

# RECLAMATION

## *Managing Water in the West*

### Categorical Exclusion Checklist

## Water and Power Upgrades at the Tracy Fish Facility

CEC-17-013

Prepared by:

Kate Connor

Kate Connor  
Natural Resources Specialist  
South-Central California Area Office

Date: 11/6/2017

Concurred by:

See Attachment A

Kevin Palmer  
Architectural Historian  
Mid-Pacific Regional Office

Date: See Attachment A

Regional Archeologist concurred with Item 8. Their determination has been placed within the project file.

Concurred by:

Shauna McDonald

Shauna McDonald  
Wildlife Biologist  
South-Central California Area Office

Date: 11/6/17

Concurred by:

Rain L. Emerson

Rain L. Emerson  
Supervisory Natural Resources Specialist  
South-Central California Area Office

Date: 11/6/2017

ITA Designee concurred with Item 11. Their determination has been placed within the project file.

Approved by:

Michael P. Jackson

Michael P. Jackson, P.E.  
Area Manager  
South-Central California Area Office

Date: 11/6/2017





## Background

The Tracy Fish Collection Facility (Fish Facility) located in Byron, California, was developed and built by the Bureau of Reclamation (Reclamation) in the 1950s as part of the Central Valley Project to protect fish entering the Delta-Mendota Canal by way of the Tracy Pumping Plant (Figure 1).

Reclamation needs to upgrade the water and power supply systems at the Fish Facility in order to improve the reliability of these systems, support its mission, and the research conducted at the Tracy Aquaculture Facility (Aquaculture Facility).

## Nature of the Action

Reclamation proposes to upgrade and/or install the following three components at the Fish Facility: (1) the north well water system, (2) the delta water system, and (3) the emergency power supply system as described below (Figure 2).

### North Well Water System Upgrades

The proposed north well water system upgrades would supply a new source of freshwater that has low salinity and low temperatures to the Aquaculture Facility. The north well system would transport water from six existing fresh water wells located north of the Delta-Mendota Canal inlet. Upgrades would consist of the following:

- Removal of the existing timber retaining wall.
- Installation of a new 24-foot long by 8-foot wide by 1-foot deep concrete equipment pad. The equipment pad will also support a new 3-sided concrete retaining wall with a maximum height of 8-feet and an anticipated width of 1-foot. A hydro pneumatic tank and a motor control cabinet for computer control equipment would be placed on the equipment pad.
- A steel canopy would be installed on the equipment pad to protect the equipment that would stand on the pad. The canopy would be supported by 4 columns with approximate dimensions of 8-feet high by 8-inches wide by 8-inches deep. Column footings may be required and their depth would not exceed 6-feet.
- Total ground disturbance for the equipment pad, retaining wall, and canopy is anticipated to be 26-feet long by 10-feet wide and an average depth of 3-feet. The maximum depth would be 6-feet for all aspects of this system.
- Water distribution piping would be installed in a 500-foot long by 3-foot wide by 1.5-foot deep trench. The ditch may be backfilled with soil removed during trenching if the soil is determined suitable.
- Electrical power and communication duct banks would be installed in a 560-foot long by 1.5-foot wide by 3-foot deep trench. The trench would require some pavement removal of up to 12 inches, however, the underlying soil would not be disturbed. The pavement would be replaced after duct banks are installed.

- The six existing well pumps would be covered with a utility box. The box would be placed by excavating a 4-foot wide by 4-foot long by 2-foot deep pit. The bottom of the pit would be lined with uniform  $\frac{3}{4}$  inch gravel and the utility box would be set within the pit so that it is approximately level with the surrounding terrain.

