



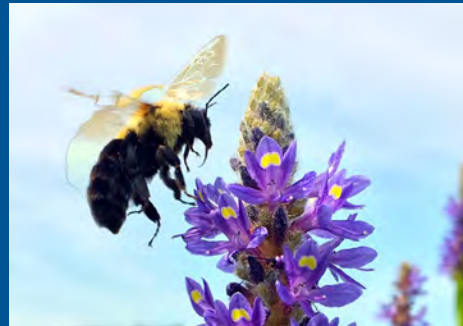
U.S. Fish and Wildlife Service



# DELAWARE RIVER BASIN RESTORATION PROGRAM

Annual Report: A Year of Impact and Progress

FISCAL  
YEAR | 2023



# Delaware River Basin Restoration Program

## PURPOSE

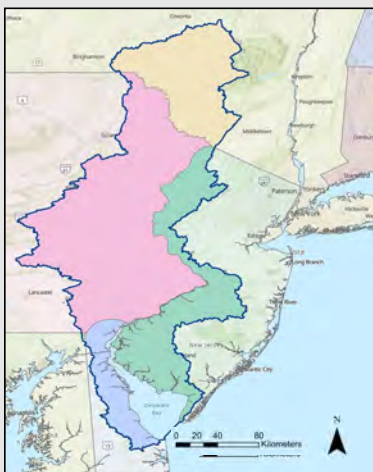
This report highlights Fiscal Year 2023 accomplishments from the U.S. Fish and Wildlife Service's Delaware River Basin Restoration Program.

## DELAWARE RIVER BASIN RESTORATION PROGRAM

For more than a decade, the Service, led by its Science Applications program, has worked with partners to advance strategic conservation at scales needed to support natural systems and processes, protect biodiversity and help communities of people and wildlife successfully adapt to a changing world. The [Delaware River Basin Restoration Program](#), and its strategic collaboration with the [National Fish and Wildlife Foundation](#), has become a national model for this landscape-conservation approach, which incorporates local needs into a larger conservation framework that aims to keep geographic areas, like watersheds, healthy and functioning.

With strong bipartisan support, Congress authorized the Delaware River Basin Conservation Act in 2016, directing the Service to establish the Delaware River Basin Restoration Program. The DRBRP takes a non-regulatory approach to landscape-scale conservation — voluntary, incentive-driven and collaborative across its four-state watershed. Congress had the foresight to recognize that conservation action was needed in four strategic areas: conserving fish and wildlife habitat, improving water quality, sustaining and enhancing water management, and improving opportunities for public access. The Service coordinates actions to address these priorities through the DRBRP's three primary components:

1. A partnership (Delaware Watershed Conservation Collaborative)
2. A grant and technical assistance program (Delaware River Watershed Conservation Fund)
3. A watershed-wide strategy (Conservation Design)



## WHY THE WATERSHED?

Flowing from the Catskill Mountains to the Atlantic Ocean, the Delaware River journeys through New York, Pennsylvania, New Jersey and Delaware, draining an area covering 13,539 square miles. The watershed is home to numerous species of fish and wildlife that are economically, ecologically and culturally important to the region. Despite providing drinking water to more than 13 million people and supporting a water-based economy of over \$20 billion<sup>1</sup>, the watershed has long been overlooked. By directing federal funds straight to the watershed, conservation and restoration efforts can be better aligned, farther reaching and more impactful.

1. [State.nj.us/drbc/basin/](https://state.nj.us/drbc/basin/)

Cover page, clockwise from top left: Golden-winged warbler/Andy Reago, Flickr; West Trenton Railroad Bridge across the Delaware River/James Loesch, Flickr; Fly fishing on the Delaware River/Sandra Cross, USFWS; Youth kayaking on the Delaware River/Delaware River Sojourn; Native bee species in the Delaware River estuary wetlands/ USFWS; Eastern box turtle/Dimitri Rucker, USFWS .

# Program Accomplishments 2018-2023

**\$55.1  
million**

awarded in  
federal funds

**\$79.2  
million**

leveraged in  
matching funds

**\$134.3  
million**

total conservation  
impact

## 195 projects funded



**76 miles**  
of stream restored



**6,052 acres**  
with public access



**1,339 acres**  
of wetlands conserved and  
enhanced



**29,321 acres**  
of forest under improved  
management

## 445 jobs created

See all DWCF grant awards on our interactive mapper:

<https://fws.maps.arcgis.com/apps/Minimalist/index.html?appid=18258caf6a9944b3a74d1ee5755f14a5>

Note, metrics are subject to change during the life of the project and the 'jobs created' metric is under development and may change.

