



BUREAU OF FRESHWATER FISHERIES MONTHLY REPORT



March 16, 2025 – April 15, 2025

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Edward Conley, Superintendent
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Seasonals: Anthony Belske, Noah Brady, Chris Cohen, Michael Kays, Samantha Lavan,
Michael McCarthy, Robert Rubino, Jesse Tyther, and Cheryl Weeks

FISHERIES MANAGEMENT

Furnace Lake (Warren)- Furnace Lake (53 acres, Oxford Twp.) was sampled for Muskellunge via trapnet from March 31-April 4 as part of regularly scheduled springtime coolwater fisheries monitoring efforts. A total of 12 overnight trap net sets occurred, capturing 6 Muskellunge. Additional data analysis will be conducted at a later date. (Rozema, F-48-R)

Lake Hopatcong (Sussex/Morris) - Nighttime electrofishing targeting Walleye occurred overnight on April 9 at Lake Hopatcong (2,685 acres, Lake Hopatcong Twp.) as part of regularly scheduled springtime coolwater fisheries monitoring efforts. A total of 2.3 hours of electrofishing was conducted on the south end of the lake, near Hopatcong State Park and Landing. A total of 52 Walleye were captured over the course of the night. Additional nighttime electrofishing is scheduled for later this month, targeting other locations further north on the lake. (Rozema, F-48-R)

FISHERIES MANAGEMENT

Fish and Mussel Work Group – On March 19th, Biologists with the Endangered and Nongame Species Program, Alex Kisurin, Bureau of Freshwater Fisheries, Scott Collenburg, and US Fish and Wildlife Service Biologist, Jillian Stark, met to continue conversations related to the common goal of overlaying fish distribution data with rare mussel locations to prioritize sampling for mussels. (Collenburg)

FishTrack Database – Work has continued to transition the old database from Microsoft Access to a geodatabase stored and managed by the GIS group. (Collenburg)

Flatbrook Logjam Remediation - Conducted multiple site visits and meetings with Lands Management and others within DEP regarding the major logjam on the Big Flatbrook. Provided guidance on necessary permits and site management strategies to mitigate stream blockages while preserving fish passage and aquatic habitat. Next steps include attaining needed permits. (Shramko)

NAACC and Habitat Connectivity Work - Worked extensively on updating stream crossing data within Brook Trout Catchments. Participated in internal meetings regarding NAACC protocols and future project planning. Attended meetings with transportation and land use officials to advocate for selective preservation of culverts critical to native Brook Trout and invasive species control. (Shramko)

Roads and Wildlife Working Group – On April 10th, the Bureau of Freshwater Fisheries had an opportunity to provide an overview of recent work assessing road and stream crossings structures using the North Atlantic Aquatic Connectivity Collaborative (NAACC) framework. This assessment aims to identify barriers that impede aquatic organism passage, with particular attention to wild trout populations and their habitat connectivity. While the general goal is to enhance connectivity by addressing problematic crossings, BFF emphasized a nuanced approach: in some cases, maintaining certain barriers is beneficial. Specifically, noting that some existing barriers play a critical role in protecting native species, such as Brook Trout, by preventing upstream movement of introduced species like Brown Trout, which can outcompete native

populations. These “helpful barriers” are strategically important in conserving native biodiversity and sustaining the ecological integrity of sensitive habitats. (Collenburg)

NJ Water Monitoring Council Meeting - Attended the NJ Water Monitoring Council Spring Meeting on 4/16/25. Presented on fisheries monitoring and assessment at dam removals. Topics covered included the benefits and drawbacks of removal, fisheries sampling methods/techniques, data collection pre and post removal, AIS concerns, and past results following removals on the Paulins Kill, Millstone, and Musconetcong Rivers. (Boehm)

Spring Trout Stocking - Prior to opening day, staff worked extensively on logistics, volunteer coordination, and site access issues for spring trout stocking operations, along with responding to a variety of emails regarding waterbodies that were not stocked due to signage issues. The three weeks of pre-season trout stocking have been completed, and we are now into the trout fishing season. The Opening Day of the 2025 trout season was Saturday, April 5th. Cool and cloudy weather was prevalent throughout the state, with moderate winds reported by survey clerks in some areas. Rain was reported intermittently, primarily in the northern counties and more consistent closer to noon. Temperatures across the state on Saturday morning ranged from the upper 40's °F and low 50's °F closer to noon. While New Jersey remains in a Drought Warning status following last year's abnormally dry summer and fall, much of the state experienced rain during the week prior to Opening Day.

