



— BUREAU OF —  
RECLAMATION

# **2022 Temporary Change in Nitrate Water Quality Requirements for Groundwater Introduced into the Delta-Mendota Canal**

**CGB-FONSI-2022-030**

**Finding of No Significant Impact**

## **Mission Statements**

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors 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.

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

**CGB-FONSI-2022-030**

**2022 Temporary Change in Nitrate Water Quality  
Requirements for Groundwater Introduced into  
the Delta-Mendota Canal**

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Concurred by: Rain L. Emerson  
Environmental Compliance Branch Chief

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Concurred by: Shauna A. McDonald  
Wildlife Biologist

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**For** Approved by: Michael P. Jackson, P.E.  
Area Manager

# 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) CGB-EA-2022-030, *2022 Temporary Change in Nitrate Water Quality Requirements for Groundwater Introduced into the Delta-Mendota Canal*, hereby incorporated by reference.

## Background

Since 1995, eight San Luis & Delta-Mendota Water Authority (Authority) member agencies<sup>1</sup> located along the Delta-Mendota Canal (DMC) have implemented a project referred to as the DMC Groundwater Pump-in Program. The DMC Pump-in Program involves the annual cumulative introduction of up to 50,000 acre-feet (AF) of groundwater into the DMC as long as specific criteria are met (e.g., water quality requirements and monitoring). The DMC Pump-in Program has been analyzed in various EAs the most recent of which was in 2018 (Reclamation 2018). In 2018, due to drought and increased trends in subsidence near the DMC (Farr et al. 2017, Sneed et al. 2013), Reclamation revised the DMC Pump-in Program to include additional design constraints to address groundwater level impacts and subsidence. All wells that participate in the DMC Pump-in Program are required to meet Reclamation's then-current water quality requirements (Reclamation 2018).

Due to current drought conditions, three of the member agencies (Del Puerto Water District, Panoche Water District, and San Luis Water District) have requested a temporary change in certain water quality requirements for the DMC Pump-in Program that would allow additional wells to be used to provide supplemental water supplies to meet existing agricultural demands.

On February 23, 2022<sup>2</sup>, due to a third year of drought, Reclamation declared a 0 percent allocation for south of Delta Central Valley Project (CVP) agricultural contractors. As a result, Del Puerto Water District, Panoche Water District, and San Luis Water District (the Districts) have a need to find alternative sources of water to fulfill demands. The purpose of the Proposed Action is to temporarily allow wells that are not meeting Reclamation's current water quality criteria for nitrates to participate in the Program to provide supplemental water supplies during this contract year (through February 28, 2023).

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<sup>1</sup> The member agencies that participate in the DMC Groundwater Pump-in Program include the following: Banta Carbona Irrigation District, Byron-Bethany Irrigation District, Del Puerto Water District, Mercy Springs Water District, Panoche Water District, Pacheco Water District, San Luis Water District, and West Stanislaus Irrigation District.

<sup>2</sup> [Reclamation outlines initial 2022 water allocations for Central Valley Project contractors \(usbr.gov\)](https://www.usbr.gov/central-valley-project/contractors/initial-2022-water-allocations)

# Alternatives Considered

## No Action Alternative

Under the No Action Alternative, Reclamation would not temporarily change water quality requirements for nitrates through February 28, 2023. Only wells that meet the water quality requirements specifically described in Reclamation's water quality monitoring plan (Reclamation 2018) would be allowed to pump groundwater into the DMC as previously approved under the existing DMC Groundwater Pump-in Program.

## Proposed Action

Reclamation proposes to temporarily change water quality requirements for nitrates through February 28, 2023. The Proposed Action is subject to the following conditions:

- Nitrates (as NO<sub>3</sub>) at the well head cannot exceed 75 mg/L. Nitrates (as NO<sub>3</sub>) in the DMC measured downstream of Check 13 and Mile Post 100.70 (downstream of Panoche Water District's last introduction point) may not exceed 20 mg/L.
- Only wells that have current (2021 or more recent) water quality data can participate.