# Delaware Watershed Conservation Fund



Dr. Holly Bamford, NFWF's Chief Conservation Officer, and Martha Williams, the Director of the Fish and Wildlife Service, at the DWCF announcement event/NFWF.

Administered in partnership with the National Fish and Wildlife Foundation, the Delaware Watershed Conservation Fund provides competitive matching grants and technical assistance to eligible entities working on a range of voluntary conservation, restoration and community engagement projects. The DWCF has funded more than 85 organizations that restore and protect habitats on public and private land, across rural, urban and Tribal ancestral landscapes. Projects must align with the DRBRP's Strategic Program Areas (below), contributing to the overall health of the Delaware River watershed — as well as benefiting the quality of life and economic vitality of the communities in this region.

## STRATEGIC PROGRAM AREAS



Sustain and enhance fish and wildlife habitat through restoration and conservation activities



Improve and maintain water quality to support fish and wildlife, as well as habitats of fish and wildlife, and drinking water for people



Sustain and enhance water management for volume and flood mitigation to benefit fish, wildlife, and people



Improve recreational opportunities for public access in the watershed consistent with the ecological needs of fish and wildlife habitat

To learn more, read the Delaware River Basin Restoration Program Framework:  
[www.fws.gov/media/delaware-river-basin-restoration-program-framework](http://www.fws.gov/media/delaware-river-basin-restoration-program-framework)



# Conservation Collaborative & Conservation Design

## DELAWARE RIVER WATERSHED CONSERVATION COLLABORATIVE

By employing a model of visionary collaboration, the Service has engaged with a diverse set of stakeholders, including agencies, landowners, hunting groups, conservation organizations, municipalities, businesses, foundations and many others to identify shared conservation goals, develop solutions and support sound conservation investments. Through ongoing partner engagement, the Service's DRBRP has *more than doubled the \$55 million federal investment* Congress has made in the watershed.



Grantees pose with the "Big Check" at the DWCF announcement event in August 2023/National Fish and Wildlife Foundation.

By aligning partners around shared conservation needs, the DRBRP has created a successful model for voluntary, incentive-driven landscape conservation that has been emulated in other priority geographies. The Service's Science Applications program is now supporting similar partner-driven initiatives in the Chesapeake Bay and Connecticut River watersheds.

## CONNECTING WITH OUR STAKEHOLDERS

DRBRP staff members take pride in being approachable and responsive public servants, committed to connecting with partners and stakeholders across the watershed. This year, staff focused on gathering feedback to improve the program's overall operations. In September 2023, more than 130 conservation practitioners participated in a stakeholder workshop at the annual Coalition for the Delaware River Watershed's Delaware River Watershed Forum — providing critical feedback that will enhance program delivery and ultimately conservation actions into the future. In addition, the Service is continuing to collaborate with Tribal nations to modernize the DWCF grant review process. Empowering our Tribal partners throughout the grantmaking process is key to protecting cultural resources thoughtfully and justly.



Angler on the West Branch of the Delaware River/  
Sandra Cross, USFWS.

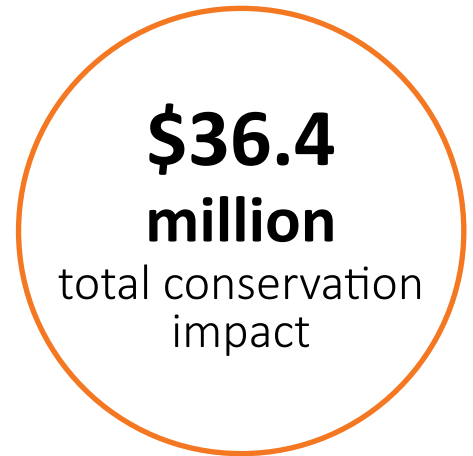
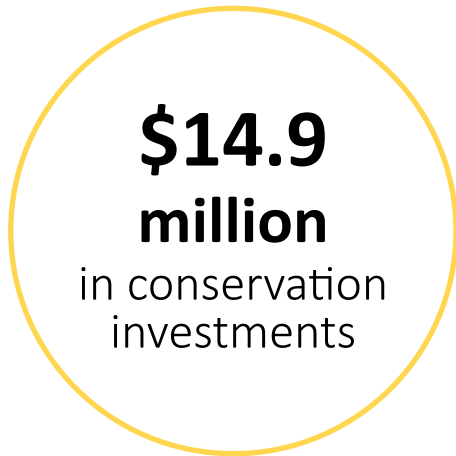
## DELAWARE RIVER WATERSHED CONSERVATION DESIGN

The Service's Science Applications program, in collaboration with its partners, is developing a watershed conservation design as mandated by the DRBCA. This design, driven by science, will outline a unified vision for conservation and restoration across the Delaware River watershed. It will encompass a strategic plan and an online spatial tracking tool.

