

Freshwater Fisheries Monthly Report – September 2024

Freshwater Fisheries - Stock Assessment

Deep Creek Lake - Western Region I staff conducted targeted surveys to collect crappie from Deep Creek Lake for age and growth determination. Twenty crappie ranging from young-of-year (YOY) to over sixteen inches were collected and kept for otolith removal where otoliths will later be processed to obtain age at length data.



Western Region I Manager Matt Sell holding a crappie collected from Deep Creek Lake.

Piney Reservoir – Western Region I staff used backpack electrofishing in an attempt to collect YOY largemouth bass as part of a long-term mercury study at Piney Reservoir. Unfortunately, due to low water conditions this summer the bass were not able to be collected.

Bass Tournament - West Region I staff worked the weigh-in at the second annual Marlon Whoolery Bass Tournament held at Deep Creek Lake. Twenty-nine boats participated in the tournament checking in 114 fish with the winning weight being 14.58 pounds with a lunker largemouth weighing in at 5.8 pounds.

Brook Trout

- Western Region I staff finished sampling the long-term monitoring brook trout sites located in Garrett County, Maryland.
- Central Region staff completed brook trout genetic work in two brook trout streams in Baltimore County. Adipose fins were clipped and collected for genetic material.



Brook trout collected at the Puzzley Run monitoring site

Trout Surveys - Central Region staff concluded the last of their summer index period sites during the month. In total, over 65 coldwater brook and brown trout sites were sampled in the Central Region during the summer index period. In September, staff focused the majority of their time on brown trout streams in the region.

- Gunpowder Falls – with help from other Freshwater Fisheries staff and volunteers, three sites in the Gunpowder tailwater were sampled. Brown trout numbers were higher than staff encountered during the previous survey in 2022. Maryland Department of Natural Resources Secretary Josh Kurtz assisted with the electrofishing survey at Masemore Road as part of Science Week.





- Bee Tree Run – All three historic Bee Tree Run sites were sampled in September. Brown trout reproduction and good densities of adult brown trout were observed at all three sites.
- Central Region staff, with assistance from Trout Unlimited volunteers, sampled seven sites in the North Branch Patapsco River watershed. Brown trout were observed at all sites.



Brown trout collected from North Branch Patapsco during the summer index period.

Freshwater Fisheries - Habitat and Water Quality

Environmental Review - Provided aquatic resource information for the following environmental review projects:

- A Columbia Gas utility line replacement project in Kitzmiller, Maryland. Comments

were provided to optimize working conditions, minimize disturbance, and provide site reclamation following the completion of the project.

- For three Maryland State Highway Administration (MD SHA) culvert lining projects in Bittering, Grantsville, and Lonaconing, Maryland. Comments were provided to optimize working conditions, sediment and erosion control measures, time of year restrictions, proper procedures during the curing process, minimal disturbance, and site reclamation following the completion of the project.
- Reviewed an application submitted by Frostburg State University for the installation of a new artificial turf field. Comments were made to treat heated runoff through existing stormwater management infrastructure and ensure sediment and erosion best management practices (BMPs) prevent runoff into Sand Spring.
- Reviewed and approved a time of year waiver request for the installation of a culvert located at the entrance of Swallow Falls State Park. Given that brook trout are not located in Toliver Run, staff agreed that the request could be granted.
- Reviewed two applications for stone revetments located at Deep Creek Lake. Comments were made to maximize fish habitat, maintain existing shoreline vegetation, and conduct work outside of Use I closure period and within the established drawdown period.
- Staff attended a Land Reclamation Committee meeting to review two proposed amendments to coal mines in Allegany County, Maryland.
- Commented on five potential Project Open Space properties in Allegany and Garrett County.
- Comments provided to the Maryland Forest Service on their proposed 2026 Chesapeake/Pocomoke Forest management activities. Staff visited many of the sites where the proposed management activities could impact water quality or aquatic resources.
- A culvert replacement project for a stream crossing at MD 495 and 4 H Camp Road in Garrett County. The project proposed a replacement for existing culverts that are deteriorating. The affected stream is an unnamed tributary to Pleasant Valley Run. While no brook trout have been observed in the proposed work area, a population is documented downstream in North Branch Casselman River. Fishing and Boating Services recommended bottomless culverts or box culverts to improve aquatic organism passage and to pass higher stream flows, depressed culverts if other options aren't possible, and strict erosion and sediment control best management practices.
- The US Route 219 Transportation Improvement Project in Garrett County. The proposed project will realign US 219 with likely impacts to Meadow Run and an unnamed tributary to Meadow Run. Meadow Run is designated as a Use Class I, warmwater stream but supports a small population of brook trout. Fishing and Boating Services submitted comments that recommended Use Class III, coldwater regulatory protection for permitting purposes, the use of best management practices for stormwater management in watersheds that support coldwater fisheries resources, maximum and redundant erosion and sediment control practices, and protections for existing riparian buffers.
- The Mid-Atlantic Resiliency Loop Transmission Line project proposed in Garrett County and Allegany County. Fishing and Boating Services attended a meeting with the energy company that will be planning the transmission lines. The project proposes to develop a new 200 foot wide transmission line from northwest Garrett County through southwest Allegany County with possible impacts to the Youghiogheny River, the Bear Creek

