL

Revised October 2014

Source: RMC

Figure 3

Proposed Recycled Water Facility

CITY OF HAYWARD
HEART OF THE BAY

SMB ENVIRONMENTAL

Appendix C

USFWS Concurrence Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846

In Reply Refer to:
08ESMF00-
2016-I-0063-1

DEC 10 2015

Carina Gaytan
State Water Resources Control Board
P.O. Box 100
Sacramento, California 95812-0100

Subject: Informal Consultation on the City of Hayward Recycled Water Project in the City of Hayward, Alameda County, California (Clean Water State Revolving Fund (CWSRF) No. C-06-8091-110)

Dear Ms. Gaytan:

This letter responds to the State Water Resources Control Board's (State Water Board) August 12, 2015, letter requesting informal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed City of Hayward Recycled Water Project (proposed project) in the City of Hayward, Alameda County, California (CWSRF No. C-06-8091-110). Your request was received by the Service on August 18, 2015. The Service received from the State Water Board on November 12, 2015, responses to the Service's comments and requests for additional information on the proposed project. At issue are the proposed project's effects on the federally threatened Alameda whipsnake (*Masticophis lateralis euryxanthus*), endangered California clapper rail (*Rallus longirostris obsoletus*), and endangered California least tern (*Sternula antillarum browni*). This response is provided under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402). Critical habitat has been designated for the Alameda whipsnake but does not occur within the action area for the proposed project. Recent genetic analyses of rail species resulted in a change in the common name and taxonomy of the large, "clapper-type" rails (*Rallus longirostris*) of the west coast of North America to Ridgway's rail (*Rallus obsoletus*) (Maley and Brumfield 2013, Chesser *et al.* 2014). The change in the common name and taxonomy of the California clapper rail, however, does not change the listing status of the species.

The Federal action on which we are consulting is the U.S. Environmental Protection Agency (USEPA) providing Federal funding to the City of Hayward (City) for the proposed project through the CWSRF Program. The CWSRF Program is administered by the States under Title VI of the Federal Clean Water Act; in California, the State Water Board administers the CWSRF Program. Under CWSRF implementing regulations, an Operating Agreement establishes the roles and responsibilities for the USEPA and the States for administering the CWSRF Program. The Operating Agreement for the California CWSRF Program includes Act Section 7 guidelines for federally-assisted projects, whereby the State Water Board generally acts as the designated non-Federal representative for conducting informal consultations. Pursuant to 50 CFR 402.12(j), you submitted a biological assessment for our review and requested concurrence with the findings

presented therein. These findings conclude that the proposed project may affect, but is not likely to adversely affect the Alameda whipsnake, California clapper rail, and California least tern.

The proposed project is located at the City's Water Pollution Control Facility (WPCF) at 3700 Enterprise Avenue in the City of Hayward, Alameda County, California. From the WPCF, a pipeline will be installed within existing roadways within the City limits to distribute recycled water to customers. The proposed project will install a new Recycled Water Facility located at the WPCF. The Recycled Water Facility would deliver an estimated 290 acre-feet per year of recycled water to 22 customers within the City. The proposed project includes 1.5 miles of new distribution pipelines within existing roadways to the north and south of the WPCF, rehabilitation and connection to an existing and abandoned Shell Oil Pipeline, and over three miles of laterals to customers, including installation of customer connections. The majority of the customers will utilize the recycled water for irrigation, with some industrial uses for cooling towers and boilers.

The City is pursuing an agreement with Shell Oil Pipeline to purchase and use the existing abandoned 8-inch diameter pipeline that runs through the City. If an agreement cannot be reached or the use is otherwise determined infeasible, three miles of new 8-inch pipeline will be added that parallels portions of the Shell Oil Pipeline in existing roadways. Construction is expected to begin in the spring/summer of 2016 and will likely continue for 18 months into the summer of 2017.

The majority of the pipelines will be installed in existing roadways using conventional cut and cover construction techniques and installing pipe in open trenches. It is assumed that up to a 50-foot wide construction corridor would be used to help maximize the efficiency during construction; however, in most places a 25-foot construction corridor could be utilized especially for the smaller diameter pipelines. It is anticipated that excavation would range from 2-5 feet wide and would typically be no more than 6 feet deep.