The online tool, to be launched by 2025, will evaluate investments and assess progress in meeting our strategic program goals. Additionally, it identifies priority areas for stakeholders to direct resources and tracks progress on climate resilience, water conservation, underserved community uplift and more. It will also pinpoint the areas where DWCF investments can make the biggest and longest-lasting difference.

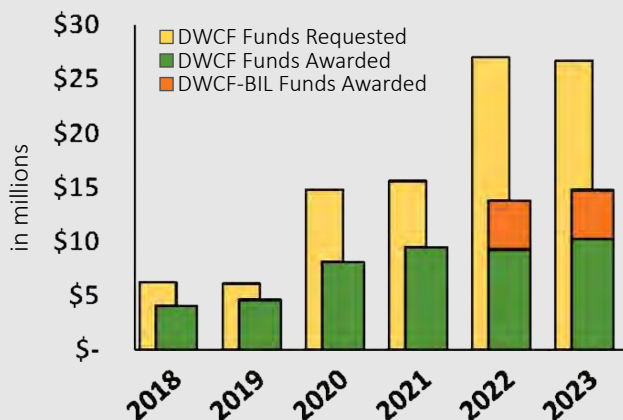
# 2023 Program Highlights

Through the DWCF, the DRBRP has supported a significant demand for restoration throughout the watershed. In fiscal year 2023, there was a high demand for DWCF funding with just 56% of proposals being funded — 36 applications funded out of 64 submissions. The FY23 DWCF grant slate is projected to open more than 1,200 acres to public access, restore nearly 70 acres of wetlands and floodplains and implement dynamic restoration plans on more than 10,000 acres of forestland. In addition, most awards this year, 72%, will address needs in historically underserved, disenfranchised and disconnected communities by directly engaging with community members in project planning and implementation.

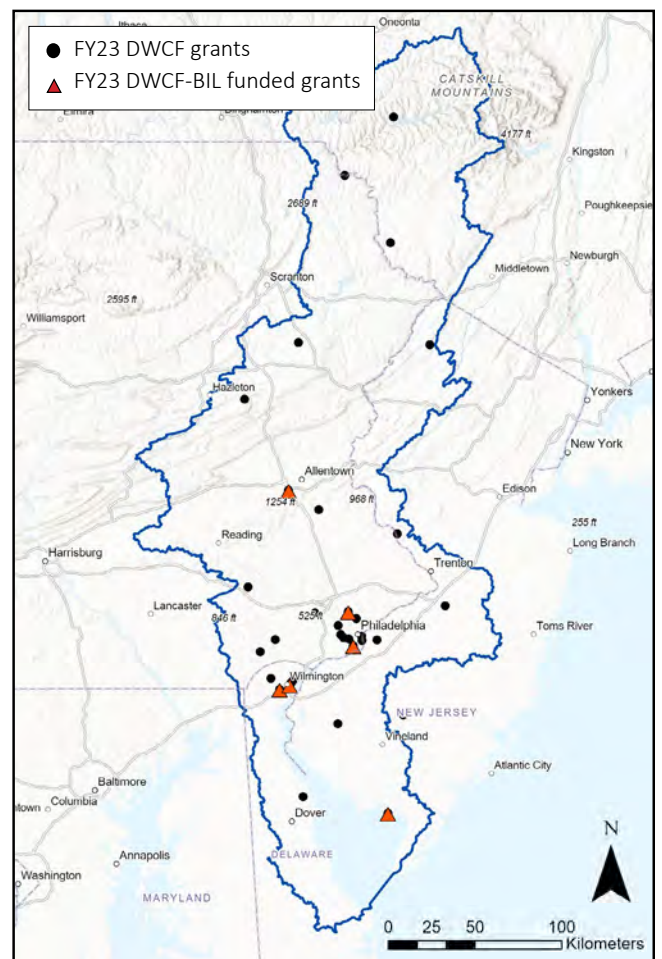


## DEMAND FOR THE PROGRAM

In FY23, the DWCF received 64 proposals requesting more than \$26 million in funding — far more than the available \$14.9 million. The high number of proposals received effectively demonstrates the importance of and demand for the DRBRP to the Service and its partners and the value it holds for the Delaware River watershed.



Full project descriptions for FY23 DWCF grant awards are available at: [www.nfwf.org/programs/delaware-river-program](http://www.nfwf.org/programs/delaware-river-program)  
\*Note, all statistics and figures here include DWCF-BIL funds.