watershed, the Casselman River watershed, the Savage River watershed, and North Branch Potomac River. Fishing and Boating Services expressed concerns about the consequences for coldwater fisheries resources and recommended the use of existing transmission line right-of-ways.

- The FY2029 Savage River State Forest Annual Work Plan. Fishing and Boating Services reviewed the plan and submitted recommendations to maintain 50 foot no cut buffers around streams and seeps that are within or in close proximity to the proposed work areas.
- A development and culvert crossing on Snowdens Run, a Use III tributary to Liberty Reservoir. Comments were made to adhere to time of year restrictions for instream work, ensure aquatic organism passage (AOP) for culvert installation, and maintain riparian vegetation.
- A culvert installation on a Use IV tributary to Weldon Creek. Comments were made to adhere to time of year restrictions, minimizing sediment and erosion during construction, and protecting the existing riparian zone.
- A solar panel project in Washington County. This project proposed putting solar panels over an existing parking lot to generate power. FFHD did not anticipate any impacts from this project.

Reits Branch - Southern Region staff walked Reits Branch, a tributary of Hunting Creek on the Patuxent River. The local community is looking to receive a grant to have an independent environmental contractor to restore the shoreline and reduce sedimentation into the tributary.

Patuxent Tailwater - Central Region staff continues to assist the Potomac/Patuxent chapter of Trout Unlimited with monitoring of water quality in the Patuxent Tailwater downstream of Brighton Dam.

Temperature Loggers

- West Region I staff collected and exchanged temperature loggers from twenty locations within the Youghiogheny River and long-term coldwater monitoring sites. Temperature data will be analyzed for the critical monitoring period of June 1 through August 31.
- Central Region staff has started retrieving the 33 temperature loggers they had deployed in trout streams across the region. These temperature recorders measure water temperatures at 20-minute intervals from June 1 through August 31 when trout are most susceptible to thermal stress.
- West Region II staff collected and downloaded 14 temperature loggers from several streams in the Monocacy River and Antietam Creek drainages. Temperature data will be analyzed for the critical monitoring period of June 1 through August 31.

Freshwater Fisheries - Stocking and Population Management

Fish Stocking Permits - One Fish Supplier Permit was issued: Sport Fish Direct LLC was added as an approved supplier and they provide fish via FedEx from Arkansas. We currently have 11 approved suppliers. Here is the full listing: [Approved Fish Suppliers PDF](#)

Pond Stocking Permits: Eight received, six approved, one awaiting more information, one resubmitted.

Freshwater Fisheries - Outreach

Customer Service - Provided customer service information for inquiries regarding:

- Fall trout stocking and fishing information- worked with communications staff to announce changes to fall stocking for 2024 in response to a put and take angler survey from 2023. The department is working towards stocking slightly fewer but larger trout per survey results.
- Fishing the Youghiogheny River; Savage Reservoir, and Deep Creek Lake
- Trout stocking in the Casselman River

Women on the Water - Provided the Mobile First Catch Fish Trailer for an introductory Fishing and Boating Clinic for women. The event was held at Seneca Creek State Park. This Recruitment-Retention-Reactivation (R3) workshop was geared toward teaching women basic boating and fishing skills. A seminar on “How to get Started in Boating” was given and discussion about boating safety, boat types, and where to go for boat rentals. Participants also learned basic fishing skills (knot tying, tackle selection, rigging, and casting) before heading to the water to fish. Staff from the Aquatic Education and Stewardship Unit provided kayak fishing for participants who wanted to try fishing from a kayak. Staff from the Office of Outdoor recreation were also present to assist where needed.