Any and all creek or drainage crossings will be constructed using trenchless techniques and will be done in the dry season and will not occur during inclement weather or between October 15 and April 1. Specifically, the Shell Oil Pipeline crosses the Oro Loma Marsh of the East Bay Regional Park District's Hayward Regional Shoreline, a designated wildlife refuge in the northwestern portion of the proposed project area near the intersection of Depot Road and West Winton Avenue. If a new pipeline is necessary, its alignment in that area would not be placed along the existing Shell Oil Pipeline, but rather along or within existing roadways avoiding the wildlife refuge site by between 0.3 and 0.5 mile. A flood control channel crosses Depot Road where the road turns west, south of the Winton Industrial Center, one of the City's potential recycled water customers. The City proposes microtunneling under the flood control channel to stay out of all creeks, streams, wetlands, and/or flood control channels, and avoid adverse environmental impacts to resources.

Federally Listed Species Habitats and Occurrences within the Action Area

The closest known occurrence of the Alameda whipsnake to the action area is more than 2.9 miles to the east through dense urban development. No suitable habitat for the Alameda whipsnake occurs near the action area. Therefore, the Service believes the Alameda whipsnake is unlikely to occur within the action area for the proposed project.

The California clapper rail is known to occur in tidal marsh habitat at Oro Loma Marsh of the East Bay Regional Park District's Hayward Regional Shoreline in the northwestern portion of the proposed project area near the Shell Oil Pipeline.

The California least tern is known to nest on an island at East Bay Regional Park District's Hayward Regional Shoreline about 0.7 mile southwest of where the Shell Oil Pipeline follows Depot Road.

Avoidance and Minimization Measures

The City will implement the following avoidance and minimization measures to avoid and minimize the effects of the proposed project on federally listed species:

1. If work is to be conducted during the California clapper rail's breeding season (February 1 – August 31), a permitted biologist will be retained to conduct protocol-level surveys at the action area and identify a 700-foot buffer to the nearest suitable habitat. Protocol-level surveys will be conducted following the Service's June 2015 survey protocol which requires four rounds of surveys conducted between mid-January through April (available at http://www.fws.gov/sfbaydelta/documents/June_2015__Final_CCR_protocol.pdf). Work will not commence within 700 feet of California clapper rail habitat during the rail's breeding season until the results of the protocol-level surveys have been reviewed and approved by the Service. No construction activities will occur within 700 feet of identified California clapper rail activity centers during the rail's breeding season.

2. If work is to be conducted during the California least tern's breeding season (April 15 – August 15), a qualified biologist will conduct pre-construction surveys prior to and within 10 days of any initial ground disturbance activities. Surveys shall be conducted within all suitable nesting habitats within 700 feet of the activity. No work will occur within 700 feet of nesting California least terns.

3. No work will occur within 50 feet of suitable tidal marsh habitat for the California clapper rail within two hours before and after an extreme high tide event (6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tide events) because this is when the rail is most likely to escape the flooded marsh to seek unsubmerged cover near the Shell Oil Pipeline and when the rail is most vulnerable to predation.

4. The City and its contractors will implement measures to avoid the introduction and spread of invasive plant species when working near tidal marsh habitat (*e.g.,* clean all equipment and clothing of all soil and plant material before arriving onsite near tidal marsh).

5. Work will be limited to the daytime hours.

6. No suitable habitat for the Alameda whipsnake, California clapper rail, and California least tern will be disturbed by the proposed project.

7. Any and all creek or drainage crossings will be constructed using trenchless techniques and will be done in the dry season and will not occur during inclement weather or between October 15 and April 1.

Conclusion

The Service concurs that the proposed project is not likely to adversely affect the Alameda whipsnake because the Alameda whipsnake is unlikely to occur within the action area for the proposed project.

