

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Lindmore Irrigation District 93.2E Plant Modernization

FONSI-18-059



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

May 2019

Mission Statements

The mission of the Department of the Interior is to conserve and manage the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provide scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honor the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

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.

BUREAU OF RECLAMATION
South-Central California Area Office, Fresno, California

FONSI-18-059

**Lindmore Irrigation District 93.2E Plant
Modernization**

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Introduction

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Bureau of Reclamation (Reclamation) prepared this Finding of No Significant Impact (FONSI) which is supported by Reclamation's attached Environmental Assessment (EA)-18-059, *Lindmore Irrigation District 93.2E Plant Modernization*, hereby incorporated by reference.

Background

The Lindmore Irrigation District has asked for \$75,000.00 in funding through the WaterSMART Small-scale Water Efficiency Project Grant Program in order to modernize the existing 93.2E Pumping Plant. This modernization would improve the efficiency of the Plant by tying delivery flow quantities more precisely to grower demand through the addition of supervisory control and data acquisition (SCADA), as well as soft starts and variable flow devices on the pumps.

Alternatives Considered

No Action

Under the No Action Alternative, Reclamation would not award the District with WaterSMART Small-scale Water Efficiency Project Grant funding of \$75,000.00. Although it is possible that the District may find alternative sources of funding for the project, for the purposes of the analysis in the EA, the consequences of Reclamation not providing funding for the 93.2E Plant Modernization Project would result in no retrofit of pump meters, no water savings of 350 acre-feet per year, and no electricity savings on pump operations.

Proposed Action

Reclamation's Proposed Action is to award the District with \$75,000 through a WaterSMART Small-scale Water Efficiency Project Grant, which would cover just over one third of the \$197,000 needed for the District's proposed Plant Modernization Project.

The District proposes to install Variable Flow Devices on pumps #1 and #5 and soft starts on pumps 2, 3, 4, 6, 7, and 8, as well as a SCADA program to manage the Plant. With this project completed, the operator could remotely manage the two main pumps to meet water supply demands and deliver closer to the demands, thus reducing deliveries into the reservoir and reducing losses to evaporation.

A secondary efficiency benefit of the Proposed Action is to reduce the amperage demand and associated power company charges from pump operations. The soft starts will eliminate the substantial amperage demand from an immediate "ON" action by taking a soft start or "ramp up" approach to pump starts. The slower start of the pump eliminates the amperage demand

charges and consumption of electricity and the District will be able to manage its pumping to what is needed instead of what is required due to pump size.

Comments on the EA

Reclamation provided the public with an opportunity to comment on EA-18-059 between 04/01/2019 and 04/30/2019. No comments were received.

Findings

In accordance with NEPA, Reclamation has determined that the approval of the Proposed Action is not a major federal action that will significantly affect the quality of the human environment; consequently, an environmental impact statement is not required.

The following reasons are why the impacts from the proposed action are not significant:

- The proposed action will not significantly affect public health or safety (40 CFR 1508.27(b)(2)).
- The proposed action will not significantly affect natural resources and unique geographical characteristics such as proximity to 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 (Executive Order (EO) 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (40 CFR 1508.27(b)(3)).
- There is no potential for the effects to be considered highly controversial (40 CFR 1508.27(b)(4)).
- The proposed action will not have possible effects on the human environment that are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)).
- The proposed action will neither establish a precedent for future actions with significant effects nor represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)).
- The proposed action will not have cumulatively significant impacts (40 CFR 1508.27(b)(7)).
- The proposed action will not significantly affect historic properties (40 CFR 1508.27(b)(8)).
- The proposed action will not significantly affect listed or proposed threatened or endangered species, or its habitat that has been determined to be critical under the Endangered Species Act of 1973 (40 CFR 1508.27(b)(9)).

- The proposed action will not threaten a violation of Federal, State, tribal or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)).
- The proposed action will not affect any Indian Trust Assets (512 DM 2, Policy Memorandum dated December 15, 1993).
- Implementing the proposed action will not disproportionately affect minorities or low-income populations and communities (EO 12898).
- The proposed action will not limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 13007 and 512 DM 3).

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Lindmore Irrigation District 93.2E Plant Modernization

EA-18-059



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

May 2019

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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 April 01, 2019 and April 30, 2019. No comments were received during this period. Changes between this Final EA and the Draft EA which are not editorial and minor in nature are indicated by a line in the left margin of this document.

1.1 Background

In conformance with the National Environmental Policy Act of 1969, Council on Environmental Quality regulations (40 CFR 1500-1508), and Department of Interior regulations (43 CFR Part 46), the Reclamation prepared this EA to disclose potential environmental effects associated with granting a WaterSMART Small-scale Water Efficiency Project Grant to the Lindmore Irrigation District (District) for its 93.2E Plant Modernization Project.

