

Pennsylvania Fish and Boat Commission

2022 ANNUAL REPORT



photos-courtesy of Emma Garneau, PFBC archives, and Terry Malloy

The mission of the Pennsylvania Fish and Boat Commission is to protect, conserve, and enhance the Commonwealth's aquatic resources, and provide fishing and boating opportunities.

FishandBoat.com



SPECIAL SECTION AND STATEWIDE INITIATIVES



The Power of Partnerships

The Pennsylvania Fish and Boat Commission (PFBC) is a relatively small state agency, which using a boxing metaphor, punches above its weight. In 2022, our nearly 420 full-time and approximately 200 seasonal staff statewide delivered incredible results on behalf of the Commonwealth's anglers, boaters, and aquatic resources. In all corners of Pennsylvania and during every season of the year, employees worked daily to implement our mission to protect, conserve, and enhance aquatic resources, and provide fishing and boating opportunities.

Some of this work will be highlighted on April 30 through May 2, 2023, when we join our colleagues at the Pennsylvania Game Commission to host the 78th Annual Northeast Fish and Wildlife Conference in Hershey. This event rotates among the northeast states from Virginia to Maine and comes to Pennsylvania about once every 10 years.

The opening plenary of the conference will feature a session entitled *The Power of Partnerships*. That title applies to this annual report and helps explain how the PFBC is able to accomplish so much. We don't do it alone.

The following pages contain examples of partners we worked with in 2022. It was tempting to try to preview some of them here, but there is not enough space on this page. The partnerships mentioned in this report only scratch the surface.

On behalf of our Board of Commissioners and Boating Advisory Board, thank you to all of the partners who collectively made our successes in 2022 possible.

As we embark on another year, we ask that everyone reading this report be our partner in the pursuit of safety. You can do that by wearing your life jacket.

Perhaps the most compelling statistic from this report is on page 27, showing that the 10-year-old cold weather life jacket regulation is working. Most boating accidents happen in the summer when more people are on the water, but a disproportionate number of fatalities happen when the water is cold and the chances of survival dramatically drop. In response, since 2012, boaters are required to wear a life jacket on boats less than 16 feet in length and on any canoe, kayak, or paddleboard from November 1 through April 30.

While the number of accidents during the cold weather months have remained steady over the past 10 years, fatalities have been cut in half. The regulation is saving lives and is a poignant reminder that life jackets work.

Do not be fooled by a warm day this winter or when boating during opening day of trout season on April 1, 2023. Despite the air temperature, the water is still dangerously cold. Wearing a life jacket can save your life, and it is the law this time of year.

If you remember two things from this annual report, hopefully it will be an appreciation of the power of partnerships for aquatic resource conservation and a renewed commitment to be our partner in boating safety by wearing your life jacket.



WEAR IT
National Safe Boating Council
Pennsylvania



PFBC Executive Director Tim Schaeffer at Pennsylvania Native Species Day, which was held at the PFBC headquarters on June 17, 2022.

SPECIAL SECTION

When it came to fulfilling the PFBC’s core mission to “Protect, conserve, and enhance the Commonwealth’s aquatic resources,” the PFBC’s Division of Habitat Management led the charge in 2022.

This special section aims to highlight the many diverse and impactful projects completed statewide in the key areas of Stream Habitat; Lake Habitat; and Fish Passage and Special Projects. Collectively, habitat projects completed on these waters will not only benefit aquatic species and water quality immediately and for decades to come but are visually impressive and contribute to world-class recreational opportunities for anglers and boaters in Pennsylvania and beyond.

Funding for these projects is achieved through local, state, and federal partnerships between the PFBC and other public and private conservation-minded organizations that understand the value of quality habitat and the resulting benefits of enhanced fisheries and reduced pollution that provides clean water locally and hundreds of miles downstream in the Chesapeake Bay.

Stream Habitat Projects Section

Spring Creek, Centre County - During summer 2022, the PFBC partnered with the Spring Creek Chapter of Trout Unlimited (TU) to improve two sites on this renowned wild trout stream. Just downstream of the Benner Spring State Fish Hatchery (SFH), habitat was improved through the installation of seven log-framed deflectors to provide over-head cover, narrow the stream channel, and stabilize eroding streambanks. Fifteen boulders were installed to provide mid-channel habitat. Additional habitat improvements were completed at a fishing access site along Route 550 near Bellefonte. This \$42,000 project was funded by Spring Creek TU, the PFBC Cooperative Habitat Improvement Program, and through the sale of PFBC Voluntary Wild Trout & Enhanced Waters Permits.



Habitat improvements were made to two sites at Spring Creek, Centre County.

Plunketts Creek, Lycoming County - The PFBC partnered with the Pennsylvania Game Commission (PGC) to construct instream habitat improvement structures on this tributary to Loyalsock Creek. Formerly an at-risk water adjacent to a pheasant farm, the section of Plunketts Creek is now home to an emerging population of naturally reproducing wild trout and provides approximately 4,000 linear feet of public fishing access. The PGC provided \$40,000 to complete the 2022 portion of this multi-year project.

Buffalo Creek, Butler County - The PFBC partnered with the Western Pennsylvania Conservancy (WPC) and Butler County Conservation District to improve 825 linear feet of publicly accessible stream within Chicora Park. Nine modified mudsills, 10 cross vane structures, and two log-framed deflectors were constructed using 100 hemlock logs and 360 tons of stone. This \$30,000 project will enhance riffle, run, and pool habitat while providing overhead cover and stabilizing the banks.



A log-frame cross vane structure on Buffalo Creek, Butler County.

Honey Creek, Mifflin County - During fall 2022, the PFBC teamed with the Pennsylvania Department of Conservation and Natural Resources (DCNR) to complete a habitat improvement project on this stream located in Reeds Gap State Park, Mifflin County. The addition of cross vane structures, a brush deflector, and 1,075 feet of large woody material enhanced the stream channel. The PFBC provided construction oversight while DCNR provided equipment operators and labor.

Spruce Creek, Huntingdon County - The PFBC and WPC partnered to improve 750 feet of this Class A wild Brown Trout stream at the PFBC Franklinville Access. More than 24 habitat enhancements now provide overhead cover, enhanced riffle, run, and pool habitat, while also stabilizing eroding streambanks and reducing the total sediment load entering the waterway. The Little Juniata River Association assisted to plant a riparian buffer of 115 trees and shrubs and a wildflower pollinator garden. This \$60,000 project was funded by the WPC, the Department of Environmental Protection’s (DEP’s) Growing Greener grant program, the PFBC Cooperative Habitat Improvement Program, and through the sale of PFBC Voluntary Wild Trout & Enhanced Waters Permits.

Little Pine Creek, Lycoming County - During fall 2022, the PFBC partnered with the Northcentral Pennsylvania Conservancy (NPC) and DCNR to improve 1,000 feet of this wild trout stream, which is also a part of the PFBC's Keystone Select Stocked Trout Waters program. More than 36 habitat enhancement structures were installed to provide overhead cover and stabilize a 200-foot-long, 16-foot-high eroded bank, which will reduce the total sediment load entering the waterway and the downstream impoundment.



A 16-foot-high, eroded streambank on Little Pine Creek, Lycoming County.



The restored, stabilized streambank on Little Pine Creek.

Lake Habitat Projects Section

Raystown Lake, Huntingdon County - The PFBC worked closely with the United States Army Corps of Engineers (USACE) to implement a large-scale fish habitat improvement plan supported by a consent order between the DEP and Sunoco. The Friends of Raystown Lake added to this support with grant funding obtained from Pennsylvania Lake Management Society (\$24,000) and the Reservoir Fisheries Habitat Partnership (\$75,000). Work completed in 2022 included a newly stabilized shoreline at the Twin Hollows



PFBC staff use a rock barge to place stone along an eroded shoreline at Raystown Lake, Huntingdon County.



A stabilized shoreline with stone deflectors, new fishing pier, and ADA accessible walking path at Raystown Lake.

Access, American with Disabilities Act (ADA) path to a new fishing pier, multiple stone deflectors, a boat mooring area, and loads of submerged fish habitat structures. Students from Juniata College assisted to build and place wood structures throughout the lake.

Glendale Lake, Cambria County - This project was a partnership between the PFBC, Cambria County Conservation District, and DCNR staff at Prince Gallitzin State Park to improve habitat at the Turtle Cove Access, stabilize shoreline at Glendale Lake, and add a new kayak ramp. This project was funded by Growing Greener, DCNR Resource Section, and the PFBC.

F. J. Sayers Reservoir, Centre County - Multiple projects conducted at this lake during spring and summer 2022 offered educational opportunities for PFBC staff and community volunteers. The PFBC's 24th Class of Waterways Conservation Officer trainees, students with the Wildlife Leadership Academy Bass Camp, and students from Our Lady of Victory Middle School each assisted with building and placing wooden habitat structures to improve cover and spawning habitat on the lakebed. In September, the PFBC and DCNR staff at Bald Eagle State Park partnered to host a National Hunting and Fishing Day event at the lake, where more than 70 attendees from the public helped to build wooden fish habitat structures.

Pymatuning Reservoir, Crawford County - As part of the annual fish habitat project, the PFBC joined with partners including Allegheny College, Crawford County Conservation District, Creek Connections, Conneaut Lake Middle School, DCNR Pymatuning State Park, Ohio Department of Natural Resources, and Pymatuning Lake Association. To create a new fishing spot, 130 wooden fish habitat structures were constructed and placed on the lakebed.



