



BUREAU OF FRESHWATER FISHERIES MONTHLY REPORT



November 16, 2022 – December 15, 2024

Shawn Crouse, Chief
Craig Lemon, Superintendent
Edward Conley, Superintendent

Christopher Smith, Principal Fisheries Biologist
Ross Shramko, Principal Fisheries Biologist

Dominick Mercurio, Crew Supervisor Bldg. Maintenance
Tyler Tresslar, Crew Supervisor, WMAO
Nicholas Healy, Crew Supervisor, WMAO
Brad Duckworth, Crew Supervisor, WW

Scott Collenburg, Sr. Fisheries Biologist
Eric Boehm, Sr. Fisheries Biologist
Justin Rozema, Assistant Biologist
Samantha MacQuesten, Assistant Biologist
Kyle Civalier, Biologist Trainee

Thomas Bissonnette, Technician I
Shaun Young, Technician II
Charles Sedor, Technician II
Nick Ruberto, Technician II
Doug Cutler, Technician II

Matthew Gadek, Sr. Wildlife Worker
Chris Sherwood, Sr. Wildlife Worker
Andrew Hutnik, Wildlife Worker
Travis Nitko, Wildlife Worker
Lynsey Bell, Wildlife Worker
Thomas Goetschkes, Wildlife Worker
Brooke Wakefoose, Wildlife Worker
Abby Bronico, Wildlife Worker

Ross StCerny- Agency Representative Trainee

Seasonals: Chris Cohen, Robert Huth, Michael Kays, Kendall Morgan, Karl Lightner, Matt Moury, Nick Moury, and Cheryl Weeks

FISHERIES MANAGEMENT

Winter Trout Stocking - Worked with Pequest Trout Hatchery to make any necessary changes to truckloads and number of trucks for the Winter Trout Stocking Schedule. Worked with Pequest Trout Hatchery and Hackettstown Hatchery on drivers and helpers for Winter Trout Stocking. Distributed Final Winter Stocking schedule to Pequest Trout Hatchery and Hackettstown Hatchery. Updated Bureau of Information and Technology on needed changes to the Winter Trout section of webpage and the Winter trout stocking hotline.

Winter Trout season began on November 25th and concluded on November 26th. The program consisted of a total of 4,680 two-year-old trout stocked across 18 lakes and ponds throughout the state. (Civalier)

TECHNICAL ASSISTANCE (State Funding)

Brook Trout Restoration – A grant titled, Building Capacity for Coldwater Habitat Conservation in the Delaware River Watershed (NJ, NY, PA), was awarded by the National Fish & Wildlife Foundation's Delaware Watershed Conservation Fund to the Wildlife Management Institute. This project will Build capacity for cold-water habitat conservation and Brook Trout population recovery across New Jersey, New York and Pennsylvania. Project will hire a landscape coordinator to facilitate project planning and a project manager to supervise on-the-ground conservation endeavors, ultimately streamlining implementation, enhancing stakeholder coordination, and bolstering habitat resilience and biodiversity in the watershed.

In conjunction with this grant as part of the America The Beautiful Challenge Grant program, a \$3.5 Million grant titled, Enhancing Coldwater Conservation for Brook Trout across Pennsylvania, New Jersey and New York was awarded. This project will implement coldwater conservation projects in priority watersheds across Pennsylvania, New York and New Jersey over four years by addressing barriers, enhancing habitat and mitigating stressors. Project will significantly enhance habitat conditions for at-risk brook trout and other species, creating healthier coldwater ecosystems capable of supporting thriving populations, and safeguarding the biodiversity of the Appalachian Corridor Highlands and streams. In addition to the three states mentioned above, other partners include, The Eastern Brook Trout Joint Venture (EBTJV), Trout Unlimited (TU), National Fish and Wildlife Foundation (NFWF), and the United States Fish and Wildlife Service (USFWS).

Staff attended a kickoff meeting on these initiatives, providing a platform for introductions and assignments of various workgroups.