The District is located at the base of the western foothills of the Sierra Nevada, on the east side of the San Joaquin Valley (Figure 1). The District extends from two miles north of the City of Lindsay, to nine miles south of the City of Lindsay which is approximately 1.5 miles south of the City of Strathmore. The 93.2 East Pump Site Plant (Plant) is located next to the Friant-Kern Canal (Figure 2). The numeric designation 93.2 indicates the approximate distance of the Line turnout from the Friant-Kern Canal headworks at Friant Dam in western Fresno County.

The District's Plant was installed in 1952. Its controls, due to design and quality, are of that vintage and are fully operational. However, the District would like to improve the efficiency of that Plant by tying delivery flow quantities more precisely to grower demand. The Plant delivers CVP water by pumping it out of pit wells located next to the FKC. There are two delivery lines that deliver water to the east side of the District and each have four pumps (a total of eight pumps). These pumps extract water out of the pit wells. The operator turns on the pumps (between one to four on each line) to deliver water to meet grower demand. However, because the strict "on or off" control of the pumps and their delivery of either "all on" or "all off" modes, water supply must always exceed demand because meeting demand is the priority. As a result, the excess supply must be delivered into mitigating reservoirs. There are two overflow cement lined reservoirs that take this excess supply. This supply remains in the reservoir unless there is demand by an adjacent grower (approximately every other week or more during irrigation season). District staff can pump water out of the reservoirs to an adjacent grower to meet irrigation needs. If it is not pumped to these growers, it sits in the reservoirs and is exposed to evaporation. During the Plant operation period, area temperatures are typically above 80 degrees Fahrenheit and can reach as high as 110 degrees Fahrenheit or more. The District estimates the annual combined losses due to evaporation in the two reservoirs to be 350 acre feet. The District determined that if it can control the supply closer to the demand, moving water into the reservoirs will be limited to just the amount needed to meet the adjacent grower needs.

The District is proposing to add supervisory control and data acquisition (SCADA) to its Plant, as well as soft starts and variable flow devices on the pumps.

