Prize Competitions Recap

In the Spotlight: Water America’s Crops

Exciting news in reducing canal seepage! Reclamation selected five Phase I winners in the Water America’s Crops Challenge. Each winner will receive a $50,000 prize and are now working to develop their solution into a lab-scale prototype for Phase II.

The proposals submitted by the winners, describing their solution, included the expected performance, effectiveness, durability, maintenance requirements, installation requirements, and cost. The five winning proposals are:

• Nylon reinforced geopolymer composite mix membrane, Zlatko Rozic, Australia
• Integral Waterproofing of Concrete, Jan Beetge, United States
• Low Cost Long Life Elastomeric Canal Liner, John Newport and Peter Murdoch of Team Chemventive, United States
• StickyCrete Canal Liners, Michael McBride, Mexico
• Bendable Concrete for Seepage Resistant Canals, Duo Zhang, United States

The competition is now moving into the prototyping phase with the Phase II prototypes due July 7, 2022. Reclamation is partnering with Bonneville Power Administration, NASA Tournament Labs, and HeroX on this prize competition.
Competition Updates:

Fish Protection Prize: Reclamation partnered with the Department of Energy’s Water Power Technologies Office to conduct the Fish Protection Prize (non-governmental website) in 2020. The Fish Protection Prize sought innovative solutions, designs, and strategies to protect fish from water infrastructure, such as water diversions, pipes, and intakes. Nine finalists presented their solutions at a Pitch Contest during the 2020 American Fisheries Society Virtual Annual Meeting and three winners were selected. Through a Cooperative Research and Development Agreement with the Pacific Northwest National Laboratory, the three winning teams are further developing their concepts. A public webinar is expected in February 2022 to showcase their technologies.

Technology Search: Debris Management and Removal: Reclamation is working with yet2 (non-governmental website) to complete a Technology Search on Debris Management and Removal. The Technology Search will identify existing, new, and emerging technologies used to remove and mitigate submerged and floating debris at dam intakes and spillways. Promising technologies may be considered for application at Black Canyon Diversion Dam near Emmett, Idaho to address debris accumulation issues.

Improvement Estimation of Snow Water Equivalent: Seasonal snowpack is a critical water resource in the Western US. Water managers use measurements and estimates of snow water equivalent (SWE) as inputs to streamflow and water supply forecasts, which then support a wide range of management decisions. Reclamation is preparing to launch a prize competition in December 2021 seeking better methods to estimate spatial distribution of SWE over the West. Stay tuned to the Upcoming Competitions page!

Imperfection Detection: Detect Me If You Can: Five Phase 1 winners have ten months to develop and demonstrate their prototype performance using their proposed project plans. The finalists will receive $40,000 initially, and an additional $20,000 as they meet milestones during Phase II. Up to three finalists will be selected to compete in Phase III.

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On the Horizon

November 2021
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](mailto:prize@usbr.gov)

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**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.