# Other Program Highlights

**120+**

partners tuned into informational webinars

**72%**

of projects will directly engage underserved communities

**35**

organizations received one-on-one coaching

**22**

new applicants

## TECHNICAL ASSISTANCE AND CONSERVATION EQUITY

Since 2018, the DRBRP has worked to grow the diversity and number of organizations, as well as the types of communities that can benefit from the DWCF. By prioritizing community engagement and expanding technical assistance opportunities, the DRBRP has increased the number of projects that benefit and engage underserved urban and rural communities, enhancing equity and social inclusion.

### 2023 SUCCESSES

The DRBRP received a record number of new applicants to the DWCF grant program this year due to expanded technical assistance and outreach. In 2023, 16 new applicants in a competitive pool of high-scoring proposals received awards, demonstrating the program's commitment to attracting new grantees as well as supporting those who have been successful in the past.

The DRBRP continues to prioritize investments that foster equity, justice and cultural competency to help address racial and economic disparities in underserved and nature-deprived communities. In 2023, a record number of projects will benefit underserved communities either through project design, community workshops and/or job creation. This means more community members will be involved in planning and implementing projects, ensuring the outcomes will address their needs and challenges.

\*Note, statistics (left) are FY23 only.

## BIPARTISAN INFRASTRUCTURE LAW, 2022 & 2023 SUCCESSES

The DRBRP received a historic investment of \$26 million through the Bipartisan Infrastructure Law, enacted in November 2021. To date, more than \$9 million of the historic \$26 million investment has been awarded to partners to accelerate conservation and restoration efforts by expanding support for innovative green-infrastructure and nature-based solution projects that contribute to the health and economic vitality of communities in the watershed. Simultaneously, these funds will support projects that advance environmental justice initiatives, sustain ecological functions, improve fish and wildlife habitat, and build community capacity to address urgent conservation needs over the next five years. See [page 8](#) and [page 9](#) for more.

\*Note, statistics (right) are FY22/23 DWCF-BIL project metrics that are subject to change during the life of the project; the 'jobs created' metric is under development and may change.

**106,400 lbs**

of sediment captured

**97 acres**

of forest under improved management

**9 barriers**

to aquatic organism passage removed

**9 jobs**

created



# Connecting Urban Communities to Nature

## NEW JERSEY, CAMDEN COUNTY

Residents of Camden, a historically underserved community that has long faced deep-seated poverty, have had limited safe access to nature. Public and private investments have begun to uplift the community, fish and wildlife are rebounding in cleaner waters, and the time is right to renew public access to nature.

In 2021, the DRBRP invested nearly \$500,000 in Upstream Alliance and five partners to develop a 13-mile water trail, with accompanying habitat restoration and recreational programming. The water trail is planned for completion in 2025. Initial investments are demonstrating substantial success, opening 1,130 acres of previously inaccessible waters on the Cooper River and Delaware River's Back Channel. Upon completion this work is expected to make nature-based recreational opportunities available to more than 6 million people who live within a one-hour drive of the trail.

The DRBRP is thrilled to continue this investment in 2023, providing an additional \$688,000 to Upstream Alliance. Additional investments will allow Upstream Alliance to improve water access points, install safety and educational signage, and extend the Camden Water Trail. With more than 3,100 Camden residents expected to benefit from programming along the water trail in 2024 and 2025, 16 local residents will be hired into paddling, fishing and hiking jobs.

Watch the success story here: [youtube/hC-DSRbiNWs](https://www.youtube.com/watch?v=hC-DSRbiNWs)



Clockwise from top left: Camden residents fishing along the Cooper River/New Jersey Conservation Foundation; Aerial view of the Camden Water Trail/Upstream Alliance; Youth enjoying a sunny day on the Cooper River, to date more than 1,500 people have been reached through various programming/Upstream Alliance; Community volunteers are participating in fish surveys and habitat restoration projects — wild celery (pictured) is being planted and studied along the Cooper River/Upstream Alliance.



# Multiplying Federal Investments

## MULTI-STATE

The Nature Conservancy is training local contractors in conservation techniques to implement dam-removal and fish-passage projects — an investment that will only grow in importance with increasing concerns among local communities over flooding and healthy fisheries. This also helps local contractors access federal funding and sustain jobs in the communities near the natural resources the Service is working to protect.

Using \$106,000 DWCF-BIL funds, The Nature Conservancy hosted more than 75 conservation practitioners in a series of workshops focused on habitat restoration, access for recreation and hazard reduction. These workshops increased capacity and expertise among non-governmental organizations, consultants and government agencies in response to a growing demand for these green-jobs skillsets. About one third of workshop participants opted to join a year-long shared-learning cohort that will continue to meet through 2024.



