

RECLAMATION

Managing Water in the West

Categorical Exclusion Checklist

Natomas Central Mutual Water Company's Dodge Crossing Automation Project

NCAO-CEC-12-16

Prepared by:



Date:

11/7/12

Jake Berens
Water Conservation Specialist
Willows Office of the Northern California Area Office

Reviewed by:



Date:

11/7/12

Paul Zedonis
Natural Resources Specialist
Northern California Area Office

Concurrence by:



Date:

11/8/12

Don Reck
Supervisory Natural Resource Specialist
Northern California Area Office

Approved by:



Date:

11/8/12

Brian Person
Area Manager
Northern California Area Office



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

November 2012

Proposed Action

Reclamation proposes to award a WaterSMART grant (#R12SF80049) to fund about 50% of the cost of the Dodge Crossing Automation Project to improve operations for the Natomas Central Mutual Water Company, Sutter & Sacramento Counties, California (Figures 1 and 2).

As part of the Proposed Action, the Natomas Central Mutual Water Company (Company) would automate the Dodge Crossing control structure through removal of two manual slide gates that have historically caused system spills, and installation of a hydraulically-balanced upstream control gate to maintain consistent water levels to minimize system spills. No new electrical service would be needed for the new gate. Other improvements included in the action include installation of SCADA at the Chappell West Pump Station to improve system response time and minimize fluctuations in supply flow downstream of Dodge Crossing.

The location of the Proposed Action is Township 11N, Range 4E, Section 8, coordinates 121°32'40.291"W, 38°48'30.845"N. The Chappell West Pump Station is located just to the east in Township 11N, Range 4E, Section 9 (or 121°32'35.342"W, 38°48'30.783"N).

Dodge Crossing

A small SCADA RTU would be installed at Dodge Crossing with a solar power supply and radio to communicate with the full SCADA station at the Chappell West Pump Station. Water level sensors will be installed upstream and downstream of the gate to record system performance for refining the upstream level setting. The head differential across the gate would be used to estimate the flow being released through the gate.

Chappell West

A full SCADA station would be installed at the Chappell West Pump Station. In addition to water level sensors in the sump and discharge canal, flow meters would be installed on each pump discharge pipe. There would be sufficient length of pipe to install MACE full penetration doppler flow meters, which are a cost effective alternative to magnetic meters. This Chappell West Pump Station SCADA station would communicate directly with the Barnes Crossing SCADA station, relaying total flow through the pump station. When a change in flow is relayed to Barnes Crossing, the automated slide gates would adjust to match the demand at Dodge Crossing.

The following scope of the work would be executed to complete the Dodge Crossing Automation Project:

Task 2 - Final Design

This task includes all work to confirm the size of the upstream level control gate; complete the design of the concrete structure to house the level control gate; specify the SCADA RTU, water level sensor and flow meter equipment; and determine the RTU control logic

for programming. This work will be performed by Parsons Brinckerhoff with input from Company staff, equipment vendors and controls/SCADA programmers.

Task 3 -Construction and Equipment Installation at Dodge Crossing

This task includes all site preparation and construction of the concrete structure and installation of the level control gate at Dodge Crossing. The level control gate may be procured by the Company for installation by the contractor if the lead time requires pre-purchase. The Company will solicit bids from local contractors and select the contractor with the most competitive qualified bid. This work will begin in January/February 2013, depending on weather conditions, to be completed by March 31, 2013.

Task 4 - Controls and Programming

This task includes all work to install the SCADA stations at Dodge Crossing and Chappell West Pump Station. At each SCADA station, Tesco Controls (TESCO), the Company's system integrator, will install the RTU, radio antenna, water level sensors and flow meters. Company staff will construct any infrastructure required, including foundation pads, conduit runs and stilling basins. Concepts in Controls will supply the MACE flow meters and assist with installation, calibration and SCADA integration. TESCO will develop and deploy the control programming for the facility based on the control scheme developed in Task 2. This work is to be coordinated with the construction activities and be completed by March 2013.

Task 5 - Startup Testing

This task includes the anticipated efforts of the contractor, equipment vendors and TESCO to perform startup testing, troubleshooting and final adjustments to the equipment and controls programming. The facility is to be fully operational prior to the beginning of the irrigation season, typically between April 15th and May 1st.

Please attach the proposal to the agreement to ensure all assertions made in the proposal are reflected in the agreement.

Milestone Schedule:

- Dodge Crossing level control gate: Estimated January 2013 through March 2013.
- SCADA Installations at Dodge Crossing and Chappell West: Coordinated with construction and completed by March 2013. Startup Testing: Between April 15th and May 1st 2013.

Exclusion Categories

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

Extraordinary Circumstances

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

- | | | | | | | |
|---|----|-------------------------------------|-----------|--------------------------|-----|--------------------------|
| 1. This action would have a significant effect on the quality of the human environment (40 CFR 1502.3). | No | ☒ | 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 | ☒ | Uncertain | ☐ | Yes | ☐ |
| 3. This action would have significant impacts on public health or safety (43 CFR 46.215(a)). | No | ☒ | 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 | ☒ | 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 | ☒ | 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 | ☒ | 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 | ☒ | 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; and 43 CFR 46.215 (g)). No ☒ 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 ☒ Uncertain ☐ Yes ☐
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 ☒ Uncertain ☐ Yes ☐
11. This action would affect ITAs (512 DM 2, Policy Memorandum dated December 15, 1993). No ☒ Uncertain ☐ Yes ☐
12. This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898; and 43 CFR 46.215 (j)). No ☒ 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 ☒ 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 ☒ Uncertain ☐ Yes ☐

Regional Archeologist concurred with Item 8 (email attached).

ITA Designee concurred with Item 11 (email attached).

NEPA Action Recommended

☒ CEC – This action is covered by the exclusion category and no extraordinary circumstances exist. The action is excluded from further documentation in an EA or EIS.

☐ Further environmental review is required, and the following document should be prepared.

- ☐ EA
- ☐ EIS

Environmental commitments, explanations, and/or remarks:

This Project includes improvements to the North Main Canal (Canal), which includes removal of two dated manually operated slide gates and construction of a new Level Control gate immediately upstream of the location of the slide gates. These activities would occur during the period of January through March when the Canal is shut down for maintenance, which is also a time recommended by the Natomas Basin Habitat Conservation Plan to conduct canal maintenance activities for the protection of the giant garter snake, the species of greatest concern for the area (US Fish and Wildlife Service and California Department of Fish and Game 2003). Heavy equipment would be used to remove the existing slide gates and to strip and excavate a small section of the canal in support of constructing the concrete sluiceway/wing-walls for the Level Control Gate. All stripping and excavation work conducted to prepare the canal for the new Level Control Gate would be conducted below the normal water level in the Canal to limit and or prevent interactions with possible dormant giant garter snake that use higher elevation habitat during these months. Back fill of excavated materials would be conducted following structure completion. Rip rap 9 to 24" would be placed around the wing-walls that would provide habitat diversity for aquatic species, including the GGS. Other species of concern including the Valley elderberry beetle and Swainson's hawk would not be affected since there are no trees or bushes in the project area.

The SCADA improvements are not believed to have any impact on any resources and therefore are not expected to have adverse effects to any natural resources.

In summary, the Project is expected to have no effect on listed species or any adverse effect on the environment.

References

- U. S Fish and Wildlife Service and California Department of Fish and Game. 2003. Natomas Basin Habitat Conservation Plan. Vol. 1. 428 pp.

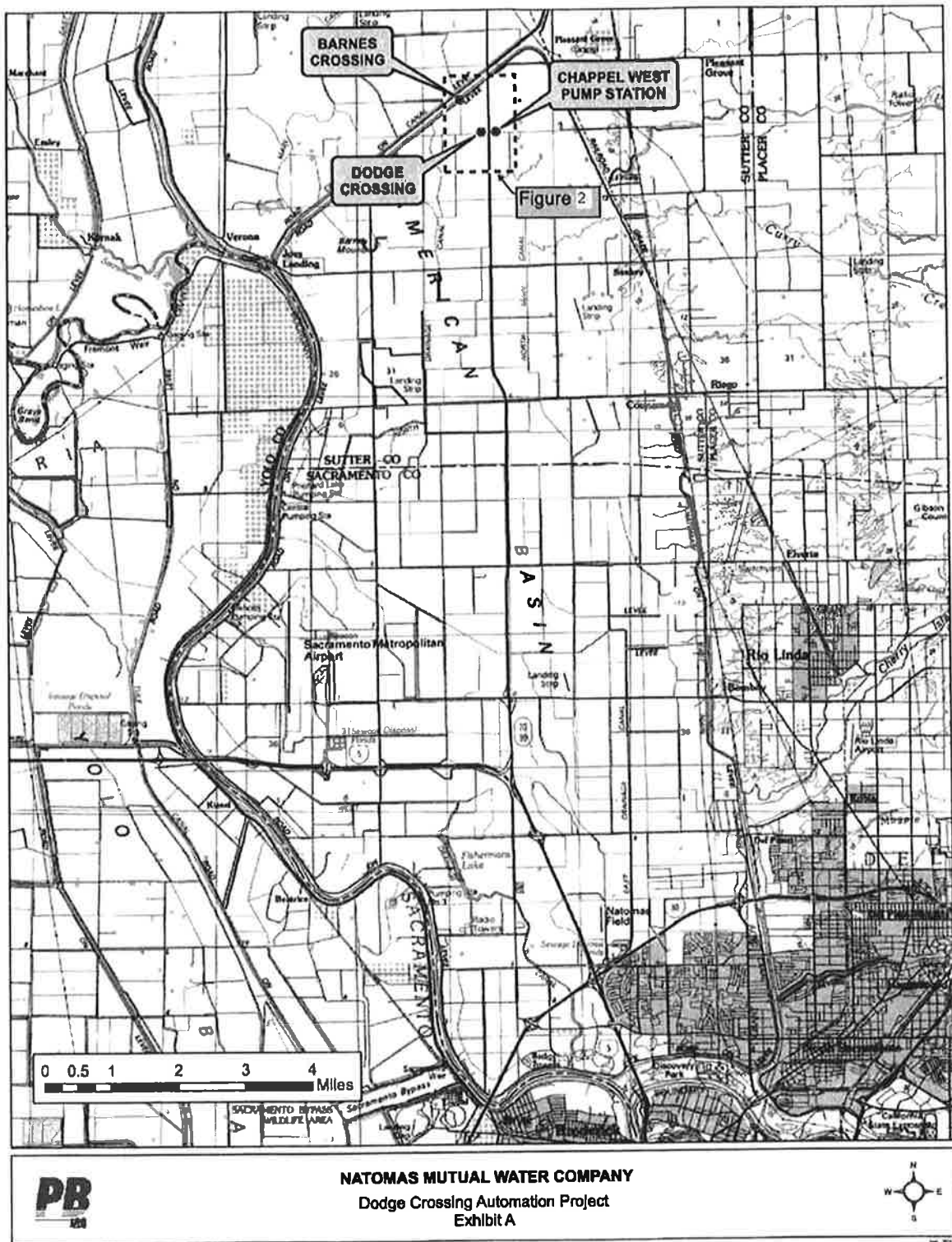


Figure 1. The Natomas Mutual Water Company and location of areas of potential effect for the Dodge Crossing Automation Project.

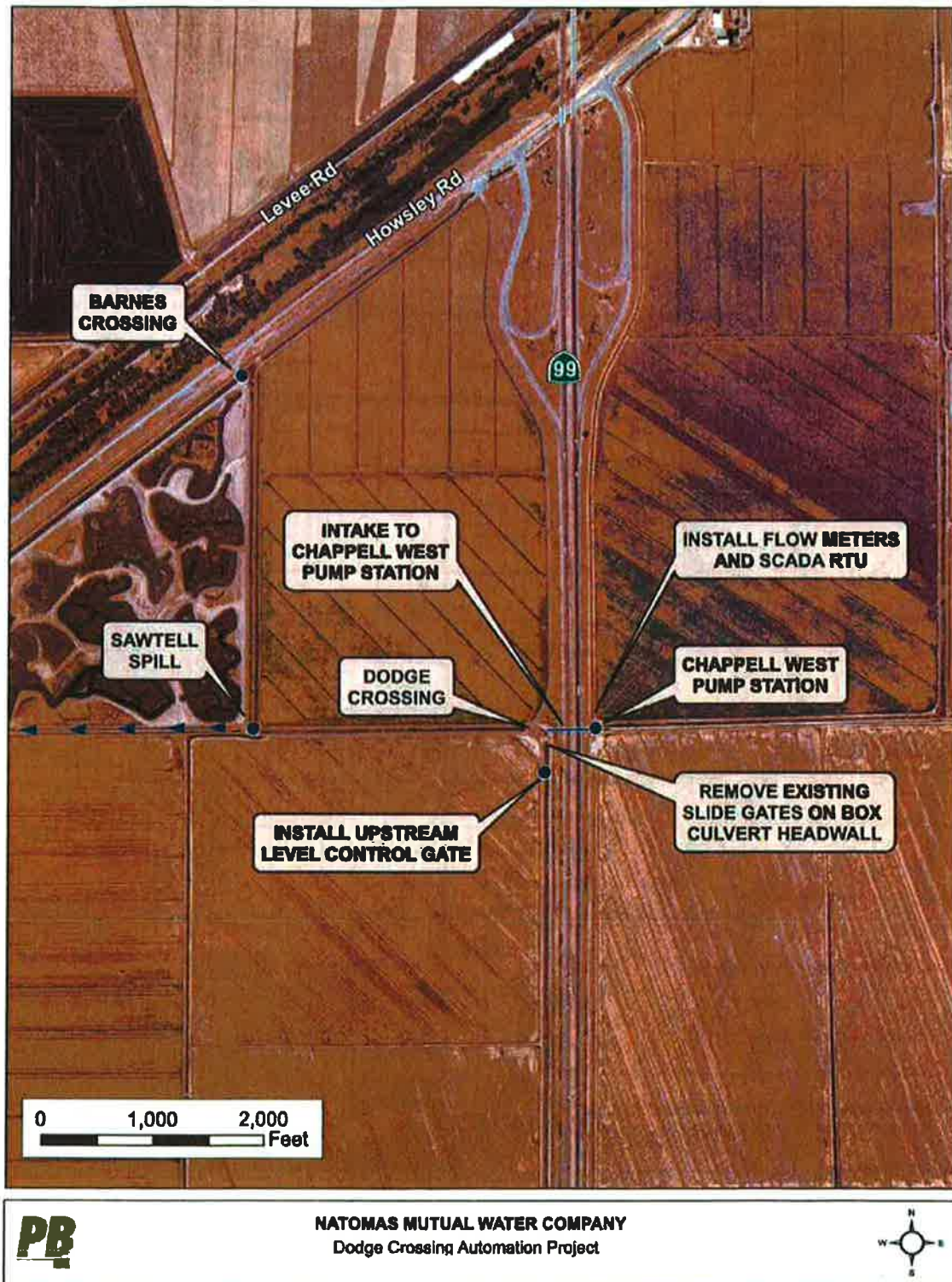


Figure 2. Close-up view of the project area for the Dodge Crossing Automation Project.

Zedonis, Paul A

From: Rivera, Patricia L
Sent: Tuesday, August 14, 2012 10:22 AM
To: Zedonis, Paul A; Williams, Mary D (Diane); Robbins, Eleanor J (Ellie)
Subject: ITA Concurrence Request: Natomas Dodge Crossing 08142012—

Paul,

I reviewed the proposed action to approve the Natomas Central Mutual Water Company's (Company) request to automate the Dodge Crossing control structure through removal of two manual slide gates that have historically caused system spills, and installation of a hydraulically-balanced upstream control gate to maintain consistent water levels to minimize system spills. No new electrical service would be needed for the new gate. Other improvements included in the action include installation of SCADA at the Chappell West Pump Station to improve system response time and minimize fluctuations in supply flow downstream of Dodge Crossing.

The proposed action does not have a potential to affect Indian Trust Assets. The nearest ITA is Auburn Rancheria approximately 12 miles ene of the project location.

Patricia Rivera
Native American Affairs Program Manager
Bureau of Reclamation
Mid-Pacific Region
Sacramento, California 95825
(916) 978-5194 (Office)
(916) 978-5290 (Fax)



From: Soule, William E
To: Berens, Jacob J
Cc: Zedonis, Paul A; BOR MPR Cultural Resources Section
Subject: RE: 12-NCAO-172 Section 106 Conclusion Natomas Central Mutual Water Co. Dodge Crossing Automation Project
Date: Wednesday, November 07, 2012 8:15:49 AM

Jake:

Re: 12-NCAO-172 Section 106 Conclusion Natomas Central Mutual Water Co. Dodge Crossing Automation Project.

Reclamation's proposed undertaking of providing funding, through the WaterSmart grant program (Grant #12SF80049), to the Natomas Central Water Company to construct the Dodge Crossing Automation Project was determined to be the type of action that could cause effects to historic properties pursuant to 36 CFR Part 800.3. Accordingly, Reclamation initiated Section 106 compliance pursuant to 36 CFR § 800. Reclamation's compliance efforts consisted of a records search completed with the Northeast Center of the California Historical Resources Information System (August 13, 2012); a review of Reclamation's in-house records and reports, a pedestrian cultural resources survey completed by a Reclamation archaeologist on July 02, 2012; and Native American consultation completed pursuant to 36 CFR §§ 800.3(f)(2), 800.4(a)(3) and 800.4(a)(4).

In a letter dated September 21, 2012, Reclamation initiated consultation with the California State Historic Preservation Officer (SHPO), inviting the SHPO's comments regarding our delineation of an area of potential effects (APE) and the appropriateness of our efforts to identify and evaluate historic properties in that APE. Reclamation also requested the SHPO's concurrence on our finding of no adverse effect, made pursuant to 36 CFR § 800.5(b). Reclamation's records show that the SHPO received our letter on September 24, 2012. The SHPO has not responded with either comments or objections within the 30 day time limit as prescribed in 36 CFR § 800.3(c)(4).

As a result, Reclamation has fulfilled its Section 106 responsibilities for this undertaking. Accordingly, I concur with item 8 in Categorical Exemption Checklist NCAO-CEC-12-16. We will continue to seek the SHPO's concurrence on our finding of effect and in the event that the SHPO re-enters consultation, Reclamation shall attempt to resolve any objections while this undertaking is allowed to proceed. This email is intended to convey the conclusion of the Section 106 process for this undertaking. Please retain a copy of this email in the administrative record for this NEPA action. Thank you for providing the opportunity to comment. Be aware that additional cultural resource review, including further consultation with the SHPO, may be necessary pursuant to 36 CFR § 800.13 if unanticipated effects to historic properties are found or if historic properties are discovered during project implementation.

Sincerely,

Bill

William E. Soule, M.A., Archaeologist
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