Fishing and Boating Services supports Women on the Water event at Seneca Creek State Park by providing a workshop on basic boating and fishing skills.

University of Maryland Center for Environmental Science and Frostburg State University field demonstration - Fishing and Boating Services collaborated with Maryland Department of Environment, Bureau of Mines to provide a demonstration of the field methods used to monitor and protect natural resources in Western Maryland. The demonstration was provided to graduate students from the University of Maryland Center for Environmental Science and Frostburg State University. The presentation included information about the impacts of legacy mining to natural resources, methods of mitigating impacts to water quality and aquatic resources, and the field methods used to monitor water quality and aquatic community health.



Fishing and Boating Services and Maryland Department of the Environment, Bureau of Mines demonstrate field methods for graduate students from University of Maryland Center for Environmental Science and Frostburg State University.

Festival del Rio - Fishing and Boating Services provided angling gear and tackle, along with an outreach display, for hundreds of participants attending Festival del Rio (Bladensburg Waterfront Park, Prince George’s County). At least 60 individuals (mostly aged 15 and under) borrowed tackle to fish alone or with families, but with some instruction by staff from Fishing and Boating Services. The event was held in support of National Hispanic Heritage Month.



Fishing and Boating Services participated in Festival del Rio, an event to support National Hispanic Heritage Month, and provided fishing instruction and materials for hundreds of participants throughout the day.

Freshwater Fisheries - Angler Access

Fishery Management Areas (FMAs) - Staff continues to perform routine checks and maintenance at the McCoolle, Black Oak and Evitts Creek FMAs. Surveillance cameras at the McCoolle FMA parking lot were refreshed after a person vandalized one of the cameras. Natural Resource Police is working with local law enforcement to identify the person from the photos and fingerprints on the scene.

Town Creek - Met with a landowner on Town Creek to determine if access would be suitable for stocking a section of Town Creek as part of a possible new Put-and-Take trout fishery.

Freshwater Fisheries – Fish Health

Completed the second week of assisting the Environmental Protection Agency with their National Rivers Assessment of benthic, fish, and water chemistry at predetermined sites on the tidal Potomac just south of National Harbor. These surveys take place between every three and five years. Two passes are completed over the same site two weeks apart.

Freshwater Fisheries - Invasive Fishes Program

Staff performed a blue catfish filet demonstration at the Maryland State Fair in collaboration with Maryland Department of Agriculture's Seafood Marketing Program. Chef Charlie Wickboldt of Jimmy's Seafood demonstrated how to cook the filets and provided tasting samples. The public enjoyed the demonstration, while samples of blue catfish fish and chips were provided to onlookers. Jimmy's Seafood also sold blue catfish fish and chips, which were a big hit at the fair.



Fishing and Boating Services participated in Blue Catfish Day during the Maryland State Fair by providing information and a fish and filet demonstration. Governor Wes Moore (right photo) was on-hand with the Invasive Fishes Program to learn more about blue catfish.

Regional Operations staff from Central Region and Invasive Fishes Program staff collected filtered water samples for later eDNA identification of invasive fish on the Gunpowder River between Falls Road and Loch Raven Reservoir. Samples were taken at 12 locations along the Gunpowder tailwater. Staff are attempting to detect the presence of Chesapeake channa, also known as northern snakehead, in the Gunpowder tailwater.

Invasive Fishes Program staff, with the assistance of staff from Southern Region, conducted a catfish survey from King's Branch to Whites Landing in the freshwater Patuxent River (Calvert and Prince George's counties). Mean catch per unit effort (CPUE) was 312 fish/hr (SE= 144.7) and ranged from 29 to 871 fish/hr. Many juveniles were observed during surveys, as well as a fish with a partially digested Atlantic menhaden.



Fishing and Boating Services staff counted, measured and weighed blue catfish from Patuxent River.

Invasive Fishes Program and Recreational Fisheries Outreach staff gave a talk to the Pasadena Sportfishing Group (Anne Arundel County). The presentation focused on the biology and issues surrounding invasive fishes in Maryland.

