

Freshwater Fisheries Monthly Report – February 2022

Freshwater Fisheries - Stock Assessment

Broadford Lake - Presented a summary of 2021 fishery assessments conducted on Broadford Lake to the Broadford Lake Watershed Committee. Fishery survey results and future management plans were presented. This presentation was part of a larger discussion about land management in the Broadford Lake watershed and its influence on water quality.

Youghiogheny Walleye - Attended a meeting with the Youghiogheny Walleye Association, Pennsylvania Fish and Boat Commission and United States Army Corps of Engineers (USACE) to discuss the significant decline in the walleye fishery in Youghiogheny Reservoir. Information was presented by the Youghiogheny Walleye Association and PA Fish and Boat Commission demonstrating a lack of reproduction in the lake. One possible explanation for the recruitment failures are the large fluctuations in lake levels often experienced after walleyes spawn and before the eggs hatch. It appears that the USACE are willing to consider maintaining post-spawn lake levels, when possible, to allow for better hatching/survival rates for walleyes.

Met to discuss results and reporting of the 2021 creel survey data collected on the North Branch of the Potomac River.

Freshwater Fisheries - Habitat and Water Quality

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

- Multiple stone revetment projects on Deep Creek Lake. Time of year restrictions were requested to protect lake resources along with comments to protect existing vegetation, protecting lake bottom substrate, and to provide favorable working conditions that would cause minimal disturbance to work locations.
- Two applications submitted by Columbia Gas of Maryland to replace aging gas lines in the Georges Creek watershed. Horizontal Directional Drilling is to be used for the installation; this method is supported and preferred by department staff as it poses minimal risk and disturbance to the stream channel and floodplain. Comments for the projects consisted of time of year restrictions, causing minimal floodplain disturbance backed by proper sediment and erosion measures, and proper site restoration after drilling practices are completed.
- Two applications for the installation of temporary bridges for timber harvests in Kitzmiller and Oakland Maryland. Guidelines were provided for proper sediment and erosion control along with the sites being restored to pre-construction conditions after bridge removal.
- An application by Garrett County Road Department was reviewed for a culvert replacement project on Glendale Road. Comments were provided to conduct work under favorable conditions, minimize disturbance, adhere to strict sediment and erosion control practices, and adhere to instream time of year work restrictions that protect aquatic resources and fish passage..
- Participated in a call to review a time-of-year waiver on the Eccleston property in the Jones Falls watershed.
- Conducted a review of a time-of-year waiver request due to State Route 32 construction.

- Reviewed a Regional Letter of Authorization request from SHA in the Upper Gunpowder Watershed.
- A pond retrofit project in the Owl Branch watershed. Owl Branch is a coldwater stream that supports a brook trout population. The landowner does not want to remove the pond but is interested in a retrofit design that will minimize thermal impacts to the stream. The proposed project will decrease the size of the pond, use groundwater and a deep rock trench to treat water temperatures at the outfall, and construct wetlands to manage water from an upstream spring. While removal of the pond is preferred, the design is a novel approach that will likely improve existing conditions and reduce downstream thermal impacts. An aggressive post-construction monitoring program was recommended to confirm that the outfall treatment is working as designed.
- Worked with Environmental Review to add useful layers to the Coldwater Resources Mapping Tool.
- Processed seven scientific collection permits.

Land Acquisitions - Reviewed two Project Open Space properties in Allegany and Washington Counties for possible land acquisitions.

Muddy Creek -Staff took advantage of a break in the weather to spray high calcium limestone sand into Muddy Creek to increase stream pH and address acid deposition from snowmelt and rain events. The goal of this project is to improve water quality and maintain pH acceptable to aquatic life.

Met with other researchers and managers to discuss past, ongoing, and future work on Deep Creek Lake. The collaboration will help managers identify threats to water quality and aquatic resources and plan management actions to address them.

Met with researchers from Texas Tech University to discuss data collection and analysis using side-scan sonar technology and the use of commercial software packages for georeferencing sonar images. Sonar technology enables managers to map existing habitat conditions.

