



## **A cost-disruptive, low impact, modular form factor low-head hydropower system**

\$1.42 million collaborative award with U.S. Department of Energy Water Power Technologies Office, supplemented by \$250k award from MA Department of Energy Resources (DE-EE0007243)

Timetable: February 2015 - January 2019

Principal Investigators: D. Duquette & C. Cox

Summary: The project develops a proof-of-concept design of integrated hydropower plant modules, penstock/turbine modules, spillway modules, leak-proof connections, stabilizers, and seepage controls and tests a full-size prototype of an integrated dam section for structural integrity, leak resistance, and ease of installation. The principal componentry is advanced to TRL 6 through analysis, numerical simulation, computational fluid dynamics, and testing at full scale in a relevant laboratory environment.

Team members:

- LPS
- GZA GeoEnvironmental, Inc.
- Alden Research Laboratory
- AECOM
- UMass-Dartmouth
- National Renewable Energy Laboratory

