

Freshwater Fisheries Monthly Report – February 2024

Freshwater Fisheries - Stock Assessment

Lower Savage River - Staff worked to complete an analysis of recruitment and environmental variables for the lower Savage River tailwater using the past 15 years of monitoring and flow data. This information may be used in the future to maximize trout reproduction and the quality of the fishery through seasonal flow manipulation.

Potomac River Walleye - Annual spring walleye monitoring has started on the upper Potomac River. Boat electrofishing surveys were conducted on the river below Dam 4 in Washington County. While fish have not moved up to the dam yet in large numbers, we were able to collect 12 females and 27 males for the department's Joseph Manning Hatchery. These fish will be spawned at the hatchery facility and the resulting juveniles stocked out in the upper Potomac River and various locations throughout the state.



26-inch walleye from the upper Potomac River

Triadelphia Reservoir - Southern Region began fyke net surveys in Triadelphia Reservoir on February 15 for white and yellow perch population assessments. This is the second season Freshwater Fisheries has used these nets in an attempt to fill data gaps on some of the more difficult to sample fish populations in the lake. Bluegill, common carp, northern pike, redear sunfish, and white crappie were also collected in the most recent sets.



Crappie and northern pike, Triadelphia Reservoir.

Burba Lake - Data from the Fort Meade's Burba Lake survey from last fall was analyzed and summarized in a report for the Natural Resources Manager at the base. The pond had a good population of black crappie and largemouth bass.

Freshwater Fisheries - Habitat and Water Quality

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

- Nine projects are currently being planned by the Bureau of Mines, Abandoned Mine Lands Division. Most of the projects will have minimal impacts to aquatic resources, though additional information was requested to confirm that impacts would be minimal. For projects that may impact aquatic resources, comments were submitted to request strict sediment and erosion control practices and minimized disturbance to riparian buffers.
- Project proposals that were submitted through the Grants Gateway to the Chesapeake and Atlantic Coastal Bays Trust Fund. Most projects were reviewed to confirm that project concepts were appropriate for the affected resources. In several cases, recommendations were submitted to avoid certain practices that would have adverse impacts to coldwater resources.
- A stream restoration project planned for an unnamed tributary to First Mine Branch in Harford County. First Mine Branch is a Use III coldwater stream that supports populations of brook trout and brown trout. The proposed project included plans to clear considerable riparian vegetation and construct an integrated stream and floodplain wetland system that would leave pools of shallow water in close proximity to the stream. Reduced shade and pooling water would likely lead to elevated stream temperatures. Furthermore, the project did not address approximately 10 acres of impervious surface in the headwaters of the stream and two inline ponds on an adjacent unnamed tributary. Comments were

submitted to advise that the existing plans were not appropriate for the resource and restoration activities should be focused on improving land use practices at the site. Riparian vegetation planting, additional livestock exclusion fencing, and strategically stabilized stream banks were recommended. Stormwater management features that use thermally sensitive methods were also suggested to treat the impervious surfaces.

- The construction of a 31-lot subdivision on an unnamed tributary to Big Hunting Creek in Frederick County. Both the unnamed tributary and Big Hunting Creek are Use Class III streams. Big Hunting Creek supports a naturally reproducing trout population and is also a Tier II (high quality) stream segment. Comments were made to minimize standing water and avoid instream work during the closure period.

Maryland Department of the Environment's 2024 Integrated Report recommendations included minor changes to messaging about widespread increases to surface water temperatures throughout the states. Rising water temperatures are a concern for many resource management agencies and efforts to address this issue should be communicated through the report.

Southern Region staff continue to make concrete reef balls as time permits. Once there are at least 20 completed, they will be deployed in a targeted pond for habitat improvement.

Freshwater Fisheries - Stocking and Population Management

Trout Stocking -

- Western Region I assisted Bear Creek Hatchery for multiple days with preseason trout stocking efforts.
- Central Region stocked 16,500 preseason trout during February.
- Regional staff assisted with seining the last few trout from the ponds at Joseph Manning Hatchery. Governors Bridge Pond received 400 of the pond-reared trout via a small ATV fitted with a tank and driven to the access point.

Fee Fishing Permits - One Fee Fishing Lake Permit issued: Beechwood Rod & Gun Club (Garrett County). Here's the full listing: [Fee Fishing Lakes PDF](#)

State Approved Fish Suppliers - Additional Fish Suppliers have been approved: We currently have eight approved suppliers, including one new supplier (Aquatic Environment Consultants Inc.). Here is the full listing: [Approved Fish Suppliers PDF](#) Approved Fish Suppliers renew their permits on an annual basis at the beginning of the calendar year. As a result, the full list of Approved Fish Suppliers is typically available in February/March. Fish suppliers and fish species are added as they are approved.

Fish stocking Permits – Seven permits issued in February

Freshwater Fisheries - Outreach

Customer Service - provided customer service information for multiple inquiries regarding:

- Provided anglers with information in regard to the new walleye regulation that went into effect for Deep Creek Lake.
- Trout stocking and or fishing information
- Ice conditions on Deep Creek Lake
- Youth trout fishing day information
- Multiple inquiries on Becoming an Outdoors-Woman Program
- Pond stocking permit and stocking recommendations
- Walleye fishing locations and conditions on the upper Potomac River

Staff attended the Patuxent River Conference, also known as PAXCON, at the Patuxent Research Refuge Visitor Center and made connections with other specialists reporting on water quality, citizen monitoring, and beaver habitat initiatives.

Queried longear sunfish data from the Geographic Inland Fisheries System (GIFS) database and sent to Kansas Department of Wildlife and Parks for a project to develop a regional relative weight index using data from several states.

