

RECLAMATION

Managing Water in the West

Categorical Exclusion Checklist

Tracy Fish Facility Groundwater Well Installation, Development, and Pumping Tests to Evaluate Groundwater Supply

CEC-15-027

Prepared by:



Rain L. Emerson

Supervisory Natural Resources Specialist
South-Central California Area Office

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

Date:

9/23/15

Concurred by:

See Attachment A

Date: See Attachment A

Mark Carper

Archaeologist/Architectural Historian
Mid-Pacific Regional Office

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

Concurred by:



Shauna McDonald

Wildlife Biologist
South-Central California Area Office

Date:

9/22/15

Approved by:



Michael Jackson
Area Manager

South-Central California Area Office

Date:

9/23/15



Background

In the 1950's, the Bureau of Reclamation (Reclamation) built the Tracy Fish Collection Facility as part of the Central Valley Project in order to protect fish entering the Delta-Mendota Canal by way of the Tracy Pumping Plant (Figure 1).

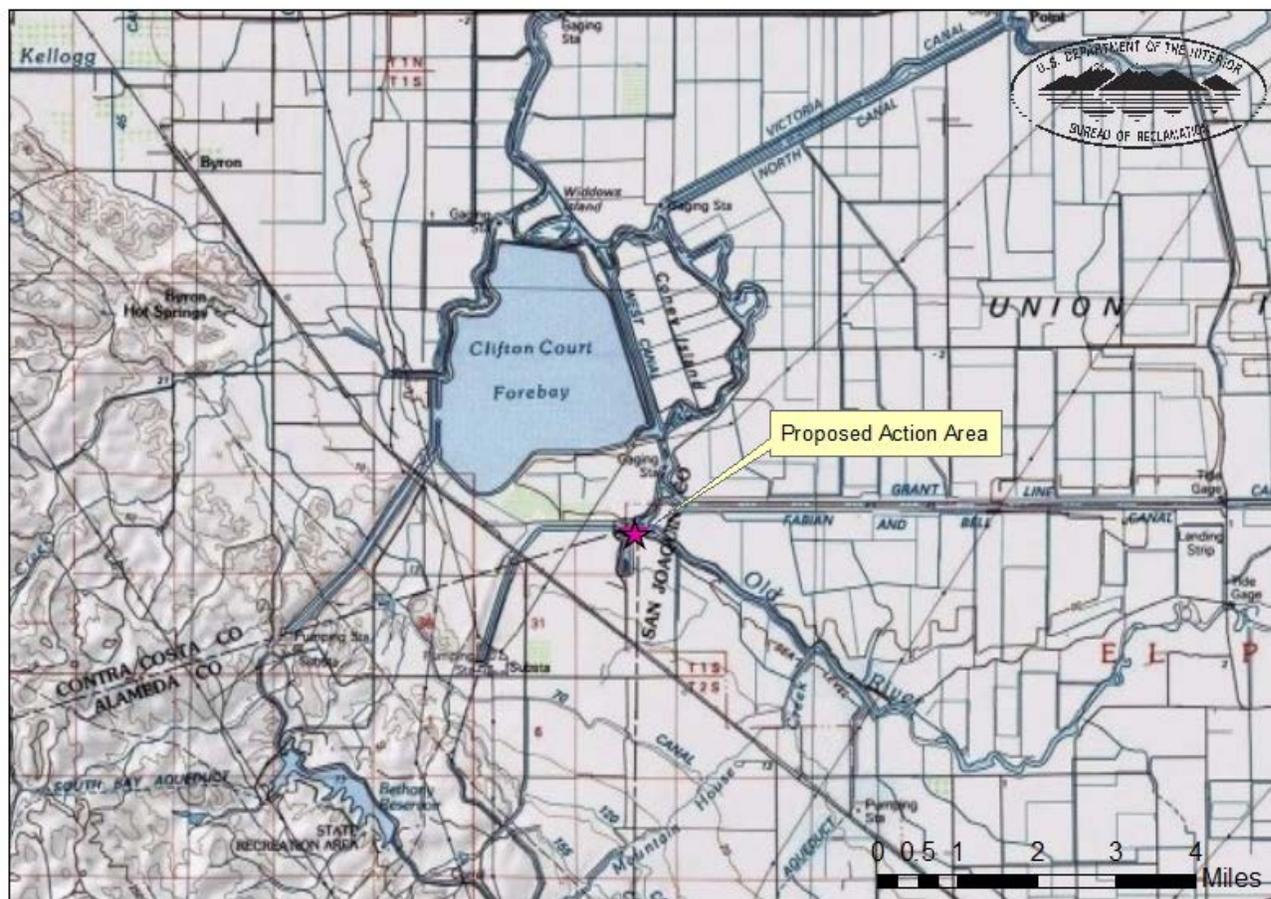


Figure 1 Location of Tracy Fish Facility (Proposed Action area)

The Tracy Fish Facility currently uses low quality groundwater as the source of water for facility operations. In 2002 and 2003, Reclamation's installed five groundwater wells at the Tracy Fish Facility with the intent to provide replacement groundwater supply for facility operations. The wells (PW-02-10 and PW-03-11,-12, -14, and -15) range in depth from approximately 28 to 49 feet. Samples were collected from the wells and laboratory analysis indicates groundwater quality in the wells is suitable for use at the facility.

In February 2015, the Tracy Fish Facility requested development of additional groundwater of suitable quality and quantity for use at the Tracy Fish Facility.

Nature of the Action

Reclamation proposes to install and develop one additional well (PW-15-1) as well as surge and develop five existing groundwater pumping wells (PW-02-10 and PW-03-11 through PW-03-15) at the Tracy Fish Facility (see Figure 2).

