

Competition launched to optimize sediment management in high-mountain hydro reservoirs

Ennomotive has launched a competition to find alternative solutions to hydraulic dredging in the sediment removal process in high-mountain reservoirs that impound water for hydropower plants.

Accumulation of sediment is a common problem in reservoirs used in run-of-river hydroelectric plants, ennomotive says. The most common practice is to remove those sediments using hydraulic dredging.

The goal of this competition is to find a solution that maintains an active capacity of reservoirs above 70% during the entire year in run-of-river hydropower plants, ennomotive says. The client is a “leading company in the power generation sector with a high commitment to protecting the environment and its natural resources,” according to ennomotive’s website.

This challenge focuses on a reservoir with 170,000 cubic meters of storage capacity and a maximum depth of 6 meters. A two-part, 75-meter-long sand trap cannot retain all of the suspended sediments in the water, meaning storage capacity of the reservoir has progressively decreased up to 60%.

This online competition is open worldwide to any professional, student or academic with a technical background in hydraulic works, water treatment, etc.

Prizes worth US\$19,000 are available for the solutions that best meet the requirements for this competition. Interested participants must submit their solutions before Sept. 10.

Ennomotive is an “open innovation platform for engineering challenges.”

Source: hydroworld