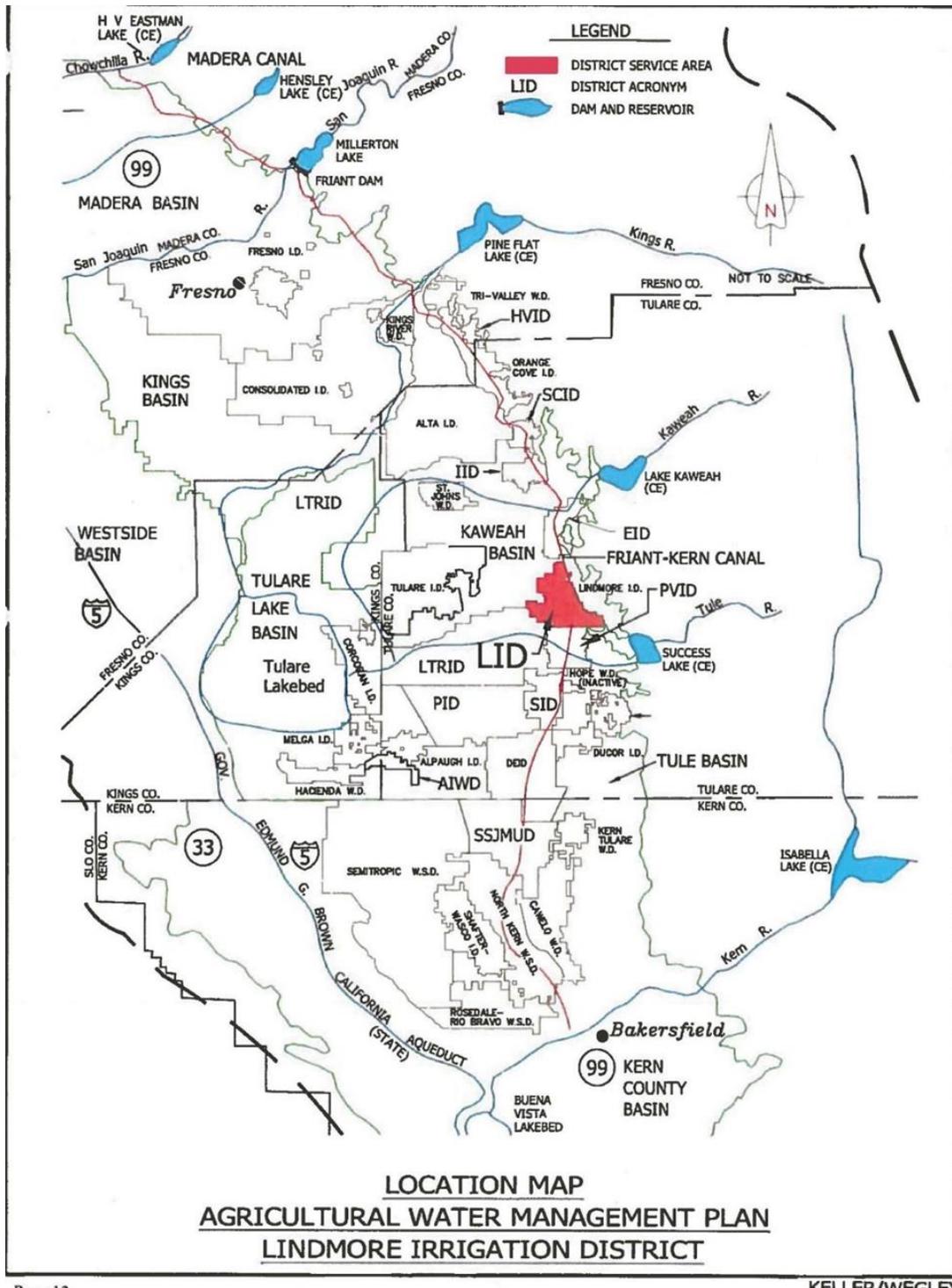


Figure 1 Vicinity of the Proposed Action Area



Figure 2 Aerial Photo of Project Area

1.2 Need for the Proposed Action

Through Small-Scale Water Efficiency Projects, Reclamation provides assistance to states, tribes, irrigation districts, water districts, and other entities with water or power delivery authority to undertake specific small-scale water efficiency projects that have been prioritized through planning efforts led by the applicant.

The primary need for the Proposed Action is to improve water delivery efficiency, decrease water losses, and reduce energy demands at the Plant. The District estimates the total water conservation from the Proposed Action to be 350 acre-feet per year.

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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 award the District with WaterSMART Small-scale Water Efficiency Project Grant funding of \$75,000.00. Although it is possible that the District may find alternative sources of funding for the project, for the purposes of this EA, the consequences of Reclamation not providing funding for the Proposed Action would result in no retrofit of pump meters, no water savings of 350 acre-feet per year, and no electricity savings on pump operations.

2.2 Proposed Action

Reclamation's Proposed Action is to award the District with \$75,000 through a WaterSMART Small-scale Water Efficiency Project Grant, which would cover just over one third of the \$197,000 needed for the District's proposed Plant Modernization Project.

The District proposes to install Variable Flow Devices on pumps #1 and #5 and soft starts on pumps 2, 3, 4, 6, 7, and 8, as well as a SCADA program to manage the Plant. With this project completed, the operator could remotely manage the two main pumps to meet water supply demands and deliver closer to the demands, thus reducing deliveries into the reservoir and reducing losses to evaporation.

A secondary efficiency benefit of the Proposed Action is to reduce the amperage demand and associated power company charges from pump operations. The soft starts will eliminate the substantial amperage demand from an immediate "ON" action by taking a soft start or "ramp up" approach to pump starts. The slower start of the pump eliminates the amperage demand charges and consumption of electricity and the District will be able to manage its pumping to what is needed instead of what is required due to pump size.

2.2.1 Environmental Commitments

Lindmore Irrigation District shall implement the following environmental protection measure:

- In order to avoid impacts to nesting migratory birds, all construction activities associated with the Proposed Action will take place outside of nesting season (generally February 1 through September 15) or when a qualified biologist determines that there is no nesting within or around the Proposed Action Area.

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

Section 3 Affected Environment and Environmental Consequences

3.1 Required Resource Disclosures

Department of the Interior Regulations, Executive Orders, and Reclamation guidelines require a discussion of Indian sacred sites, Indian Trust Assets, and Environmental Justice when preparing environmental documentation. Impacts to these resources were considered and found to be absent. Brief explanations for their elimination from further consideration are provided below:

3.1.1 Indian Trust Assets

Indian trust assets are legal interests in assets that are held in trust by the United States Government for federally recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the United States on behalf of federally recognized Indian tribes. “Assets” are anything owned that holds monetary value. “Legal interests” means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. Indian Trust Assets cannot be sold, leased or otherwise alienated without United States’ approval. Trust assets may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Indian reservations, Rancherias, and Public Domain Allotments are common Indian Trust Assets in California. There would be no impact to Indian Trust Assets as there are none in the Action Area. The nearest Indian Trust Asset is the Tule River approximately 13.45 miles from the Action Area.