Weekly sampling for nitrates will be performed by the Districts. Each weekly collection will consist of one sample from each location (Check 13 and Mile Post 100.70), plus one duplicate sample (total of four samples per week). All samples would be collected in bottles and delivered to the South-Central California Area Office by 5pm on Thursday. The Districts will pay for all water sampling conducted for this variance. Each sample will be tested for nitrates (as NO<sub>3</sub>) with a minimum detection level of 1 microgram per liter (µg/L). If the concentration of nitrates exceeds the parameters listed above, Reclamation will direct the Authority to notify the applicable Districts to incrementally direct the well operators with the highest levels to stop pumping into the DMC until thresholds are met.

In addition to the conditions described above and the criteria included in Reclamation's then-current water quality requirements for the DMC Pump-in Program (Reclamation 2018), the Authority and participating member agencies shall continue to implement the following environmental commitments as required for the DMC Groundwater Pump-in Program:

- Each district would be required to confirm that the proposed pumping of groundwater would be compatible with local ordinances. Each district would be limited to pumping a quantity below the "safe yield" as established in applicable ordinances or their groundwater management plan, in order to prevent groundwater overdraft and avoid adverse impacts.
- No groundwater pumping would occur in Management Areas 2 and 3 since these areas are subject to inelastic subsidence.
- All districts participating in the DMC Groundwater Pump-in Program must annually provide the depth to groundwater in every well prior to start of pumping.

- Though most of the wells are privately owned, the Districts must provide access to each well for Reclamation and Authority staff, as and when required for verification of sampling and data collection.
- All compliance monitoring data collected by the Districts would be entered into worksheets and presented each week to Reclamation and the Authority via e-mail. Reclamation would review the data to identify potential changes in the local aquifer that could lead to overdraft or subsidence.
- Groundwater measurements have been collected by the Authority since May 1995. Annually, the current depth to groundwater in each well would be compared to the measured depths. If the current depth exceeds the maximum measured depth, Reclamation would recommend that the District stop pumping from that well until the depth of water recovers to an agreed depth, such as the median observed depth.
- The water shall be used for beneficial purposes and in accordance with Federal Reclamation law and guidelines, as applicable.
- Use of the water shall comply with all federal, state, local, and tribal law, and requirements imposed for protection of the environment and Indian Trust Assets.
- The water shall be used within the permitted place of use.
- No land conversions may occur and no construction or other ground disturbing activity may occur as part of the Proposed Action.
- No native or untilled land (fallow for three years or more) may be cultivated with the water involved with these actions. Most of the water would be used to sustain existing permanent crops (orchards, vineyards).

## Comments on the EA

Reclamation provided the public with an opportunity to comment on the Draft EA between July 15, 2022 and July 25, 2022. No comments were received.

## Findings

With the implementation of the environmental commitments listed in Section 2.2 of the EA, Reclamation has determined that there would be “no effect” to proposed or listed species or designated critical habitat under the Endangered Species Act of 1973, as amended (16 U.S.C. §1531 et seq.) and no take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et seq.).

Reclamation has determined that the Proposed Action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1).

In accordance with NEPA, Reclamation considered potential short-term and long-term effects of the Proposed Action, both beneficial and adverse. Following are the reasons why the impacts of the

Proposed Action are not significant, with respect to the affected environment and degree of effects of the action (40 CFR 1501.3(b)).

1. The Proposed Action will not significantly affect public health or safety (40 CFR 1501.3(b)(2)(iii)).
2. The Proposed Action will not violate federal, state, tribal, or local law protecting the environment (40 CFR 1501.3(b)(2)(iv)).
3. The Proposed Action will not affect any Indian Trust Assets (512 DM 2, Policy Memorandum – July 2, 1993).
4. Implementing the Proposed Action will not disproportionately affect minorities or low-income populations and communities (EO 12898 – February 11, 1994).
5. The Proposed Action will not 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 – May 24, 1996 and 512 DM 3 – June 5, 1998).