

LAKE RESTORATION EFFORTS

Pennsylvania's lake protection and restoration program is supported by various State and Federally funded programs. State funding sources include the Department of Environmental Protection's (DEP) Growing Greener Grant Program, the Commonwealth's Environmental Stewardship Fund (ESF), and the Department of Conservation and Natural Resource's (DCNR) TreeVitalize program. Additionally, cooperative efforts by outside agencies to include but not limited to the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACOE), the Pennsylvania Lake Management Society (PALMS), the Pennsylvania Fish and Boat Commission (PFBC), County Conservation Districts, and neighboring state agencies such as the Ohio Department of Natural Resources (ODNR) have supported lake restoration efforts. Federally funded programs such as the Environmental Protection Agency's (EPA) 319 Grant Program have also supported the Commonwealth's protection and restoration efforts. Other funding sources could include EPA Section 104(b)3 grants, the Natural Resource Conservation Service, the Chesapeake Bay Program, and PENNVEST.

Overall program goals are to protect and restore lake water quality. To meet these goals, actions are executed in Phases – Phase I to III. Phase I is to complete an assessment of the lake by gathering data, determining impairment status, and identifying pollution sources. Phase II is to develop a plan of action to remediate and restore water quality by implementing Best Management Practices (BMP), implementing Total Maximum Daily Loads (TMDL), and/or prescribing control measures. Phase III is to follow-up to monitor the efficacy of BMPs, TMDLs, and other control efforts.

Projects for the period July 1, 2023 through June 30, 2025 are summarized in Table 1. When determining projects to be funded, lakes are prioritized according to public use and lake benefit, impairment status and watershed impairment status. During this period, \$3,525,339.77 had been spent on Phase II projects. A variety of project types were completed on lakes across the Commonwealth. Restorative efforts included stormwater BMPs, invasive plant management, nutrient management, shoreline rehabilitation, and habitat improvements. Shoreline restoration projects not listed in Table 1 have occurred but have not yet been quantified: Doubling Gap Lake, Keystone Lake, Lake Arthur, Glendale Lake and Presque Isle Bay.

Additionally, several restoration projects in the Lake Erie watershed that have a positive impact on Presque Isle Bay and/or Lake Erie during this reporting period have been identified and reported in Table 2.

Table 1. Completed Lake Restoration Projects – Period 07/1/2023 to 6/30/2025.

Funding Source	Funding Amount	Lake Name	County	Project Description	Project Period	Phase
EPA 319	\$355,732.00	Frances Slocum Lake	Luzerne	Watershed BMPs	October 2020 to June 2025	II
EPA 319	\$790,914.00	Lake Luxembourg	Bucks	Stormwater BMPs	October 2020 to June 2025	II
DCNR	\$5,000	Memorial Lake	Lebanon	Invasive Hydrilla Suppression	July 2023 - Present	II
DCNR	\$5,000	Scotts Run and Hopewell Lakes	Berks	Invasive Hydrilla Suppression	July 2023 - Present	II
DCNR	\$4,148	Glendale Lake	Cambria	Wetland Planting at Troxell Point Shoreline	April 2024 - Present	II
DCNR	\$145,000.00	Foster Joseph Sayers Reservoir	Centre	Shoreline Enhancement	January 2023- present	II
DCNR	\$21,000.00	Lake Wilhem	Mercer	Shoreline Enhancement	January 2024- December 2023	II
DCNR	\$38,000.00	Pymatuning Reservoir	Crawford	Shoreline Enhancement	January 2024- December 2024	II
DCNR	\$20,000.00	Shawnee Lake	Bedford	Shoreline Enhancement	January 2024- December 2024	II
EPA 319	\$406,250	Lake Galena	Bucks	Agricultural Conservation, Manure storage+	June 2023-2025	II
NRCS-EQIP	\$423,000	Lake Galena	Bucks	Agricultural Conservation, Manure storage+	June 2023-2025	II
PA - ACAP	\$342,000	Lake Galena	Bucks	Agricultural Conservation, Manure storage+	June 2023-2025	II
NRCS - RCPP	\$416,000	Lake Galena	Bucks	Agricultural Conservation, Manure storage+	June 2023-2025	II
PA - ACAP	\$155,000	Lake Galena	Bucks	Agricultural Conservation, Manure storage+	June 2023-2025	II
PA DCNR	\$26,000	Lake Galena	Bucks	(PACD) Lawn to Habitat	June 2023 - 2025	II
County of Bucks	\$28,000	Lake Towhee	Bucks	AIS Control	June 2023 - 2025	II
Growing Greener	\$20,941	Lake Towhee	Bucks	AIS Control (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$23,992.71	Blue Marsh Lake	Berks	Shoreline restoration (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$24,000.00	Raystown Lake	Huntingdon	Shoreline restoration (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$15,000.00	Foster Joseph Sayers Reservoir	Centre	(PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$2,000.00	Pine Run Reservoir	Mercer	Invasive European water chestnut treatment (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$24,000.00	Lake Alden	Wayne	Invasive Hydrilla treatment (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$23,757.01	Edgewood Lake	Philadelphia	Invasive species control and shoreline stabilization (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$24,000.00	Waynewood Lake	Wayne	Nutrient reduction/Harmful algal bloom treatment (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$22,500.00	Hemlock Farms Ponds	Pike	Nurtient reduction	January 2022 - December 2024	II
Growing Greener	\$14,500.00	Skymount Lake	Montgomery	Invasive species treatment (PALMS Mini-grant)	January 2022 - December 2024	II

Funding Source	Funding Amount	Lake Name	County	Project Description	Project Period	Phase
Growing Greener	\$24,000.00	Lake Wallenpaupack	Pike, Wayne	Stormwater improvements (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$7,391.74	Heart Lake	Susquehanna	Shoreline restoration (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$17,710.76	Lake Wilhem	Mercer	Shoreline restoration (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$23,983.79	Donegal Lake	Westmoreland	Shoreline restoration (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$18,623.34	Lake Latonka	Mercer	Shoreline restoration (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$22,423.00	Middle Birchwood Lake	Pike	Nutrient reduction/Harmful algal bloom reduction (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$23,986.20	Lake Sheridan	Lackawanna	Nutrient reduction/Harmful algal bloom reduction (PALMS Mini-grant)	January 2022 - December 2024	II
Growing Greener	\$6,561.72	Laurel Lake	Cumberland	Invasive treatment	January 2022 - December 2024	II
Growing Greener	\$2,750.00	Minsi Lake	Northampton	Invasive treatment	January 2022 - December 2024	II
Growing Greener	\$2,175.00	Mountain Lake	Bradford	Invasive treatment	January 2022 - December 2024	II

Table 2. Completed Presque Isle and Lake Erie Restoration Projects – Period 07/1/2023 to 6/30/2025.

Funding Source	Funding Amount	Lake Name	County	Project Description	Project Period	Phase
Growing Greener	\$15,000.00	Presque Isle Bay	Erie	Shoreline/wetland restoration and native plantings	January 2022 - December 2024	II
USFWS	\$840,607.00	Lake Erie	Erie	Aquatic Invasive Species (AIS) Management Plan Implementation (Penn State University)	October 2020 - October 2024	II
USEPA	\$303,900.00	Presque Isle Bay	Erie	Garrison Run Litter Traps Project for Lake Erie	October 2021 - March 2024	II
USFWS	\$512,407.00	Presque Isle Bay	Erie	Restoring Dune Habitat for Shorebirds at Presque Isle State Park (PA)	October 2022 - October 2024	II