

HYDROPOWER CURRICULA ASSESSMENT



PURPOSE

Develop an understanding of existing educational programs and curricula available for hydropower at U.S. postsecondary schools to support workforce growth, attract students to work in this sector, support industry needs, and spur innovation.

Hydropower includes in-conduit, run-of-river dams, run-of-river bypass, non-powered dams, storage and release, and pumped storage.

APPROACH



Contacted **105 individuals representing 66 U.S. schools** engaged in hydropower – including universities and community colleges.



Schools were asked to discuss **current course programming, research, and partnerships.**



Received **28 responses from 26 schools.**

FINDINGS

- 18 schools do not offer degree programs focused on hydropower, 5 offer it as a specialization.
- Only 2 schools have dedicated hydropower courses. 6 schools have no courses relevant to hydropower.
- 19 schools cover hydropower as a topic within other energy courses.
- 13 schools include practical applications of hydropower in their courses. 9 schools partner with power utilities.
- 9 schools want to grow their hydropower programs. 6 schools lack the funding.
- Schools see growing demand from employers for students with hydropower education.
- Students are interested in renewable energy, generating student awareness and interest in hydropower is a challenge.

RECOMMENDATIONS

SURVEY



DEVELOP



Survey students to understand perceptions of the hydropower industry and **information needs to improve awareness and interest as a career.**

Develop a resource hub to raise awareness of students and educators on hydropower through educational materials, access to hydropower professionals, current events, news, research and jobs.



ESTABLISH



ASSESS

Assess hydropower industry job readiness, additional training needs, program improvements at educational institutions, and hiring challenges.

Establish online certificate program for hydropower to **meet growing industry needs** while making **curricula available to all** interested students and educators.