On the Opening Day of trout season, volunteers and staff conducted over 40 creel surveys and spot checks, however a few volunteers had not submitted data at the time of report. Of these, 31 were on lakes or ponds and 5 were on rivers. This survey is not intended to be a direct measure of the entire spring trout stocking program. Rather, it is a subset of observations directed at specific waters due to a multitude of reasons such as volunteer availability near a particular waterbody, a long time since last surveyed, selection as a bonus broodstock water, consideration in dropping it from the program if angler turnout and/or success is low, etc. Survey clerks recorded 950 anglers, with 820 anglers on lakes/ponds and 130 anglers on rivers/streams. The average catch rate during the 2025 Opening Day Angler Survey was 0.70 fish per angler, which is well above the average catch rate of 0.56 fish per angler over the past 11 surveys. The weather forecast likely reduced the angler turnout somewhat, but this year's anglers were successful. (Civalier and staff)

Wild Trout Biomass Tracking and Analysis - Significant progress was made updating the Wild Trout Biomass spreadsheet to monitor population trends across our survey streams. This ongoing work will help guide future management and restoration efforts. (Shramko)

INVASIVE SPECIES MANAGEMENT (State Funding)

MAPAIS Meeting - Participated in the Mid-Atlantic Panel on Aquatic Invasive Species (MAPAIS) annual spring meeting on April 9th. MAPAIS is a sub-committee of the ANS Task Force. Highlights of the meeting include reviewing grant proposals and regional species updates. Established as New Jersey's new state representative on the panel. (MacQuesten, Smith)

AIS Reporting Form - The new AIS Reporting Form has been published and is ready for public introduction. Submitted updates and improvements on NJFW's AIS webpage and drafted social media posts in preparation for the reporting form launch. (MacQuesten)

TECHNICAL ASSISTANCE

Freshwater Fisheries License Sales and Marketing Meeting - Attended a meeting on 4/11 discussing current license sales information and data as well as current plans for future marketing efforts of license sales. (Crouse, Rozema)

Freshwater Fishing Regulations Web Application - Provided final review of the Freshwater Fishing Regulations Web Application developed by the Office of Fish and Wildlife Information Systems. The application is now public following its launch earlier this month. This application provides location-specific regulations for all freshwater waterbodies in New Jersey. Simply select the waterbody on the interactive map where you plan to fish, and a pop-up will display the location-specific regulations including special waterbody regulations and species harvest regulations. The application includes the boundary of the Brook Trout Conservation Zone and fishing license boundary points. (Boehm, Crouse, Rozema)

Eastern Brook Trout Joint Venture (EBTJV) Activities - Prepared for and participated in the EBTJV Steering Committee Meeting. Reviewed eight project proposals; unfortunately, the Mine Brook dam removal project in the Musconetcong Watershed was not selected for funding this year. Participated in Steering Committee discussions and also completed additional EBTJV administrative duties regarding potential future sponsorship changes. (Shramko, F-48-R)

PFOS Sampling and Monitoring Coordination - Engaged in multiple meetings related to PFOS contamination in the Musconetcong River, including sessions with DEP Biological Monitoring, Federal EPA, and Fish & Wildlife staff. Participated in discussions regarding future water and fish sampling, and provided input on local knowledge critical to study design. Reviewed and provided input on the draft PFOS sampling plan, scheduled for implementation the week of April 28th, 2025. (Shramko)

Drought Response Advisory Group – Multiple meetings were held to discuss the current state of drought in the state of NJ. Scott Collenburg, Principal Fisheries Biologist, provided comment in relation to any concerns with the fisheries resources. Conditions are generally improving, and we have had wetter conditions than average in most parts of the state in the past 30 days. Reservoir levels are increasing as well. The drought status is still “Warning.” The public is strongly urged to continue voluntary water conservation practices. The Drought Response Advisory Group meets every Friday. (Collenburg)