Volunteers construct 130 wooden fish habitat structures for Pymatuning Reservoir, Crawford County.

Fish Passage and Special Projects Section

In 2022, the PFBC’s work in this area focused on the facilitation of small dam removals and the identification, prioritization, and implementation of road-stream crossing (culvert) replacement projects to restore aquatic organism passage (AOP).

Cacoosing Creek, Berks County - the PFBC helped to fund and coordinate the removal of Paper Mill Dam, which inhibited fish passage on this wild trout stream that supports a Class A population in its upper reaches. This multi-phased project included removing the dam, protecting a buried gas line through the construction of a rock riffle, stabilizing streambanks, and removing excessive sediment deposits. Through this work, both Cacoosing Creek and its receiving water, Tulpehocken Creek, will benefit from the removal of a public safety hazard, reduced water temperatures, increased oxygen levels, and improved habitat and fish passage.



Before

The former Paper Mill Dam on Cacoosing Creek, Berks County.



After

Natural stream flow and fish passage was restored following dam removal.

Little Portage Creek, Potter County - The PFBC partnered with the Potter County Conservation District to restore AOP at a road-stream crossing on this Class A wild trout stream, which is a tributary to Freeman Run, another Class A wild trout stream. The former road-stream crossing, which had a concrete bottom and impeded wild trout movement and AOP, was replaced with a bottomless structure consisting of a native substrate, which opened approximately six miles of upstream habitat. This project was partially funded by the PFBC Sinnemahoning Creek Grant Program and through the sale of PFBC Voluntary Wild Trout & Enhanced Waters Permits.

AOP College Partnership

A collaboration between the PFBC, DCNR, and colleges and universities across the commonwealth introduce future natural resource professionals to the issue of AOP and provide students with experience assessing road-stream crossings for AOP. After being trained by the PFBC to conduct road-stream crossing assessments using North Atlantic Aquatic Connectivity Collaborative (NAACC) assessment protocol, participating faculty and staff conducted NAACC assessments with students in a variety of settings including field-based laboratory courses. To date, eight participating schools have assessed more than 70 road-stream crossings since the beginning of summer 2022, greatly increasing the PFBC’s capacity for these projects.



PFBC staff train faculty and staff from Allegheny and Thiel colleges on how to assess road-stream crossings.

STATEWIDE INITIATIVES

Return to Statewide Opening Day

On Saturday, April 2, 2022, the PFBC successfully held a statewide Opening Day of Trout Season for anglers in all 67 counties. The occasion marked a return to a single, statewide season opener and replaced the two-date regional opening day schedule that had been in place since 2007. A statewide Mentored Youth Trout Fishing Day was also held on Saturday, March 26, 2022. The majority of anglers surveyed by the PFBC in 2020 and 2021 indicated they preferred a single, statewide opening day of trout season over multiple opening days. To provide convenience and predictability for years to come, opening day will continue to occur annually on the first Saturday in April, with the mentored youth day occurring annually on the Saturday before.

- Saturday, March 25, 2023 - Statewide Mentored Youth Trout Day
- Saturday, April 1, 2023 - Statewide Opening Day of Trout Season



Representative Bob Merski, Erie, purchased his 2022 fishing license during the Sportsman's Day on the Hill event on March 30 at the State Capitol.

Wild Trout Streams Identified

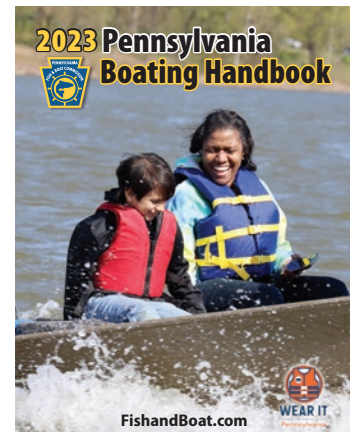
During 2022, PFBC biologists and the Unassessed Waters Initiative partners continued to survey streams to identify and classify naturally reproducing populations of trout. Surveyed waters that support natural reproduction of wild trout qualify to be added to the Commission's listing of wild trout streams and/or listing of Class A wild trout streams. In 2022, the Commission added 96 new waters to the list of wild trout streams and extended the limits of two waters that were currently listed, increasing the protection on 183 miles of streams. The Commission also added 25 new stream sections to the Class A wild trout streams list, thus increasing the protection on 48 miles of stream.



Brook Trout

Fishing Summary/Boating Handbook

For fishing license year 2023, beginning December 1, 2022, the PFBC created the new *2023 Pennsylvania Fishing Summary and 2023 Boating Handbook*. The book is available free of charge at nearly 700 license issuing agents, can be viewed using the FishBoatPa mobile app, or downloaded on fishandboat.com. Along with fishing regulations, the book includes information for both powered and unpowered boat operators including basic navigation rules and safety information related to life jackets and boating under the influence (BUI).



Limited Edition Fishing License Button

The collectible button for 2023 features a blue keystone on a vibrant, yellow background. The 2023 fishing license buttons are a limited edition offering of 10,000 buttons, which will be numbered between 00001-10000.



Amended Bowfishing Regulations

In July, following several months of input from the public, including avid bowfishing enthusiasts and guides, updated bowfishing regulations were adopted. These changes were in response to complaints to PFBC law enforcement staff regarding the intense lighting and generator noise that can be created by those participating in bowfishing. The changes prohibit bowfishing on any special regulation trout waters; make it unlawful to cast direct rays of a spotlight, mounted headlight, or any other artificial light of any kind from any watercraft upon any occupied building or another watercraft; and limit noise from generators used aboard a boat while bowfishing to no more than 90 dB(a), which is consistent with regulations for noise produced by motorboats.

In October, the Board of Commissioners voted to add invasive snakehead fish to the list of species that can be harvested through bowfishing. Under this change, it will remain unlawful to possess and transport live snakeheads and introduce live snakeheads into Pennsylvania waters. The PFBC recommends that all snakeheads caught should be disposed of properly, either by harvesting them for food or discarding them into a waste container, and the fish should not be released back into the water.

New Zealand Mudsail Response Plan

In May, when invasive New Zealand Mudsails (NZM) were found on the premises of the Benner Spring SFH in Centre County, the PFBC activated a special prevention, monitoring, and response plan at hatcheries statewide. After thorough inspections at all hatcheries, NZMs were only detected at one additional facility, the Pleasant Gap SFH, also in Centre County. While NZMs were not detected in areas which contained fish, under the response plan, biosecurity measures were immediately enhanced at all SFHs, and a high-level risk assessment began. Large scale disinfection operations were conducted at affected hatcheries and quarantine zones were established within the raceways to monitor groups of fish. Sampling of fish digestive material was conducted on hundreds of fish to detect any presence of NZMs. After several months of risk assessment, trout from the Benner Spring SFH and Pleasant Gap SFH were deemed to be unaffected by the presence of NZMs at the hatcheries and many trout were stocked during fall and winter stocking operations. The special response plan will remain in effect indefinitely at all PFBC hatcheries to prevent further spread of NZMs.



New Zealand Mudsails

Law Enforcement Awards

Each year, the PFBC's Bureau of Law Enforcement (BLE) honors its Waterways Conservation Officers (WCOs) with a variety of awards that recognize outstanding service and excellence in the field. In 2022, awards were presented in the following categories: The Top Gun Award was presented to WCO Sean D. Lake (Southern York County) for his BUI enforcement. The Gerald L. Greiner Environmental Protection Award was presented to WCO Rachael Thurner-Diaz (Adams/Western York counties) for her environmental work. The 2021 Officer of the Year Award was presented to WCO Chad E. Doyle (Southcentral Crawford/Eastern Mercer counties) for his well-rounded efforts in the Northwest Region. The National Association of State Boating Law Administrators (NASBLA) Boating Law Officer of the Year was presented to Mark A. Sweppenhiser (Northern Dauphin/Northumberland counties) for his outstanding contributions to boating and water safety.

Fish-for-Free Days

The annual Fish-for-Free Days were offered again in 2022 on May 29 and July 4. The Fish and Boat Code permits the PFBC to offer two free fishing days a year. The 2022 dates were picked to coincide with the Memorial Day and Independence Day weekends. Fish-for-Free Days allow anyone—residents and non-residents—to legally fish in Pennsylvania without a fishing license. From 12:01 a.m. to 11:59 p.m. on both days, no fishing license is needed to fish in Pennsylvania's waterways. All other fishing regulations apply.

Voluntary Permit Projects

During the 2022 season, thousands of generous anglers continued to support their favorite PFBC programs through the purchase of voluntary permits for Bass, Musky, Wild Trout & Enhanced Waters, and Habitat/Waterways Conservation. These permits are not required for fishing and carry no additional privileges, but all funds generated through them are reinvested into their respective programs. In 2022, more than \$102,500 was generated through the sale of voluntary permits, and the PFBC has invested more than \$520,000 into special projects funded by the program since 2019.