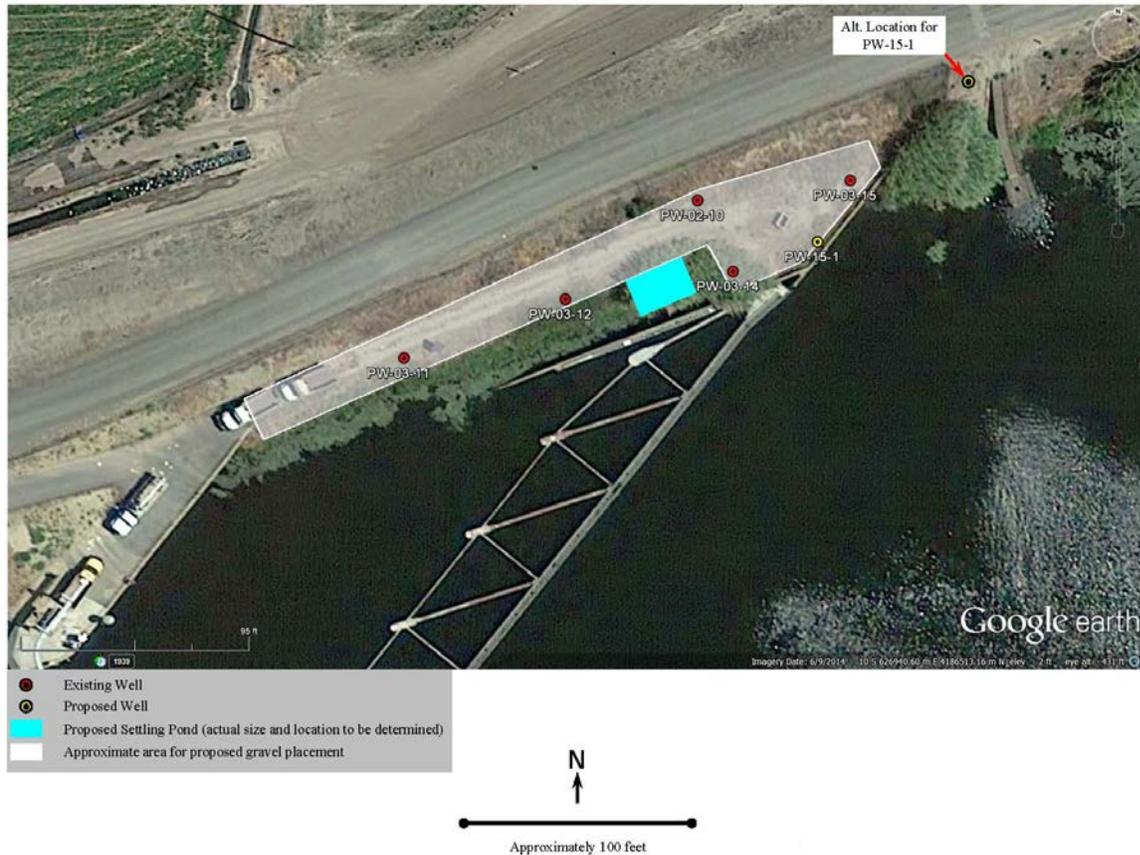


Figure 1 Location of Existing and Proposed Groundwater Wells

Specific details are included below:

New Well Installation (PW-15-1)

As shown in Figure 2, there are two potential locations for the new well. Prior to drilling, all known locations of subsurface structures (drain lines, electrical, culverts, etc.) will be mapped and the new well location determined and staked. A drill hole will be advanced to a depth of 50 feet using a truck-mounted drill rig equipped with 10.5-inch hollow stem auger. The drill hole will be converted into a pumping well by placing a 4.5 inch outside diameter PVC pipe within the hole. The pipe will have a 0.020-inch slotted screen from 50 to 20 feet and solid casing from 20 feet below ground surface to 2 feet above the ground. The hole around the pipe will be sand packed between 50 to 18 feet and then filled with bentonite from 18 feet to the ground surface.

Due to anticipated “soggy” ground conditions during drilling, about 4 inches of crushed gravel may be placed on the 300-foot long dirt road that is currently used to access the existing pumping wells.

Pumping Well Development

Well development for the five existing wells and one new well would consist of the following:

- Cleaning (swabbing) the screen interval inside the wells with a brush
- Air lifting wells after cleaning to remove sediment laden water. The air lifting will be achieved by inserting a 1-inch diameter PVC pipe (tremie pipe) inside the wells and injecting pulses of air through the tremie pipe.

This process would continue until well development is completed. Water quality tests for the wells would be done in the field and would consist of the following: pH, temperature, electrical conductivity, turbidity, and color. Well development will continue until the following water quality parameters are achieved:

- Turbidity is less than 5 nephelometric turbidity units (NTU).
- Settleable solids (sediment) are reduced to a point that it is no longer present or has reached a point where the content can no longer be reduced.
- Field parameters stabilize within 10 percent of the previous measurement (minimum of 1 well volume between measurements).
- The wells dewater and do not sufficiently recharge within a time deemed reasonable Reclamation. In the past the wells fully recharged within about 1 hour. The wells may be dewatered several times during development.

Turbid water will be generated during development of the six wells. A temporary settling pond (see Figure 2 for proposed location) constructed of sand bags will be installed to contain the turbid water and allow sediment in the water to settle out before the water is discharged into the adjacent Delta-Mendota Canal Intake Channel. The location and size of the settling pond will be determined during a site visit.

Pumping Tests

Pumping tests will be performed to determine the maximum sustainable yield for each of the 6 wells. The pumping test will be performed by installing a pump and pressure transducer (water level indicator) in each well, then all wells will be pumped simultaneously over a 24 hour period. Groundwater generated during the pumping test will be discharged into the Delta-Mendota Canal Intake Channel. Analytical results of water samples previously collected from the five existing wells and surface water from the Delta-Mendota Canal Intake Channel show water chemistries are similar; therefore, discharging groundwater into the Delta-Mendota Canal Intake Channel will not negatively impact surface water quality.

Field work is anticipated to occur in the fall of 2015 and may require up to 15 consecutive days to complete. Well installation and development will occur between 7:00 am and 7:00 pm.