Moore's Brook – As part of a Land's Management Review for a project that entailed dredging a section of Moore's Brook, Biologists Ross Shramko and Scott Collenburg conducted an electrofishing survey in Moore's Brook to determine the potential impacts to the fish assemblage. During the survey on December 10th, Redfin Pickerel, Pumpkinseed, Bluegill, Largemouth Bass, and Eastern Mudminnow were captured in the project area. It was beneficial to see the area that the Town of Newton was interested in dredging as it appears to be a large floodplain area that's already well suited to absorb high stream flows. Most of the sediment in-

stream looks to have settled within the first 600 feet downstream of Straway Blvd and any additional work downstream from there should be considered impactful to the habitat and aquatic biota. (Collenburg/Shramko)

Mine Brook site visit - Investigated potential dam removal project on Mine Brook, a tributary of the Musconetcong River. – Staff performed an onsite assessment of a potential dam removal on Mine Brook and its impacts on Brook Trout restoration. Collaborated with members from the Eastern Brook Trout Joint Venture and members from the Musconetcong Watershed Association. (Shramko)

West Brook (Passaic) Brook Trout Restoration Site Visit- Conducted a site visit on 12/9/24 in relation to the possibility of reintroducing Brook Trout into a section of the upper West Brook and a tributary of the West Brook located on The Land Conservancy property. (Shramko & Rozema)

Classification Recommendations – Through the course of field work, from 2018 to 2023, 13 stream sections were identified as needing upgrades in their classification based upon their suitability for trout. Those recommendations were compiled in a report and shapefiles were sent to NJDEPs Bureau of Environmental Analysis, Restoration and Standards for review and incorporation into changes to the surface water quality standards. (Collenburg)

Drought Response Advisory Group – Weekly meetings were held to discuss permitted and proposed modified passing flows related to water supply and the current state of drought in the state of NJ. Shawn Crouse, Chief of Freshwater Fisheries, and Scott Collenburg, Senior Fisheries Biologist, provided recommendations and comment on potential impacts to fisheries based on potential flow modifications. Despite the recent rain and snowfall accumulations there was not enough to change the current water supply conditions and New Jersey remains in a drought warning. The public is strongly urged to continue voluntary water conservation practices. The Drought Response Advisory Group meets every Friday. (Collenburg & Crouse)

Ken Lockwood Gorge Habitat Restoration – On December 4th, Fisheries Biologists with the Bureau of Freshwater Fisheries met with the Lake Solitude Fishing Club to discuss the possibilities of a restoration project that would improve in-stream habitat within the public fishing area of the South Branch of the Raritan River within the state-owned Ken Lockwood Gorge. Club members shared with Fish & Wildlife staff work that has been performed on nearby club property as examples to the type of work that could be done to enhance the instream habitat within sections of the Ken Lockwood Gorge. Discussions were preliminary and suppositional. (Collenburg, Crouse, & Shramko)

Nutrient Reduction Project at Lake Hopatcong - Participated in Lake Hopatcong Harmful Algal Bloom HAB meeting with Princeton Hydro. Princeton Hydro will be performing work in Lake Hopatcong to study the effectiveness of different treatments in preventing and reducing HAB's beginning in 2025. Fish & Wildlife staff addressed concerns with study design, treatments and timing with Princeton Hydro staff along with concerns about rare native species like Bridle Shiner which have been found in some of the areas that of the lake where these treatments are proposed to occur. (Davis, Crouse, & Shramko)

State Wildlife Action Plan Habitat Associations - As part of the State Wildlife Action Plan (SWAP) time was spent reviewing the habitats and regions that SGCN fish species are located in. The deadline for this review of Habitat Associations is December 20th. (Collenburg)

Dam Removal Meeting - Had a meeting about potential dam removals with staff from the Nature Conservancy. The Nature Conservancy is looking to expand their restoration efforts from the Paulins Kill Watershed mostly to other watersheds in NJ. These potential expanded areas of focus include the Pequest River, Pohatcong Creek, Flatbrook, and Musconetcong River Watersheds. (Shramko)

