WASHINGTON, Oct. 10, 2018 -- Congress approved significant hydropower reform in a bicameral Water Resources Development Act deal that hits on the future of an unheralded and still largely untapped clean power source.

“This is a major suite of Republican and bipartisan efforts to help clean, reliable hydropower,” ClearPath Action Executive Director Rich Powell said.

The WRDA deal includes a bipartisan bill from Reps. Richard Hudson (R-N.C.) and Diana DeGette (D-Colo.) that would trim federal reviews of small conduit (or energy-recovery) hydropower projects. Sen. Steve Daines (R-Mont.) pushed similar language in the Senate Energy and Natural Resources Committee.

The Promoting Conduit Hydropower Facilities Act (H.R. 2786) aims to aid projects that are typically low environmental impact because they are constructed as part of existing water infrastructure, such as irrigation canals and pipes that deliver water to cities and for industrial and agricultural use.

Hydropower has been an overlooked source of clean baseload power despite it serving as the largest source of U.S. renewable electricity. It is also a flexible source of power that can be quickly adjusted to match real-time changes in power demand.

One of the most promising untapped sources for new hydropower is in small and existing man-made structures. The U.S. has 1.2 million miles of water supply mains and there are thousands of hydro generation opportunities just within these water pipes alone. According to a Department of Energy estimate, the potential for conduit hydropower projects could be more than all the new conventional hydropower projects built in the U.S. over the past decade (1.7GW of conventional vs. up to 2GW of energy-recovery hydropower potential).

Also included in the WRDA package:
1. Important measures previously proposed by Senate Energy and Natural Resources Chairman Lisa Murkowski (R-Alaska) and Rep. Cathy McMorris Rodgers (R-Wash.) that reduce the burdensome licensing and relicensing for non-federal hydropower facilities. The bill takes aim at ending the perverse incentive of delaying environmental improvement projects until the relicensing process. The Federal Energy Regulatory Commission (FERC) is given more discretion to provide developers more time during the pre-construction permitting process. The bill also clears the way for a two-year licensing process for closed-loop pumped storage projects.

2. The Promoting Hydropower Development at Existing Nonpowered Dams Act from Rep. Larry Bucshon (R-Ind.) and Sen. Rob Portman (R-Ohio), which would establish a streamlined environmental review process for qualifying non-powered dam projects. The Department of Energy estimates the U.S. non-powered dam power generation potential is equivalent to roughly two dozen large coal power plants.

3. The Promoting Closed-Loop Pumped Storage Hydropower Act (H.R. 2880) led by Rep. Morgan Griffith (R-Va.) would streamline the federal licensing process stymying the development of pumped storage hydropower facilities that make up the vast majority of U.S. electricity storage technologies. “Despite the recent cost-declines in batteries, they are no substitutes for the long-duration energy storage services pumped storage facilities can provide,” Powell said.

As increasing levels of intermittent renewable energy are connected to the grid, more energy storage will be needed. A 2016 Department of Energy report found the economic potential for pumped hydropower to exceed 35 GW. Tapping this potential by 2050 is unlikely to occur without regulatory reforms: a single pumped storage hydropower project can exceed $1 billion and take several years to permit. Streamlining the regulatory process would improve investor certainty and encourage more market-driven investments.

About ClearPath Action

Founded by businessman Jay Faison, ClearPath Action’s mission is to accelerate conservative clean energy solutions. To advance the mission, ClearPath Action develops cutting-edge policy and messaging and works with policymakers and industry. Follow us on Twitter: @JayFaison1, @powellrich, @ClearPathAction