Environmental Commitments

Reclamation shall implement the following environmental protection measures to avoid and/or reduce potential environmental impacts:

Resource	Protective Measure
Biological Resources	Avoidance measures for San Joaquin kit fox shall be adhered to (Service 2011). Prior to commencing activity, and whenever a lapse of the activity for two or more weeks occurs, a survey of the project area by a biologist shall be conducted for the presence of San Joaquin kit fox (SJKF), or sign or other evidence of use or potential use of the area by SJKF, including their dens, or potential dens, etc. as defined by the Service (Service 2011). If evidence of their presence, or use of the area by SJKF is found, or sign or dens or potential dens are found, additional environmental review is required, including potentially formal consultation with the Service. However, pending a finding of no evidence of SJKF, or sign of, or use of the area, or of dens or potential dens for SJKF, activities would be permitted.
Biological Resources	Should listed species be observed, any additional environmental review required shall be completed before resumption of activities.
Biological Resources	Speed limit of vehicles conducting this action on Reclamation lands/non-public roadways shall not exceed 15 miles per hour.
Biological Resources	Nighttime work shall be minimized to the extent possible.
Biological Resources	Contamination of water shall be avoided so listed fish and their habitat would not be affected. To avoid effects on listed species and designated critical habitat, activities that would affect water quality are not permitted.
Biological Resources	Equipment operating at Reclamation facilities shall be maintained in good working condition protections shall be in place to prevent spills and contamination of water.
Biological Resources	Migratory birds are protected from take under the Migratory Bird Treaty Act (16 USC § 703 et. Seq.) and no take of migratory birds is permitted.
Biological Resources	Any burrows occupied by burrowing owls shall be protected and activities shall be conducted in a manner so as to not cause abandonment of nests with eggs or young, or otherwise cause take.

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

Exclusion Category

516 DM 14.5 B (3). *Data collection studies that involve test excavations for cultural resources investigations or test pitting, drilling, or seismic investigations for geologic exploration purposes where impacts will be localized.*

Evaluation of Criteria for Categorical Exclusion

- | | | | |
|--|---|---------------------------------------|---------------------------------|
| 1. This action would have a significant effect on the quality of the human environment (40 CFR 1502.3). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

- | | | | |
|---|---|---------------------------------------|---------------------------------|
| 3. This action would have significant impacts on public health or safety (43 CFR 46.215(a)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<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)). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |
| 11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993). | No
<input checked="" type="checkbox"/> | Uncertain
<input type="checkbox"/> | Yes
<input type="checkbox"/> |

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|---|---|---|---|
| <p>12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)).</p> | <p>No
<input checked="" type="checkbox"/></p> | <p>Uncertain
<input type="checkbox"/></p> | <p>Yes
<input type="checkbox"/></p> |
| <p>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)).</p> | <p>No
<input checked="" type="checkbox"/></p> | <p>Uncertain
<input type="checkbox"/></p> | <p>Yes
<input type="checkbox"/></p> |
| <p>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 expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (l)).</p> | <p>No
<input checked="" type="checkbox"/></p> | <p>Uncertain
<input type="checkbox"/></p> | <p>Yes
<input type="checkbox"/></p> |

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



Baker, Kelly <kmbaker@usbr.gov>

Cultural Concurrence - Groundwater Wells at Tracy Fish Facility (CEC-15-027)

2 messages

Carper, Mark <mcarper@usbr.gov>
To: Kelly Baker <kmbaker@usbr.gov>
Cc: Rain Emerson <remerson@usbr.gov>

Wed, Sep 16, 2015 at 1:44 PM

Kelly-

Regarding the proposed project (CEC-15-027) I concur with item #8 that the proposed action will have no significant impacts on historic properties.

Please use this email as my signature on the CEC and keep a copy for the administrative record.

Mark

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Mark A. Carper - Archaeologist - M.A.

Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, Sacramento, CA 95825
Phone: 916.978.5552 - Fax: 916.978.5055
Cell: 916.396.6144

Baker, Kelly <kmbaker@usbr.gov>
To: "Carper, Mark" <mcarper@usbr.gov>
Cc: Rain Emerson <remerson@usbr.gov>

Wed, Sep 16, 2015 at 2:03 PM

Mark, thank you!

~Kelly

[Quoted text hidden]

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Kelly Baker
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