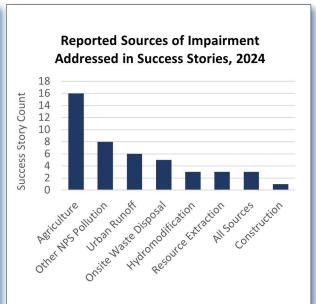
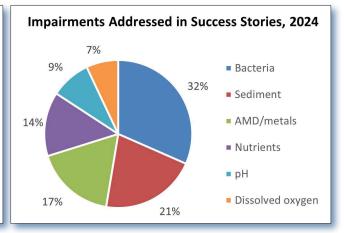
2024 Nonpoint Source Success Story Recap

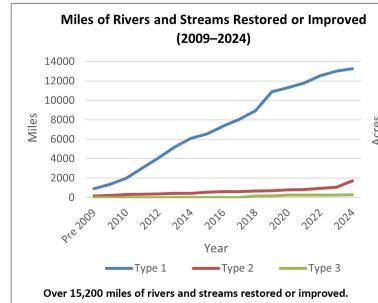
<u>Success stories</u> describe nonpoint source (NPS) pollution-impaired water bodies where restoration efforts have led to documented water quality improvements. States and territories submit stories that address a range of pollutant causes and types. Since 2009, success stories have documented over **1,195 waterbodies restored and improved**.

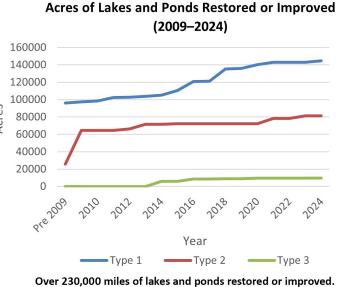




Туре	Definition	Waterbodies restored/ improved in 2024 (S20)**
1	Partially or fully restored to WQS*	41 (66)
2	Progress toward achieving WQS*	7
3	Shows ecological restoration	3
		TOTAL: 51
*WQS= water quality standards **Number of NPS impairments that have been eliminated from 303(d)-listed waterbodies/waterbody segments through restoration.		







Easter Lake Revitalized by Community Partnerships (Type 1 Story)

Easter Lake was constructed in 1967 on the site of a former coal mine in the city of **Des Moines**, IA. Land use in the watershed was largely agricultural when the lake was built, but by the 1970s, half of the watershed was highly urbanized. Phosphorus pollution from multiple sources contributed to high levels of algae, total phosphorus, and suspended sediment in Easter Lake. The lake was listed as impaired in 2004. Stakeholders worked together to develop the Easter Lake Water Quality Management Plan (WQMP) in 2013. Polk County passed two major bond initiatives in 2012 and 2021 to support water quality improvement efforts through the WQMP, which included establishing multiple green infrastructure practices, a runoff management system, and a 37-acre stormwater wetland. Since the project's completion, park use has almost tripled, and Trophic State Index scores indicate Easter Lake meets chlorophyll a and Secchi depth criteria. The Iowa Department of Natural Resources proposed removing Easter Lake from the impaired waters list in 2024.



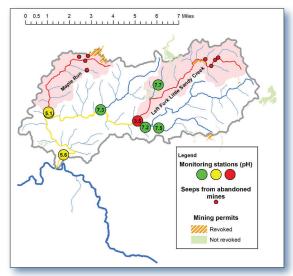
Stormwater wetland at Easter Lake after construction in Fall 2018.



Bioretention cells installed in parking lot to treat runoff.

Lime Dosing is Improving Tributaries of Little Sandy Creek (Type 2 Story)

Little Sandy Creek receives polluted water from abandoned and bond-forfeiture coal mines along its tributaries, Maple Run and the Left Fork of Little Sandy Creek (LFLSC). The West Virginia Department of Environmental Protection (WVDEP) added Little Sandy Creek to the CWA Section 303(d) List of Impaired Waters in 1996 for pH and iron impairments associated with its public water supply and warm water fishery designated uses. WVDEP, the Save the Tygart Watershed Association (STTWA), and the West Virginia Water Research Institute (WVWRI) have worked to reduce pollutant loads in the Maple Run and LFLSC subwatersheds. WVDEP built in-stream dosers, which are devices that add hydrated lime to the stream water. STTWA sought resources from WVDEP's NPS program to support the construction of a treatment plant that will remove even more iron from LFLSC. Little Sandy Creek now meets water quality standards for dissolved aluminum and pH near the mouth. Fish have been seen in Little Sandy Creek for the first time in many decades.



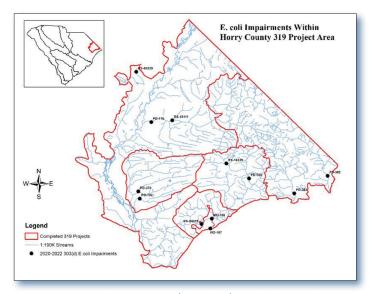
Map of the Left Fork of Little Sandy Creek with monitoring and abandoned mine sites



The Left Fork of Little Sandy Creek carried iron, dissolved aluminum and acidity to Little Sandy Creek in Fellowsville, WV.

Ecological Restoration of Patroon Creek Through Daylighting with Enhanced Flood Protection (Type 3 Story)

Patroon Creek was listed on New York's CWA Section 303(d) list in 2002 for not supporting its designated use of fishing and for violating the state's dissolved oxygen standards. The 1,500-foot-long portion of Patroon Creek flowing through a large underground pipe restricted stream flow, which increased flood risks during high precipitation events. To mitigate storm surges, increase flood storage capacity and enhance public recreational access, the City of Albany, NY, completed the Patroon Creek daylighting project. Daylighting the formerly buried and channelized stream corridor has resulted in a wider stream channel that has reduced stream flow velocity and downstream erosion. U.S. Geological Survey streamflow data show that three of the five years since the project was completed have had peak flows of over 500 cubic feet per second, exceeding the identified capacity of the underground stream/pipe from the feasibility study. This project has presumably helped alleviate potential impacts from those peak flows. The project will help improve dissolved oxygen levels in Patroon Creek and enhance fish and wildlife habitat.



Horry County project areas and impaired monitoring stations.



Educational stakeholder meeting in Horry County.





Patroon Creek after restoration and daylighting

Section 319 Grant Impacts More Than 1,000 Citizens in Horry County, South Carolina (Type 5 Story)

Bacteria from agricultural facilities and malfunctioning septic systems have contributed to Escherichia coli impairments in the Pee Dee River Basin in Horry County, SC. Since 2011, the Horry Soil and Water Conservation District (HSWCD) has implemented seven Clean Water Act (CWA) Section 319-funded water quality improvement projects throughout the Pee Dee River basin. HSWCD staff have conducted outreach via door-to-door campaigns, flyers, brochures and door hangers to recruit potential landowners with failing septic systems for educational workshops and septic system repair and replacement. Horry County has since conducted efforts to educate community members on the proper care and maintenance of septic systems and to recognize the signs of a failing system. Project partners have also implemented a suite of on-theground projects. To date, 1,190 septic and 38 agricultural projects have been completed across 26 subwatersheds through the implementation of three nine-element watershed plans.

Note: Type 5 stories feature other qualitative measures showing that an NPS program has made progress toward restoring/improving water quality and hydrology, even though no measurable or observed improvement has occurred.