

CATEGORICAL EXCLUSION CHECKLIST
**2011 Water and Energy Efficiency WaterSMART Grant for the Henry Miller
 Reclamation District No. 2131 Arroyo Canal System Modernization Project**

South-Central California Area Office

June 16, 2011

Background: Henry Miller Reclamation District No. 2131 (HMRD) is in charge of operating and maintaining canals and drains in the San Luis Canal Company (SLCC) service area within Merced and Fresno Counties, California. Formed in 2000, HMRD works in conjunction with SLCC to deliver irrigation water and provide drainage service to SLCC customers. HMRD's water system was first installed by Miller and Lux over 100 years ago and is a completely gravity fed system which consists of 59 miles of main canals, 98 miles of lateral canals, 113 miles of surface ditches, and a few recirculation pumps.

In 2005, the Irrigation Training and Research Center (ITRC) of California Polytechnic State University prepared a System Optimization Report (SOR) in which they proposed system modernization projects for HMRD's water system. At present, most of the check structures in the system are flashboards; although, HMRD has installed 20 long-crested weirs and four ITRC flap gates and is in the process of installing a Supervisory Control and Data Acquisition (SCADA) system.

The Arroyo Canal is HMRD's main artery and provides water for the Temple-Santa Rita, San Juan, Delta, Midway, and San Pedro lateral canals. In January 2011, HMRD applied for a Bureau of Reclamation (Reclamation) Water and Energy Efficiency WaterSMART grant (WaterSMART grant) for their Arroyo Canal Modernization project.

Purpose and Need for Action: HMRD is modernizing their canal infrastructure between the headworks of the Arroyo Canal and their new Central Regulating Reservoir. HMRD needs to replace the existing check structures within the Arroyo Canal in order to better manage water levels and prevent operational impacts to their customers due to fluctuating levels.

The purpose of the Proposed Action is to improve operational reliability and flexibility within HMRD's Arroyo Canal.

Proposed Action: Reclamation proposes to award a \$434,975 WaterSMART grant to HMRD for their Arroyo Canal Modernization project which includes retrofitting four existing flashboard control structures with modern long-crested weirs. Location of the four weirs is summarized in Table 1 and shown in Figure 1.

Weir	Coordinates		Section	Township	Range	County
	Latitude North	Longitude West				
Temple Santa Rita backup	37 0.15606	-120 32.714514	4	11	13	Fresno
Upstream Indiana Road	37 0.70953	-120 35.37082	31	10	13	Merced
San Juan backup	37 1.955597	-120 36.768887	25	10	12	Merced
Hwy 33	37 2.34917	-120 38.327537	27	10	12	Merced