Skillful Angler Program - Received and reviewed 39 Skillful Angler applications from anglers. Applications have now reached 420 for 2024 and continue to come in steadily. Packed and mailed out the remaining patches and certificates to anglers. (Civalier)

Freshwater Fisheries Permits – Reviewed water lowering and fish stocking applications and contacted applicants to obtain necessary information. A few projects required significant lowering that necessitated fish salvage. Reviewed LMRs from a freshwater fisheries perspective for upcoming projects. (Staff)

WMA Fishing Tournament Permits –Issued fishing tournament permits to local fishing organizations. Reports have been steadily coming. Began receiving requests of tournaments in 2025 (Smith)

INFORMATION AND EDUCATION AND PUBLIC OUTREACH

Met with I&E staff on 11/15/24 to plan a fishing outreach event in January 2025 to introduce the public to bass fishing and black bass management in New Jersey. (Smith)

PEQUEST TROUT HATCHERY (Ed Conley)

Inventory Data

<u>Stocking Program</u>	<u>Length</u>	<u>Average Daily Increase</u>	<u>Conversion</u>
Spring 2025 RBT (14 months old)	9.3"	0.014	2.10
Fall 2025 RBT (14 months old)	10.0"	0.023	1.70
Spring 2026 RBT (2 months old)	1.7"	-	-

Flow Rates – November 2024

3.54 inches of precipitation fell during the month of November.

Production Well Pumping Rate Average for November was 6,000 gpm with an average 8.42 million gallons per day pumped during the month.

The potable well pumped 9,357 gallons for the month of November.

Fish Culture Activities



The Pequest Trout Hatchery met and exceeded production goals for this year's 2024 Winter Trout Stocking Program with 4,680 two-year old Rainbow Trout that were loaded on stocking trucks and distributed into 18 lakes and ponds during November 25th and 26th.

PEQUEST TROUT HATCHERY **2024 WINTER TROUT STOCKING SUMMARY**

	<u>#FISH</u>	<u>#LBS.</u>	<u>AVG. LENGTH</u>
RBT Production -	4,680	6,997	14.5"

All lots of 2026 production are on feed (Mash - #2's) and have now been dropped out of the troughs into the tanks. Staff continues to spend more time in Nursery building cleaning as all fish are on feed now. Staff are preparing the B-line in preparation to move out approximately 360,000 fish from the Nursery building in the next week. Inventories were completed on Lot#1 fish and 25,000 1.7-inch surplus were given to Hackettstown hatchery for forage.

Monthly inventories were completed on all Spring and Fall 2025 production pools. Feed quantities have been adjusted to regulate growth rates to reach our final goals for stocking. These fish are being fed by the feed truck 4 times a day with 5.0 mm feed. Screens are being cleaned twice a day and basins weekly.

Pequest Maintenance

During the past month we had a couple of voltage spikes that set off alarms and had a couple of wells that needed to be reset as well as the alarm panel.

The New Yaskawa Variable Drive unit and cabinet were installed, programmed, and set for correct flow in Well #1 by Willier Electric. We had failure on Well 1 datalogger and had to troubleshoot it with customer support. It was determined the outputs were putting out the wrong voltage and it had failed. A new Campbell Scientific CR1000XE datalogger was ordered and will take about a month to come in and then it will need to be programmed on-site and reinstalled. The diesel-backup switch began to work inconsonantly, so we ordered and installed new switch that works properly.

