Pennsylvania Department of Conservation and Natural Resources

The Pennsylvania Department of Conservation & Natural Resources (DCNR) conducts several conservation and partnership programs including River Conservation Grants, managing the Invasive Species Program, and creating Aquatic Resource Management Plans.

DCNR oversees various community conservation partnership program grants. One category is River Conservation Grants. These grants focus on enhancement and protection of Pennsylvania's waterways. Applications for these grants are submitted under several categories: Land Acquisition and Conservation Funding, which includes lands for the purpose of waterway conservation; Community Recreation and Conservation Planning Funding, which address water-related recreation or conservation needs; Park Rehabilitation and Development Funding, which include physical improvements that enhance water resources; State and Regional Partnerships Funding, which fund a variety of water-related projects; and Riparian Forest Buffer Funding, which aims at increasing trees, plants, and grass buffers along streams statewide.

In 2019, DCNR released a grant investment of just over $908,000 to five recipients throughout Pennsylvania for planting trees and income-producing species along streams to help keep nutrients and sediments from the land from impacting water quality. The grants are administered through DCNR's Community Conservation Partnership Program with funding provided by PENNVEST. The final round of PENNVEST-funded grants was offered in the fall of 2019, with awards expected to total roughly $1 million.

DCNR is also working closely with the Department of Health (DOH) on monitoring bacteria. All permitted inland beaches are regulated by DOH under 28 Pa. Code Chapter 18, §18.28, Bathing beach contamination. Weekly testing for *Escherichia coli* (*E. coli*) density is required based on USEPA 2012 Recreational Water Quality Criteria. The Federal Beaches Environmental Assessment and Coastal Health Act (BEACH Act) was signed into law on October 10, 2000. This requires the Environmental Protection Agency (EPA) to develop criteria for testing and monitoring recreational water issues. Pennsylvania is one of the states covered by this Act. See the summary of Department of Health for more details.

DCNR's Bureau of State Parks is also working with DOH, Department of Environmental Protection (DEP), and other state agencies to monitor and identify cyanobacteria blooms. State parks use this information to post advisories and provide information to visitors when needed.

DCNR also has an Invasive Species Program. The Bureau of State Parks is actively suppressing nuisance and invasive aquatic vegetation in several state park waterbodies for recreational access and ecological purposes. *Hydrilla* continues to be a priority target for active invasive species suppression. For example, about 90% of the known *Hydrilla* at Pymatuning State Park were treated in summer 2019. A stewardship boat

inspection program is also operating within state parks to help prevent the spread of aquatic invasive species. In 2019 the program operated from Memorial Day to Labor Day at nine lakes. Over 5,300 visitors were educated on aquatic species in this program, with the goal of increased visitor action to prevent the spread of invasive species. 63% of visitors committed to inspecting their boats and other gear in the future. Four of the nearly 3,000 boat inspections identified and removed an invasive that had the potential to spread to noncontaminated state parks.

In 2019, the Bureau of State Parks Outdoor Programming Services (OPS) Division taught 410 aquatic education programs to 10,860 participants for 799 total hours. These programs included Watershed Education (WE) Teacher Workshops (including a WE week-long Institute); Meaningful Watershed Educational Experiences (MWEE) Ambassador trainings for non-formal Educators, school administrators, and classroom teachers; Project WET (Water Education for Teachers) and Healthy Water/Healthy People Educator Workshops; programming on invasive plants (including service learning with aquatic invasive plant removal); programs using water as a lens to investigate land use practices; and school programs that included water quality monitoring.