Water Rescue Training

The PFBC provided more than 7,000 hours of training in 2022, and certified 5,155 students through the Water Rescue Program, a 70% increase over 2021. This surge is attributed to increased demand by first responders and rescue professionals in response to the return of in-person training. The Commission also conducted numerous water rescue and water safety awareness courses with state partners including the PGC, DCNR, and DEP. Since 1983, the PFBC has trained more than 80,000 students in water rescue operations and is the largest non-profit, public water and ice rescue training program in the country.

WCO and Deputy WCO Classes

On June 24, 2022, 16 members of the 24th Class of WCOs graduated during a ceremony at the Capitol. During their conservation law enforcement careers, the officers will patrol streams, rivers, and lakes; assist with investigations; participate in public outreach events; and stock waterways with fish. Another class of WCOs began training in July 2022 and will graduate in the summer of 2023.

On June 12, 2022, a class of 12 Deputy WCOs graduated from training at the PFBC's H.R. Stackhouse School of Fishery Conservation and Watercraft Safety. Deputy WCOs are volunteers whose 16-day training includes courses in constitutional law; fish identification; armed and unarmed self-defense training; tactical firearms; boat accident response investigation protocol; patrol boat trailer use and maintenance; and field training alongside seasoned WCOs.



24th Class of WCOs

Law Enforcement Investigations

The Special Investigations Division focuses on unique or complicated casework outside the normal daily duties of uniformed WCOs, including the illegal commercialization of native species, illicit trafficking of wildlife, and the apprehension of persons that cause large amounts of damage to the environment. During its first full year of operation in 2022, the Division filed 71 Special Investigation Reports and conducted numerous informal investigations to support WCOs in the field. These investigations resulted in one misdemeanor criminal complaint, 113 summary charges, and over 21 warnings for violations of the Pennsylvania Fish and Boat Code (Title 30). Charges included misdemeanor possession of an endangered species, sale of native species, guiding without the proper credentials, no charter boat license, fishing without a license, and possessing fish and reptiles over the legal limit.

Undercover officers attended three sanctioned rattlesnake hunts, resulting in two reports of intentional destruction of habitat and possession of a venomous snake. Undercover officers visited 222 stores and 55 reptile expos and executed four search warrants in 2022. Notable cases included 12 charges filed against a charter captain operating unlawfully in Erie, multiple charges against an individual illegally propagating invasive crayfish in the Poconos, and the confiscation of more than 1,300 pounds of illegally possessed crayfish in Philadelphia, which resulted in more than \$5,000 in fines. Eleven charges were filed against the operator of a pet store for the illegal possession of venomous snakes and other native species. In the Pittsburgh area, a multi-month surveillance investigation resulted in 46 charges being filed against four suspects accused of fishing unlawfully with gill nets and selling native fish.

Additionally, the PFBC referred 11 cases to the PGC, U.S. Fish and Wildlife Service (USFWS), and neighboring states.

Climate Action Plan

In the face of current and anticipated climate change effects, the PFBC is well-positioned to help ensure healthy fish populations, vital habitats, and safe, accessible fishing and boating opportunities remain for generations to come. Through the first PFBC Climate Action Plan (CAP), the PFBC identified how recent science-based climate change projections will impact Pennsylvania's aquatic resources and outlined goals, strategies, and actions, in collaboration with partner organizations, to address climate change impacts.

Young-of-the-year Smallmouth Bass

PFBC biologists frequently use electrofishing to assess the presence and abundance of young-of-the-year Smallmouth Bass in flowing waters across the Commonwealth. Data collected in 2022 from the Juniata River using new electrofishing equipment will be studied alongside data collected using older equipment from the same water in 2018 to compare fish capture efficiency. As part of this study, a number of fish were tagged and placed into historic sampling sites to aid in measuring capture rates. Results of this study are expected to be available in 2023 and will be used to influence future fish management operations.

Native Crayfish Conservation

From 2019-2022, PFBC biologists have surveyed thousands of sites for various crayfish species, which serve an important ecologic role. As a result of these surveys, mostly in the Southwest Region but also in the Southeast Region, Digger Crayfish were collected for the first time in Pennsylvania, a potentially undescribed species was collected in the Lake Erie basin, and the Devil Crayfish was rediscovered for the first time since the early 1900s. In 2022, enough data was collected to rank the population status of many Pennsylvania crayfish, including nine species which were determined to be vulnerable or imperiled and listed among Species of Greatest Conservation Need (SGCN).

Trout In the Classroom (TIC)

This program continued to grow in 2022, providing educational experiences for students and teachers who raise Rainbow Trout from eggs to fingerling-size fish in aquariums as part of their curriculum. For the 2021-2022 school year, 39,548 students in 379 classrooms completed 7,625 hours of TIC-related education. Schools in 64 counties participated in the program, representing 44% of Pennsylvania school districts. The PFBC conducted four TIC workshops for 117 new teachers/program partners and offered 28 virtual programs for approximately 6,800 students. TIC is a partnership between the PFBC, Pennsylvania Council of TU, local TU chapters, Pennsylvania Department of Education, participating schools, and volunteers.

Women's Education Programs

Statewide, the PFBC offered 23 women's programs, reaching 498 participants, who learned skills in the areas of fly, ice, kayak, and steelhead fishing. Through these programs, PFBC staff serve as co-chair for the Pennsylvania Council of TU's Women, Diversity, and Inclusion Committee and assisted with planning the 3rd Annual Women's Leadership Retreat reaching 27 female leaders representing TU chapters and other organizations from across the state.



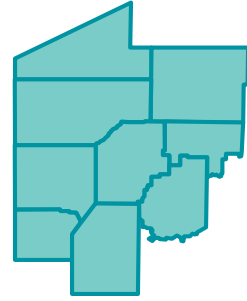
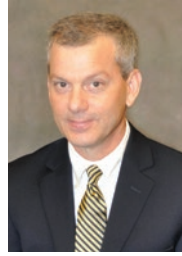
Elizabeth Brandon, Crawford County, caught this Black Crappie on Lake Nessmuk, Tioga County, during a PFBC Women's Intro to Ice Fishing Program.

Legislative Update

During the Pennsylvania General Assembly's 2021-2022 legislative session, the PFBC prioritized its advocacy for a new, common sense, boat registration bill's enactment into law. Act 28 of 2022, introduced as Senate Bill 403 by Senator Devlin Robinson, was signed into law on June 27, 2022. Under Act 28, boat registration periods will now be issued to parallel the calendar year by beginning on January 1 and extending until December 31 of the second year. The measure aligns registrations with the same schedules as Commonwealth launch permits for canoes, kayaks, and paddleboards. Prior to this update, boat registrations have been historically issued to take effect from April 1 through March 31 of their second year, and was confusing for boaters, leading to an abundance of warnings and violations. Recreational boating continues to increase in popularity, with over 301,000 boats currently registered statewide.

FIRST DISTRICT

Commissioner Daniel J. Pastore



Commissioner Daniel J. Pastore, Fairview, Erie County, represents the First District of the PFBC. He was appointed in June 2019.

The First District includes **Butler, Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, and Warren counties.**



FIRST DISTRICT

A World-Class Steelhead Fishery

In 2022, the PFBC continued to increase angler access to the tributaries of Lake Erie, which provide a unique, world-class steelhead fishery during late fall and winter. Through property acquisitions and easements, 3.24 miles (17,095 linear feet) of stream access was acquired, including a 1.7 mile (8,960 linear feet) section of Twentymile Creek that was the largest easement acquisition ever acquired by the PFBC. To date, the PFBC has acquired 28.08 miles (148,299 linear feet) of public fishing access in the Lake Erie Watershed through easements and land purchases under the Erie Access Improvement Program. In December, the PFBC hosted



PFBC Biologist Craig Lucas

guests from multiple states to highlight steelhead collection and spawning as part of the USFWS's Partner with a Payer program. The program aims to positively engage fishing industry manufacturers who pay a federal excise tax annually to help fund fish and wildlife agencies nationwide.

Erie Access Improvement Grant Program

In 2022, the PFBC awarded more than \$348,000 in grants through this program, which is funded through proceeds from the sale of Lake Erie permits. Grants are awarded to programs that benefit public fishing, including enhanced access and habitat projects on or at Lake Erie and its watersheds. The projects awarded through the 2022 round of grants include:

- Erie-Western PA Port Authority; Parade Street Public Access Rehabilitation; Presque Isle Bay, Erie County
- Pennsylvania State University for Pennsylvania Sea Grant; Manchester Falls Fish Passage Feasibility Study; Walnut Creek, Erie County

Linesville SFH Open House

On April 9, the PFBC welcomed several thousand guests to an open house at this hatchery, featuring educational and entertaining activities and exhibits. Visitors enjoyed a Walleye spawning demonstration, live reptile and amphibian displays, fish cooking demonstrations, and fly tying instruction.

Lake Erie Sportfishing Update

The Walleye fishery in Lake Erie was exceptional for the sixth consecutive year, and 2022 was the seventh consecutive year with above average Walleye angler catch rates. The 2022 fishing season provided the third highest Walleye angler catch rate in the 26-year survey period, with harvested Walleyes averaging 19 inches long and trophy-size fish up to 28 inches long. Most harvested Walleyes were age 3 (53%), age 4 (17%), and age 7 (16%). Spawning success and juvenile survival of Walleyes in Lake Erie has been outstanding since 2015, resulting in a high-quality fishery that will provide excellent fishing for years to come.