We have continued getting alarms/errors on the domestic UV system during a test run period with the most recent occurring on 11/24, 11/25, 11/27, 12/1, and 12/2. We are also still having communication issues where connection and data are being lost after a power outage during the transfer to emergency generator back-up which needs to be addressed. Portasoft Inc. the installation vendor, has recently requested us to drain and clean the (3) pressure tanks to see if that helps with the running issues. This will not be completed until the end of December or the beginning of January. After that is completed, they will continue to monitor, collect data on the system, and determine if other adjustments to the system will be needed. Although we had estimated 1/1/25 as an on-line date we will still need more time to see if cleaning of the pressure tanks helps with the issues or is unrelated, and if the units will run for extended periods without error messages. The communication issue needs to be figured out as well, so we record the proper data. We requested extend the on-line time to March 1st, 2025, if it is needed.

Installed 2 new batteries on Trout distribution truck 145 before winter stocking added diesel fuel anti-gel and fuel additive to diesel tanks, transport tanks, distribution trucks, and tractors before winter. Looking at getting a second opinion on motor problems on distribution truck 682. Inspection and smoke test was completed on truck 847.

Raceways areas were prepared for winter. Heated disinfection dips were set up for outside equipment, and everything not needed was put away in preparation of any winter storms. Cleaned all gutters and drains on well houses before cold weather as well.

Still waiting on the purchase order in the amount of \$48,969.00 through CBT funding for Well #6 rebuild and electrical update after it was submitted last month.

Miscellaneous Activities

New full-time Wildlife Worker Abby Bronico received a 11/18/24 start date. Welcome aboard!

Attended the pre-proposal meeting on 11/21/24 for CBT P1336-00 Fuel Tank Upgrade project that moved into A/E selection. It went over the scope review, some dates for the consultants, and onsite look at the area and electrical.

Attended a hatchery Modernization meeting on 12/5/24 with HDR engineering and management about work they are doing for other states and possibilities of doing review and plans to upgrade the Pequest Trout Hatchery and Hackettstown hatcheries. Looking to get a rough quote of how much it would be to render services.

Attended the pre-proposal meeting on 12/11/24 for the CBT Well Rehabilitation project that moved into A/E selection. It went over basically the scope review, some dates for the consultants, and on onsite look at the existing well houses and electrical.

Had Annual Life Hazard Inspection of the facility with Joseph Hayes from DCA on 12/11/24. The facility passed.

Worked on and submitted Renewal Package for the facility's NJPDES discharge permit NJ0033189. Filled out and reviewed with treatment plant operators before submittal. This permit requires the renewal package to be submitted 180 days before expiration of the permit.

Sent out a Request for Proposal the Pequest Trout Hatchery requesting a proposal of services for an S-2 Licensed Operator, Water System Licensed Operator, and water/sewer system laboratory services for a period of 1 year. The waste treatment plant handles domestic and fish waste. Bids closed 4pm on December 12th and are being reviewed. The awarded bid will be submitted after review of required documents.

Submitted Pequest Trout Hatchery's 2024 Annual Report and information regarding stocking production activities and 2024 CBT projects.

Completed the 2024 Trout Stocking Summary and sent to Information and Education to post it on the website.

Newer staff have continued attending scheduled Fish and Wildlife Experiences to learn about various Fish and Wildlife Programs.

We received a new depredation permit for 2025.

Hackettstown State Fish Hatchery (Craig Lemon)

<u>Species</u>	<u># Fish</u>	<u>Avg.”</u>
Landlocked Salmon	3,200	5.9”
Muskellunge	5,955	9.5”
Largemouth Bass	3,000	5.0”
Largemouth Bass (Ark.)	2,500	3.6”
Hybrid Striped Bass	1,600	6.7”
Gambusia	50,000	1.5”

<u>Stocking Totals</u>		(November 16 – December 15)			
<u>Date</u>	<u>Species</u>	<u>Location</u>	<u>#Fish</u>	<u>Pounds</u>	<u>Length</u>
11/14	Lls	Tilcon Lake	480	665	14.0”
11/14	Lls	Lake Aeroflex	524	727	14.0”
11/15	Lls	Merrill Creek Reservoir	680	766	14.0”
11/18	Lls	Wawayanda Lake	1,320	1867	14.7”

Lls – Landlocked Salmon

Intensive Culture

Landlocked Salmon

Currently culturing 3,200 fish about 5.9” in two 2,000-gallon tanks. Staff clean and feed them daily. Staff split next year’s fish into two 2,000-gallon tanks. Finished stocking last year’s fish. A total of 3,000 fourteen-inch fish were float stocked. The stocking was two weeks later than normal waiting on lake and reservoir water temperatures to drop below 55°F.