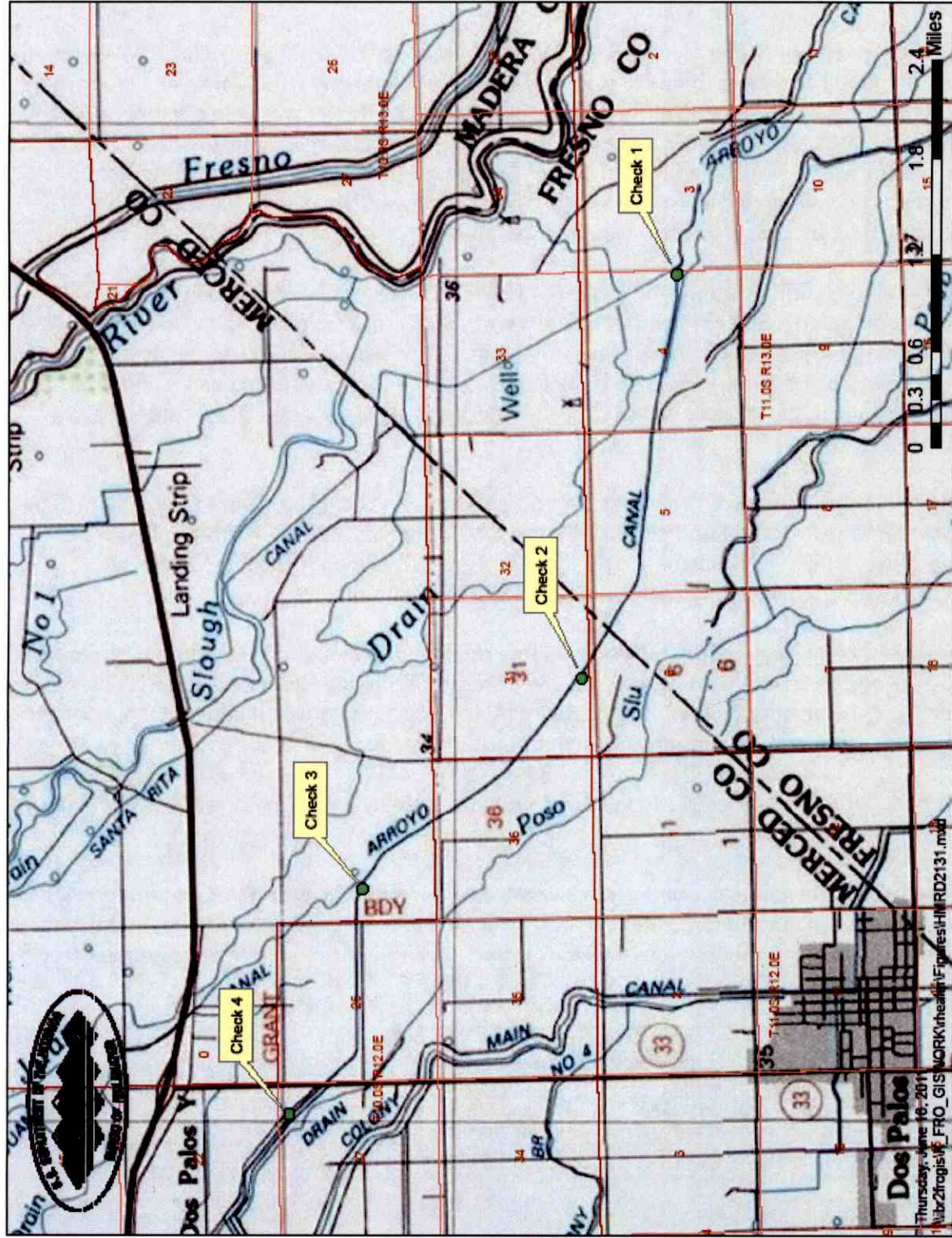


Figure 1. Proposed Action locations

All excavation would occur within the prism of the canal. Installation of a long-crested weir would require constructing a concrete channel upstream of the existing check structures. Excavations would be 175-200 feet and 1-foot deep upstream of the existing check structures. Concrete would be poured over 12-inch layer of crushed rock into wooden forms installed for this purpose. The concrete channel would be approximately 10-feet wide and would taper inward over the whole length of the structure.

The end bays at each of the existing check structures would be left in place and operational and the central bays would be replaced with the long-crested weir. Dimensions of ground disturbing activities at each weir location would include:

Weir	Length of Disturbance (feet)	Depth of Disturbance (feet)	Total volume (cubic yards)
Temple Santa Rita backup	2235	1	83
Upstream Indiana Road	1929	1	71
San Juan backup	2219	1	82
Hwy 33	2229	1	83

Construction is expected to begin December 2011 and continue until the start of their irrigation season (early February 2012). Both the canal and the adjacent dirt access roads have been disturbed in the past and during regular maintenance activities. Access and staging would occur along the dirt access roads adjacent to the canal. If construction is not completed during this dewatering season, work would continue in 2012 during the same time period. Construction equipment would include excavators, concrete trucks, and backhoes.

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.

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. No X Uncertain ____ Yes
2. This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources. No X Uncertain ____ Yes

Evaluation of Exemptions to Actions within Categorical Exclusion

1. This action would have significant adverse effects on public health or safety. No X Uncertain ____ Yes
2. 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; floodplains; national monuments; migratory birds; and other ecologically significant or critical areas. No X Uncertain ____ Yes
3. This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks. No X Uncertain ____ Yes
4. This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects. No X Uncertain ____ Yes

5. This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects. No X Uncertain ____ Yes
6. This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by the bureau (in coordination with a Reclamation cultural resources professional). No X Uncertain ____ Yes
7. 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. No X Uncertain ____ Yes
8. This action would violate a Federal, State, local, or tribal law or requirement imposed for protection of the environment. No X Uncertain ____ Yes
9. This action would affect Indian Trust Assets (ITA) (To be completed by Reclamation official responsible for ITA). No X Uncertain ____ Yes
10. This action would have a disproportionately high and adverse effect on low income or minority populations. No X Uncertain ____ Yes
11. 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. No X Uncertain ____ Yes

12. 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.