Freshwater Fisheries - Angler Access

Fishery Management Areas:

- Staff continues to perform routine checks and maintenance at the McCooles, Black Oak, and Evitts Creek.
- Met with Engineering and Construction personnel for future projects to be completed at the Evitts Creek Ponds Fishery Management Area.

Staff opened conversation with Garrett County's Senior Planner on the idea of a new ADA accessible fishing area proposed for Broadford Lake in Garrett County.

Several projects at Smithville Lake are completed or nearing completion. The roof has been replaced on the garage used for equipment storage, and the dilapidated mobile home has been razed. The larger project to replace the drain pipe and valve to the water control structure is nearing completion. All in-stream work is complete and demobilization has begun. Many thanks to the department's Engineering and Construction staff getting these badly needed projects completed smoothly.



Photos from Smithville Lake repairs projects.

Provided information to the GIS expert for improving the Angler Access Map with details for area ponds that were missing from the map.

Freshwater Fisheries - Invasive Fishes Program

Staff met with stakeholders from the recreational and commercial sectors, as well as other state agencies to increase public awareness of blue catfish and other invasive fishes.

Staff began accepting applications for an Invasive Fishes Control grant, which will fund up to four invasive fish control projects, in the amount of up to \$4,700, aimed at increasing removals of blue catfish and/or northern snakehead from Maryland waters. There is a great deal of interest in the grants, and to date, over 400 applications have been received. The submission period for applications ends on April 15 and successful applicants will be notified in early-to mid-May.

Presented an overview to a staff meeting in Annapolis about the new GIFS Map Extractor and provided screenshots of how to use the query tools. The meeting included database storage options for invasive species data and invasive catfish aging techniques.

Imported data into GIFS from Western and Central Regions for invasive species such as flathead catfish and snakehead collected in the upper Potomac River and impoundments.

Freshwater Fisheries - Coldwater Program

Initiated an effort to update the 2020 Brook Trout Patch Assessment with recently collected data. Both survey data and genetic data will be used to complete the update. The results will provide guidance for resource prioritization and determine where management action is needed.

Developed the 2024 coldwater fisheries data collection plan and submitted the information to the Maryland Water Monitoring Council for the annual Maryland Streams Roundtable. The information will be shared with other monitoring and research organizations to identify opportunities for collaboration and minimize redundant survey efforts.

Met with United States Geological Survey (USGS) to discuss the analysis of Maryland's temperature dataset. Maryland stream monitoring efforts have amassed a large set of temperature records since 2000. This data analysis initiative will attempt to detect long-term trends in coldwater streams and determine impacts from landscape features such as small ponds and impervious surfaces. The results will be used to identify resilient coldwater resource habitat and direct mitigation efforts.

Met with representatives from Trout Unlimited and Maryland Department of the Environment to discuss a habitat enhancement project on Black Lick Run in the Savage River watershed. The project will add rock and wood structures to existing pools to improve habitat for brook trout and other aquatic fauna. Meeting discussion topics included potential impacts to water levels and stream flow and the wetlands and waterways permitting process.

Conducted a site visit to a property that is located on Frozen Camp Run in the Cherry Creek watershed. The landowners are interested in tree planting opportunities for the ~35 acre property. Staff made initial recommendations for a tree planting project and reached out to Maryland Forest Service to schedule a follow up visit to develop a planting plan. In addition, the Coldwater Fisheries Program will collect temperature data and conduct a stream survey later in the year to document the existing stream community and thermal regime.

Freshwater Fisheries - Tidal Bass Program

Staff sent the annual bass tournament director letter that included information summarizing report information from 2023, <https://dnr.maryland.gov/fisheries/pages/bass/ta.aspx>.

Staff completed the Black Bass Annual Review, which will be sent to licensed self-identified black bass anglers, tournament directors, and the general public by mid-March.

Staff have completed revisions of a spatial data exporter that will be used to more efficiently process internal and external data requests; data regarding catch during tidal bass surveys will be displayed to the general public later this spring.

Staff finalized details regarding the interjurisdictional monitoring (Virginia, D.C., and Maryland) project of largemouth bass on Potomac River (tidal), with confirmation of tags, methods, tag reporting, and tournament data attendance at Smallwood State Park. The Standard Operating Procedure for the survey was updated and finalized following

results from the jurisdictions in 2023,
<https://dnr.maryland.gov/fisheries/pages/bass/index.aspx>.

Staff have confirmed the hiring of a new Tidal Bass Program Manager, who will begin at the end of May, but will none-the-less, attend monthly meetings of statewide operations and the Black Bass Advisory Committee (April 8th).

Staff received proofs of a paper published in *Ecological Modeling*, *A GIS-based approach for managing catch-and-release fisheries*, which describes 20 years of work in the upper Chesapeake Bay including dispersal, population dynamics, and fishery monitoring with the goal to understand how long-term changes in habitat carrying capacity can influence patterns of catch by anglers in a catch-and-release fishery for largemouth bass.

Staff completed three bass conservation videos that featured Mike Iaconelli, a professional bass anglers. These videos were uploaded to the department's YouTube pages and website and will be shared periodically on social media beginning in March and then throughout the year; these videos showcase the upper Chesapeake Bay fisheries, handling tips after catching a largemouth bass, and live well maintenance tips when containing bass throughout the fishing day for an afternoon weigh-in.

Freshwater Fisheries - Other

Electrofishing survey boats were taken to Eastern Region's Wye Mills garage for maintenance and repairs by in-house mechanical guru Jerry Stivers.