### **Delta Water System**

The proposed new delta water system would supply a reliable source of untreated water from the Sacramento/San Joaquin Delta to the Aquaculture Facility. In order to construct the Delta Water System a new intake structure from the Delta-Mendota Canal would be constructed along the canal embankment, downstream of the fish removal equipment. The new intake structure would support a multiple pump manifold, as well as, filtration equipment. The new delta water system would include installation of the following:

- A 30-foot wide by 2-foot long by 2-foot deep concrete equipment pad that would support the equipment platform at the top of the embankment.
- Three sets of steel piles (with an estimated 9 piles in total) would be driven into the Delta-Mendota Canal floor using a vibratory hammer. Specific pile distances from the fish screen are 65-feet at a depth of 17.5-feet, 98-feet at a depth of 16-feet, and 127-feet at a depth of 14.5-feet. The piles closest to the shore would support an equipment support platform consisting of steel wide flange beams and grating. Piles driven further into the channel would support underwater suction piping, a self-cleaning debris screen, and an intake manifold.
- One to two 300-foot long by 3-foot wide by 1.5-foot deep trenches would be excavated for placement of electrical conduit and pipeline. Trenches would be excavated within the existing roadways and backfilled with removed soil and resurfaced with new pavement.
- A self-cleaning debris screen would be installed upstream of two turbine pumps. The screen would consist of a rotating wedge-wire drum that would prevent all foreign material larger than  $\frac{1}{8}$  inch from entering the system.
- The two vertical turbine pumps would draw water from the Delta-Mendota Canal through the self-cleaning debris screen. Each pump would be powered by a three phase electric motor and provide an individual flow of up to 250 gallons per minute. Each pump would also be equipped with a variable frequency drive capable of reducing the pump speed proportional to the demand resulting in lower overall power use.
- A metal platform would be installed to match the road elevation and would overhang the water of the primary channel. The platform would support pumps, pump motors, debris screen, filters, and a hydro-pneumonic tank. The platform would also include a metal structure to support future placement of an additional pump and motor.

### **Emergency Power Supply System**

The proposed emergency power supply system would consist of an emergency standby diesel generator system capable of providing 100% of power in the event of a total loss of power. The emergency power supply system would prevent the loss of research fish populations in the Aquaculture Facility that could occur during a power outage. The emergency power supply system would also prevent the interruption of fish collection activities at the facility. The emergency power supply system would include the following:

- Installation of an approximately 24-foot long by 24-foot wide by 2-foot deep concrete containment basin and/or a reinforced concrete equipment pad with reinforced concrete secondary containment for generators. The equipment pad would support two 500 Kilo Volt-Amp (a measure of apparent power in electrical equipment) generator sets, with fuel tanks, and required output equipment.
- A 1.5-foot wide by 3-foot deep by 40-foot long trench would be needed to connect the generator sets to the existing power conduits and existing equipment. A new automatic transfer switch would be installed to complete the power system and properly distribute electrical loads.

Reclamation would use an existing staging area located north of the Fish Facility across the Delta-Mendota Canal. Equipment to be used would include: backhoe, dump truck, pavement saw, excavator, roller compactor, vibratory compactor, pile driver, crane, industrial truck and/or forklift.

The project would take approximately 8 months to complete once initiated. The desired start date for this project March 2019.

## **Environmental Commitments**

Reclamation shall implement the following environmental protection measures to avoid and/or reduce environmental consequences associated with the Proposed Action.

- Workers shall look for California sea lions prior to beginning any in-water work, and continue to watch for them during in-water work. If a sea lion is present, in-water work shall not proceed until the animal has left the Action Area of its own accord.

Environmental consequences for resource areas assume the measures specified would be fully implemented.