The steelhead tributary fishery continues to perform above expectations. Below average precipitation in the Erie basin

contributed to a moderate decrease in tributary angler catch rate during fall 2021 and spring 2022, but the target catch rate of 0.30 steelhead/angler hour was exceeded for the ninth consecutive year. Similarly, the open lake boat angler catch rate in 2022 for steelhead exceeded the long-term average catch rate for the ninth time in the last decade with an overall increase in weight observed. The PFBC increased the quality and size of the stocked juvenile steelhead in 2013, which improved survival while maintaining the annual agency stocking objective of 1 million smolt. Pennsylvania provides one of the best steelhead trout fisheries on the Great Lakes

Tamarack Lake Sportfish Assessment

Following repairs to the dam in 2019, the 562-acre lake was refilled, and the PFBC began stocking various popular warmwater sportfish and forage fish including Largemouth Bass, Bluegills, Walleyes, Muskellunge, White Crappies, Yellow Perch, and minnows. Preliminary sampling in 2021 and 2022 revealed strong populations of many of the species, and anglers are able to enjoy fishing under Catch and Release Lakes program regulations. Additional sampling will occur to monitor the progress of the fishery and once sportfish populations are well established, the catch and release regulations will be removed in favor of alternative regulations that permit limited harvest.

Shenango River Caged Mussel Study

To study the potential impacts of discharges, such as those from sewage treatment and industrial facilities, the PFBC collaborated with the USFWS and DEP to perform a caged freshwater mussel study. Juvenile Plain Pocketbook mussels, reared at PFBC's Union City Aquatic Conservation Center, were contained within areas of an "impact zone" known to have elevated zinc levels, as well as upstream and downstream of the zone, for 85 days. Periodic sampling of the mussels in each of the areas was conducted during the test period to document survival and measure growth. Data from the study will help determine if current discharge regulations are adequate to protect aquatic organisms.



Caged mussel study

Women's Intro to Steelhead Fishing

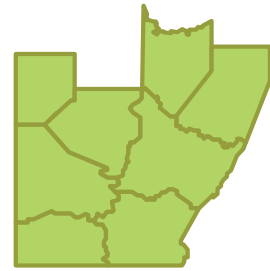
PFBC partnered with the Pennsylvania Steelhead Association, Fly Fishers International, Penn's Woods West TU, and Corn Planter TU to implement three Women's Introduction to Steelhead Fishing Programs and one Intro to Steelhead Fishing Program for participants who attended previous PFBC programming. The programs reached 56 people with the majority being female.

Access Area and Marina Improvements

- **Edwards Property Access, Erie County** - A parking area was added to allow public fishing access on this popular section of Conneaut Creek.
- **Walnut Creek Marina, Erie County** - Cosmetic and safety improvements included fresh paint, new doors and railings, a water bottle refill station, life jacket loaner station, and large ice freezer. Large amounts of debris were removed from the beach area.

SECOND DISTRICT

Commissioner John Mahn Jr.



Commissioner John Mahn Jr., Charleroi, Washington County, represents the Second District of the PFBC. He was appointed in December 2021.

The Second District includes **Allegheny, Armstrong, Beaver, Fayette, Greene, Indiana, Washington, and Westmoreland counties.**

SECOND DISTRICT

Blue Catfish Restoration Plan

Beginning fall 2022, the PFBC initiated a multi-year stocking effort to restore Blue Catfish to the Ohio River basin in western Pennsylvania, including the Allegheny, Ohio, and Monongahela rivers – known as the Three Rivers. Blue Catfish are native to the Three Rivers, but due to pollution and habitat alteration, the species was eliminated from Pennsylvania in the early 1900s. As North America's largest catfish species, Blue Catfish can grow to 100 pounds or more and are extremely popular with catfish anglers.

The goal of the Three Rivers Blue Catfish Restoration Plan is to ultimately establish a self-sustaining, naturally reproducing population of Blue Catfish in the Three Rivers only, and not to establish the species in lakes or other rivers in the Commonwealth, where they are non-native and are considered highly invasive.

Blue Catfish stocking in the Ohio River began with fingerlings (3-5 inches) in 2022 and yearling (8-10 inches) stockings are planned in 2023 and beyond. The PFBC will monitor the Blue Catfish restoration efforts in the Three Rivers every 3 years beginning in 2025.



PFBC Fish Culturist Andy Severns with Blue Catfish.

Freshwater Mussel Stocking

In October, the PFBC and DEP teamed up to stock approximately 500 freshwater mussels into Dunkard Creek, Greene County. The juvenile Plain Pocketbook and Fatmucket mussels were reared at the PFBC's Union City Aquatic Conservation Center. This was a small stocking, and the PFBC expects to stock 40,000 additional mussels in 2023 to help restore populations destroyed by pollution.



Freshwater mussels were stocked into Dunkard Creek, Greene County.

Three Rivers Walleye Study

To assess how angler harvest may be affecting naturally reproducing Walleye populations in the Three Rivers, the PFBC began this study focusing on spawning, growth, and presence of different age Walleyes in the population. The study is ongoing, and the results will inform fisheries managers about the suitability of current harvest regulations for maintaining quality Walleye fishing in the Three Rivers.

Pittsburgh First Catch Program

The PFBC and Venture Outdoors partnered for the Pittsburgh First Catch program, which provided 80 fishing and kayaking programs to 993 participants in underrepresented communities in Pittsburgh and surrounding areas. Through a \$150,000 Recruitment, Retention, and Reactivation grant, the PFBC helped launch this pilot program, which is a concept of the Recreational Boating and Fishing Foundation, designed to provide fishing and boating experiences in urban communities.

Outdoor Afro

Through a new partnership with Outdoor Afro in Pittsburgh, the PFBC provided two Intro to Fly Fishing programs for 14 participants. Outdoor Afro is a community that reconnects African Americans with natural spaces and one another through outdoor recreational activities including fishing and boating.



A group photo from an Outdoor Afro Intro to Fly Fishing program.

Fish with a WCO

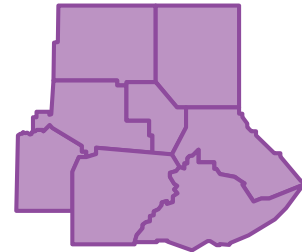
In July, the PFBC partnered with DCNR and the Port of Pittsburgh for this event at Keystone State Park in Westmoreland County. The Port of Pittsburgh provided 150 life jackets as a giveaway to participants, who practiced their fishing skills at a casting station prior to fishing and boating in the lake, many for the first time.

Access Area Improvements

- **Rosston Access Area, Armstrong County** - In August and September, a new concrete boat launch was constructed, and improvements were made to the parking area.
- **Monongahela Access Area, Washington County** - In December, improvements were made to the parking area.

THIRD DISTRICT

Commissioner William C. Brock



Commissioner William C. Brock, St. Marys, Elk County, represents the Third District of the PFBC. He was appointed in July 2017 and was reappointed in January 2022.

The Third District includes **Cameron, Centre, Clearfield, Clinton, Elk, Jefferson, McKean, and Potter counties.**

THIRD DISTRICT

Spring Creek Angler Survey

In the spring, PFBC biologists conducted an angler use, opinion, and economic survey on a 6-mile section of this prized wild Brown Trout fishery in Centre County. Survey results will help guide future management of the stream as well as estimate the local economic impact. In August, fishery surveys were conducted to evaluate fish size structure and population. Study results are expected in 2023.



Spring Creek, Centre County

Trout Slot Limit Program

Penns Creek, Section 03, in Centre and Mifflin counties, was added to the new All Tackle Trout Slot Limit program. This Class A wild trout stream was part of an experimental slot limit regulation since 2014, which allowed for year-round fishing, use of all tackle types, and the harvest of two trout per day that are at least 7 inches but less than 12 inches in length, from the opening day of the regular season for trout through Labor Day, with no harvest permitted the remainder of the year. The success of this experimental regulation led to the creation of an official Slot Limit program, which included two sub-programs: All-Tackle and Artificial Lures Only. While the name of the regulation applied to Penns Creek, Section 03, will change, the current regulation in place will remain the same.

Partner with a Payer

On April 12, the PFBC hosted several Pennsylvania fishing tackle manufacturers as part of the USFWS Partner with a Payer program. The program highlights the benefits

of federal excise taxes on fishing equipment, which is paid by manufacturers, and helps to fund state fish and wildlife agencies. The event included a tour of the Benner Spring SFH and an electrofishing demonstration at Bald Eagle State Park, Centre County.



Partner with a Payer tour of the Benner Spring SFH, Centre County.

Hatchery Improvements

In a continuing effort to improve infrastructure agencywide, the Oswayo State Fish Hatchery, Potter County, received several upgrades in 2022. A new exterior gate, fencing, and sidewalk will enhance biosecurity and safety.



Oswayo State Fish Hatchery, Potter County

Dam Safety Improvements

Cloe Lake, Jefferson County - Site investigations, geotechnical exploration, and hydraulic evaluation is currently in progress on this \$525,000 construction project that will address dam embankment drainage deficiencies.

Colyer Lake, Centre County - New sections of fence were installed for enhanced public safety around the dam spillway.