Land Management Reviews (LMRs) - Completed reviews and provided technical comments on several LMRs, including important assessments at Lommason's Glen Brook, Swartswood Lake, and Lake Hopatcong. Worked to ensure that flood hazard rules and critical habitat protections were fully considered in all cases. (Shramko)

INFORMATION AND EDUCATION AND PUBLIC OUTREACH (State Funding)

Conservation Knowledge Exchange Program - Participated in the kick-off meeting for the Conservation Knowledge Exchange Program, a new initiative connecting conservation professionals from across New Jersey for field visits and program sharing. (Shramko)

Skillful Angler Program - Received and reviewed 42 Skillful Angler applications from anglers. Applications reached 87 for 2025 and are coming in steadily. (Civalier)

STAFF & ADMINISTRATIVE TASKS

Freshwater Permits - Reviewed Land Management Reviews (LMR's), water lowering permits and fish stocking applications and contacted applicants as necessary to obtain required information. Responded to requests from the public for information on fish stocking and water lowering permit programs. A few projects required significant lowering that necessitated fish salvages. The applicants were provided with a list of consultants to complete the salvage. (Staff)

WMA Fishing Tournament Permits – A total of 141 WMA Tournament Permit requests have been received. Tournament reports have been steadily received since the fishing season started with good catches reported by participants. (Smith)

PEQUEST TROUT HATCHERY (Ed Conley)

Inventory Data

| <u>Stocking Program</u> | <u>Length</u> | <u>Average Daily Length Increase</u> | <u>Conversion</u> |
|------------------------------------|---------------|--------------------------------------|-------------------|
| Spring 2026 RBT (6 months old) | 4.5" | 0.018 | 1.10 |
| Spring 2025 RBT (18 months old) | 11.3" | 0.009 | 2.05 |
| Fall 2025 RBT (18 months old) | 11.8" | 0.015 | 2.02 |

Flow Rates – March 2025

4.38 inches of precipitation fell during the month of March.

Production Well Pumping Rate Average for February was 5,513 gpm with an average of 7.94 million gallons per day pumped during the month.

The potable well pumped 12,434 gallons for the month of March.

Submitted Quarterly Water Diversions on 4/2/25.

Fish Culture Activities

The 2025 Spring Stocking program began on March 17th, 2025. 185,680 Rainbow Trout were stocked before the season opened on Saturday April 5th, 2025. The trout stocked included some brood-stock weighing up to 7lbs. Another 68,730 additional Rainbow Trout were stocked during the first week of the seven in-season stockings. So far, 30 Hook a Winner tags have been reported so far.

Monthly inventories of the remaining Spring 2025 production stock and the fish for the 2025 Fall Program fish were completed during this time. Feed quantities have been adjusted to regulate growth rates to reach our final goal for stocking. These fish are being fed by the feed truck four times a day with 5.0 mm feed. Screens are cleaned twice a day and basins weekly.



Spring sorting of the 2026 production stock (over 800,000) has begun in which smaller fish graded off using metal grader boxes and pools are reset as they become available. This requires several staff and takes time, but it is necessary to keep a closer size range on the trout.

The A and C-lines were emptied, cleaned, and sterilized. The A-line and the odd side of the C-line were also reset with sorted fish. Some of the 2026 production stock from the nursery were inventoried and moved into the even side of the C-line at this time. Also, inventory and sorting of the 2026 production stock in the nursery was completed. Tanks were reset at this time. Approximately 25,000, 3.2-inch surplus trout were given to Hackettstown Hatchery for forage during this period.

All fish in the nursery are being fed by automatic feeder twice every hour for about 10 hours a day. The feeders are being filled daily with 2.5mm feed. All tanks are still being cleaned by all shifts and flows were adjusted and outside screens are being cleaned twice daily. Outside 2026 production trout are being fed 3.0 mm by the feed truck now four times a day. Hatchery flows were adjusted during this period.

Coordinated daily load assignments of Spring Stocking Trout runs to various water bodies onto selected distribution trucks. Hatchery Staff stocked all the Pequest River runs pre-season and In-season. Also, stocked the Pequest Fishing Education Pond 3/17/25 with surplus.

Pequest Maintenance

Had a few alarms during this time regarding well levels and a quick power glitch which staff had to respond. M-scoped all wells ensuring proper well levels in drought conditions.