No X

Uncertain ____

Yes

NEPA Action: Categorical Exclusion X

Environmental commitments, explanation, and/or remarks:

☒ Yes ☐ No Environmental commitments are required and attached.

☐ San Joaquin Kit Fox Avoidance and Minimization Measures

☒ Giant Garter Snake Avoidance and Minimization Measures
(see attached ESA determination memo)

☐ California Tiger Salamander Avoidance and Minimization Measures

☐ California Red-Legged Frog Avoidance and Minimization Measures

☐ Other:


Prepared by:

Rain HealerDate: June 24, 2011

South-Central California Area Office

Regional Archeologist concurrence with Item 7:
See attachment.ITA Designee concurrence with Item 10:
See attachment.

Concur:

Date: Aug 19, 2011Wildlife Biologist, South-Central California Area Office

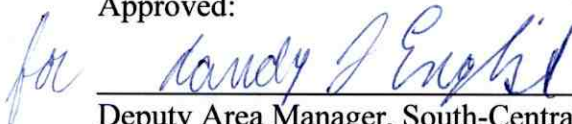
Concur:

Date: 8/19/11Supervisory Natural Resources Specialist, South-Central California Area Office

Concur:

Date: 8/19/11Chief, Resources Management Division, South-Central California Area Office

Approved:

Date: 8/19/11Deputy Area Manager, South-Central California Area Office



IN REPLY REFER TO:

United States Department of the Interior


BUREAU OF RECLAMATION
1243 "N" Street
Fresno, CA 93727



August 2, 2011

MEMORANDUM

To: Rain L. Healer
Natural Resources Specialist

From: Jennifer L. Lewis 
Endangered Species Act Branch

Subject: No-Effect Determination for Water and Energy Efficiency WaterSMART Grant for the Henry Miller Reclamation District No. 2131 Arroyo Canal System Modernization Project (CEC-11-041 2011).