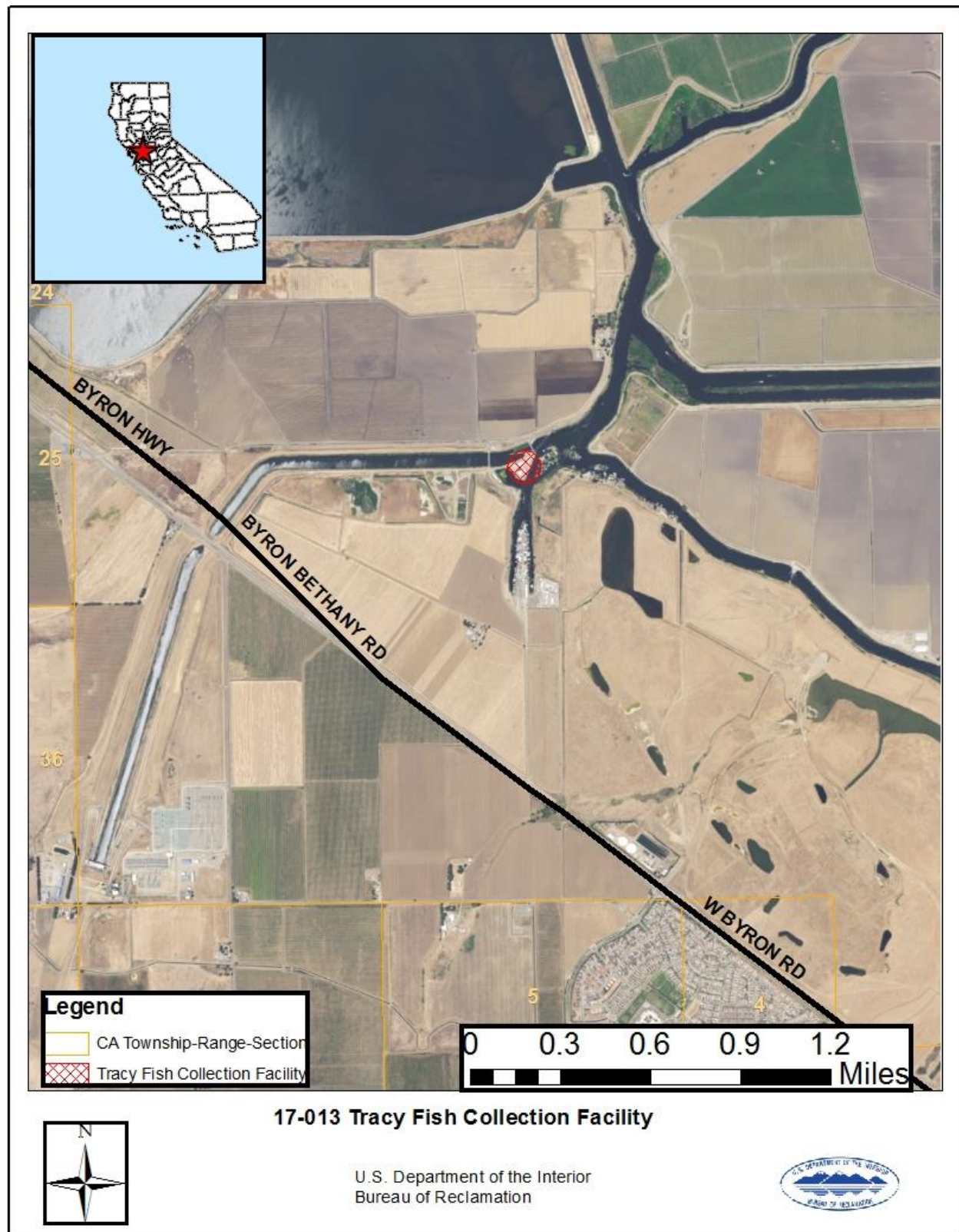


Figure 1 Project area



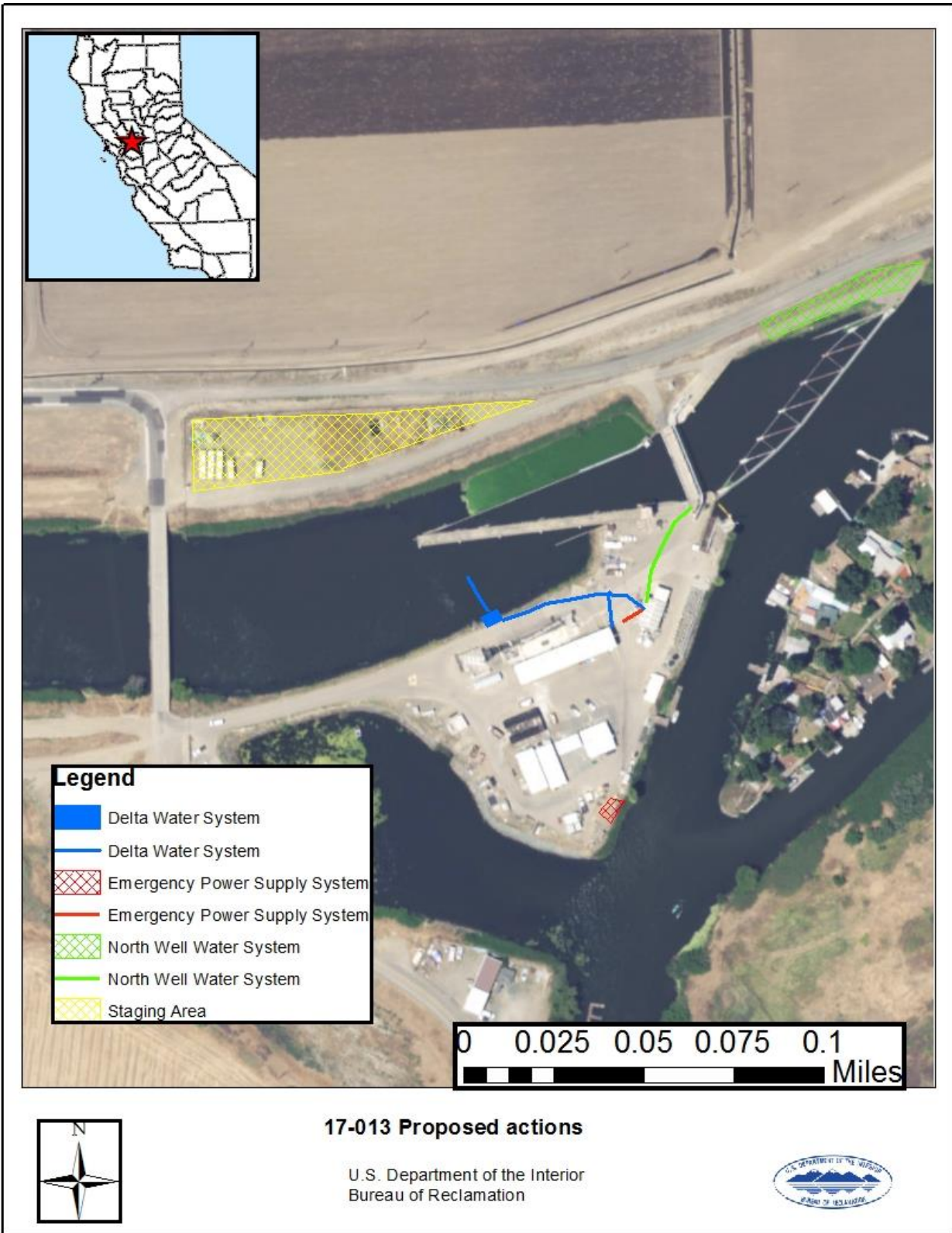


Figure 2 Proposed action area

## Exclusion Category

*516 DM 14.5 D (1). Maintenance, rehabilitation, and replacement of existing facilities which may involve a minor change in size, location, and/or operation.*

## Evaluation of Criteria for Categorical Exclusion

Below is an evaluation of the extraordinary circumstances as required in 43 CFR 46.215.

Extraordinary Circumstance	No	Uncertain	Yes
1. This action would have a significant effect on the quality of the human environment (40 CFR 1502.3).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102(2)(E) and 43 CFR 46.215(c)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. This action would have significant impacts on public health or safety (43 CFR 46.215(a)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This action would have significant impacts on such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks (43 CFR 46.215(d)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by Reclamation (LND 02-01) (43 CFR 46.215 (g)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated critical habitat for these species (43 CFR 46.215 (h)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. This action would limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007, 43 CFR 46.215 (k), and 512 DM 3)).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Extraordinary Circumstance	No	Uncertain	Yes
expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (l)).			

**NEPA Action: Categorical Exclusion**

The Proposed Action is covered by the exclusion category and no extraordinary circumstances exist. The Action is excluded from further documentation in an EA or EIS.

## **Attachment A: Cultural Resources Determination**

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

**MP-153 Tracking Number:** 16-SCAO-214

**Project Name:** Tracy Fish Collection Facility (TFCF) Water and Power Upgrades Project,  
Contra Costa County, California

**NEPA Document:** CEC-17-013

**MP 153 Cultural Resources Reviewer:** Lex Palmer

**NEPA Contact:** Kate Connor

**Determination:** No Adverse Effect

**Date:** November 6, 2017

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This proposed action by Reclamation is to authorize water and power upgrades at the TFCF in Contra Costa County. Reclamation determined that the use of federal appropriations for the utility upgrades on Reclamation lands is an undertaking as defined in 36 CFR § 800.16(y) and is a type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a).