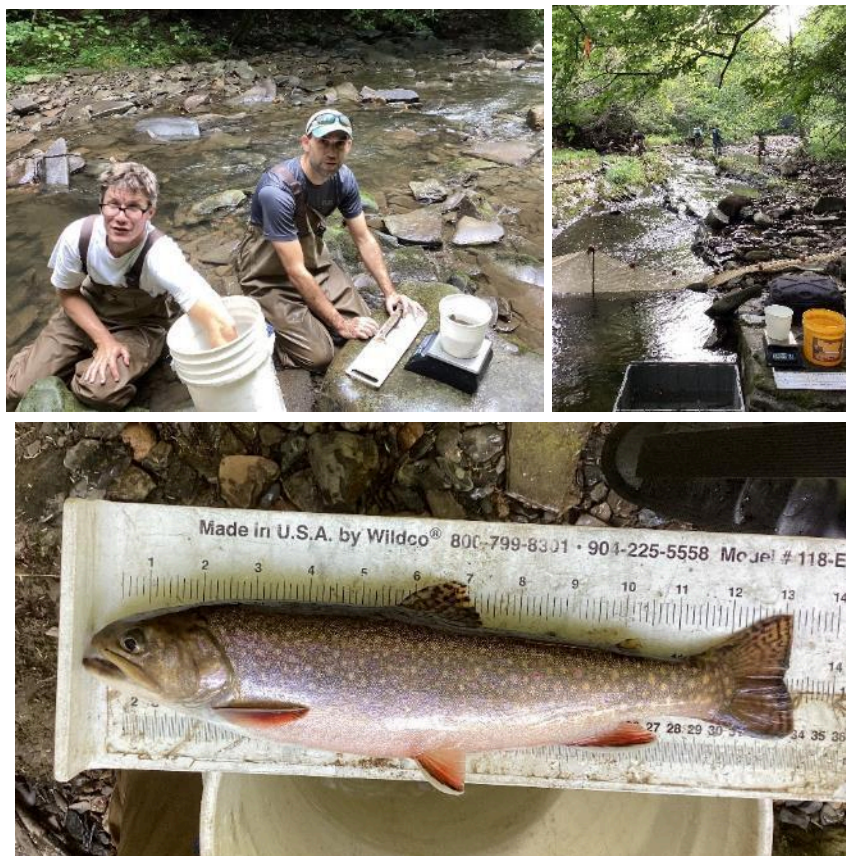
Fishing and Boating Services supported US Geological Survey Eastern Ecological Science Center with an event for congressional staff and other stakeholder groups to inform them about the need for funding blue catfish research in the Chesapeake Bay watershed. Department staff discussed the biology and management issues surrounding blue catfish, and staff demonstrated the abundance and density of invasive blue catfish using low-frequency electrofishing. Collaborators included: Maryland Department of Agriculture, Coastal Conservation Association Maryland, Friends of Patuxent, a commercial catfish harvester, and Peterson Companies who manage National Harbor (Prince George's County). The event was successful and will garner more support for blue catfish mitigation in the region. Staff collected specimens for display the day prior from Fort Washington (Potomac River), including one blue catfish weighing almost 60 pounds.



Southern Region staff assisted the Invasive Species Program by collecting blue catfish on the Patuxent River using low frequency electrofishing. Part of this exercise was to determine the best way to set up a sustainable sampling protocol for collecting blue catfish in particular, and to determine the most effective way to expand the sampling into tidal waters. Identifying and sampling invasive catfish habitat is difficult because river flow and tidal stage affect their location and spawning areas. Blue catfish are also mobile. The more we learn about their movements and habitats within tidal waters, the better we can direct harvest and reduce their numbers in Maryland.

Freshwater Fisheries - Coldwater Program

The Coldwater Program completed annual coldwater fisheries surveys and began to retrieve continuous temperature data loggers from targeted streams. During the 2024 summer field season, the Coldwater Fisheries Program conducted 31 quantitative surveys to estimate trout population abundances, 41 qualitative surveys to determine coldwater resource occupancy and/or coldwater potential, and deployed 70 temperature data loggers to gather information about stream temperature regimes. Additionally, tissue samples were collected from eight brook trout patches for genetic analysis.



Fishing and Boating Services' Coldwater Fisheries Program survey activities in 2024.

