

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2015-0041**

ALLOCATE UP TO \$359,100 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO
THE CITY OF DELANO (CITY) FOR A PILOT FIXED-BED BIOREACTOR WELLHEAD
TREATMENT SYSTEM FOR NITRATE AT PARADISE COLONY (PROJECT)

WHEREAS:

1. The City is requesting \$359,100 from the CAA to fund pilot testing of a biological treatment system using a fixed-bed bioreactor (FXB) to better understand the suitability of this technology for small drinking water systems, especially those located in rural disadvantaged communities, with groundwater that exceeds the Maximum Contaminant Level (MCL) for nitrate of 45 mg/L (measured as NO₃);
2. Paradise Colony is a small unincorporated community in Tulare County located near the City of Lindsay. This community consists of five houses and is home to approximately 12 residents. The five connections are served by an existing water supply well which has an average nitrate concentration of approximately 70 mg/L of nitrate;
3. The State Water Resources Control Board (State Water Board) is currently co-funding a project with the Department of Water Resources (DWR) to pilot-test the FXB technology at the City's Well No. 35. The Project will test a smaller water system, which tends to operate intermittently. Simulation of intermittent operation has been conducted as part of the Well No. 35 demonstration;
4. The Project will produce a report with a summary of capital and operations and maintenance costs, as well as an evaluation of the feasibility of using the FXB for other small, rural communities;
5. An advantage that biological nitrate treatment has over other traditional forms of nitrate drinking water treatment technologies (e.g., ion exchange, and reverse osmosis) is that it does not produce a significant brine/concentrate waste discharge requiring disposal;
6. Many small disadvantaged communities in the Tulare Lake Basin rely on drinking water supplies from groundwater that have been contaminated by nitrate exceeding the MCL;
7. The State Water Board and the Central Valley Regional Water Quality Control Board support the evaluation of innovative drinking water treatment technologies that are simple, reliable, economical and minimize required operational oversight, especially for small rural communities; and
8. The requested allocation is consistent with the purposes of Water Code (WC) section 13442. WC section 13442 provides that the State Water Board may approve the payment of moneys from the CAA to a public agency in order to assist it in cleaning up a waste and abating the effects of a waste on waters of the state.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves up to \$359,100 from the CAA to fund the Project.
2. Makes the funds available until December 31, 2016, with any unexpended funds reverting to the CAA as of January 31, 2017, unless the Deputy Director or Assistant Deputy Director of the Division of Financial Assistance authorizes an extension.

CERTIFICATION


The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Board held June 16, 2015.

AYE: Chair Felicia Marcus
Vice Chair Frances Spivy-Weber
Board Member Tam M. Doduc
Board Member Steven Moore
Board Member Dorene D'Adamo

NAY: None

ABSENT: None

ABSTAIN: None



Jeanine Townsend
Clerk to the Board