Freshwater Fisheries staff participated in talks to reduce harmful algal bloom impacts to Hunting Creek Lake in Cunningham Falls State Park. The lake has experienced several large algae blooms in late summer/early fall the past several years. Discussion included the potential management actions to try to prevent blooms from developing.

Lake Waterford - Anne Arundel County is moving forward with plans to dredge Lake Waterford, a former put-and-take trout location. The stocking program ceased due to poor water quality. Since then, the county has dedicated funds for engineering projects and water quality monitoring, and have recently planned to dredge organic material from the lake. Funds are being procured and work should begin in 2023. This dredging project will improve lake water quality and will add to current recreational fishing opportunities in the county.

Freshwater Fisheries - Stocking and Population Management

Channel Catfish - Provided information to the town of Accident regarding a request to stock channel catfish into Accident Pond.

Trout - Freshwater and Hatcheries staff coordinated to “rail stock” inaccessible sections of the North Branch Potomac River Delayed Harvest management area. Trout will be stocked from a CSX hi-rail truck into locations that would be otherwise inaccessible.

Pre-season Trout Stocking:

- Assisted hatchery personnel with stocking pre-season trout into Central Region streams. Stocked pre-season trout in nine different areas. Trout Unlimited assisted with Patuxent River float stocking efforts in Howard County.
- Coordinated with Patapsco Valley State Park Maryland Conservation Corps crew to float stock the South Branch Patapsco River Delayed Harvest area.
- Worked with Harford County government to stock rainbow trout in Bynum Pond.
- Stocked over 10,000 rainbow trout to lakes and ponds in southern Maryland as part of the pre-season put-and-take trout fishery. Anglers were delighted to pursue the fish as a respite to the doldrums of winter. Anglers are astonished by the size and quality of the trout they are catching. Trout were reared at Manning Hatchery (Charles County).
- With the assistance of Unicorn Lake Fish Hatchery staff, Eastern region staff completed the region’s pre-season stockings. With the arrival of warmer weather, the timing could not have been better.

Walleye - Started the annual walleye brood collection on the upper Potomac River. Thirty adult walleye (10 females, 20 males) were collected from the Taylors Landing section of the river and transported to Manning Hatchery for spawning. The largest walleye measured just under 26 inches. Good densities of walleye were seen in the 15-20 inch size range. Anglers are reminded that all walleye >20 inches must be released from January 1 – April 15 in the upper Potomac River. As water temperatures increase, walleye will begin to congregate in higher densities below Dam 4 and Dam 5.

Freshwater Fisheries - Outreach

Provided customer service information for inquiries regarding:

- Information on American eels.
- Provided information for ice safety and ice conditions to inquiring anglers.
- Fishing license information.
- Fielded calls from over 25 angling constituents.

Staff are supervising an intern from the Carroll County Public Schools system. The intern has been assisting Central Region staff with trout stocking during the last month.

Western Region I biologist presented a fish dissection and anatomy lesson to Crellin Elementary School in Garrett County.

Master Naturalist Program– Provided an Aquatic Ecosystems/Freshwater Fish talk for two separate Maryland Master Naturalist Programs. One in the Piedmont Region and one in the

Coastal Plain Region. The presentation covers different aquatic ecosystems in Maryland, the threats to the stream ecosystems (e.g., invasive species, land use, stormwater runoff) and the importance of the riparian buffers for protection of the Maryland resources. A PowerPoint presentation on the Fishes of Maryland with focus on fish found in their region was also provided.

Assisted Maryland Public Television with the filming of an Outdoors Maryland segment focused on ice fishing in Garrett County. Over two days, the film crew conducted interviews and filmed the “ins-and-outs” of ice fishing on Deep Creek Lake.



Maryland Public Television filming an Ice Fishing Segment

Assisted the Deep Creek Lake Hardwater Anglers with their annual youth ice fishing clinic held on Deep Creek Lake. Despite cold and windy conditions, a number of young anglers (and parents) donned their warm clothes and learned about how to catch fish through the ice. Topics ranging from ice safety to electronics and techniques were covered. The Maryland Public Television crew was also on-site for additional filming.



Deep Creek anglers ready for the youth ice fishing clinic.