Forty-four people representing 30 organizations participated in Trenton, New Jersey, for the Dam Removal Project Manager Training Course (top)/TNC; Workshop participants visited the Sylvia Lake Dam on Shabakunk Creek in Mercer County, New Jersey (bottom)/TNC.



Projecting to reach more than 200 unique landowners and impact 10,000 acres with applied conservation under U.S. Department of Agriculture program incentives, this investment will have far-reaching benefits supporting the missions of both the Service and the USDA/Jarrod Erbe, Unsplash.

## SOUTHWESTERN NEW JERSEY

Insufficient conservation technical assistance is routinely cited as a significant barrier to the adoption of voluntary conservation practices. Such barriers are even more pronounced in rural parts of the watershed, such as southwest New Jersey. Seeking to amplify investment impacts, the DRBRP is building capacity to expedite services to landowners and ensure that conservation practices are planned and delivered effectively.

Using a 2023 DWCF grant, Ducks Unlimited, in partnership with the New Jersey-Natural Resources Conservation Service, will hire a new biologist to work one-on-one with agricultural producers and landowners. The biologist will educate landowners and community members on conservation programs and practices that benefit wildlife and water quality. Boosting capacity will enhance conservation technical assistance, BMP planning and increase enrollment in voluntary conservation programs.

This investment will aid local landowners and agricultural producers in planning and implementing conservation practices to safeguard and enhance natural resources in rural parts of the watershed.



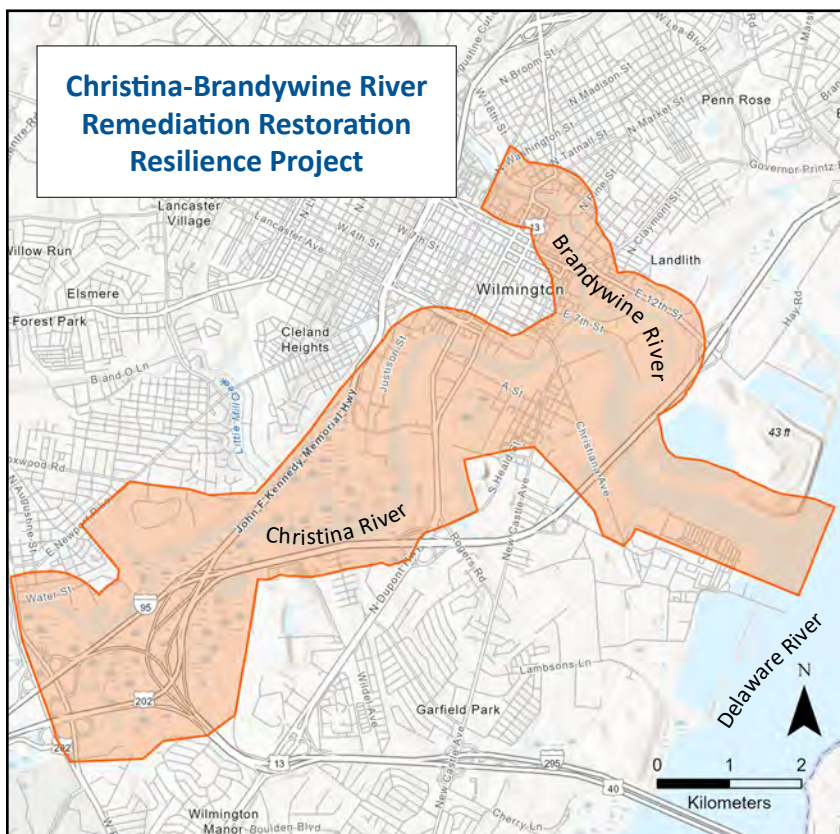
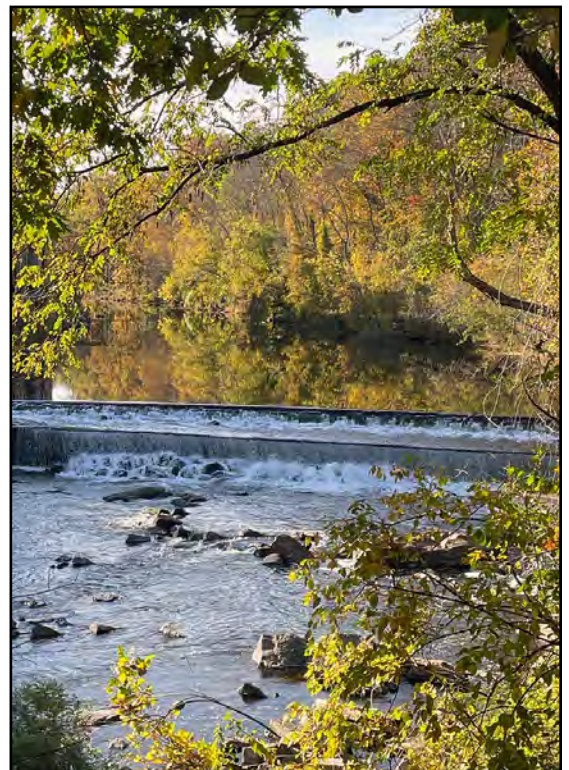
# Funding a Vision with Infrastructure Dollars

