



Bill Kunze © Perri Strawn

Almost fifty years ago, controversy surrounding construction of the Kinzua Dam on the Allegheny River fueled a debate around harnessing rivers versus preserving them in a natural state, and led to passage of the Wild and Scenic Rivers Act. Today, The Nature Conservancy is bringing new science to this and other Pennsylvania rivers to ensure there is enough water—in the right places and at right times of year—to support both wildlife and those who rely on Pennsylvania’s 83,260 river miles. From partnering with dam operators to manage flows, to restoring floodplains to hold water and reduce pollution, we continue to pursue infrastructure solutions that benefit people, wildlife and water throughout the Commonwealth.

Bill Kunze



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Upper Ohio River Basin

A national partnership with the Army Corps of Engineers advances conservation in western PA.

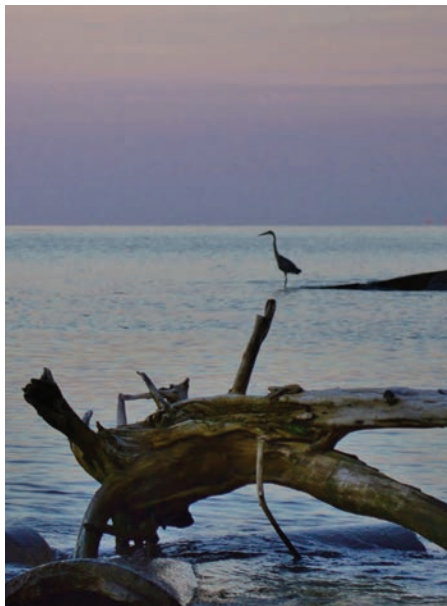
Once a centerpiece of economic vitality fueled by steel, iron and coal, western Pennsylvania is now a leader in advancing innovative and sustainable approaches to social change and environmental health. The transformation has prompted The Nature Conservancy to tap into the Sustainable Rivers Partnership, a national program co-led with the Army Corps of Engineers to modernize water infrastructure systems to improve river health, ensure safety and fuel prosperity.

“We must ask ourselves if our project purposes, shaped by conditions that existed more than 80 years ago, still align with current and anticipated future needs.” Colonel John P. Lloyd, Commander of the Army Corps Pittsburgh District.

In western Pennsylvania, the Conservancy is working with the Army Corps’ Pittsburgh District on assessing locks, dams and reservoirs once key to transporting goods, maintaining water quality and reducing floods throughout the region for 150 years. “Moving forward, we must consider that aging

infrastructure not only refers to the physical age and condition of our facilities but also to the historical purposes for which they were built,” says Colonel John P. Lloyd, Commander of the Pittsburgh District.

Part of this planning includes closely examining how flows controlled by dam operations affect natural habitats downstream. The effort will inform recommended river flow targets ideal for supporting fish, mussels and other wildlife now and under a changing climate. The partners are also examining whether locks and dams located on the upper Allegheny and Monongahela rivers remain economically justified for navigation or whether alternatives such as decommissioning or modernization should be considered.



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Susquehanna River

Securing low-carbon energy on the Conowingo Dam while restoring a national treasure.

Exelon Corporation is looking to renew a 50-year federal license to continue generating electricity from the 88-year-old Conowingo Dam. Through that renewal process, a historic agreement was reached to restore millions of migratory fish like American shad, river herring and American eel to the Susquehanna River. The Nature Conservancy was instrumental in ensuring that the agreement used science-based performance standards to guide structural and operational investments to meet restoration goals.

“Conowingo is one of the largest privately-owned hydropower dams in the U.S., using the power of the Susquehanna River to generate enough low-carbon energy each day to meet the needs of about 160,000 homes and businesses,” says Tara Moberg, a freshwater scientist for the Conservancy’s North America Region.

The relicensing process provides a once-in-a-generation opportunity to secure a source of low-carbon electricity while addressing three critical challenges:

- Restoring self-sustaining populations of migratory fish like American Shad and American Eel by ensuring safe passage over the dam to historic spawning habitats in Pennsylvania.
- Modifying dam releases to restore downstream populations of mussels, turtles, striped bass and other aquatic plants and animals.
- Improving water quality and sediment conditions in the lower river and Chesapeake Bay.

Moberg adds, “We’re working to achieve solutions to secure low-carbon energy while restoring what was once the most productive rivers on the East Coast feeding the Chesapeake Bay, one of the richest estuaries in the world.”

NATURE PENNSYLVANIA

Our health, security and quality of life depend on clean water that is managed by man-made infrastructure such as levees, dams and storm water systems. The Nature Conservancy is working to ensure that natural resources—such as forests and floodplains—represent key components of local, state, federal and private plans in water management infrastructure nationwide.

Delaware River



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The Nature Conservancy’s Pennsylvania and New York chapters are collaborating on a restoration project that highlights how healthy, intact floodplains benefit wildlife and water quality while reducing the impacts of floods. In the Upper Delaware, volunteers have planted approximately 15,000 trees in an effort to restore a floodplain forest along the lower section of the Neversink River. In addition to reducing reliance on concrete dams or levees and providing critical habitat for wildlife, such natural solutions also result in a lush, forested landscape capable of storing waters and filtering sediments and pollution before allowing water to gradually flow back into the river.