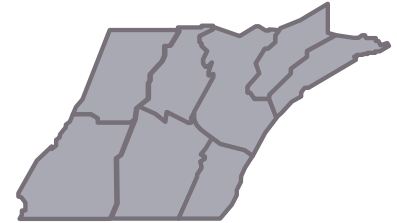
Teaching Fishing and Boating Skills

The PFBC offered three programs for 21 students in Bellefonte Area High School's "Back-to-Nature" class, introducing students to fly fishing and kayak fishing.

Two Intro to Fly Fishing programs at Lyman Run State Park, Potter County, were attended by 23 anglers.

FOURTH DISTRICT

Commissioner Donald K. Anderson



Commissioner Donald K. Anderson, Meyersdale, Somerset County, represents the Fourth District of the PFBC. He was appointed in October 2018.

The Fourth District includes **Bedford, Blair, Cambria, Fulton, Huntingdon, Juniata, Mifflin, and Somerset counties.**

FOURTH DISTRICT

Reopening of Lake Somerset

On June 10, the PFBC, state and local officials, and community partners gathered to celebrate the completion of a lengthy \$8 million dam rehabilitation project at Lake Somerset. Refilling of the lake occurred throughout spring and summer, and a multi-year restocking plan began with the introduction of Golden Shiners, Fathead Minnows, Walleyes, and Largemouth Bass. Eventually, other species will be introduced into the lake including catfish, Bluegills, Black Crappies, and Muskellunge. While fishing is permitted at the lake, anglers must abide by catch and release regulations until the fishery becomes self-sustaining and abundant enough to allow angler harvest.



Pictured are (left to right) Camden Connor, Connor Cramer, and Gino Tieteman at the reopening of Lake Somerset, Somerset County.

Dam Safety Improvements

High Point Lake, Somerset County - Currently in the design phase, this \$5.5 million construction project will address dam safety deficiencies related to spillway capacity, spillway integrity, and dam embankment stability.

Raystown Lake Striped Bass Survey

An early spring gill net survey of the lake yielded a catch of 87 Striped Bass ranging 23-35 inches long, with the largest

fish weighing 19 pounds. The 2022 catch rate was nearly identical to the previous 2016 assessment, suggesting that the PFBC's annual fingerling stockings are critical to maintaining the Striped Bass fishery. In addition to Striped Bass, other sportfish were captured including 7 hybrid Striped Bass, 83 Walleyes, 5 Lake Trout, 5 Muskellunge, 11 tiger muskellunge, 66 Channel Catfish, and 2 Flathead Catfish. The catch of 2 adult Flathead Catfish, likely introduced by anglers, was the first documented occurrence for this non-native species in Raystown Lake. Flathead Catfish, which are considered invasive outside of the Ohio River drainage, can have adverse impacts on native aquatic species.



PFBC Area Fisheries Manager Bryan Chikotas and Deputy Director of Field Operations Robert Brown at Raystown Lake, Huntingdon County.

Education

- An Intro to Kayaking program was held at Duman Lake, Cambria County, where participants learned about legal requirements, proper life jacket wear, water hazards, and basic paddling skills.
- PFBC staff provided casting instruction and practice as well as an educational amphibian and reptile program to 30 youth in the Somerset Boys & Girls Club.
- PFBC staff conducted a Fishing Meet-up and provided information to thousands of visitors at the Prince Gallitzin State Park Apple Cider Festival, Cambria County.

Access Area and Marina Improvements

Breezewood Access Area, Bedford County -

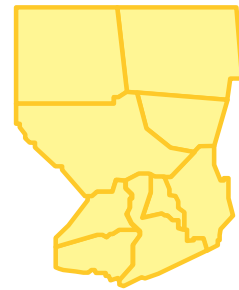
Improvements included the addition of a new parking area and a wider path for canoe/kayak access to the Raystown Branch Juniata River.

Franklinville Access Area, Huntingdon County - A new parking area was added. Several structures on the property, previously known as Indian Caverns, were removed to make way for a stream habitat project.

Walker Access Area, Juniata County - In October, improvements were made to the parking area.

FIFTH DISTRICT

Commissioner Eric C. Hussar



Commissioner Eric C. Hussar, Lewisburg, Union County, represents the Fifth District of the PFBC. He was appointed in October 2014 and reappointed in June 2019.

The Fifth District includes **Bradford, Columbia, Lycoming, Montour, Northumberland, Snyder, Sullivan, Tioga, and Union counties.**

FIFTH DISTRICT

Dam Safety Improvements

Beechwood Lake Dam, Tioga County - Design work continued on this project that will provide dam safety improvements to address spillway capacity and dam embankment stability. The dam and property are owned and managed through a partnership between the PFBC and the Natural Resources Conservation Service.

Rose Valley Lake, Lycoming County - Final design work was completed on this proposed \$5.57-million construction project that will address dam safety deficiencies related to spillway capacity, spillway integrity, and dam embankment stability.

Hunters Lake, Sullivan County - Early site investigations, geotechnical exploration, and hydraulic evaluation is in progress on this proposed \$2.8-million construction project that will address dam safety deficiencies related to spillway integrity and dam embankment stability.

Susquehanna Greenway Outdoor Expo

Held at Shikellamy State Park Marina, Northumberland County, on Saturday, June 4, 2022, the PFBC participated in this expo to celebrate National Trails Day and National Get Outdoors Month. The free event featured a hands-on paddling skills workshop.

Life Jacket Loaner Site

The PFBC partnered with the DCNR Bureau of Forestry to establish a new Life Jacket Loaner site on Pine Creek in Lycoming and Tioga counties. Paddlers can now borrow and return life jackets at two locations on this popular water trail at no charge.



WCO Chad Lauer at the life jacket loaner site along Pine Creek.

Flathead Catfish Expansion

Sampling for Flathead Catfish in 2022 documented the presence of this species near Danville, Montour County, and Sayre, Bradford County. These findings confirmed that Flathead Catfish are now present from the confluence with the West Branch Susquehanna River at Northumberland to the New York and Pennsylvania state line near Sayre. The largest captured Flathead Catfish to date in the North Branch Susquehanna River was caught in Falls Township, Wyoming County, and was 43 inches long with an estimated weight of more than 30 pounds. Flathead Catfish were first found in the lower reaches of the Susquehanna River in the early 2000s and were first captured in the North Branch Susquehanna River by PFBC biologists in 2014. In Pennsylvania, Flathead Catfish are only native

to the Ohio River drainage, and are considered invasive in the Susquehanna River and other waters where they can have adverse impacts on native fish populations.

Freshwater Mussel Surveys

During freshwater mussel surveys conducted in July on the West Branch Susquehanna River in Lycoming County, several rare mussel species were collected, including the Eastern Lampmussel, Brook Floater, Green Floater, and Triangle Floater. These species are listed in Pennsylvania's State Wildlife Action Plan as being of Greatest Conservation Need, which means they are at risk of becoming Threatened or Endangered. At one site near Williamsport, biologists collected more than 500 mussels during an hour-long snorkeling session, representing nine of the 11 species historically known to live in the West Branch Susquehanna River. This is an important find, because this site supports a nearly intact mussel community despite past degradation of the water quality and habitat of the river from surface coal mining, logging, and dam construction.



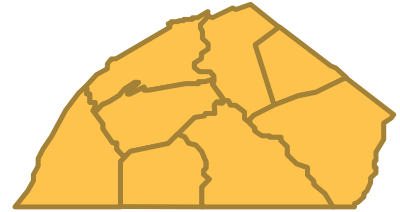
PFBC Biologist Dakota Raab and Fisheries Biologist Aide Katelynn Sallack sampling mussels in the West Branch Susquehanna River.

Fishing Programs

- Forty-nine anglers attended two Women's Intro to Ice Fishing programs and one general Intro to Ice Fishing program at Nessmuk Lake, Tioga County.
- Twenty-three anglers were reached through two Women's Intro to Fly Fishing programs and one Intro to Fly Fishing program at Hills Creek State Park, Tioga County.
- The Rose Valley Lake Family Fishing program, Lycoming County, was attended by 102 people to learn basic fishing skills.

SIXTH DISTRICT

Commissioner Robert B.J. Small



Commissioner Robert B.J. Small, Mechanicsburg, Cumberland County, represents the Sixth District of the PFBC. He was appointed in July 2017 and was reappointed in January 2022.

The Sixth District includes **Adams, Cumberland, Dauphin, Franklin, Lancaster, Lebanon, Perry, and York counties.**



SIXTH DISTRICT

Breaking Ground on Childrens Lake

On September 2, the PFBC, state and local officials, and community volunteers broke ground on the \$4.3 million dam and facilities rehabilitation project at Childrens Lake, located in Boiling Springs (South Middleton Township), Cumberland County. In June 2016, after a sinkhole appeared, seepage and structural deficiencies were discovered in the existing dam at Childrens Lake. The PFBC, South Middleton Township, private donors, and local residents combined efforts to fund the early design work, and in March 2018, Governor Tom Wolf authorized the release of \$2.4 million in capital budget funds to advance the project. In June 2022, with the assistance of Senator Mike Regan and Representative Torren Ecker, additional capital funds were released, and construction began in September 2022. The extensive rehabilitation project will include the construction of a new dam, spillway, and retaining wall. Amenities including an upgraded boat launch and ADA fishing area will be funded through various grants. The project is expected to be completed in summer/fall 2023.



A ground-breaking ceremony at Childrens Lake, Cumberland County.