Freshwater Fisheries - Angler Access

Initiated a conversation about ice fishing access on Broadford Lake in Garrett County. Due to issues with littering and vandalism, the lake has been closed to ice anglers for a number of years. We are hopeful that with some creative thinking, we can find a way to open access for ice anglers again.

Continued work with the City of Frostburg to develop and construct an ADA-compliant fishing pier on Piney Reservoir in Garrett County.

Freshwater Fisheries - Invasive Species

Secured funding from US Fish and Wildlife Service to support harvesting invasive fishes at Conowingo dam and incentivize harvest of northern snakehead from the upper Chesapeake Bay.

Developed infrastructure to test whether environmental DNA can be used to more efficiently monitor changes in abundance of blue catfish in tidal rivers.

Responded to angler tag returns of blue catfish from the Patuxent River. Staff shared fish history with reporting anglers, and referred them to the online tag detection history of fish (<https://usgs.gov/apps/ecosheds/tame#/projects/patuxent-blue-catfish>). Fish were tagged in August 2021 as part of a mark-recapture project that estimated population size for a 5-mile stretch of the tidal, freshwater Patuxent River. That project estimated a population of about 70,000 fish (8 inches or greater) with densities as high as 1,250 fish per acre in that stretch of the river.

Participated in a “walkdown” at Conowingo Dam with Constellation Energy (formally Exelon) to plan for the removal of invasive fish during the 2022 fish lift operation season. Similar to 2021, the consultant who operates the lifts will remove and crate northern snakehead, flathead

catfish, and blue catfish and place the crates into a refrigerated trailer. Freshwater Fisheries staff will facilitate transport of most of these fish to a processor who will be donating the meat to needy Marylanders. Some fish will be kept and processed by Freshwater staff or other agencies to gather valuable scientific data.

Participated in a planning discussion with researchers at Salisbury University for the collection of blue catfish from the Nanticoke River and its tributaries. Blue catfish are being collected using a variety of methods throughout the year. Data are being collected on diet, age, and growth. The findings will assist in assessing the current and future management concerns with the species.

Freshwater Fisheries - Coldwater Program

Participated in the Central Appalachia Grantee Roundtable. The objectives of the meeting were to share updates on some of the projects that have received grant funding from National Fish and Wildlife Foundation and to discuss ongoing issues with improving aquatic resource passage. Staff presented information about fish passage issues in Maryland, challenges for improving passage, and efforts to address these challenges.

Attended a site visit for a road improvement project in the Frederick City Watershed. Patapsco Valley Trout Unlimited is pursuing a project that will mitigate the impacts of stormwater runoff to Fishing Creek. Fishing Creek supports a robust brook trout population that is routinely monitored and is considered to be one of the state's stronghold populations. A preliminary meeting in December of 2021 identified locations of significant instream habitat degradation. A project area was selected and a follow up site visit was conducted with project consultants in February of 2022. The February meeting laid out an approximate limit of disturbance and developed a list of permitting needs and project design considerations.

Met with regional and hatchery staff to discuss potential changes to trout stocking signs and ideas for more youth trout fishing opportunities.

Freshwater Fisheries - Tidal Bass Program

Conducted interviews to hire a creel clerk who will help estimate reporting rate for an interjurisdictional mark-recapture project on Potomac River aimed at monitoring abundance.

Secured bids to purchase young largemouth bass to help support conservation efforts in the upper Chesapeake Bay.

Completed outreach that highlights progress in black bass conservation in Maryland over the past year; outreach should be widely available by April.

Freshwater Fisheries - Other

Participated in a virtual meeting to cover critical maintenance projects to take place at the Mt. Nebo Work Center as well as the Fishery Management Areas (FMAs) in Garrett and Allegany Counties. Within the year, multiple projects will be completed including new lighting, new heat/AC units, and roadway construction at McCoole and Black Oak FMAs.

Welcomed a new member to the Freshwater Fisheries and Hatcheries Division family late in the evening on February 10. A new electrofishing raft was delivered to the field office. The craft will be used primarily to conduct fishery assessments on small-medium sized rivers where traditional electrofishing boats cannot navigate and wading is not an option. There are already a number of planned projects utilizing the raft and we are anxious to break it in.

