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Press Release

FOR IMMEDIATE RELEASE

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The Water Research Foundation Wins DOE Grant to Improve Energy Efficiency and Resource Recovery at Water Resource Recovery Facilities

(Denver, CO) 10/4/21 – Last week, the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy awarded a \$2.2 million project to The Water Research Foundation to lead a critical project, *Crossing the Finish Line: Integration of Data-Driven Process Control for Maximization of Energy and Resource Efficiency in Advanced Water Resource Recovery Facilities*. This project will develop and demonstrate data-driven process controls in full-scale facilities for five promising process technologies that provide a whole-plant approach and offer substantial energy and resource recovery benefits. The five applications that will be investigated are:

- Carbon diversion: High-rate contact stabilization
- Biological nutrient removal: ammonia-based aeration control/ammonia vs. NOx control + mainstream partial denitrification with anammox
- Disinfection with peracetic acid
- Phosphorus recovery: MagPrex[™]
- Holistic biosolids optimization

The research team^{*}, led by WRF, includes HRSD (Hampton Roads Sanitation District - VA), DC Water, Metro Water Recovery (Metro) (CO), U.S. Military Academy West Point, University of Michigan, Northwestern University, Oak Ridge National Laboratory, and Black & Veatch.

The project also includes a Utility Advisory Committee comprised of nine participating utilities: Charlotte Water, City of Boulder, Raleigh Water, Clean Water Services (OR), Delta Diablo (CA), Great Lakes Water Authority (MI), Hillsborough County Public Utilities (FL), Metropolitan Water Reclamation District of Greater Chicago, New York City Department of Environmental Protection.

"We are excited to receive this funding and lead such a distinguished research team," said Peter Grevatt, CEO of The Water Research Foundation. "This unique project will provide water resource recovery facilities with a toolbox of approaches to improve their energy efficiency while protecting public health and the environment." This project is funded as part of DOE's Water Security Grand Challenge (WSGC). The WSGC is a White House initiated, U.S. DOE-led framework to advance transformational technology and innovation to meet the global need for safe, secure, and affordable water.

If you have questions about this project, contact Jeff Moeller, WRF Research Unit Leader, at <u>imoeller@waterrf.org</u>.

*pending contract negotiations

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About The Water Research Foundation

The Water Research Foundation (WRF) is the leading research organization advancing the science of all water to meet the evolving needs of its subscribers and the water sector. WRF is a nonprofit, educational organization that funds, manages, and publishes research on the technology, operation, and management of drinking water, wastewater, reuse, and stormwater systems—all in pursuit of ensuring water quality and improving water services to the public. For more information, visit www.waterrf.org.