Adult Smallmouth Bass Surveys

PFBC biologists conducted adult Smallmouth Bass surveys within the Middle Susquehanna River (Sunbury to York Haven) during September. Catch rates of adult (age 1 and older) and large (15 inches and longer) Smallmouth Bass were approximately double the long-term historic catch rates for this section of river. The presence of strong, back-to-back year classes in 2021 and 2022 suggests anglers can anticipate high abundance of younger fish and great fishing opportunities in coming years. Persistence of the strong 2015-year class continues to influence the population structure in this portion of the Susquehanna River, which has been managed with catch and release regulations for Smallmouth Bass since 2011.

Yellow Breeches Creek Water Trail

In September, the PFBC and the New Cumberland Borough, Cumberland County, celebrated the opening of a newly rehabilitated unpowered boat launch along the Yellow Breeches Creek. The \$104,000 project was funded with \$47,000 from the PFBC's Boating Facility Grant Program and included replacing a primitive launch with a modern, 15-foot-wide concrete ramp, ADA accessible parking spot and walking path, gravel entrance road, and new signage.

Speedwell Forge Lake Sportfish Evaluation

In 2022, surveys were conducted at this lake in Lancaster County to determine the status of panfish populations following dam repairs and refilling of the reservoir in 2016. Results suggest panfish populations including Black Crappies, White Crappies, and Bluegills have been re-established and improved to levels where populations can now sustain limited harvest. Results of a 2021 electrofishing survey indicated that Speedwell Forge Lake also supports a high-quality Largemouth Bass population. The lake will now be managed under Big Bass Program Special Regulations for black bass and Commonwealth Inland Waters regulations for all other species.

Family Fishing Day at Italian Lake

The PFBC teamed with the City of Harrisburg to offer this free day of fishing on Italian Lake, which is normally closed to fishing. Participating anglers were provided with bait and fishing gear as needed and enjoyed catching Largemouth Bass, Channel Catfish, Bluegills, and Carp.



Family Fishing Day at Italian Lake, Dauphin County.

Cooperative Nursery Upgrades

The Yellow Breeches Anglers and Conservation Association, Cumberland County, was awarded a grant from the Pennsylvania Department of Community and Economic Development towards a \$150,000 rehabilitation project to rebuild the facility's concrete raceways, install new protective netting, and improve walking areas. The organization annually raises approximately 40,000 trout and stocks them into public waterways for anglers to enjoy.

Bilingual Education Programs

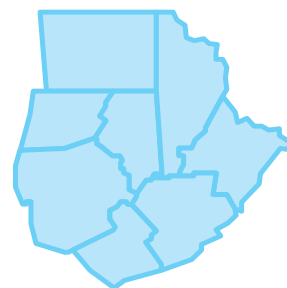
In June, the PFBC delivered a STREAM (Science, Technology, Reading, English, Arts, and Math) workshop that was marketed for a bilingual audience within the City of Lancaster.

Access Area Improvements

Middletown Access Area, Dauphin County - During Fall 2022, improvements were made to the parking area and access road.

SEVENTH DISTRICT

Commissioner William J. Gibney



Commissioner William J. Gibney, Honesdale, Wayne County, represents the Seventh District of the PFBC. He was appointed in June 2019.

The Seventh District includes **Carbon, Lackawanna, Luzerne, Monroe, Pike, Susquehanna, Wayne, and Wyoming counties.**

SEVENTH DISTRICT

Lackawaxen River Water Trail

In June, the PFBC joined with DCNR, USFWS, and Wayne County to announce grant funding that will help establish a Lackawaxen River Water Trail in Wayne County. Through the PFBC's Boating Facility Grant Program, the PFBC has awarded more than \$559,000 towards the development of three access areas that will provide safe and convenient access to approximately 10 miles of the Lackawaxen River from Honesdale to Hawley.



In June, the PFBC joined DCNR, USFWS, and Wayne County to announce grant funding that will help establish Lackawaxen River Water Trail in Wayne County.

Construction at Lower Woods Pond

Construction continued on this 91-acre lake in Wayne County, where a \$2.6-million project will result in the reconstruction of three dams and a spillway. Construction is expected to last approximately one year, with the lake ready to enjoy by the end of 2023. While boaters will be able to enjoy the pond as soon as it refills, anglers will have to abide by catch and release fishing regulations until a multi-year restocking plan can re-establish the bountiful fishery with species including Largemouth Bass, Walleyes, and panfish. Lower Woods Pond was dewatered in 2012 following the discovery of a leak in the aging dam structures, which presented a safety hazard.

Dam Safety Improvements

Belmont Lake Dam, Wayne County - This \$3.1-million rehabilitation project is expected to begin in summer/fall 2023 and will address dam safety deficiencies related to spillway capacity and dam embankment stability. In October 2022, the PFBC lifted fishing regulations at the 172-acre lake to allow licensed anglers to remove as many fish as possible before the lake is drained for construction.

White Oak Pond Dam and Miller Pond Dam, Wayne County - This proposed \$6.5-million project remains in the permitting stage and will eventually include the rehabilitation of two dam structures.

Harris Pond, Luzerne County - Preliminary site investigations, geotechnical exploration, and hydraulic evaluation is in progress for this proposed \$1.96-million project.

Stevens Lake, Wyoming County - This proposed \$1.68-million project remains in the early pre-construction stages.

Fords Lake, Lackawanna County - This proposed \$2.7-million construction project remains in the early pre-construction stages.

Joint Fisheries Investigation Plan

In 2022, the PFBC and the New York State Department of Environmental Conservation continued to partner to complete a stock assessment of the Upper Delaware River Tailwaters trout population. Results suggest the presence of robust wild Brown Trout and wild Rainbow Trout populations, with both abundant large fish and young fish forming a stable fishery. Based on these findings, which are part of the Joint Fisheries Investigation Plan, Pennsylvania and New York are working on a joint management plan for the Upper Delaware River Tailwaters focused on trout population sustainability and meeting angler expectations for trophy-sized trout.

American Shad Management

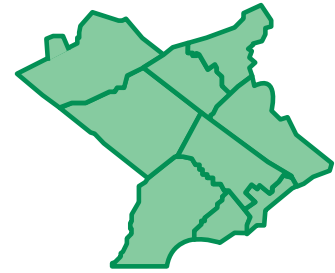
American Shad support a popular recreational fishery in the Delaware River during their spring spawning run. This fishery is collaboratively managed by the Atlantic States Marine Fisheries Commission (ASMFC) and the Delaware River Basin Fish and Wildlife Management Cooperative (Co-op). The PFBC is a member of both entities. Several management benchmarks focused on relative abundance and commercial harvest of fish, have been identified by Co-op members, and outlined within the 2022 American Shad Sustainable Fishery Management Plan. Recent findings in the ASMFC 2021 stock assessment, however, demonstrated total mortality is unsustainable within the Delaware River Basin. In response, Co-op members implemented restrictions by 33% for both commercial landings and recreational harvest beginning in 2023. Fortunately, the 2022 summertime assessment of the young-of-the-year (YOY) American Shad production was encouraging. Catches suggest above average production, ranking ninth overall in the time-series (1988 to 2022). When mature in 2027, these fish are expected to produce a strong spawning run.

Access Area Improvements

Lake Winola Access Area, Wyoming County - Construction and maintenance staff removed an aging timber bulkhead and constructed a new concrete bulkhead with an ADA accessible concrete sidewalk to the bulkhead and docks.

EIGHTH DISTRICT

Commissioner Richard S. Kauffman



Commissioner Richard S. Kauffman, Leesport, Berks County, represents the Eighth District for the PFBC. He was appointed in July 2017 and reappointed in June 2019.

The Eighth District includes **Berks, Bucks, Chester, Delaware, Lehigh, Montgomery, Northampton, Philadelphia, and Schuylkill counties.**

EIGHTH DISTRICT

Lake Nockamixon Musky Survey

PFBC biologists conducted a trap net survey during the spring at Lake Nockamixon, Bucks County, to evaluate the status of the lake's Muskellunge and tiger muskellunge populations. A total of 45 muskies ranging from 31 to 49.5 inches long were captured. Of these fish, 56% exceeded 40 inches long. The catch rate of Muskellunge was nearly 10 times the established catch benchmark in the Pennsylvania Muskellunge Management Plan. Additionally, six tiger muskellunge ranging 36 to 39 inches long were captured, which is slightly greater than the Musky Plan catch benchmark. While the PFBC no longer stocks tiger muskies at Lake Nockamixon, annual musky stockings by the Penn-Jersey Chapter of Muskies Inc. have produced a tremendous trophy fishery since 2012. Due to this success, the PFBC will initiate yearling musky stockings beginning in spring 2023 to maintain this fishery for the future.



Mike Porta, PFBC Area Fisheries Manager, with a Muskellunge from Lake Nockamixon, Bucks County.

Managing Bog Turtle Habitats

In cooperation with other states, the PFBC is implementing a Competitive State Wildlife Grant for a regional project to protect and maintain the population of Bog Turtles and habitat in the northeast United States. A major focus of the grant is the management of Bog Turtle habitats, which are groundwater-fed emergent wetlands. Without management or grazing, these wetlands become overtaken by invasive species, shrubs, and trees that shade areas required by turtles for basking in the sun and incubating eggs. The PFBC, with contractors and landowner cooperation, cleared shading woody plants and invasives from more than six Bog Turtle wetlands during winter 2022. Turtles at these managed sites will be monitored to measure the response to habitat improvement.