Muskellunge

Currently culturing 5,955, 9.5-inch fingerlings in two 2,000-gallon tanks. They will be overwintered on a dry pellet diet in 52°F spring water. After the New Year, we hope to change them over to live forage.

Hybrid Striped Bass

Currently culturing 1,600 6.7-inch fingerlings in one 2,000-gallon rectangular tank. These fish will be raised through the winter and be moved outside in the spring. They will be on a dry pelleted diet in 52°F water. Tank water temps are currently 52°F.

Largemouth Bass

Purchased 2,500 three-inch dry food trained Largemouth Bass from Keo Fish Farms to grow intensively until next spring. These will be part of the PERCH program in two to three years. Staff inventoried our NJ Largemouth Bass and came up with 3,295 pellet trained five-inch fingerlings. These will also be overwintered intensively and put outside in ponds for future PERCH program fish. Both lots of fish are doing well and are in 52°F water.

Gambusia

Currently culturing 50,000 Gambusia and Fathead Minnow mix in three 1,000-gallon tanks. These fish will be reared over the winter in 52°F spring water and fed a dry mash diet.

Intensive Production Work

We are currently pumping 478 gpm of 52°F spring water. Both cool and warm water recirculation systems are shut down for the winter. Water levels in the spring houses have risen following the past few weeks of rain and snow.

Extensive Culture

Channel Catfish

Broodfish are being overwintered in Pond 92. Overwintering three-year classes of catfish for the PERCH Program in Ponds, 74, 89, and 90.

Hybrid Striped Bass

240 sixteen-inch fish were moved to Pond 89 for future PERCH Program fish. The 2023 holdovers are overwintering in Pond 90.

Largemouth Bass & Smallmouth Bass

All bass broodstock ponds have been harvested and the adults returned to Pond 50 overwinter.

Fathead Minnows

Overwintering two 1,000-gallon tanks intensively for use as live forage after January 1st on Muskies.

Hatchery Extensive Pond Work

The final extensive pond was harvested for the season. Staff are cleaning up and organizing all the pond gear – screens, plugs, slides, boards in the storage building. Putting together a list of concrete repairs to inflow and outflow structures. Staff dredged the bottoms of Ponds 77 & 78. Working on repairing the Pond 77 inflow bubbler pipe and pad.

Information & Education

Provided information and photos for four GoFishFriday's posts 180-183. 1,303 likes, 42 comments, and 59 shares. Answered as many questions as possible on these posts. Provided pics and information on the stocking of Landlocked Salmon. Received good feedback 622 likes, 16 comments, and 200 shares.

CBT/CBTM Projects

A CBTM project was created for the dredging and regrading of Pond 90. Tilcon would not update their DPA paperwork, so we opted to Stavola, and they did the paperwork. A PO has been issued and plans are to order stone to complete the Pond 90 project. The CBT Project for Boiler Replacement has moved to the next step. An engineering consultant has been chosen and a TEAMS meeting took place. The contractor has made a site visit to gather information and measurements. They have also reached out via email a couple of times.

Severe Drought Conditions

On a brighter note the drought conditions have lessened following some good rains and a little snow. Ground water and Trout brook levels have both increased substantially

Winter Trout Stocking

Staff took part in Winter trout stocking on November 25th and 26th.

Winterizations

Staff have winterized all boats and motors, tractors and mowers, and are working to finish up oil changes/parts/maintenance checks on all 12 vehicles. Checked heat in all state houses and buildings. Snowplow markers have been placed and all plows and snow equipment are ready to go.