

Prize Competitions Recap



BUREAU OF
RECLAMATION

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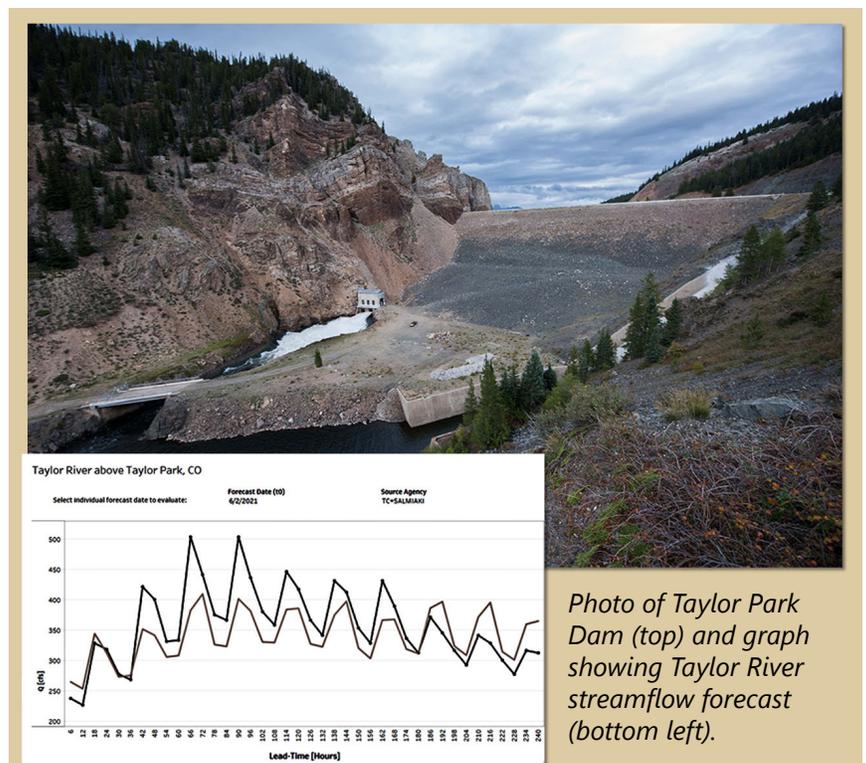
In the Spotlight: Streamflow Forecast Rodeo



In March 2022, Reclamation announced the 10 winners for the yearlong Streamflow Forecast Rodeo prize competition. Competitors developed methods for making 10-day streamflow forecasts for multiple locations across the Western United States and entries were judged based on how closely those predictions matched the actual streamflow.

The winning solutions used many different approaches. In some cases, a single solution would have multiple approaches and adjust the approaches depending on the month, type of streamflow occurring, or seasonality. The top performing solution combined several approaches and utilized historical streamflow and day of year to capture seasonality. The competitor with the top performing overall solution won \$71,000 of the \$435,000 total prize purse.

Competition success is due to Reclamation's partnerships with CEATI International's Hydropower Operations and Planning Interest Group, NASA Tournament Lab, Department of Energy's Waterpower Technologies Office, Tennessee Valley Authority, HydroQuebec and Topcoder.



Competition Updates:



More Water Less Concentrate: The More Water Less Concentrate prize competition is seeking solutions to generate more usable water from inland desalination plants. Five finalists will be testing their prototypes at Reclamation's Water Quality Improvement Center in Yuma, Arizona in summer 2022 using a feed water source of reverse osmosis concentrate. Prizes totaling \$250,000 will be available for the highest performing teams.

Guardians of the Reservoir: The top three finalists were selected and continue to refine and test their prototypes. A virtual demonstration of the reservoir sediment removal prototypes and final evaluation will be completed in August 2022. A finalist showcase and announcement of the Guardians of the Reservoir winner is planned for September 2022.



Water America's Crops: The five solver teams in Phase II are making excellent progress developing and refining their solutions! The Phase II laboratory testing program is being commissioned at the TSC using standard canal lining materials. Phase II testing will kick off in July 2022 with winners announced in January 2023.

Imperfection Detection: The five Phase 2 winners are nearing completion of the prototype development period with submissions due July 2022. Judging will be completed in August 2022 with up to three winners advancing to the Phase 3 prototype delivery to Reclamation. Laboratory evaluations of the prototypes will begin October 2022.



On the Horizon – Improving Precipitation Measurement Devices

A new challenge seeking new and improved designs for ground-based precipitation measurement devices (precipitation gauges) is planned for launch late summer or early fall 2022. Improved designs are needed to address limitations of existing precipitation gages including measurement accuracy, resolution, stability, and operations and maintenance challenges.

Click [here](#) to learn more about all of Reclamation's Prize Competitions
Interest in partnerships, potential topics, or questions can be emailed to prize@usbr.gov.

About Reclamation

Established in 1902, Reclamation is best known for the dams, powerplants, and canals it constructed in the 17 western states. The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Reclamation is leveraging prize competitions to help solve some of the most critical water resource problems in the areas of Water, Infrastructure, and Environment.