We welded and repaired Hackettstown large stocking truck and replaced seals on 6" valves. Installed a new starter in the fish pump, repaired a power washer with broken draw tube and continue to repair ¼ and ½ raceway screens. Also, working on the CBT-M Bollard Sleeve Project which will cover all the safety bollards in the hatchery.

Staff have also been making repairs on stocking equipment and trucks as needed as well as daily oxygen checks. Truck 917 had the rear end replacement after failure and truck 126 yearly inspection was completed.

William Stothoff Company finished installing the new equipment in Well #6 and is back-up and running. There was another issue determined with a pressure equalizing valve in the trunk line in which we are awaiting a quote.

Received purchase order for PSI Inc. to fix wiring and VFD communication in Well#1. Also, received one for Miner Ltd, for the replacement of an overhead door in the lighthouse through CBT funding. We are in the process of scheduling the work with vendors.

Miscellaneous Activities

Had Rack and Fin Radio Interview with Tom Pagliaroli on 3/27/25 about Spring Trout Stocking. Scheduled a few other press/ photo events for Spring Trout Stocking during this time.

4/11/24, had a kickoff meeting for CBT Project P1334-00 - Well Rehabilitation and Upgrades at Pequest State Trout Hatchery. The project is currently in the design phase. Also, we discussed other preliminary projects.

Working with DOIT and Directors Office technical staff with upgrading the Pequest phone system with a Teams based system.

Hackettstown State Fish Hatchery (Craig Lemon)

Intensive Culture (Inventory)

| <u>Species</u> | <u># Fish</u> | <u>Avg.”</u> |
|-----------------------|----------------------|---------------------|
| Landlocked Salmon | 3,200 | 8.0” |
| Muskellunge | 5,955 | 10.8” |
| Gambusia | 50,000 | 1.5” |

Stocking Totals (March 16 – April 15)

| <u>Date</u> | <u>Species</u> | <u>Location</u> | <u># Fish</u> | <u>Fish/Pound</u> | <u>Pounds</u> | <u>Length</u> |
|--------------------|-----------------------|------------------------|----------------------|--------------------------|----------------------|----------------------|
| 3/27 | Np | Rhode Island | 100,999 | | | fry |
| 3/28 | Np | Connecticut | 83,520 | | | fry |
| 4/15 | Np | Connecticut | 30,088 | 663 | 45.4 | 2.0” |

Intensive Culture

Northern Pike

Currently culturing 76,000 two-inch fingerlings in eight 350-gallon circular tanks, and six 1,000-gallon rectangular tanks.

Tiger Muskellunge

Currently culturing 21,000 1.2-inch fingerlings in two 350-gallon circular tanks.

Landlocked Salmon

Currently culturing 2,800 fish about 8.0” in three 2,000-gallon tanks. Staff clean and feed them daily. Recent precipitation has helped our spring house levels enabling us to fill a third tank and split and fin clip the salmon. Staff fin clipped the left ventral fin. These fish will be stocked around November 1st at 15 inches.

Muskellunge

Currently culturing 5,955, 10.8-inch fingerlings in two 2,000-gallon tanks. They were overwintered on a dry pellet diet in 52°F. They have been switched to live forage and will be stocked around April 21st.

Hybrid Striped Bass

The Hybrid Striped Bass were stocked in Manasquan Reservoir.

1,846 fish-611.3 pounds – 3.02 fish/pound-7.7-inch average-Range-6.9-8.7

Largemouth Bass

Both tanks of Largemouth Bass were moved outside to Pond 30. Surface temperature 54°F.

3/19-Tank 14-Keo Fish purchased 2,500 on 9/9/24. Moved 2,346 fish out. 169 pounds – 13.9 fish/pound.

3/21-Hand sorted NJ Bass-Sorted 318 bigs to Pond 90, and the rest to Pond 30.

Bigs-7.3-inches Range-6.3-9.2

Smalls-6.05-inches Range-5.1-7.2

Gambusia

Currently culturing 50,000 Gambusia (Mosquitofish) in two 1,000-gallon tanks. These fish are being reared over the winter in 52°F spring water and fed a dry mash diet. They will be used by County Mosquito Commissions in the Spring as Biocontrol measures for mosquitoes. They are brought indoors in the Fall, because they do not overwinter well in the wild.