The Service concurs that the proposed project is not likely to adversely affect the California clapper rail because: (1) no suitable habitat for the California clapper rail will be disturbed; (2) no work will occur within 700 feet of California clapper rail activity centers during the rail's breeding season as determined by Service-approved protocol-level surveys; (3) work will be limited to the daytime hours; (4) if the abandoned Shell Oil Pipeline through Oro Loma Marsh cannot be reused, then a new 8-inch pipeline will be added in existing roadways along Cabot Boulevard between 0.3 and 0.5 mile away from Oro Loma Marsh which would not affect California clapper rails; (5) no work will occur within two hours before and after extreme high tide events within 50 feet of suitable tidal marsh habitat; and (6) the City and its contractors will implement measures to minimize the potential for the introduction and spread of invasive plant species into suitable tidal marsh habitat.

The Service concurs that the proposed project is not likely to adversely affect the California least tern because: (1) no suitable habitat for the California least tern will be disturbed; and (2) no work will occur within 700 feet of nesting California least terns as determined by pre-construction surveys by a qualified biologist.

Therefore, unless new information reveals effects of the proposed project that may affect listed species in a manner or to an extent not considered, or a new species is listed, no further action pursuant to the Act is necessary for the proposed project. If you have any questions regarding this letter, please contact Joseph Terry, Senior Biologist, or Ryan Olah, Coast/Bay Division Chief, at the letterhead address, telephone (916) 943-6721, or electronic mail (joseph_terry@fws.gov or ryan_olah@fws.gov).

Sincerely,

Ryan Olah
Chief, Coast/Bay Division

cc:
Marcia Grefsrud, California Department of Fish and Wildlife, Napa, California
Josh Amaris, U.S. Environmental Protection Agency, San Francisco, California

LITERATURE CITED

Chesser, R.T, R.C. Banks, C. Cicero, J.L. Dunn, A.W. Kratter, I.J. Lovette, A.G. Navarro-Sigüenza, P.C. Rasmussen, J.V. Remsen, Jr., J.D. Rising, D.F. Stotz, and K. Winker. 2014. Fifty-Fifth Supplement to the American Ornithologists' Union *Check-list of North American Birds*. The Auk: October 2014, Vol. 131, No. 4, pp. CSi-CSxv. http://aoucospubs.org/doi/full/10.1642/AUK-14-124.1. Accessed on September 1, 2015.

Maley, J. M., and R.T. Brumfield. 2013. Mitochondrial and next-generation sequence data used to infer phylogenetic relationships and species limits in the Clapper/King rail complex. Condor 115:316–329. http://aoucospubs.org/doi/abs/10.1525/cond.2013.110138. Accessed on September 1, 2015.

Appendix D

Cultural Resources Compliance Memo

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

MP-153 Tracking Number: 15-MPRO-125

Project Name: National Historic Preservation Act (NHPA) Section 106 Consultation for the City of Hayward Recycled Water Project (City), Alameda County, California (Project # 15-MPRO-125)

NEPA Document: 15-25-MP

MP 153 Cultural Resources Reviewer: Lex Palmer

NEPA Contact: Jaime LeFevre

Determination: No Historic Properties Affected

Date: March 26, 2018

Reclamation is proposing to award WaterSMART grant funds to the City from Reclamation's Title XVI Water Reclamation and Reuse Program to construct a recycled water facility and pipeline in Alameda County, California. Reclamation determined that the use of Federal appropriations for this 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).

The City applied for and received a provisional award of funding to construct a recycled water facility and install or refurbish up to 13 miles of pipeline. The area of potential effects (APE) for the proposed project will include the footprints of construction activities for the pipeline trench and recycled water facility and will extend from curb to curb where the pipeline will be installed in roadways. Access will be along existing roadways with no improvements needed. This will provide for an APE of approximately 240.0 acres with varying depth of approximately 4-14 feet, as described above.

On behalf of Reclamation and the City, historic property identification efforts for the proposed undertaking were completed by Far Western Anthropological Research (FWARG) Consultants and JRP Historical Consulting, LLC (JRP). FWARG performed geoarchaeological field testing, and produced a buried site sensitivity model, archeological monitoring plan, late discovery plan, and a process for the management of identified human remains. JRP identified four historic-era resources within the APE that required documentation. JRP recommended that none of the built environment resources in the APE meet the significance criteria for listing in the National Register of Historic Places.

