

## Overview of U.S. Department of Energy's Water Power Technologies Office R&D to Advance Sustainable Hydropower

*Dana N McCoskey (she/her); Environmental Technologies Manager; United States Department of Energy Water Power Technologies Office*

*Email corresponding author: [dana.mccoskey@ee.doe.gov](mailto:dana.mccoskey@ee.doe.gov)*

**ABSTRACT:** An overview of research and development supported by the U.S. Department of Energy's (DOE) Water Power Technologies Office (WPTO) will be presented focusing on the Hydropower Program's priorities for sustainable hydropower. The WPTO strives to ensure that hydropower's contributions towards meeting U.S. energy needs are consistent with the objectives of environmental stewardship and water use management identified in the 2017 *Hydropower Vision Report*. Information on recent competitive funding awards relevant to sustainable hydropower operations will be shared (e.g., improving fish passage, real-time monitoring, Artificial Intelligence, sensor systems). Additional information on governmental priorities for climate, environmental justice, and renewable energy will be noted. A case study demonstrating how 15 federal agencies are coordinating across diverse mission spaces in a Fish Passage Task Force to improve watershed-scale and community benefits of the record funding made available by the 2020 Bipartisan Infrastructure Law for hydropower environmental improvements, dam removal, and aquatic restoration will be presented.