Freshwater Mussel Surveys

During summer 2022, biologists conducted freshwater mussel surveys on the Delaware Estuary in Bucks County. During the surveys, seven species were collected including four Species of Greatest Conservation Need. During 19 surveys conducted over 12 river miles, more than 5,800 mussels were documented. The Delaware Estuary supports certain tidal mussel species and is an established recreational fishing destination for important migratory fish species. These efforts will help avoid impacts from future development and dredging, while identifying multiple sites as potential sources for hatchery broodstock for Delaware River Watershed species.

Philly Fun Fishing Fest

In September, the PFBC joined the Philadelphia Water Department and Philadelphia Parks & Recreation to host a morning of free catch and release fishing and friendly competition on the Schuylkill Banks. This urban fishing event featured skills instruction for newcomers at an ADA accessible location. No fishing license was required, and fishing gear and bait was provided to anglers.



Anglers at the Philly Fun Fishing Fest.

Trout Slot Limit Program

Monocacy Creek, Section 07, Northampton County, and Saucon Creek, Section 05, Northampton County, which are both Class A wild trout streams, were removed from the Trophy Trout program and added to the new Artificial Lures Only Trout Slot Limit program. Survey results on both streams indicated that due to a lack of large trout (16 inches or more) in the streams, the Artificial Lures Only Trout Slot Limit program was more appropriate, allowing anglers to harvest two trout per day that are at least 7 inches long but less than 12 inches long from the opening day of the regular season for trout through Labor Day with no harvest permitted the remainder of the year. This change is expected to increase the number of large trout and reduce fishing mortality.

BOATING- AT-LARGE

Boating-At-Large Commissioners

Two members of the Commission serve at-large and are experienced in boating and water safety education.



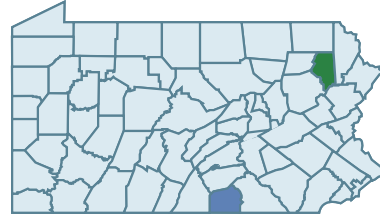
Charles J. Charlesworth

Commissioner Charles J. Charlesworth, Clarks Summit, Lackawanna County, was appointed as an at-large boating commissioner in June 2019.



Richard Lewis

Commissioner Richard Lewis, Gettysburg, Adams County, was appointed as an at-large boating commissioner in July 2017 and was reappointed in January 2022.



Boating Advisory Board

The Boating Advisory Board (BAB) advises the Commission regarding matters relating to boating including recommendations with respect to proposed boating rules and regulations. The BAB's advice assists the Commission with establishing a boating program that ensures the safe and enjoyable operation of boats.

BAB Members:

- Loren Lustig, *Chairperson*
Biglerville
- Rocco Ali,
North Apollo
- Scott Ballantyne
Fleetwood
- Steven Ketterer
Harrisburg
- Elizabeth Winand
Wrightsville

National Safe Boating Week

From May 21-27, the PFBC provided content across social media and e-newsletter platforms to share safe boating information to boaters of all experience levels. Videos included testimonials to promote life jacket wear, boat launch etiquette, and tips to handle an on-the-water encounter with a WCO. Fifty-one social media posts reached more than 202,000 unique users, and customized e-newsletters were sent to 1.2 million subscribers. The PFBC produced 27 videos featuring state legislators to spread safe boating messages to their constituents, including one video in Spanish. PFBC staff appeared in six radio broadcasts, seven television broadcasts, and numerous newspaper feature articles in major media markets across the state. Three in-person safe boating expos were offered at prime boating locations in partnership with the United States Coast Guard Auxiliary, United States Army Corps of Engineers, and local community organizations. Locations included Walnut Creek Marina, Erie County; Raystown Lake, Huntingdon County; and Blue Marsh Lake, Berks County.



WCO Rachael Thurner-Diaz demonstrates a safety inspection during National Safe Boating Week.

Adopt an Access

New in 2022, an updated Adopt an Access program was launched at PFBC access areas and boat ramps. Volunteers with organizations, including the Backcountry Hunters & Anglers and Xylem, Inc., “adopted” and picked up litter at sixteen access areas across Pennsylvania in 2022. Interested groups should contact the PFBC’s Bureau of Boating at 717-705-7816.

Boating Safety Education

The PFBC issued approximately 16,177 boating safety education certificates to students who completed an approved course.

Cold Weather Life Jacket Wear

The 10-year anniversary of the PFBC’s annual cold weather life jacket requirement transpired in 2022. This regulation was adopted in 2012, requiring all boaters on boats less than 16 feet in length or any canoe, kayak, or paddleboard to wear a life jacket from November 1 through April 30. Since then, boating accident data has proven that while the number of boating accidents during the cold weather months has remained comparable over the 10-year period, fatalities have been reduced by approximately 50%.



Boating Facility Grant Program

In 2022, the PFBC awarded grants that will support 12 projects involving the planning, acquisition, development, expansion, and rehabilitation of public boating facilities located on the waters of the Commonwealth.

Thanks to a \$400,000 grant from the National Fish and Wildlife Foundation under the auspices of the Delaware River Basin Conservation Act, the PFBC gave special consideration to proposed boating facility projects within the Delaware River Watershed, resulting in \$1.39 million being dedicated for three impactful projects.

Funds for the Boating Facility Grant Program are derived primarily from boat registration fees, state motorboat fuels tax, and restricted revenue accounts. In certain instances, federal aid is also used.

In October, the PFBC sought applicants for an additional round of grants, expected to be awarded in spring 2023.



The New Cumberland Borough, Cumberland County, used funds from the Boating Facility Grant Program to construct a new ADA accessible boat ramp, which opened in September along the Yellow Breeches.

Statewide Statistics

Non-game Permits
Species Impact/PNDI Reviews – 2,115
Scientific Collector Permits/Amendments – 415
Threatened and Endangered (T&E) Species Permits – 53
Biological Opinions/T&E Take Permits – 5
Non-game Special Permits – 33
Organized Reptile and Amphibian Hunt Permits – 6
Venomous Snake Permits – 2,174
Commercial Snapping Turtle Permits – 17

Bureau of Law Enforcement
Citations – 2,310
Crimes Codes – 32
Warnings for Violations – 18,365
Total Boats Boarded – 21,505
Boating Safety Education Certificates Issued – 16,177
Special Activities – 2,454
Water Rescue Certificates – 5,155
Pollutions Investigated – 88
Boating Under the Influence – 46
Lake Erie Commercial Permits – 22

Boating Accidents
<p>Each year, on average, 700 people die in boating-related accidents nationwide. Nearly 85% of the victims were not wearing life jackets. In 2022, there were 41 recreational boating accidents that resulted in nine fatalities. Only three of the nine victims were wearing life jackets at the time of the accidents. Alcohol or drugs were believed to have been a factor in three of the fatal accidents. The number of recreational boating accidents in 2022 was the lowest on record since 1998.</p>

Program Type	Count	Participants
2021-2022 Trout In the Classroom Teachers	379	39,548
Aquatic Resource Education Programs	70	5,453
Paddling and Boating Programs	20	1,081
Instructor Training Courses	19	301
Shows and Events	42	19,276 (*Direct Contacts)
Sport Fishing	247	8,214
Total	777	73,873

*Direct Contacts are interactions with the public at the agency show and expo booth. This typically involves providing publications and answering questions.

2022 Fishing License Types	
December 1, 2021 - December 31, 2022	Units Sold
1-Day Resident	3,317
1-Day Tourist	5,153
10-year Non-Resident	24
10-Year Resident	830
3-Day Tourist	23,920
3-Year Non-Resident	585
3-Year Resident	14,247
3-Year Senior Resident	869
5-Year Non-Resident	77
5-Year Resident	3,767
5-Year Senior Resident	150
7-Day Tourist	7,306
PA Resident National Guard/Reserve	87
Senior Lifetime	21,416
Non-Resident	51,847
Non-Resident PA Student	976
POW Resident Annual	0
POW Resident Lifetime	0
Reduced Disabled Veteran	542
Resident	622,387
Senior Resident	26,669
Voluntary Youth	9,494
Total Licenses	793,663

2022 Fishing Permit Types	
December 1, 2021 - December 31, 2022	Units Sold
3-Year Combination Lake Erie and Trout Permit	2,411
3-Year Lake Erie Permit	207
3-Year Trout Permit	13,480
5-Year Combination Lake Erie and Trout Permit	752
5-Year Lake Erie Permit	58
5-Year Trout Permit	4,680
10-Year Combination Lake Erie and Trout Permit	216
10-Year Lake Erie Permit	11
10-Year Trout Permit	1,279
Combination Lake Erie and Trout Permit	78,055
Lake Erie Permit	22,327
Trout Permit	452,395
Total Permits	575,871

Fiscal Year 2021-2022 Report (unaudited)

EXPENDITURES

Fish Fund

Personnel	\$27,842,791
Operating	\$12,611,992
Fixed Assets	\$1,131,293
Grants	\$806,313
Fish Fund Total	\$42,392,389

Boat Fund

Personnel	\$13,323,895
Operating	\$4,711,046
Fixed Assets	\$1,187,961
Grants	\$484,611
Boat Fund Total	\$19,707,513

