

**Categorical Exclusion Checklist** 

# Bradbury Dam Temperature Monitoring Equipment Installation

#### CEC-12-049

Prepared by:

Date: 5-30-12

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Date: 5/31/12

DEPARTMENT OF THE INTERIOR

U.S. Department of the Interior Bureau of Reclamation South-Central California Area Office

#### Background

The Bureau of Reclamation's (Reclamation) Bradbury Dam in Santa Barbara County, California, stores water from the Santa Ynez River at Lake Cachuma (Figure 1).

Water at the dam is combined with water regulated by the California Department of Water Resources (State Water). The combined water is delivered through the Tecolote Tunnel to the South Coast Conduit and lateral systems, which distribute water to croplands of the Goleta, Montecito, Summerland, and Carpinteria Water Districts, and to municipal users in the city of Santa Barbara.



**Figure 1 - Project Location** 

In September 2000, the National Marine Fisheries Service, Southwest Region, issued a Biological Opinion (BO) regarding the operation and maintenance of the Cachuma Project on the Santa Ynez River. An agreement between Reclamation and the Central Coast Water Authority (CCWA) was reached regarding an acceptable water temperature limit for discharge into the Stilling Basin below Bradbury Dam for compliance with the BO. The agencies agreed that water discharged into the stilling basin below the dam would have a maximum temperature of 18 degrees Celsius (64.4 degrees Fahrenheit) to meet the needs of the endangered Southern Steelhead. Since the federal water from the reservoir is generally cooler than the State Water, the composite water temperature in the Stilling Basin would be controlled by adjusting the amount of each flow that is allowed to enter to the pool at a given time.

#### **Purpose and Need for Action**

There is a need to measure the water temperature entering the stilling basin so that it does not exceed the threshold temperature of 18 degrees Celsius. The purpose of the proposed action is to install temperature measurement instrumentation as a means to ensure compliance with the BO.

#### **Proposed Action**

Reclamation proposes to allow installation of temperature measurement instrumentation at the Bradbury Dam. There will be no new ground disturbance or modifications outside of existing facilities. All of the instrumentation would be installed on and in the piping above the stilling basin at the Dam (See Figures 2 and 3). The items to be installed include:

- 1. Two thermocouples with thermowells;
- 2. Three panel mounted indicators for local display;
- 3. Three signal isolators;
- 4. Three pair signal cable to deliver the re-transmitted signals.



Figure 2 - Discharge Area, Plan View



Figure 3 - Discharge Area, Profile View

The signals from the temperature transmitters would be connected to CCWA's local Programmable Logic Controller (PLC). The PLC would use the temperature signals from the Bradbury Dam Penstock and State Water Pipeline to compute the weighted average temperature. The flow measurement signals from the Accusonic flow meter on the Bradbury Penstock and the electromagnetic flow meter on the State Water Pipeline at the Santa Ynez Pumping Plant would also be used in the weighted average temperature calculation.

Three conditioned signals would be re-transmitted through signal isolators to provide:

(1) a local panel display on the CCWA PLC panel;

(2) input of the signals to the CCWA supervisory control and data acquisition (SCADA) interface panel;

(3) input of the signals to the Bureau of Reclamation's SCADA interface panel.

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A three conductor cable would be installed between CCWA's PLC panel and Reclamation's SCADA interface panel to allow for connection of the re-transmitted signals to the Bureau's interface equipment.

#### **Environmental Commitments**

Reclamation shall implement the following environmental protection measures:

Resource	Protection Measure
Biological Resources	If nests are present in the area where installation is to occur, Reclamation
	biologists will be contacted for guidance before starting work.

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

### **Categorical Exclusion Category**

516 DM 14.5 C (3). Minor construction activities associated with authorized projects which correct unsatisfactory environmental conditions or which merely augment or supplement, or are enclosed within existing facilities.

## 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	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	
3.	This action would have significant impacts on public health or safety (43 CFR 46.215(a)).	No	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	
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	$\boxtimes$	Uncertain	Yes	

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<ol> <li>This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)).</li> </ol>	No	$\boxtimes$	Uncertain	Yes	
11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993).	No	$\boxtimes$	Uncertain	Yes	
<ul><li>12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)).</li></ul>	No	$\boxtimes$	Uncertain	Yes	
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)).	No	$\boxtimes$	Uncertain	Yes	
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)).	No	$\boxtimes$	Uncertain	Yes	

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

Area Office Biologist concurred with Item 9. Their determination has been placed within the project file.

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