3.1.2 Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as “any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site.”

Executive Order 13007 requires Federal land managing agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites.

The Proposed Action would not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or affect the physical integrity of such sacred sites. There would be no impacts to Indian sacred sites as a result of the Proposed Action.

3.1.3 Environmental Justice

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects

of its program, policies, and activities on minority populations and low-income populations. No significant changes in agricultural communities or practices would result from the Proposed Action.

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.

3.2 No Action Alternative

Under the No Action Alternative, Reclamation would not award the District with a WaterSMART Small-scale Water Efficiency Project Grant of \$75,000. The District would continue to provide CVP water supplies to its users as it does currently. Although it is possible that the District may find alternative sources of funding for the project, for the purposes of this EA, the consequences of Reclamation not providing funding for the Proposed Action would result in no retrofit of pump meters, no water savings of up to 350 acre-feet per year, and no electricity savings on pump operations.

3.3 Proposed Action

3.3.1 Air Quality

There would be no direct, indirect, or cumulative impacts to air quality as a result of implementing the Proposed Action as the Proposed Action would only facilitate the retrofit of new equipment onto existing mechanical meters. No new construction or ground disturbing activities would occur as part of the Proposed Action. In fact, the Proposed Action will have beneficial effects as it is intended to reduce the amount of power needed to operate the pumps. Also, because there will be no construction or ground disturbance, no emissions or dust generation would affect air quality.

3.3.2 Biological Resources

The Proposed Action would only facilitate the retrofit of new equipment onto existing mechanical meters and no new construction or ground disturbing activities would occur as part of the Proposed Action. However, there is a possibility of nesting migratory birds on the existing structures that will be retrofit.

Based upon the fact that there will be no new construction or ground disturbance, and with implementation of this avoidance measure, 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.), No Adverse Effects under the Magnuson-Stevens Act (16 U.S.C. §1801 et seq.), and No Take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et seq.).

3.3.3 Cultural Resources

There would be no direct, indirect, or cumulative impacts to cultural resources as a result of implementing the Proposed Action as the Proposed Action would facilitate the retrofit of new

equipment onto existing mechanical meters. No new construction or ground disturbing activities would occur as part of 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.

3.3.4 Global Climate Change

While pumping would be necessary to deliver CVP water, the Proposed Action will have beneficial effects as it is intended to reduce the amount of power needed to operate the pumps. In addition, the generating power plant that produces electricity for the electric pumps operates under permits that are regulated for greenhouse gas emissions. As such, there would be no direct, indirect, or cumulative impacts to global climate change as a result of the Proposed Action.

3.3.5 Water Resources

The Proposed Action would result in beneficial effects to water resources. Because of the current pump operations, excess water supplies must be delivered into mitigating reservoirs. The District estimates that the loss of water in these reservoirs due to evaporation is approximately 350 acre feet. The proposed improvements will make the delivery of water much more precise, eliminating the need for the mitigating reservoirs.

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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 between October 19, 2018 and November 6, 2018. No comments were received.

4.2 List of Agencies and Persons Consulted

Reclamation is coordinating with the Lindmore Irrigation District regarding the Proposed Action.

Appendix A: Reclamation's Cultural Resource Determination

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

MP-153 Tracking Number: 19-SCAO-037.001

Project Name: Lindmore Irrigation District 93.2E Plant Modernization (SWEP Grant)

NEPA Document: EA-18-059

NEPA Contact: Kathleen Linder, Natural Resource Specialist

MP 153 Cultural Resources Reviewer: Scott Williams, Archaeologist *sw*

Date: March 6, 2019

Reclamation has proposed to provide WaterSMART Small-scale Water Efficiency Project (SWEP) Grant funding of \$75,000.00 for the Lindmore Irrigation District's (District) Plant Modernization Project implementation. 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 Title 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA) 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).

The grant award will assist in modernizing and automating the Plant's motor controls. The Plant is located next to the Friant-Kern Canal (designated as the 93.2 East Pump Site). The District plans on installing a Variable Flow Device (VFD) on each of pumps #1 and #5 and soft starts on pumps 2, 3, 4, 6, 7, and 8, as well as a Supervisory Control and Data Acquisition (SCADA) program to manage the Plant. Proposed Action would facilitate the retrofit of new equipment onto existing mechanical meters. No new construction or ground disturbing activities would occur as part of the Proposed Action.

This document is intended to convey the completion of the NHPA Section 106 process for this undertaking. This action would not 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)). 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.