The proposed project involves upgrading the TFCF water and power supply systems to improve the reliability of these systems in support of the TFCF mission and the research conducted at the associated Tracy Aquaculture Facility. The proposed upgrades consist of three components: the North Well Water System, the Delta Water System, and the Emergency Power Supply System.

Reclamation initiated consultation with the California State Preservation Office (SHPO) by letter dated October 5, 2017 requesting concurrence with a finding of no adverse effect for the proposed project. SHPO responded on November 3, 2017, (refer to attached SHPO letter) and concurred with Reclamation's finding of no adverse effect, pursuant to 36 CFR § 800.5(b).

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.



**DEPARTMENT OF PARKS AND RECREATION  
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer  
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November 3, 2017

Reply in Reference To: BUR\_2017\_1005\_001

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

RE: Tracy Fish Collection Facility Water and Power Upgrade, Contra Costa County,  
California (16-NCAO-214)

Dear Ms. Leigh:

Thank you for the letter received on October 5, 2017, initiating consultation with the State Historic Preservation Officer (SHPO) for the above-referenced project to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 300101), as amended, and its implementing regulation found at 36 CFR § 800. The Bureau of Reclamation (Reclamation) is seeking my comments regarding the effects the undertaking described below will have on historic properties. Included with the consultation letter were:

- *Tracy Fish Collection Facility Water and Power Upgrades Contra Costa County, California Mid-Pacific Region, prepared by Reclamation in 2017*

As described in the consultation package, the undertaking involves upgrading the Tracy Fish Collection Facility (TFCF) water and power supply systems to improve the reliability of these systems. The upgrades consist of:

- North Well Water System, supplying a new source of fresh water
- Delta Water System, supplying a source of untreated water
- Emergency Power System, a standby generator system

The Area of Potential Effect (APE), as fully described in the report, includes four discontinuous locations. The entire APE is 1.9 acres with a maximum depth of 17 feet 6 inches.

Identification efforts included archival research, inventory of the project site, and evaluation of resources within the APE. Reclamation identified five buildings and structures of the TFCF as a historic property within the APE, eligible for the National Register of Historic Places (NRHP) under Criteria A and C as a contributing element of the Delta Mendota Canal (DMC). The DMC was previously determined eligible for listing in the NRHP in 2005 (BUR041115A). The five buildings and structures include the Debris Boom, Main Louver, Secondary Louver, Fish Collection, Tanks Building, and 4-ton Primary Crane. These buildings and structures are eligible for listing in the NRHP under Criterion A for their association with the Central Valley Project (CVP) and the DMC and an example of Reclamation's response to the California environmental movement that fused with recreation pursuits to conserve sport fishing species. It is also eligible under Criterion C for the unique engineering of the facility's fish collection system.

Reclamation has determined that the five TFCF buildings and structures identified above are eligible for listing in the NRHP as contributors to the DMC, and found that the undertaking will have no adverse effect to historic properties. After reviewing the information submitted with your letter, I offer the following comments:

- I agree that the Area of Potential Effect (APE) as represented in the attachments to your letter is appropriate, per 36 CFR § 800.4(a)(1).
- I concur that Reclamation's identification and evaluation efforts are sufficient for this undertaking, per 36 CFR § 800.4(b).
- I concur that the five TFCF buildings and structures, including the Debris Boom, Main Louver, Secondary Louver, Fish Collection, Tanks Building, and 4-ton Primary Crane, are eligible for listing in the NRHP as contributors to the DMC, per 36 CFR § 800.4(c)(2).
- Please note that Native Americans do ascribe value to built environment resources, and that the absence of archaeological materials should not preclude consultation with tribes and interested parties.
- I concur with your finding and agree that pursuant to 36 CFR § 800.5(b), a Finding of No Adverse Effect is appropriate for the undertaking as described.
- Please be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have future responsibilities for this undertaking under 36 CFR § 800.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact Kathleen Forrest, Historian, at (916) 445-7022 or [Kathleen.Forrest@parks.ca.gov](mailto:Kathleen.Forrest@parks.ca.gov).

Sincerely,



Julianne Polanco  
State Historic Preservation Officer