Intensive Production Work

We are currently pumping 593 gpm of 52°F spring water and 162 gallons of 68°F water. Staff started up the 68°F system on March 3 in anticipation of Northern Pike Trapnetting in Budd Lake. The Amiad filter had a faulty pressure switch, which was ordered, and has been replaced. After a few weeks up and running a seal went in one of the large circulator motors. It has been replaced. Water levels in the spring houses have rebounded nicely with the recent precipitation.

Extensive Culture

Channel Catfish

Broodfish are being overwintered in Pond 92. Overwintering three-year classes of catfish for future fishing programs in Ponds, 74, 89, and 90. All of the catfish ponds are being fed daily and look to have come through the winter well.

Hybrid Striped Bass

240 sixteen-inch fish were moved to Pond 89 for future programs. The 2023 holdovers are overwintering in Pond 90. Estimated 1,300 Hybrids and 1,828 Lmb were moved to Pond 90 from Pond 30. The fish looked nice, and the polyculture seemed successful.

Largemouth Bass & Smallmouth Bass

All bass broodstock ponds have been harvested and the adults returned to Pond 50 to overwinter. Pond 50 water level is being dropped for seining on April 16th. Smallmouth will be setup in New Pond 87, and Largemouth Bass brood will be setup in Ponds 13, 17, and 48.

Hatchery Extensive Pond Work

The majority of ponds are full. Still holding back on Ponds 18, 31, 32, 60, 82, and 83. These are all ponds that are scheduled for fry. We have encountered numerous leaks and broken pipes this Spring, possibly due to ground heaving from heavy frost.

Walleye Broodstock Collection (Swartswood Lake)

Hatchery staff set two South Dakota style trapnets in Swartswood Lake on 3/18. The lake was still about four-feet low from Winter drawdown making launching the boat and setting nets very difficult. The crew could not get our net up in Neldon Brook where we have done excellent over the years. The first two days only produced nine Walleyes, and a stretch of cold, nasty weather was predicted so we pulled the nets. Staff took a boat ride on Friday March 27th to look at the lake level and it was decided to give it a try on Monday March 31. Staff set three South Dakota nets and checked them for the next four days. A total of 80 Walleyes were captured. The catch was made up of 62 males and 10 females. For the first time in many years no females were spawned. Not sure what happened. Maybe the females spawned on rocky shoals, because they could not get in the brook. Decent numbers of Yellow Perch (268), and Bluegill (303) were captured, and returned to the lake. Thirteen different species were captured in all. Lake water temperatures ranged from

40-48°F. Working with the PA. Fish and Boat Commission and the New York DEC to procure Two million Walleye eggs.

Information & Education

Provided information and photos for four GoFishFriday's posts 198-201. 4,109 likes, 96 comments, and 297 shares. Answered as many questions as possible on these posts. Provided information, pictures, and short video clips of Budd Lake trapnetting for Northern Pike, plus spawning and egg hatching. 3,264 likes, 368 comments, and 459 shares. Hosted a Trapper Education class on 3/30. Hosted three First Catch Center Programs – 4/7, 4/12, and 4/13 – Women and Families. Participated in a Licensing/R3 meeting.

CBT/CBTM Projects

The CBT Project for Boiler Replacement has moved to the next step. An engineering consultant has been chosen, and multiple TEAMS meetings have taken place. The engineering contractor has made several site visits to gather information and measurements. They have also reached out via email a couple of times.

Budget/Purchasing

Orders have been completed for pond dye, fertilizer, tower fish food, bagged minnow feed, Fathead Minnow delivery from Arkansas. Working on a second order for minnows for the State Mosquito Commission.

Hatchery Maintenance

Brush hogged all hatchery fields. Spread rip rap on the outflow of Pond 90 bank. Spread stone on several hatchery roads. Met with a Treasury Representative to discuss the bathroom and kitchen remodels in the 34 Reese Ave State House. Called three contractors for quotes on the bathroom remodel. Secured a PO for the remodel job. Took measurements and made sketches of the Pond 53 outflow flume. Emailed sketches and pictures of the flume to four businesses for quotes. We have received two quotes back so far.