Although no historic properties were identified within the project APE, FWARG developed an

archaeological monitoring plan which is predicated on the buried archeological site sensitivity model. Archaeological monitoring will be conducted continuously during earth disturbing construction activities, within the twelve areas identified as having the highest sensitivity. The remaining areas of non-highest sensitivity will be spot checked. All monitoring, whether continuous or spot checking, will be carried out by or under the direct supervision of a qualified professional who meets professional qualifications as defined in the Secretary of Interior's *Standards and Guidelines for Archaeology and Historic Preservation* as published at 36 CFR Part 61.

Reclamation requested and received a Native American contact list and negative results of a review of the Sacred Lands File from the Native American Heritage Commission (NAHC). Pursuant to the regulations at 36 CFR § 800.3(a)(3), Reclamation contacted the individuals identified by the NAHC as likely to have interest area in the project that included Mr. Tony Cerda, Ms. Ann Marie Sayers, Ms. Rosemary Cambra, and Mr. Andrew Galvan. No response was received from any of the contacts provided.

Reclamation initiated consultation with the California State Preservation Office (SHPO) by letter dated February 21, 2018 requesting concurrence with a finding of no historic properties affected by the proposed project. SHPO responded in a letter dated March 23, 2018 with a concurrence on the finding of no historic properties pursuant to 36 CFR § 800.4(d)(1).

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

Enclosure: SHPO to Reclamation March 23, 2018.

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
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March 23, 2018 In reply refer to: BUR_2018_0222_001

VIA ELECTRONIC MAIL

Ms. Anastacia T. Leigh
Regional Environmental Officer
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

RE: Section 106 consultation for the Hayward Recycled Water Project, Alameda County (Reclamation Project # 15-MPRO-125)

Dear Ms. Leigh:

The U.S. Bureau of Reclamation (Reclamation) is initiating consultation with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulation at 36 CFR Part 800. By letter received on February 22, 2018, Reclamation is seeking my comments on their finding of effect for the above-referenced undertaking.

Reclamation is proposing to provide grant funding to the City of Hayward to construct a recycled water facility and pipeline in Alameda County. Reclamation has defined the Area of Potential Effects (APE) as the footprint of construction activities and pipeline trenching, resulting in approximately 240 acres with varying depths of approximately 4 to 14 feet. I have no comments on the APE for this undertaking.

Reclamation submitted the following documents to support their finding of effect:

- A Cultural Resources Sensitivity Assessment and Constraints Analysis for City of Hayward Recycled Water Project, Alameda County California (Jack Meyer, FWARG July 2017).
- Historic Resources Inventory and Evaluation Report, City of Hayward Recycled Water Project, Alameda County, California (Steven Melfin, JRP, May 2017).
- *Geoarchaeological Study and Monitoring Plan for City of Hayward Recycled Water Project, Alameda County, California (Jack Meyer, FWARG December 2017).*

Reclamations efforts to identify historic properties documented four historic-era resources in the APE, none of which meet the National Register of Historic Places (NRHP) criteria. A geoarchaeological analysis found the area is highly sensitive for buried archaeological sites and recommended monitoring in specific areas due to specific project effects. Reclamation states they will follow 36 CFR 800.13 and consult with SHPO if a historic property is discovered during construction.

Native American consultation included contacting the Native American Heritage Commission (NAHC) and requesting a record search of their sacred land file which was negative. Reclamation sent letters to the tribal entities identified by the NAHC as having ancestral ties to the project area, including Mr. Tony Cerda, Ms. Ann Marie Sayers, Ms. Rosemary Cambra, and Mr. Andrew Galvan. Reclamation states that no responses have been received to date.

Reclamation has asked for concurrence that the four properties in the APE are not eligible for the NRHP:

- City of Hayward Water Pollution Control Facility (WPCF), built in 1953.
- South Pacific Coast Railroad/Southern Pacific Railroad (SPCRR/SPRR) segments, built in 1878-1906.
- Southern Pacific Railroad Spur Line, built in 1969-1973.
- Alameda County Flood Control and Water Conservation District (ACFCWCD) Canals, built in 1955-1968.

I concur.

Reclamation has made a finding of No Historic Properties Affected for this undertaking. **I do not object.**

Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, Reclamation may have additional future responsibilities for this undertaking under 36 CFR Part 800. If you require further information, please contact Anmarie Medin of my staff at (916) 445-7023 or Anmarie.Medin@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer