

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Additional Points of Delivery for Panoche Water District's Non- Project Groundwater to Westlands Water District

EA-16-009



U.S. Department of the Interior
Bureau of Reclamation

May 2016

Mission Statements

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact (FONSI) and Draft Environmental Assessment (EA) between May 4, 2016 and May 10, 2016. No comments were received. Changes between this Final EA and the Draft EA, which are not minor editorial changes, are indicated by vertical lines in the left margin of this document.

1.1 Background

In 2012, the San Luis & Delta-Mendota Water Authority (SLDMWA), on behalf of eight of its member agencies, requested approval from Reclamation to pump groundwater into the Delta-Mendota Canal (DMC) for storage and conveyance to South-of-Delta (SOD) Central Valley Project (CVP) contractors over a 10-year period (referred to as the DMC Groundwater Pump-in Program). Reclamation analyzed the 10-year Groundwater Pump-in Program in Environmental Assessment (EA)-12-061 (Reclamation 2013). Based on specific environmental commitments included in the DMC Groundwater Pump-in Program, including water quality requirements, Reclamation determined that the cumulative introduction, storage, and conveyance of up to 50,000 acre-feet (AF) per year of groundwater would not significantly affect the quality of the human environment and a FONSI was issued on January 10, 2013.

On May 1, 2013, Reclamation executed a temporary 5-year Warren Act contract (Contract No. 13-WC-20-4386) with Panoche Water District (Panoche) for the annual introduction and storage of up to 10,000 AF of its groundwater into the DMC as part of the DMC Groundwater Pump-in Program. Points of delivery for this groundwater include Panoche's existing turnouts on the DMC and San Luis Canal (SLC). As described in EA-12-061, storage and delivery via the SLC is done by exchanging with Reclamation introduced groundwater for an equivalent amount of CVP water. In 2014, Panoche requested approval from Reclamation to include additional points of delivery for up to 5,000 AF of its pumped groundwater to Westlands Water District's (Westlands) turnouts along the SLC through February 28, 2015 (Figure 1). The additional points of delivery were analyzed in EA-14-022 and a FONSI was issued on July 9, 2014 (Reclamation 2014). As these assessments expired on February 28, 2015, Panoche has requested additional approval to continue to deliver up to 5,000 AF per year of their pumped groundwater to Westlands through the remaining term of their Contract (February 28, 2018).

1.2 Need for the Proposed Action

The State of California is currently experiencing unprecedented water management challenges due to severe drought in recent years. SOD CVP contractors experienced reduced water supply allocations from 2007 to 2013 due to hydrologic conditions and regulatory requirements. Based on recent hydrologic conditions, Reclamation declared a 0 percent allocation for SOD CVP contractors for the 2014 and 2015 Contract Year and an initial 5 percent allocation for the 2016

Contract Year. As a result, SOD CVP contractors, such as Westlands, have a need to find alternative sources of water to fulfill demands.

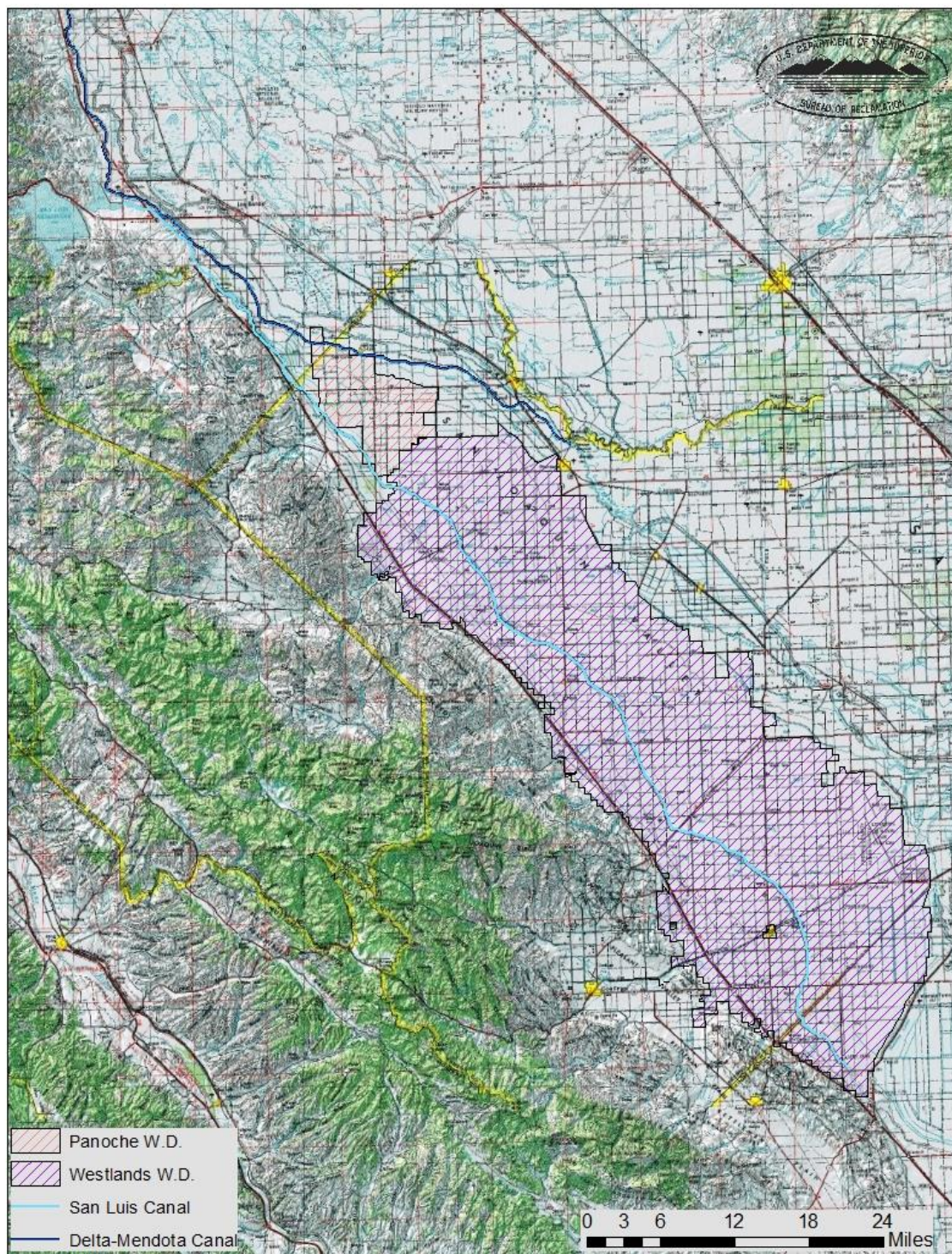


Figure 1 Proposed Action Area

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve additional points of delivery for Panoche's non-Project groundwater introduced under its existing 5-year Warren Act contract. Panoche's groundwater would continue to be introduced, stored, and/or conveyed to Panoche's previously approved points of delivery as analyzed in EA-12-061. Westlands would not receive this additional source of water.

2.2 Proposed Action

Reclamation proposes to approve additional points of delivery for up to 5,000 AF of Panoche's non-Project groundwater introduced into the DMC as part of the DMC Groundwater Pump-in Program through February 28, 2018. The 5,000 AF is included in the up to 10,000 AF provided for under Panoche's existing 5-year Warren Act contract which is included in the cumulative total (50,000 AF per year) allowed under the DMC Groundwater Pump-in Program. The additional points of delivery would include existing turnouts along the SLC for Westlands. As shown in Figure 2, storage in San Luis Reservoir and delivery via the SLC is done by exchanging Panoche's introduced non-Project groundwater with Reclamation for an equivalent amount of CVP water.

2.2.1 Environmental Commitments

As required by Panoche's Warren Act contract and analyzed in EA-12-061, Panoche shall continue to implement the environmental commitments required for the DMC Groundwater Pump-in Program. In addition, Westlands would implement the environmental protection measures listed in Table 1 to reduce potential environmental consequences due to the Proposed Action. Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Biological Resources	No native or untilled land (fallow for three consecutive years or more) may be cultivated with this water without additional environmental analysis and approval.
	The Proposed Action cannot alter the flow regime of natural waterways or natural watercourses such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to have a detrimental effect on fish or wildlife or their habitats.
	The Proposed Action shall not change the land use patterns of the cultivated or fallowed fields that do have some value to listed species or birds protected by the Migratory Bird Treaty Act (MBTA).
Various Resources	Use of the water shall comply with all federal, state, local, and tribal law, and requirements

Resource	Protection Measure
	imposed for protection of the environment and Indian Trust Assets.
	No land conversions may occur as a result of the Proposed Action.
	No new construction or modification of existing facilities may occur in order to complete the Proposed Action.

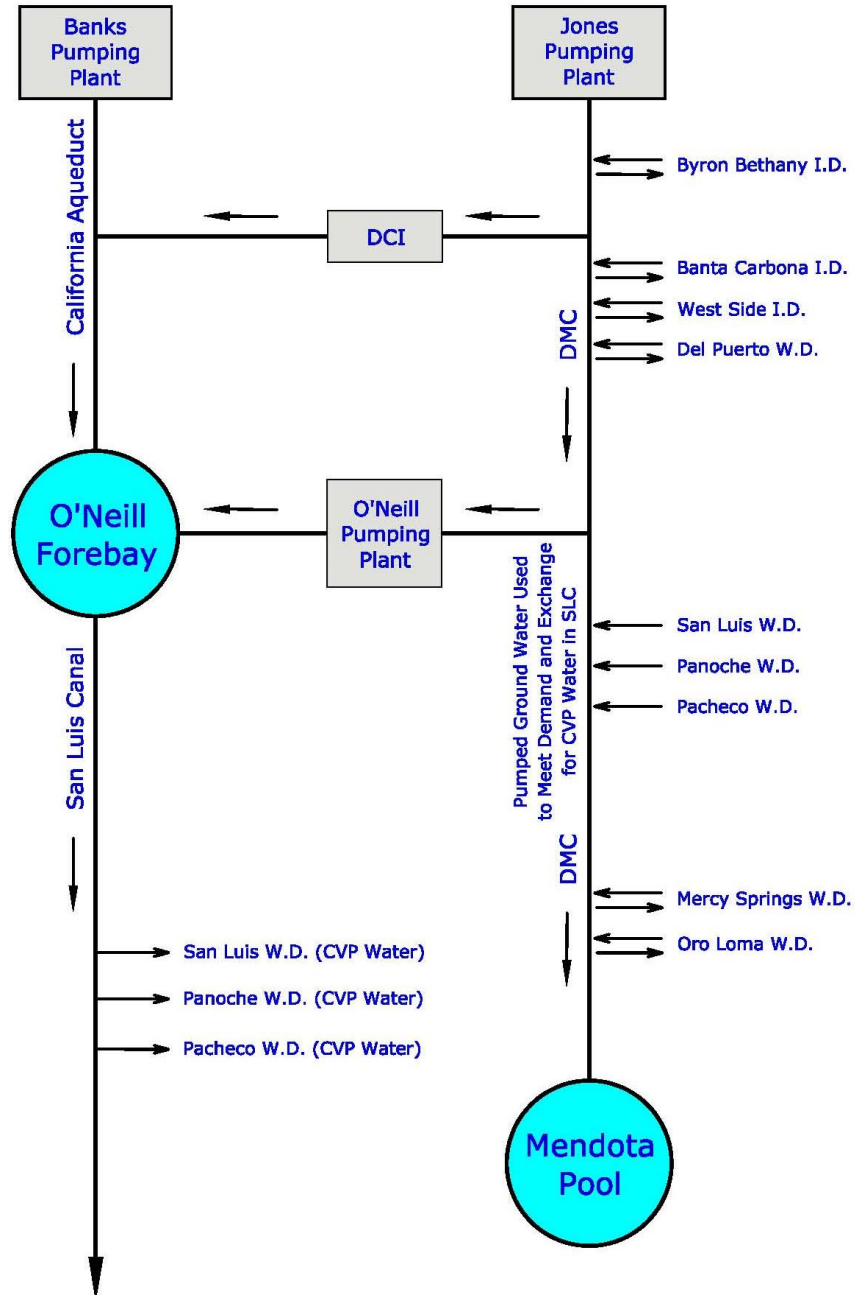


Figure 2 Groundwater Pump-in Program Schematic

Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 Resources Eliminated from Further Analysis

The only difference between the Proposed Action analyzed in this EA and the action analyzed in EA-12-061 and EA-14-022 is the delivery of up to 5,000 AF of Panoche's non-Project groundwater to Westlands from its existing turnouts on the SLC through the term of Panoche's existing Warren Act contract (February 28, 2018). The environmental impacts analyzed within Section 3 of EA-12-061 and EA-14-022 are still valid and adequately assesses the environmental effects from this Proposed Action, which are hereby incorporated by reference. Potential impacts to the following resources were re-considered as a result of this proposal and were still found to be minor. Brief explanations of impacts are provided in Table 2.

Table 2 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Air Quality	The pumping of wells for the DMC Groundwater Pump-in Program was previously analyzed in EA-12-061 which found emissions of all of the proposed pumps to be well below the <i>de minimis</i> thresholds for the San Joaquin Valley Air Pollution Control District. No additional pumping would occur as a result of the Proposed Action, as such, there would be no additional impacts beyond those previously covered and a conformity analysis pursuant to the Clean Air Act is not required.
Cultural Resources	The Proposed Action would facilitate the flow of water through existing facilities to existing users. As no construction or modification of facilities would be needed in order to complete the Proposed Action, Reclamation has determined that these activities have no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). See Appendix A for Reclamation's determination.
Environmental Justice	The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease nor would it disproportionately impact economically disadvantaged or minority populations.
Geology	All of Panoche's wells are included in the subsidence monitoring program required for the DMC Groundwater Pump-in Program. As these have previously been covered and no additional pumping would be needed for this action, no additional effects would occur as a result of the Proposed Action.
Global Climate and Energy Use	The pumping of wells for the DMC Groundwater Pump-in Program was previously analyzed in EA-12-061 which found emissions of all of the proposed pumps to be well below the <i>de minimis</i> thresholds for the Environmental Protection Agency. No additional pumping would occur as a result of the Proposed Action, as such, there would be no additional impacts beyond those previously covered. Global climate change is expected to have some effect on the snow pack of the Sierra Nevada and the runoff regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility.
Indian Sacred Sites	The Proposed Action would not limit access to or ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites.

Resource	Reason Eliminated
Indian Trust Assets	The Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area.
Land Use	The additional points of delivery of up to 5,000 AF of Panoche's non-Project groundwater would be used to irrigate existing permanent crops in Westlands. The water would not be used to place untilled or new lands into production, or to convert undeveloped land to other uses. There would be no change in land use as a result of the Proposed Action.
Socioeconomics	The Proposed Action would have beneficial impacts on socioeconomic resources for Westlands as the additional groundwater would be used to help sustain existing crops and maintain farming within the district.

3.2 Biological Resources

3.2.1 Affected Environment

The affected environment is the same as described in Section 3.4 of EA-12-061 (Reclamation 2013) and Section 3.2 in EA-14-022 (Reclamation 2014). Rather than repeating the same information that has been incorporated by reference into this document, the affected environment and environmental consequences section in this EA will focus on updates or changes.

Reclamation requested an updated species list for the Proposed Action footprint from the U.S. Fish and Wildlife Service (USFWS) via the USFWS' website, <http://ecos.fws.gov/ipac>, on April 13, 2016 (Consultation Code: 08ESMF00-2016-SLI-1248). The California Department of Fish and Wildlife's California Natural Diversity Database (CNDDDB) was also queried for records of protected species near the Proposed Action area (CNDDDB 2016). In addition to the federally listed species, western burrowing owl (*Athene cunicularia hypugaea*) and Swainson's hawk (*Buteo swainsoni*), both protected by the federal Migratory Bird Treaty Act (MBTA), may be present. This information was compared with Reclamation's findings from EA-12-061 and EA-14-022 and the species listed and habitat conditions have remained the same as those previously analyzed.

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve additional points of delivery for Panoche's non-Project groundwater to Westlands under its existing 5-year Warren Act contract and Westlands may be unable to sustain permanent crops within their service area. Lands located within Westlands may become fallow, but the short contract period of 5 years would not likely cause substantial land use changes. The condition of biological resources under the No Action Alternative would remain the same as current conditions. As a result, the No Action alternative would not result in adverse effects on fish, vegetation, or wildlife resources located in the Action area.

Proposed Action

The flow regime of natural waterways or natural watercourses such as rivers, streams, creeks, ponds, pools, wetlands, etc., would not be altered as a result of the Proposed Action. In addition, the Proposed Action would not involve the conversion of any land fallowed and untilled for three or more years. As such, Reclamation has determined there would be no effect to proposed or listed species or critical habitat under the Endangered Species Act of 1973, as amended (16

U.S.C. §1531 et seq.). Therefore, no consultation with the USFWS or NMFS is necessary. Reclamation has also determined that there would be no take of birds protected under the MBTA (16 U.S.C. §703 et seq.) as none would be affected by the Proposed Action.

Cumulative Impacts

As the Proposed Action is not expected to result in any direct or indirect impacts to biological resources, there would be no cumulative impacts.

3.3 Water Resources

3.3.1 Affected Environment

The affected environment is the same as described in Section 3.1 of EA-12-061 (Reclamation 2013) and Section 3.1 of EA-14-022 (Reclamation 2014). Rather than repeating the same information that has been incorporated by reference into this document, the affected environment and environmental consequences section in this EA will focus on updates or changes.

SOD CVP agricultural allocations averaged 29 percent from 2007 to 2016 (Table 3). Over the last five years the average allocation was 13 percent with a range of 0 to 40 percent. Due to operational constraints and fluctuating hydrologic conditions, water allocations in the future are likely to be similar to those shown in Table 3.

Table 3 Ten Year Average SOD Agricultural Allocation

Contract Year	Agricultural Allocations (%)¹
2016 ²	5
2015	0
2014	0
2013	20
2012	40
2011	80
2010	45
2009	10
2008	40
2007	50
Average	29

¹As percentage of Water Service Contract total
²Initial 2016 allocation.
Source: http://www.usbr.gov/mp/cvo/vungvari/water_allocations_historical.pdf

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve the additional points of delivery of up to 5,000 AF of Panoche's non-Project groundwater water to Westlands via the SLC. Panoche's non-Project groundwater would continue to be pumped into the DMC for direct conveyance to Panoche and/or later return to Panoche's service area via exchange with Reclamation pursuant to the existing Warren Act Contract previously analyzed in EA-12-061. Any additional water supply needs within Westlands would need to be met from other sources, such as purchasing surface water supplies or from additional groundwater pumping.

Proposed Action

Under the Proposed Action, Panoche would continue to introduce up to 10,000 AF of groundwater into the DMC pursuant to its existing Warren Act contract. Up to 5,000 AF of this groundwater would be delivered to Westlands via existing turnouts along the SLC. No additional groundwater pumping would occur in order to provide this water to Westlands beyond what was previously approved and analyzed in EA-12-061 and EA-14-022.

Cumulative Impacts

Cumulative impacts result from incremental impacts of the Proposed Action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Reclamation has reviewed existing or foreseeable projects in the same geographic area that could affect or could be affected by the Proposed Action. As in the past, hydrological conditions and other factors are likely to result in fluctuating water supplies which drive requests for water service actions. Water districts provide water to their customers based on available water supplies and timing, while attempting to minimize costs. Farmers irrigate and grow crops based on these conditions and factors, and a myriad of water service actions are approved and executed each year to facilitate water needs. It is likely that in 2016, more districts will request transfers and Warren Act contracts due to hydrologic conditions. Each water service transaction involving Reclamation undergoes environmental review prior to approval.

The Proposed Action and other similar projects would not hinder the normal operations of the CVP and Reclamation's obligation to deliver water to its contractors or to local fish and wildlife habitat. Since the Proposed Action would not involve construction or modification of facilities, nor interfere with CVP or State Water Project operations, there would be no cumulative impacts to existing facilities or other contractors.

Capacity in the DMC and SLC is limited, and if many water actions were scheduled to take place concurrently they could cumulatively compete for space. However, non-Project water would only be allowed to enter the DMC and SLC if excess capacity is available. As such, the Proposed Action would not limit the ability of other users to make use of the facilities.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA during a 7-day public review period. No comments were received.

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Section 5 Preparers and Reviewers

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Jennifer L. Lewis, Wildlife Biologist, SCCAO

Scott Williams, Archaeologist, MP-153

Joy Kelley, Repayment Specialist, SCCAO – reviewer

David E. Hyatt, Resources Management Division Chief, SCCAO – reviewer

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Section 6 References

Bureau of Reclamation (Reclamation). 2014. *Additional Points of Delivery for Panoche Water District's Non-Project Groundwater to Westlands Water District* (Final FONSI/EA-14-022). South-Central California Area Office. Fresno, CA. Website:
http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=11470.

Bureau of Reclamation (Reclamation). 2013. *Exchange Agreements and/or Warren Act Contracts for Conveyance of Groundwater in the Delta-Mendota Canal – Contract Years 2013 through 2023 (March 1, 2013 – February 29, 2024)* (Final FONSI/EA-12-061). South-Central California Area Office. Fresno, CA. Website:
http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=11470.

California Natural Diversity Database (CNDDDB). 2016. California Department of Fish and Wildlife's Natural Diversity Database, Government Version. Last Updated April 2016.

Appendix A

Cultural Resources Determination

CULTURAL RESOURCES COMPLIANCE
Division of Environmental Affairs
Cultural Resources Branch (MP-153)

MP-153 Tracking Number: 16-SCAO-111

Project Name: Additional Points of Delivery for Panoche Water District's Non-Project Groundwater to Westlands Water District

NEPA Document: EA-16-009

NEPA Contact: Rain Emmerson, Natural Resource Specialist

MP 153 Cultural Resources Reviewer: Scott Williams, Archaeologist 

Date: April 15, 2016

Reclamation proposes to approve additional points of delivery for Panoche's non-Central Valley Project (CVP) groundwater introduced into the Delta-Mendota Canal (DMC) as part of the DMC Groundwater Pump-in Program through February 28, 2018. This is the type of undertaking that does not have the potential to cause effects to historic properties, should such properties be present, pursuant to the NHPA Section 106 regulations codified at 36 CFR § 800.3(a)(1). Reclamation has no further obligations under NHPA Section 106, pursuant to 36 CFR § 800.3(a)(1).

Reclamation proposes to approve additional points of delivery for up to 5,000 AF of Panoche's non-Project groundwater introduced into the DMC as part of the DMC Groundwater Pump-in Program through February 28, 2018. The 5,000 AF is included in the up to 10,000 AF provided for under Panoche's existing 5-year Warren Act contract which is included in the cumulative total (50,000 AF per year) allowed under the DMC Groundwater Pump-in Program. The additional points of delivery would include existing turnouts along the SLC for Westlands. Water storage in San Luis Reservoir and delivery via the SLC is done by exchanging Panoche's introduced non-Project groundwater with Reclamation for an equivalent amount of CVP water. No new construction or modification of existing facilities may occur in order to complete the Proposed Action.

This document 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.