

**STATE WATER RESOURCES CONTROL BOARD  
RESOLUTION NO. 2015-0042**

ALLOCATE UP TO \$3,000,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA)  
TO THE WEST VALLEY WATER DISTRICT (DISTRICT) FOR A FIXED-BED BIOREACTOR  
WELLHEAD TREATMENT SYSTEM FOR PERCHLORATE IN THE RIALTO GROUNDWATER  
MANAGEMENT ZONE (PROJECT)

WHEREAS:

1. The District is requesting \$3,000,000 from the CAA to fund the construction and operation of a fixed-bed bioreactor (FXB) demonstration project to clean up perchlorate wastes from contaminated drinking water from the Rialto Groundwater Management Zone over a three-year period;
2. The Rialto Groundwater Management Zone is beneficially used for municipal and domestic supply, in addition to other uses. A significant water quality problem currently exists in the Rialto Groundwater Management Zone, due to volatile organic compounds and perchlorate pollution. The perchlorate pollution has already impacted a number of municipal supply wells that are within the jurisdiction of the District;
3. The State Water Resources Control Board (State Water Board) designated the Rialto area as an environmental justice community;
4. The United States Environmental Protection Agency is addressing the plume of volatile organic compounds and perchlorate in the geographic area defined as Operable Unit 1 (OU1) in the Rialto Groundwater Management Zone, through an Interim Remedy for regional treatment of the plume under the National Contingency Plan;
5. Funding from the State Water Board, California Department of Public Health, Department of Defense, in combination with other grants, has been utilized for the construction and operation of the combined wellhead treatment system for two of the impacted wells (Rialto No. 6 and WVWD No. 11). The treatment system utilizes a fluidized bed bioreactor (FBR) for biological treatment of perchlorate and nitrate;
6. The Rialto FBR wellhead treatment system has been in operation since 2013 and, when permitted, will help meet local drinking water supply needs with local groundwater sources;
7. Recently, the Department of Defense's Environmental Security Technology Certification Program developed and pilot-tested an FXB system. The results from the pilot studies of the FXB system indicate that the FXB system may be even more efficient than the FBR system for treating perchlorate;
8. Currently there are no full-scale FXB systems in operation for treating drinking water. The Department of Defense has awarded a \$3.4 million contract to Carollo Engineers to construct and operate a FXB system parallel to the FBR system. This would be the first full-scale FXB treatment system, and it would provide critical data to compare and evaluate the two systems for perchlorate treatment;

9. The Department of Defense contract would only pay for the FXB and would not cover the cost of permitting, design, construction, installation and source water. The District is requesting a grant of \$3.0 million from the CAA to cover the cost of permitting, design, construction, installation and source water for the FXB system;
10. The information obtained during the operation and monitoring of the FBR and FXB will provide a performance record that could be utilized to facilitate the use of similar technologies throughout California and the United States;
11. The District has indicated that the proposed FXB construction project is shovel-ready, and could be in operation parallel to the existing FBR system in 2018; and
12. 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 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 \$3,000,000 from the CAA to fund the Project.
2. Makes the funds available until September 30, 2018, with any unexpended funds reverting to the CAA as of December 31, 2018, 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 on 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

  
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 Jeanine Townsend  
 Clerk to the Board