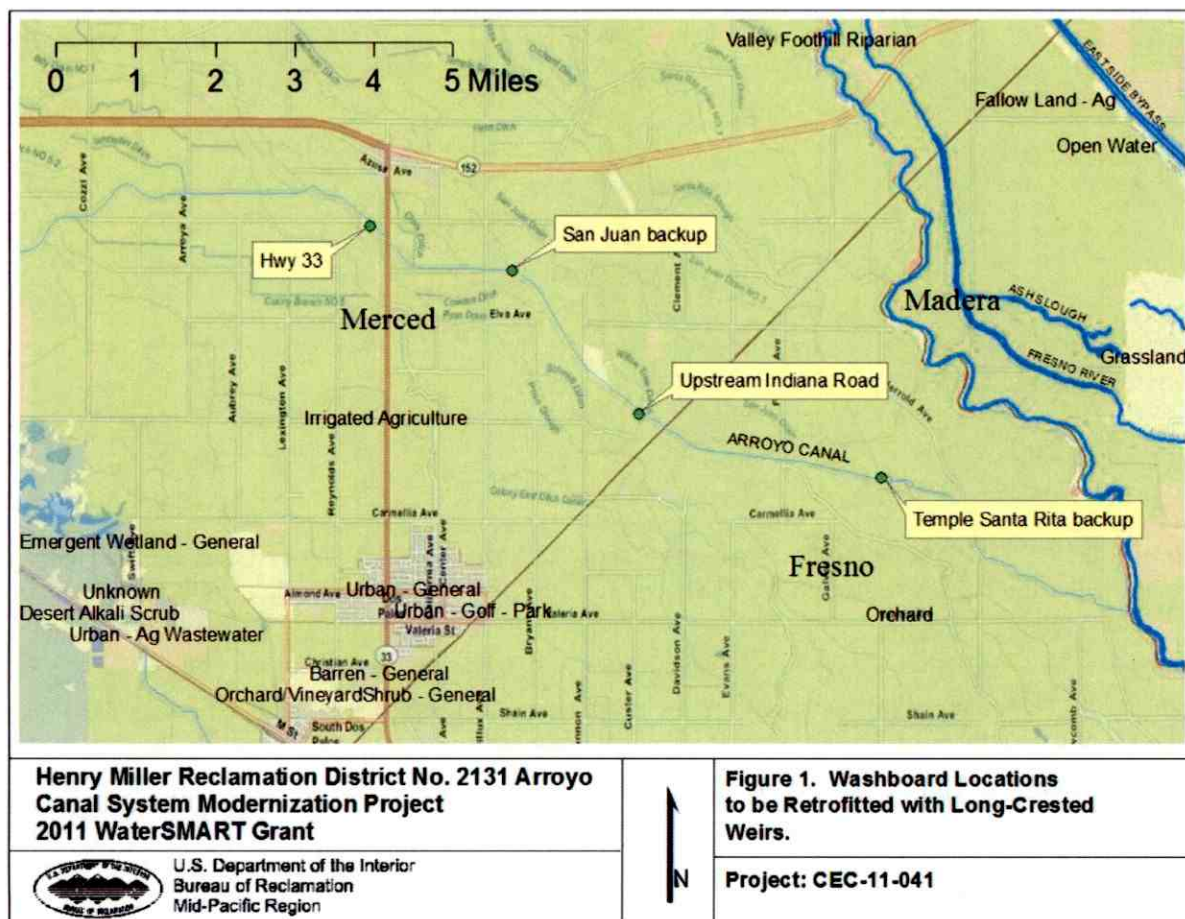
The Bureau of Reclamation (Reclamation) has reviewed Henry Miller Reclamation District No. 2131 (HMRD) application for a 2011 WaterSMART grant for potential impacts to biological resources. Reclamation proposes to award a grant to HMRD to assist in their Arroyo Canal Modernization project. This grant would provide funding to retrofit four existing flashboard control structures with long-crested weirs at four locations along the Arroyo Canal (Table 1; Figure 1), as listed below.

Table 1. Flashboard Locations that Would be Retrofitting to Long-Crested Weirs.

Weir	Coordinates		Township	Range	Section	County
	Latitude North	Longitude West				
Temple Santa Rita Backup	37 0.15606	-120 32.714514	11	13	4	Fresno
Upstream Indiana Road	37 0.70953	-120 35.37082	10	13	31	Merced
San Juan Backup	37 1.955597	-120 36.768887	10	12	25	Merced
Hwy 33	37 2.34917	-120 38.327537	10	12	27	Merced

All excavations would occur within the canal prism. A concrete channel would be installed upstream of each weir. Excavations would be approximately 200-feet long and 1-foot deep. Concrete would be poured over 12-inch layer of crushed rock into wooden forms installed for this purpose. This concrete channel would be approximately 10 feet wide and would taper inward over the whole length of the structure. Access and staging would occur along the dirt access roads adjacent to the canal.

Construction is expected to begin December 2011 and continue until the start of the irrigation season (early February 2012). If construction is not completed during the non-irrigating season, work would continue in 2012 during the same time period.



Biological Resources

Existing washboards to be retrofitted are entirely surrounded by active agriculture and agriculture-supporting infrastructure (Images 1-2). In addition, construction/ installation would occur completely within the canal prism and accessed by using the existing farm dirt access roads.

Special-status species potentially occurring in the project area were identified, in part, through requesting an official species list from the USFWS via the Sacramento Field Office's website, http://www.fws.gov/sacramento/es/spp_list.htm on July 7, 2011 (document number: 110707015106). The list is for the following USGS 7½ minute quadrangles (Quads): Oxalis, Delta Ranch, and Santa Rita Bridge. Reclamation further queried the California Natural Diversity Database (CNDDDB 2011) records for listed species in the vicinity of the projects. Based upon the CNDDDB records, the federally threatened giant garter snake (*Thamnophis gigas*; GGS) was added to the project's list.

The one CNDDDB-recorded GGS occurrence within the vicinity of the flashboard locations was reported April 28, 1976 by G. Hansen, and is located within a 5-mile radius of both Hwy 33 Weir and San Juan Backup Weir (CNDDDB 2011).

Ongoing maintenance of the canal systems for flood control and agricultural purposes has eliminated and/or prevents the establishment of habitat characteristics required by snakes (Hansen 1988) (refer to Images 1 and 2).



Image 1. The San Juan Backup Weir to be Retrofitted to a Long-Crested Weir.

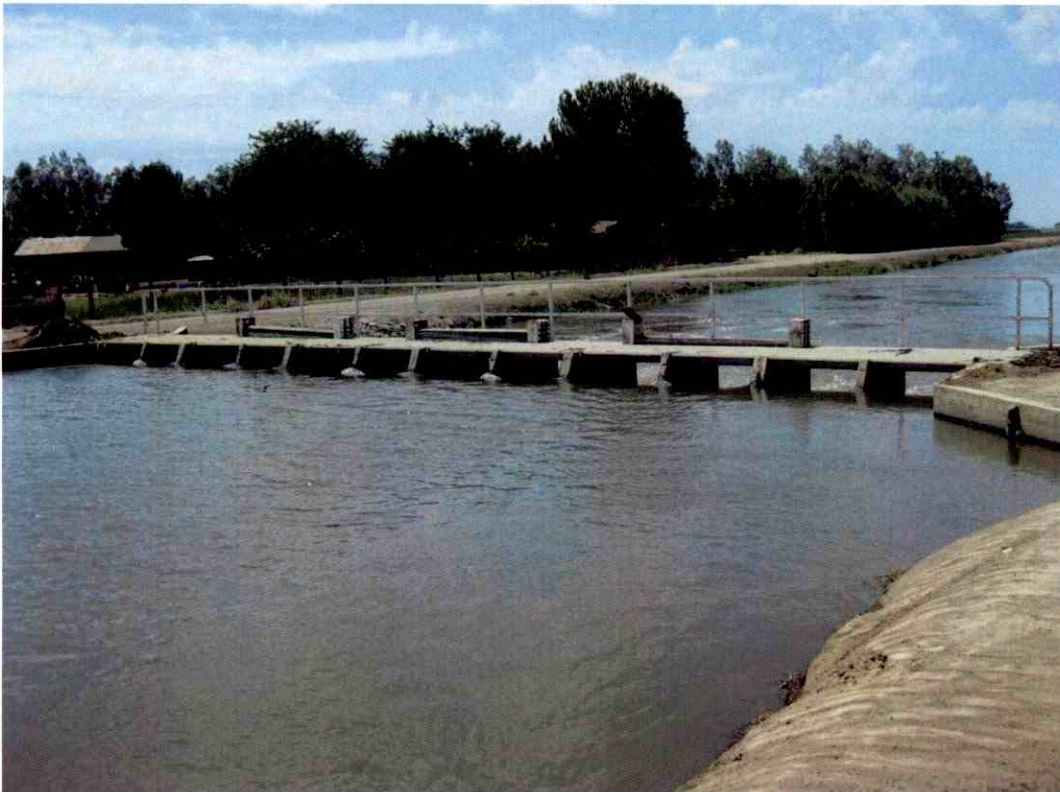


Image 2. Hw 33 Weir to be Retrofitted to a Long-Crested Weir.

Environmental Protection Measures

HMRD will implement the following Environmental Protection Measures to avoid listed species effects associated with the Proposed Action. Reclamation's listed species determination is based on the full implantation of the following measures:

- A pre-construction/pre-activity survey shall be conducted by qualified biologist(s) for giant garter snake 24-hours prior to commencement of any ground disturbing activities. Project site development may not begin until the results have been submitted to Reclamation.
- Survey of the project area should be repeated if a lapse in construction activity of two weeks or greater has occurred. If a snake is encountered during construction, activities shall cease and Reclamation biologists shall be contacted immediately. Report any sightings and any incidental take to the USFWS immediately by telephone at (916) 414-6600 and to Reclamation biologists at (559) 487-5116.

If no GGS or evidence of occupancy is found, no further measures are necessary. Should evidence of a GGS be found, appropriate consultation with USFWS shall be followed.

Conclusion

With the implantation of the above restrictions, Reclamation has determined there would be No Effect to listed species, under the Endangered Species Act (16 U.S.C. §1531 et. seq.).

References

- CNDDDB (California Natural Diversity Database). 2011. California Department of Fish and Game's Natural Diversity Database, Version 3.1.1. RareFind 3. Last Updated July 2011.
- Hansen, G.E. 1988. Review of the status of the giant garter snake (*Thamnophis couchi gigas*) and its supporting habitat during 1986-1987. Final report for California Department of Fish and Game Contract C-2060. Unpublished Report. 31 pp.

Healer, Rain L

From: Goodsell, Joanne E
Sent: Wednesday, August 17, 2011 4:12 PM
To: Healer, Rain L
Cc: Looper, Sheryl A (Sheri); Barnes, Amy J; Bruce, Brandee E; Dunay, Amy L; Fogerty, John A; Leigh, Anastasia T; Nickels, Adam M; Overly, Stephen A; Perry, Laureen (Laurie) M; Soule, William E; Williams, Scott A
Subject: WaterSMART Grant: Arroyo Canal Modernization Project (CEC-11-041/11-SCAO-163)
Attachments: 11-SCAO-163.SHPO.consult.pdf; 11-SCAO-163.SHPO.concur.pdf

Tracking No. 11-SCAO-163

Project: 2011 Water and Energy Efficiency WaterSMART Grant for the Henry Miller Reclamation District No. 2131
Arroyo Canal System Modernization Project

CEC-11-041: 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.

Rain:

The Proposed Action to award a WaterSMART grant to the Henry Miller Reclamation District No. 2131 for their Arroyo Canal Modernization Project, which consists of retrofitting four existing flashboard check structures with modern long-crested weirs, was determined to be an undertaking with the potential to cause effects to historic properties, assuming such properties are present. As such, in accordance with 36 CFR Part 800, Reclamation initiated the Section 106 process and entered into consultation with the California State Historic Preservation Officer (SHPO) on a finding of no adverse effect to historic properties, pursuant to 36 CFR Part 800.5(b). This finding was based on an assumption of National Register of Historic Places eligibility for the Arroyo Canal, which was constructed over 100 years ago by the historically significant Miller and Lux Corporation.

A letter report documenting Reclamation's Section 106 historic properties identification efforts and finding of effect for the undertaking was submitted to the SHPO on August 5, 2011 (attached). The SHPO concurred with Reclamation's finding in a letter dated August 15, 2011, and received by Reclamation on August 17, 2011 (attached). Receipt of SHPO concurrence completes the Section process for this undertaking. I am now able to concur with Item 6 on CEC-11-041, dated June 16, 2011. Please retain a copy of this e-mail and attached correspondence for your files. Also note that if project plans or actions change, additional Section 106 consideration, including consultation with the SHPO, may be required.

Sincerely,

Joanne Goodsell, M.A., Archaeologist
Bureau of Reclamation, Mid-Pacific Regional Office
2800 Cottage Way, MP-153
Sacramento, CA 95825
(916) 978-5499 jgoodsell@usbr.gov

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BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED		
AUG 17 2011		
CODE	ACTION	REMARKS
150	✓	
153	Copy	8/18/11

Reply in Reference To: BUR110808B

August 15, 2011

Shane Hunt - Acting Regional Environmental Officer
United States Department of the Interior
Bureau of Reclamation, Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

Re: Section 106 Compliance for the *Arroyo Canal System Modernization Project, Merced and Fresno Counties, California* (Project No. 10-SCAO-163)

Dear Mr. Hunt:

Thank you for consulting pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA). The Bureau of Reclamation (BUR) is seeking my comments on the above noted Undertaking concerning (1) the delineation of the Area of Potential Effect (APE), (2) resource identification efforts, and (3) a finding of "No Adverse Effect" pursuant to 36 CFR Part 800.5(b).

The BUR is providing a WaterSMART grant to Henry Miller Reclamation District #2131 (HMRD #2131) to upgrade water control infrastructure on the 22-mile long Arroyo Canal (AC) in Merced and Fresno counties. The upgrades involve constructing one "long-crested weir" on each of the four following water control check structures:

- Check Structure 1 - Temple Santa Rita Backup Weir
- Check Structure 2 - Upstream Indiana Road
- Check Structure 3 - San Juan Backup
- Check Structure 4 - Hwy 33

As depicted in the submitted letter report and design schematic, construction of the new weirs entails excavating one 4-foot (ft) deep by 175 to 200-ft long foundation trench in the upstream portion of the canal floor at each of the above listed control check structures. The foundation trenches will taper in width from 10-ft at the base of the structures to 4-ft at their upstream termini. When completed, each new weir will resemble an elongated box with a concrete floor and walls extending 4-ft above the canal floor.

SCANNED

Your letter report describes the APE as consisting only of the four water check structure locations plus an arbitrary 30.0-meter radius. Project access and staging were excluded from the APE as these activities will utilize existing roads. Resource identification work involved a Southern San Joaquin Valley Information Center (SSJVIC) search and consultation with the Tachi Yokut Tribe. Field-survey was deemed unnecessary due to proposed construction work being confined to the interior prism of the canal and the four individual water check structures. Resource identification efforts indicated five previous cultural resource investigations and two cultural resource sites had been documented within a 0.25 of a mile of the APE. The sites consist of one circa "1976" bridge (#39C-270) and an unspecified segment of the AC located upstream of Check Structure 4. Based on information obtained from HMRD #2131, the four water check structures date to the mid-1990s and, as such, are not historic properties or contributing resources to the 100-year old AC.

Classification	ENV-3.00
Project	214
Control No.	11004377
Folder I.D.	1147982
Date Input & Initials	8/17/2011 AD

After reviewing your submitted report and attachments, I have the following comments:

1. Pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d), the APE description is inconsistent with Federal regulations as it does not include the area extent of the historic Arroyo Canal or any other water system(s) to which it may be associated. Please be advised that whenever a Federal undertaking is implemented within the boundary of a historic property, the APE cannot singularly focus on the construction footprint and must always encompass the area extent of all historic properties it physically connects as well as those to which it is a contributing resource.
2. Pursuant to 36 CFR Part 800.4(b)(1), I find the *Level of Effort* completed for identifying historic properties in support of the current undertaking appropriate but with the singular issue of APE description discussed above.
3. Pursuant to 36 CFR Part 800.5(b), I find the proposed new long-crested weirs will have an effect on the 100-year old Arroyo Canal, however, as the four existing water check structures do not meet the age criteria for historic properties, are not contributing resources to the historic AC, and because the proposed undertaking is consistent with the upkeep and maintenance of a functioning water system; I **concur** with the no adverse effect determination for the current undertaking.
4. Please be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, the BUR may have additional future responsibilities for this undertaking under 36 CFR Part 800.

Thank you for considering historic properties as part of your project planning. Please contact Jeff Brooke of my staff at (916) 445-7003 or jbrooke@parks.ca.gov if you have any questions or concerns regarding this project review.

Sincerely,

Handwritten signature of Susan H. Stratton in cursive script.

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Healer, Rain L

From: Rivera, Patricia L
Sent: Monday, June 27, 2011 5:59 AM
To: Healer, Rain L; Robbins, Eleanor J (Ellie); Williams, Mary D (Diane)
Subject: RE: CEC-11-041 WaterSMART grant for Henry Miller****DIANE NO ACTION OTHER THAN LOG IN --ADMIN

Diane,

Please just log in this request no other action needed - it is admin. thanks

Rain,

I reviewed the proposed action to award a \$434,975 WaterSMART grant to HMRD for their Arroyo Canal Modernization project which includes retrofitting four existing flashboard control structures with modern long-crested weirs.

The proposed action does not have a potential to affect Indian Trust Assets.

Patricia

From: Healer, Rain L
Sent: Friday, June 24, 2011 2:48 PM
To: Rivera, Patricia L; Robbins, Eleanor J (Ellie); Williams, Mary D (Diane)
Cc: Looper, Sheryl A (Sheri)
Subject: CEC-11-041 WaterSMART grant for Henry Miller

Patricia,

I have attached the project description for CEC-11-041 *2011 Water and Energy Efficiency WaterSMART Grant for the Henry Miller Reclamation District No. 2131 Arroyo Canal System Modernization Project* for your review.

Rain L. Healer
Natural Resources Specialist
United States Department of the Interior
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