Hydropower is a critical multipurpose resource that serves as an integral part of the nation’s renewable energy portfolio. These projects generate clean, carbon-free electricity, and ensure the reliability of the grid by providing fast ramping support for more intermittent renewable resources such as solar and wind. According to the National Hydropower Association (NHA), the United States is the third-largest producer of hydropower in the world, with an installed capacity of almost 103,000 MW. However, the effects of climate change have led to an increased frequency of extreme weather events including floods, droughts, and wildfires, causing accelerated sediment runoff and buildup within hydroelectric reservoirs. Accelerated sediment buildup can degrade water quality, accelerate the wear and tear of turbines, substantially reduce the storage pool, and reduce overall power output. The removal and relocation of sediment build-up from hydropower reservoirs leads to substantially increased costs that are ultimately passed on to electric consumers—making this a pressing financial issue, as well as environmental and operational concern.

A large portion of the cost associated with the removal of sediment from these projects relates to the permitting, transport, and relocation of the materials. Many of our nation’s hydropower facilities are located on or adjacent to federal lands where much of the debris originates. However, federal policies inhibit the ability to deposit uncontaminated sediment that has been removed from a reservoir back onto federal lands—and the result is significantly increased costs for hydropower owners and electric consumers, and increased greenhouse gas emissions as debris is trucked farther distances for disposal.

NOW, THEREFORE, BE IT RESOLVED: That the American Public Power Association (APPA) supports federal policies to expedite the voluntary removal and redeposit of debris and sediment runoff from hydropower reservoirs that results from more frequent and extreme weather events. Facilitating disposal of sediment for beneficial use on adjoining federal lands should be encouraged and streamlined to more effectively address the environmental, operational, and financial impacts of climate change.

Adopted at the Legislative & Resolutions Committee meeting
March 2, 2021
Sunsets in March 2029