Fish Fund and Boat Fund Total

Personnel	\$41,166,686
Operating	\$17,323,037
Fixed Assets	\$2,319,254
Grants	\$1,290,924
Fish Fund and Boat Fund Total	\$62,099,902

Fiscal Year 2021-2022 Report (unaudited)

REVENUE

Fish Fund

Licenses and Fees	\$26,948,740
Fines and Penalties	\$231,600
Miscellaneous	\$2,948,466
Federal and State Grants	\$10,197,360
Fish Fund Total	\$40,326,166

Boat Fund

Licenses and Fees	\$9,295,565
Fines and Penalties	\$232,262
Miscellaneous	\$7,434,108
Federal and State Grants	\$4,415,335
Boat Fund Total	\$21,377,270

Fish Fund and Boat Fund Total

Licenses and Fees	\$36,244,305
Fines and Penalties	\$463,862
Miscellaneous	\$10,382,574
Federal and State Grants	\$14,612,695
Fish Fund and Boat Fund Total	\$61,703,436

2022 Cooperative Nursery 50 Year Award Certificates

- Beaverdam Run Trout Club
- Three Point Sportsmen's Club

Trout Stocked by PFBC

Trout Species	Lifestage	Amount
Brook Trout	Adult	291,481
	Fingerling	47,000
Brown Trout	Adult	727,594
	Fingerling	258,200
Rainbow Trout	Adult	1,997,574
	Fingerling	193,300
Golden Rainbow Trout	Adult	19,721
Steelhead	Yearling	945,712
Total Trout Stocked by PFBC		4,480,582

Trout Distributed to Cooperative Nurseries

Trout Species	Lifestage	Amount
Brook Trout	Fingerling to Coops.	100,850
Brown Trout	Fingerling to Coops.	366,900
Rainbow Trout	Fingerling to Coops.	529,735
Golden Rainbow Trout	Fingerling to Coops.	9,841
Steelhead	Yearling	56,771
Total Trout Distributed to Coops.		1,064,097

Total Trout Species (Stocked and Distributed) 5,544,679

Warmwater/Coolwater Fish Production and Stocking

Species	Lifestage	Amount
American Shad	Fry	1,498,053
Black Crappie	Fingerling	47,758
Bluegill	Fingerling	31,125
Brown Trout - Erie	Adult	770
Brown Trout - Erie	Yearling	55,142
Channel Catfish	Fingerling	163,475
Channel Catfish	Yearling	31,183
Golden Shiner	Fingerling	91,224
Lake Trout	Fingerling	3,000
Lake Trout	Yearling	70,380
Largemouth Bass	Adv. Fingerling	21,928
Largemouth Bass	Fingerling	29,146
Muskellunge	Yearling	36,383
Northern Pike	Fingerling	2,770
Spottail Shiner	Adult	250
Striped Bass	Phase 1 Fingerling	100,050
hybrid Striped Bass	Adv. Fingerling	8,932
hybrid Striped Bass	Fingerling	53,032
Tiger Muskellunge	Fingerling	4,050
Tiger Muskellunge	Yearling	4,950
Walleye	Fry	12,875,000
Walleye	Phase 1 Fingerling	1,549,674
White Crappie	Adult	25
White Crappie	Fingerling	6,500
Yellow Perch	Fingerling	4,403
Grand Total of all Species		16,689,203

Website Statistics

Top Ten Pages by Page View

1. Homepage - 653,608
2. Buy a Fishing License - 651,698
3. Register/Title a Boat - 396,373
4. Stocking - 225,035
5. Fishing License FAQ - 137,542
6. Trout Season Overview - 134,869
7. Launch Permit Agents - 125,284
8. Trout - PA Fishes - 123,930
9. Boat Registration FAQ - 119,825
10. Best Fishing Waters - 92,365

Total Sessions

2,858,961

Total Users

1,928,263

Web Page Visits by State

1. Pennsylvania - 1,249,286
2. New York - 211,582
3. Ohio - 73,101
4. Virginia - 65,188
5. New Jersey - 54,186
6. District of Columbia - 38,062
7. Michigan - 28,999
8. Maryland - 26,232
9. Georgia - 23,116
10. North Carolina - 22,641

Social Media 2022

(1/1/22 to 12/31/22)

Facebook

Followers (5% increase)	116,797
Posts	763
Impressions	21,354,950
Engagements	756,967
Engagement Rate	28.03%

Twitter

Followers (4% increase)	13,125
Tweets	728
Impressions	620,471
Engagements	17,623
Engagement Rate	3.12%

Instagram

Followers (10% increase)	22,107
Posts	518
Impressions	2,527,656
Engagements	128,869
Engagement Rate	4.84%

YouTube

Subscribers (28% increase)	3,391
Videos	58
Impressions	1,241,940
Views	372,422
Click-through Rate	5.80%

For More Information:

Headquarters

1601 Elmerton Avenue
P.O. Box 67000
Harrisburg, PA 17106-7000
Phone: 717-705-7800
Hours: 8:00 a.m. – 4:00 p.m.
Monday through Friday

Boating Safety Education Courses

Phone: 888-723-4741

Centre Region Office

595 East Rolling Ridge Drive
Bellefonte, PA 16823
Lobby Phone: 814-359-5124
Fisheries Admin. Phone:
814-359-5110
Hours: 8:00 a.m. – 4:00 p.m.
Monday through Friday

Fishing Licenses:

Phone: 877-707-4085

Boat Registration/Titling:

Phone: 866-262-8734

Publications:

Phone: 717-705-7835



fishandboat.com/socialmedia

Region Offices: Law Enforcement/Education

Contact **Law Enforcement** for information about regulations and fishing and boating opportunities. Contact **Outreach and Education** for information about fishing and boating programs and boating safety education.

Northwest Region

11528 State Highway 98, Meadville, PA 16335
Law Enforcement: 814-337-0444
Outreach and Education: 814-336-2426
Fax 814-337-0579 Fax 814-337-0579
Counties: Butler, Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, Warren

Southwest Region

236 Lake Road, Somerset, PA 15501
Law Enforcement: 814-445-8974
Outreach and Education: 814-443-9841
Fax 814-445-3497 Fax 814-445-3497
Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland

Northcentral Region

595 East Rolling Ridge Drive
Bellefonte, PA 16823
Law Enforcement: 814-359-5250
Outreach and Education: 814-359-5127
Fax 814-359-5254 Fax 814-359-5153
Counties: Cameron, Centre, Clearfield, Clinton, Elk, Jefferson, Lycoming, McKean, Montour, Northumberland, Potter, Snyder, Tioga, Union

Office hours from 8:00 a.m. to 4:00 p.m., Monday through Friday. If you see anything suspected to be a pollution, disturbance, or poaching on any waterway, regardless of how seemingly insignificant, report it immediately by calling the local PFBC Region Law Enforcement office listed above during business hours or call the PFBC toll-free hotline: 855-FISH-KIL to leave a message. A pollution or disturbance may also be reported to the Pennsylvania Department of Environmental Protection at 1-800-541-2050 (24 hours a day, 7 days a week).

Southcentral Region

1704 Pine Road, Newville, PA 17241
Law Enforcement: 717-486-7087
Outreach and Education: 717-705-7919
Fax 717-486-8227 Fax 717-705-7831
Counties: Adams, Bedford, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lebanon, Mifflin, Perry, York

Northeast Region

5566 Main Road, Sweet Valley, PA 18656
Law Enforcement: 570-477-5717
Outreach and Education: 570-477-2206
Fax 570-477-3221
Counties: Bradford, Carbon, Columbia, Lackawanna, Luzerne, Monroe, Pike, Sullivan, Susquehanna, Wayne, Wyoming

Southeast Region

P.O. Box 9, Elm, PA 17521
Law Enforcement: 717-626-0228
Outreach and Education: 215-968-3631
Fax 717-626-0486
Counties: Berks, Bucks, Chester, Delaware, Lancaster, Lehigh, Montgomery, Northampton, Philadelphia, Schuylkill

State Fish Hatcheries

- **Bellefonte**
1115 Spring Creek Road
Bellefonte, PA 16823
814-355-3371
- **Benner Spring**
1735 Shiloh Road
State College, PA 16801
814-355-4837
- **Oswayo**
96 State Route 244 East
Coudersport, PA 16915
814-698-2102
- **Reynoldsdale***
162 Fish Hatchery Road
New Paris, PA 15554
814-839-2211
- **Corry**
13365 Route 6
Corry, PA 16407
814-664-2122
- **Huntsdale***
195 Lebo Road
Carlisle, PA 17013
717-486-3419
- **Pleasant Gap**
450 Robinson Lane
Bellefonte, PA 16823
814-359-5132
- **Tionesta**
172 Fish Hatchery Lane
Tionesta, PA 16353
814-755-3524
- **Fairview**
2000 Lohrer Road
P.O. Box 531
Fairview, PA 16415
814-474-1514
- **Linesville***
13300 Hartstown Road
Linesville, PA 16424
814-683-4451
- **Pleasant Mount**
229 Great Bend Turnpike
Pleasant Mount, PA 18453
570-448-2101
- **Tylersville**
43 Hatchery Lane
Loganton, PA 17747
570-725-3965

* Includes visitor center. Visitor centers are open from 8:00 a.m. to 3:30 p.m. daily. Groups should make advance arrangements.

FishandBoat.com