Water Environment Federation
the water quality people

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October 26, 2017

The Honorable Thad Cochran
Chairman
Senate Committee on Appropriations
S-128, The Capitol
US Senate
Washington DC, 20510

The Honorable Patrick Leahy
Ranking Member
Senate Committee on Appropriations
S-146A, The Capitol
US Senate
Washington DC, 20510

The Honorable Rodney Frelinghuysen
Chairman
House Committee on Appropriations
H-305, The Capitol
US House of Representatives
Washington, DC 20515

The Honorable Nita Lowey
Ranking Member
House Committee on Appropriations
1016 Longworth H.O.B.
US House of Representatives
Washington, DC 20515

RE: FY18 Federal Funding for Water Research

Dear Chairman Cochran and Ranking Member Leahy/Chairman Frelinghuysen and Ranking Member Lowey;

Funding for water science and technology research is essential to the continued protection of public health and the environment. Population growth, aging infrastructure, increasing urbanization, and extreme events are increasing threats to water quality and demand on water resources. Research can increase our understanding of the potential impacts of these on public health and water quality. It can also lead to: new and improved methods to mitigate health risks and damage to the environment, enhanced resource recovery (nutrients, energy, and water) from wastewater treatment, provision of sufficient water for energy and food, opportunities for U.S. companies in a growing global marketplace, and cost-effective infrastructure repair and replacement.

The current data on water research and technology development needs for the water sector come from a recent survey of utilities that collectively serve >70% of the sewered population of the United States (U.S.). The total budget for these water research and technology development projects is $350 million, of which utilities have committed to contribute $200 million, but the projects are in need of an additional $150 million in funding to advance. Needs were identified in the areas of energy recovery, phosphorus recovery, nutrient recovery, and intelligent water systems.

Survey respondents only estimated municipal wastewater treatment needs, and represent a small sub-section of the >16,500 Water Resource Recovery Facilities (a.k.a. wastewater treatment facilities) in the U.S. The Water Environment Federation (WEF) and other organizations estimate that the $350 million required is at least an order of

magnitude too small to cover the water sector's real technology advancement and commercialization needs. WEF urges Congress and the Administration, through increased funding and programmatic support, to bolster efforts in the water sector to develop innovative technologies and approaches.

Innovation in the water sector is needed to address our nation's current and future challenges. The water sector is currently providing much of the funding for research, development, demonstration and deployment of new and pioneering technologies and approaches to solve persistent and significant water quality challenges; however, federal support is needed to scale up these efforts and to make meaningful positive impacts, including economic gains.

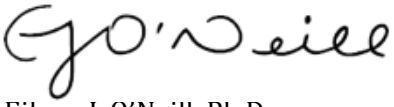
Therefore, WEF and its members are very supportive of federal funding and resources committed to federal water research programs. Specifically, WEF urges support for efforts within:

- US Geological Survey's (USGS) Water Resources Program;
- Bureau of Reclamation's Desalination and Water Purification Program;
- All water science programs within the National Science Foundation;
- Department of Energy's Advanced Manufacturing Office Clean Water Hub, and the Energy Efficiency and Renewable Energy Office's Integrated Biorefinery Program;
- Environmental Protection Agency's (EPA's) National Priorities for Water Research Program, its Science & Technology Program, and its Environmental Programs & Management program.

The data and technologies obtained through these research programs will help address some of the nation's most pressing water quality and supply challenges. For instance, within the EPA's Office of Science and Technology, the Advanced Nutrient Monitoring program is studying new innovative technologies that will measure nutrient pollution in the air and water using satellites, portable and ground remote sensors as well as measurement and model data. These technologies enhance current monitoring activities and also provide cheaper and faster information on nutrients and other pollutants.

On behalf of the Water Environment Federation's 34,000 water professionals across the U.S. and around the globe, I strongly urge an increase or at least level funding in FY18 for these important water research programs. Continued research funding is critical to the quality of life for communities across the US, and the business and economic advantages it gives our nation in the global marketplace. Thank you for your consideration.

Sincerely,



Eileen J. O'Neill, Ph.D.
Executive Director
Water Environment Federation

Cc:
Subcommittees on Interior and Environment Appropriations
Subcommittees on Energy and Water Appropriations
Subcommittees on Commerce, Justice, Science, and Related Agencies Appropriations