Met with representatives from Garrett County, Trout Unlimited, and U.S. Fish and Wildlife Service to tour and discuss the on-going Wolfden Run culvert replacement project at Shallmar Road. This project will replace a failing culvert with an appropriately sized bridge. The

collaborative effort will make critical repairs to an important transportation route for the local community while improving passage in Wolfden Run for brook trout and other aquatic life.

Participated in a site visit with staff from Wildlife and Heritage Service and Maryland Department of the Environment, Bureau of Mines to discuss a proposed high wall reclamation project at Dans Mountain Wildlife Management Area (Allegany County). The project area is located in the headwaters of Moores Run, which supports a small brook trout population. The reclamation project will address steep highwall grades while improving wildlife habitat on the property and removing an impoundment that was a source of sediment and thermal pollution to Moores Run. Fishing and Boating Services requested that the project maintain an undisturbed 100 foot riparian buffer around a small tributary to Moores Run and minimize forest loss where possible.

The Coldwater Fisheries Program was awarded a \$238,900 grant through the National Fish and Wildlife Foundation Chesapeake WILD Grants Program to pursue conservation projects for Maryland brook trout populations. The grant will support efforts to protect forest and agricultural lands in brook trout watersheds, restore and plant riparian buffers, improve connectivity in coldwater watersheds, pursue environmental education events for underserved youth, and develop a brook trout propagation program. The department was awarded with an additional \$74,900 for a collaborative effort to protect and conserve endangered blackbanded sunfish and their associated habitat.

Freshwater Fisheries - Tidal Bass Program

Eastern Region staff began sampling tidal black bass populations in tidal waters this month. Sampling thus far in the upper Chesapeake Bay suggests that largemouth bass reproduction was excellent this year in that area. Several large Chesapeake channa, also known as northern snakehead, were collected and removed from the system. Sampling will continue throughout the fall in the upper Chesapeake Bay, Marshyhope Creek, and the Pocomoke River.

Staff attended the Major League Fishing (MLF) tournament at Smallwood State Park on September 14 and 15. Over 70 anglers competed in the tournament with a total of 262 fish weighed in with a winning bag weight of 18 pounds 12 ounces. This was the second time the MLF Phoenix Tour visited the Tidal Potomac this year. The first tournament occurred in late June during the heat dome and despite fish care/health requirements, due to the extreme temperatures, staff observed a 15 percent mortality rate of bass at the scales. The most recent tournament staff observed 6 percent mortality most likely due to the cooler temperatures during that weekend. Tournament mortalities were collected and dissected to obtain growth structures and collect diet data.

Staff worked with Eastern Region to stock approximately 1,500 largemouth bass from the Joseph Manning Hatchery into Marshyhope Creek. Marshyhope Creek has shown lower than average catch rates in recent years during the Tidal Bass Survey. To help bolster populations, Joseph Manning Hatchery has produced 9,000 largemouth bass ranging from 2-8 inches that have been stocked throughout early summer and fall.

The Black Bass Advisory Committee had an additional meeting outside of their regularly scheduled quarterly meeting. The additional meeting took place to cover housekeeping items in order to streamline the usual quarterly meeting; FABS staff attended to provide insight when needed. Topics covered included the logistics for a tournament benefiting the Black Bass Conservation Fund; several docket items for upcoming committee meetings; and creating a mission statement for the Black Bass Conservation Fund.

The Central, Southern, and Eastern regions have started sampling for the Tidal Bass Survey aimed at monitoring the status of tidal black bass fisheries. List of areas to be sampled this year include Potomac, Gunpowder, Bush, Middle, and Pocomoke rivers, as well as the Upper Bay, Marshyhope Creek, and Swan Creek. Staff assisted with sampling in the Upper Bay towards the end of the month and will continue in October as the survey progresses.



Staff preparing the electrofishing boat for tidal bass sampling.

Freshwater Fisheries - Other

Staff completed federal Sportfish and Restoration Act reporting for fiscal year 2024.

Staff attended the 20th anniversary meeting of the Eastern Brook Trout Joint Venture (EBTJV) in Millinocket, Maine. Presentations were provided by all participating states and NGO partners to discuss the current status and trends of Brook Trout throughout their range, as well as new and emerging threats for the group to focus on and address moving forward.