## DELAWARE, NEW CASTLE COUNTY

In 2020, the DRBRP invested in a landscape-scale, multi-partner initiative led by American Rivers, Inc. to address legacy contamination, restore native habitats and implement nature-based solutions to prepare for a changing climate — an initiative called the [Christina-Brandywine River Remediation Restoration Resilience \(CBR4\) Initiative](#). It addresses the severely degraded landscape left behind from legacy gunpowder, cotton and shipbuilding industries in Wilmington, Delaware.

Today, DWCF grants are financing the implementation of several projects within the CBR4 Initiative, including one carried out by New Castle County. Using DWCF-BIL funds, NCC has begun a multi-phased, 155-acre restoration project at Banning Regional Park. Tree plantings with corporate partners, stormwater management and habitat enhancements will improve the water quality of vernal pools and other wetlands, directly benefiting a variety of amphibians, birds and insects.

Complementing the CBR4 Initiative, the Brandywine River Restoration Trust has plans to remove two inactive dams along the Brandywine River in 2024, reducing downstream flood impacts and improving public safety, while increasing aquatic habitat diversity and water quality.



Wood frogs (pictured, top), who nearly completely freeze over in the winter months, as well as rusty blackbirds, wood thrush and northern long-eared bats will benefit from restoration at Banning Regional Park/Yianni Laskaris, USFWS; Legacy dams, like the Bancroft Mills Dam (bottom), along the Brandywine River prevent American shad migration and increase flood risks/Sandra Cross, USFWS; More than 300 community members were involved in developing the CBR4 Initiative, pictured is the project area (left)/Delaware Nature Society.



# Fostering Stewardship in Faith-Based Communities

## DELAWARE, NEW CASTLE COUNTY

The National Wildlife Federation is creating opportunities in faith-based communities to expand environmental stewardship and enhance urban wildlife habitat. Building on existing trust within these communities, NWF is fostering a culture of environmental responsibility nationwide.

In 2021, the National Wildlife Federation received a \$237,000 DWCF grant award to replicate this urban environmental stewardship model in the Delaware River watershed. Over the grant period, more than 300 volunteers installed 21 pollinator gardens at places of worship across Wilmington, Delaware, complementing the CBR4 Initiative. NWF provided hands-on assistance, ensuring these gardens not only met the specific needs of the community but also the requirements of pollinators.

Beyond planting efforts, NWF hosted a variety of workshops and trainings for faith-based communities. These workshops offered insights into the simplicity of creating pollinator gardens at home, complete with native plants and vouchers to purchase native plants at local vendors.



In the summer of 2022, pollinator gardens were installed at numerous houses of worship, including Grace United (left) and Ezion Mt Carmel (center)/NWF; Countless pollinator and bird species have been visiting the gardens, including the native bumblebee (pictured, right) at Church of The Holy City/Sandra Cross, USFWS.

*“People enthusiastically rallied, showing up with tools, gloves, hats, boots and even refreshments. Together, we*



*transformed a vacant space into a beautiful garden — all within the span of just one year.”*

Caren Turner  
Community leader

## STANDARDS OF EXCELLENCE

The work of the National Wildlife Federation complements Service priorities well. In 2023, NWF received a \$500,000 DWCF grant award to incorporate the Service’s Standards of Excellence Framework into community engagement trainings for organizations engaging with urban neighborhoods and underserved communities across the watershed. These standards are defined by four critical elements: community-focused, intentional, inclusive and collaborative, and should be the foundation of all relationship building with communities on and off Service lands.



# Restoring Streams in Rural Communities

## NEW YORK, SULLIVAN AND DELAWARE COUNTIES

Heavy storms were eroding nearly 15 feet of land per year along the Little Beaver Kill, a stream in Sullivan County, New York, degrading instream habitat and water quality.

