

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2015-0001**

ALLOCATE \$2,000,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA)
TO THE UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA) FOR THE
DISTRIBUTED SMART WATER TREATMENT (DSWT) SYSTEM FOR
DISADVANTAGED COMMUNITIES PILOT STUDY (PROJECT)

WHEREAS:

1. UCLA is requesting \$2,000,000 from the CAA to conduct a pilot study using DSWT systems at up to four disadvantaged communities for a period of approximately three years;
2. These disadvantaged communities will be located in the Monterey/Salinas area and/or the Central Valley and will have drinking water systems that have been impacted by nitrate at concentrations above the Maximum Contaminant Level (MCL);
3. The overall goals of the Project are to: 1) evaluate whether remotely, but centrally managed, DSWT systems can provide reliable water treatment and deliver high-quality drinking water to disadvantaged communities at affordable operation and maintenance costs; 2) assess the extent to which operational costs can be reduced while increasing reliability through improved treatment process control systems and advanced satellite/remote operation; and 3) find ways to reduce the cost of handling treatment system residuals while addressing concerns associated with residuals;
4. The DSWT systems are self-adjusting ('smart') and use modular membrane-based technology (reverse osmosis) integrated with ultrafiltration, disinfection, and ion-exchange (for the treatment of residuals for disposal). DSWT systems use centralized remote monitoring and operational control and, as necessary, utilize local satellite operators;
5. As part of the Project, UCLA plans to demonstrate reduced operational and maintenance costs due to the ability to remotely monitor and operate the DSWT systems. The Project will also demonstrate the benefits of having these systems self-adjust;
6. The requested funding from the CAA will be used for: 1) site-specific evaluations of water quality; 2) initial system design; 3) close collaboration with permitting agencies to acquire the necessary permits; 4) design and construction of the treatment systems (in a phased approach); 5) operation of up to four treatment systems; 6) monitoring and detailed reporting; and 7) planning and transitioning for long-term governance of continuous system operations;
7. The Project team will work closely with the selected communities and with environmental justice groups to engage the communities. The team will provide education regarding water quality issues and water treatment using DSWT systems, and will provide access to water quality information. The Project team will also work with stakeholders to develop a governance structure for operating a water treatment system that will position the communities for a suitable long-term solution;

8. The UCLA project, if approved, will minimize further drought impacts in the selected communities, with the goal of solving drinking water problems for small remote and disadvantaged communities;
9. UCLA previously received \$99,191 in funding (division-level approval) from the CAA for the evaluation and site selection phase of the Project; and
10. The allocation from the CAA for the Project is consistent with purposes of section 13442 of the Water Code. Section 13442 provides that the State Water Resources Control Board (State Water Board) may order moneys to be paid from the CAA to, among other entities, a public agency with the authority to clean up or abate the effects of a waste in order "to assist it in cleaning up the waste or abating its effects on waters of the state."

THEREFORE BE IT RESOLVED THAT:

The State Water Board:


1. Approves \$2,000,000 from the CAA to fund the Project.
2. Makes the funds available until July 31, 2020, with any unexpended funds reverting to the CAA as of October 31, 2020, 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 January 20, 2015.

AYE: Chair Felicia Marcus
 Board Member Tam M. Doduc
 Board Member Steven Moore
 Board Member Dorene D'Adamo

 NAY: None
 ABSENT: Vice Chair Frances Spivy-Weber
 ABSTAIN: None



 Jeanine Townsend
 Clerk to the Board