Trout Unlimited and the Service's New York Field Office partnered with Friends of the Upper Delaware River to secure DWCF funding to restore 1,600 feet of the Little Beaver Kill. Heavy machinery was used to regrade the streambank and install tree root clusters and rocks for instream fish habitat, reestablishing the natural ecology. The project, completed in 2022, is already showing signs of success. Brown trout and rainbow trout are using the new instream habitat, supporting a thriving recreation- and water-based economy. Newly planted native trees and shrubs in the reconnected floodplain are helping to stabilize the stream bank and attenuate flood waters. Additional funding came from a concerned private landowner, the Town of Rockland, and New York's new Environmental Protection Fund.

To date, using DWCF funds, Trout Unlimited, Friends of the Upper Delaware River, and their partners have completed nine stream restoration and habitat improvement projects and 14 culvert replacement/barrier removal projects which enhance aquatic connectivity and flood resilience around the Upper Delaware River. Their work is improving recreational opportunities for the thousands of people who visit the area annually, generating millions in economic revenue for the region<sup>2</sup>. Additionally, restoration efforts are improving water quality for millions of people in Pennsylvania and New York who rely on the river for drinking water.

2. Upper Delaware River Tailwater Recreation Plan, [fudr.org](http://fudr.org);



Nearly 15 feet of land was eroding away annually along the Little Beaver Kill (top left), exposing a water line that supplies drinking water to residents in the Town of Rockland/Trout Unlimited; One year after restoration (bottom left), vegetation is growing and tree root clusters along the streambank are mitigating shoreline erosion and providing fantastic habitat for brook trout/Sandra Cross, USFWS; Catching brook trout (right) requires persistence, patience and practice/Ryan Hagerty, USFWS.

# Exploring New Ways to Access Federal Funding

Accessing federal funding can pose a daunting challenge. The increasingly complex grant process creates significant barriers that often prevent smaller and low-capacity entities from pursuing federal funding. Only organizations with the infrastructure to manage federal grants and find matching funds can apply to the DWCF. This leaves a funding gap for small, rural and low-capacity organizations who work to address restoration and conservation projects at smaller scales in the Delaware River watershed.

The DRBRP and NFWF are supporting innovative approaches that broaden access to federal funding. In 2022, DRBRP invested in two separate “mini-grant” programs, hosted by the Partnership for the Delaware Estuary and New Jersey Audubon. These two programs aim to increase funding opportunities for smaller organizations, especially those in underserved areas. Dedicating staff time to peer mentoring and coaching will help low-capacity partners navigate and access federal funding in the watershed. Over time, smaller organizations will be better equipped to pursue federal funding on their own.

## MULTI-STATE

In 2023, the Partnership for the Delaware Estuary, host of the Delaware Estuary Program, received 47 proposals in its inaugural year of “mini-grants” — only eight received funding due to budget constraints. There is no doubt that increased mentoring can play a vital role in ensuring that organizations with limited capacity can access and responsibly manage federal funds. As such, we remain committed to supporting our partners with the necessary resources to facilitate this type of mentoring.

The funded projects, slated to begin implementation in 2024, will aid environmental justice communities with limited resources and low-income populations residing in the four urban centers within the watershed, Camden, New Jersey, Chester and Philadelphia, Pennsylvania and Wilmington, Delaware. These small but mighty nature-based investments will result in community pollinator gardens, rain gardens and the enhancement of streambank areas. While these funds may not generate significant conservation gains for fish and wildlife, they present vitally important opportunities for urban communities to reestablish a connection with nature. This contributes significantly to the enhancement of urban ecosystems and local water quality.

One of PDE’s “mini-grant” recipients, Nicetown-Tioga Improvement Team, will establish and train a local Community Garden Corps to maintain and uplift North Philadelphia’s neighborhood gardens like the Healing Garden, a once vacant lot, and the Unity Garden (pictured)/Erica Rossetti, PDE.

## MULTI-STATE

In 2024, New Jersey Audubon will solicit proposals for its DWCF funded “mini-grant” program designed to support smaller organizations working on restoration and community-based projects under \$75,000. In addition to a simplified application process, NJA will work one-on-one with grantees to ensure successful project completion.





# Working with Priority Species

## NORTHEASTERN PENNSYLVANIA

While nearly 60% of Pennsylvania is forested, much of this land is too “simple” to support diverse forest bird communities. These birds require structurally complex forests — think landscapes with a mosaic of young and old forest — to support their lifecycles. The DRBRP has awarded more than \$3.4 million to the American Bird Conservancy to improve forest management on more than 23,500 acres of private and public land. By fostering collaboration among state, federal and private partners, investments have supported large-scale habitat management to address forest health concerns while benefiting forest-dependent bird species.

The American Bird Conservancy, whose initial efforts focused on partnerships with state agencies, has begun to partner with private forest owners. To date, ABC and its partners have led nine outreach and education programs for private forest owners teaching forest-bird conservation and management practices that will improve habitat for local bird populations. In addition to providing direct management support to willing landowners, ABC also connects them to other resources, like the Natural Resources Conservation Service’s Farm Bill programs.



With approximately 12 million acres of privately owned forest lands in Pennsylvania, DRBRP investments provide major conservation potential for species like the wood thrush (pictured)/Andrew Weitzel, Flickr.



Detecting the ironcolor shiner is challenging. Scientist at ANS will use eDNA analysis, a technique that identifies genetic material (think microscopic fish scales or feces) of ironcolor shiner in the water/ANS.

## SOUTHWESTERN NEW JERSEY

Ironcolor shiner are small freshwater minnows with a black line down their side. Once abundant in the watershed, today, the species is identified as a Regional Species of Greatest Conservation Need of Very High Concern due to habitat loss, predation by non-native fish and water quality degradation. Without action, this species may be listed under the Endangered Species Act. The DRBRP is investing in projects that support species conservation to restore species and keep them off the List.

The Academy of Natural Sciences at Drexel University, in collaboration with the New Jersey Division of Fish and Wildlife’s Bureau of Freshwater Fisheries, is using a \$275,000 DWCF award to 1) characterize the distribution and occurrence of ironcolor shiner at 250 sites in the Delaware River watershed and 2) provide recommendations for restoration activities and conservation planning. Future conservation actions will have numerous benefits such as water quality improvement and habitat enhancements that will support several other endangered or at-risk species, including spotted turtle, bog turtle, blackbanded sunfish and swamp darter.



# Encouraging Partnerships to Advance Conservation

## PENNSYLVANIA, MONROE COUNTY

The DRBRP encourages DWCF applicants to collaborate with partners to implement comprehensive restoration and conservation actions across multiple sites. In particular, public-private partnerships have led to more efficient and effective conservation outcomes.

The Pocono Heritage Land Trust partnered with private fishing clubs, several townships and the Brodhead Creek Regional Authority to complete six projects improving water quality, water flow and wildlife habitat in rural parts of Monroe County.

Notably, their public-private partnership with the 125-year-old Pohoqualine Fish Association supported ongoing restoration at Wagner’s Dam site on McMichael’s Creek in Stroudsburg, Pennsylvania.

Though the dam was removed in 2018, additional work was needed to restore the natural ecology of the creek. Dam removal projects rarely end once a dam is removed — streambank restoration and other enhancements are needed for downstream flood mitigation and water quality improvements, while also providing the added benefit of creating better recreational opportunities like fishing and boating.



Wagner’s Dam (left); Instream rock structures were installed to reestablish the natural ecology of McMichael’s Creek, benefiting brook trout and other aquatic organisms (center)/Ben Turpin, Pohoqualine Fish Association; Completed restoration (right) will benefit not only recreational fly fishers, but also mitigate flooding in downstream communities/Ben Turpin, Pohoqualine Fish Association.

## PARTNERSHIPS EXPAND INVESTMENTS IN DELAWARE’S PUBLIC SCHOOLS

The Caesar Rodney School District has successfully transformed unused green spaces on school campuses into vibrant and meaningful outdoor learning spaces teeming with native wildlife and pollinators, and is now partnering with the Red Clay Consolidated School District to share lessons learned and expand the outdoor learning spaces.

Outdoor learning spaces have proven immensely popular with teachers and students of all ages, reflecting a growing appetite for hands-on environmental education programming in public schools. Initial investments<sup>3</sup> made by the DRBRP in the Caesar Rodney School District have paved the way for additional funding within Delaware’s public school system. In 2023, a DWCF grant was awarded to the Red Clay Consolidated School District to establish innovative outdoor learning spaces at six additional public schools in Delaware. Students and teachers, as well as local wildlife and pollinators, will reap the benefits of these additional investments.

3. Read the more about the initial investments in the FY22 Report to Congress at [fws.gov/media/delaware-river-basin-restoration-program-fiscal-year-2022-report-congress](https://fws.gov/media/delaware-river-basin-restoration-program-fiscal-year-2022-report-congress)



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Learn more about the Delaware River Basin Restoration Program:  
[www.fws.gov/program/delaware-river-basin-restoration](http://www.fws.gov/program/delaware-river-basin-restoration)