



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

December 2023

(November 16th, 2023 – December 15th, 2023)

Patrick Woerner, Geographic Information Systems Specialist
Kevin Blythe, Geographic Information Systems Specialist
Brian Henderson, Geographic Information Systems Specialist
Molly VanWieren, Geographic Information Systems Specialist

Temporary/Seasonal Employees: Joseph DeCeglia
Olivia Hrymoc

ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 37 projects in progress and 0 new projects requested through the GIS Project Request Form.
- OIS attended the NJDEP GIS User Group Meeting.
- OIS staff attended the quarterly New Jersey Geospatial Forum (NJGF) meeting.
- OIS participated in the NJ Conservation Blueprint Steering Committee with the goal of accelerating the preservation of the most important remaining natural and cultural land resources that support healthy and vibrant communities in New Jersey.

GIS DATA DEVELOPMENT

Shellfish Aquaculture Lease Lot Data

- OIS staff is working on updating the official corners of shellfish lease lots with the goal of integrating GIS data with NJEWMS and transforming the way Bureau of Shellfisheries currently manages their data.

Freshwater Fishing Opportunities and Access

- OIS completed coding of approximately 260,000 stream segments with both waterbody- and species-specific fishing regulations. The stream segments will be linked to regulation tables, which will serve to populate popups and online PDFs in a statewide fishing regulations map application.

New Jersey Statewide Trails Dataset

- No update.

Diadromous Fish Habitat Mapping and Timing Restrictions

- OIS staff continues to analyze streams and collaborate with Bureau of Freshwater Fisheries based on anadromous inventory points and dams.

Wildlife Management Area Boundary Alignment

- OIS staff completed QA/QC of the mapping and work done to date and revised the file organizational structure. A tutorial guide that includes the file structure and the steps of the process of mapping surveys has been created to assist new staff in becoming familiar with the project and will continue to be revised as necessary in the future.

Landscape Project

- OIS continues to manage the Landscape Project mapping update in coordination with ENSP.
- OIS completed an updated riparian corridor layer and finalized the habitat base layer using the newly released 2020 land-use/land-cover data. This data will form the basis of all habitat modeling for listed species and species to be newly proposed for listing.
- OIS QA/QC'd habitat preference selections made by ENSP for listed species and provided a list of entries that need modification to ENSP.
- OIS received a new draft species occurrence area (SOA 15) file and is currently prepping it for inclusion in the next version of the Landscape Project.
- OIS met with the Bureau of Freshwater Fisheries to get input on mapping methods for modeling listed fish species habitat within the Landscape Project.

Hard Clam (Estuarine) Survey Mapping

- BGIS has internally published the estuarine inventory data and OIS staff has created a web map app for reviewing the dataset prior to public release.

Wildlife Management Area System Inventory

- OIS met with Bureau of Land Management (BLM) staff to discuss management of the statewide patch file, including schedules for archiving data and adjusting spatial extent with updated open space (WMA) boundaries due to new acquisitions and other changes.
- OIS staff are currently filling out attribute fields for 508 new point, line, and polygon features collected with GPS units at 37 WMAs. These will be added to the WMA system inventory over the next month.
- OIS staff has reviewed and updated the statewide habitat patch file to create multi-part patches under the same management and to split patches into single-part that have different management activities.
- OIS staff is working with BLM to create maps of planned in-kind activities and leased farm patches for 2024.

Law Enforcement data for Computer-Aided Dispatch (CAD) system

- OIS is currently developing and submitting data for inclusion in a new CAD system for the Bureau of Law Enforcement (BLE). OIS continues to collaborate with Bureau of GIS and Motorola to develop and compile all necessary GIS datasets.
- A draft version of the Central Region's patrol areas was digitized and sent to Law Enforcement to review and identify errors. A draft version of the Northern Region's Patrol Areas is currently being produced before being sent for review.

GIS ANALYSIS

Ocean Trawl Survey Environmental/Biological Analysis

- OIS is updating the black sea bass maps, adding a few additional years of data, and updating the symbology.

Habitat Change Analysis Project (HCAP)

- OIS staff continues to coordinate with Rowan University on a continuation of HCAP utilizing 2020 habitat data and an expanded list of species of greatest conservation need (SGCN).

Identifying Potential Encroachments on WMAs

- No updates.

CARTOGRAPHIC PRODUCTION

Central Patrol Areas Map

- A draft version of the Central Region's patrol areas was digitized and sent to Law Enforcement to review.

Bear Incident Mapping for Sustainable Waste Management

- OIS sent maps of bear incidents in four municipalities from 2018-2023 to Sustainable Waste Management for review and comments.

WEB MAP/APP PRODUCTION

Deer Disease Sighting Survey

- No updates.

Hunting & Trapping Explorer

- No updates.

Wildlife Management Area Explorer

- No updates.

Saltwater Fishing Explorer

- No updates.

Freshwater Fishing Explorer

- No updates.

Conservation Focal Area Application

- No updates.

Marine Resources GeoHub

- No updates.

Shared Wildlife Health Information System (SWHIS)

- OIS staff continues to collaborate with Wildlife Futures Program (WFP) at UPenn and the Timmons Group on the development of SWHIS and a feature service that will include wildlife health events, including animal morbidity and mortality information.

Wild Turkey Brood Sighting Survey

- OIS staff has identified and removed duplicated sightings.

Turkey Permit Sales and Harvests Dashboard

- OIS staff is working on updating the dashboard to include 2023 Fall data.

Northeast Regional Conservation Priorities web application

- OIS staff has made some simple edits to the published web map app.

Fishing and Hunting License Agent Locator web application

- Updates were made to license agents.

Lenape Farms Story Map

- No updates.

GPS/FIELD DATA COLLECTION

- OIS GPS Field Technician, Patrick Lombardi departed for a full-time position and OIS will be seeking to replace him prior to the end of April, 2024.

GIS TECHNICAL GUIDANCE

- OIS staff responded to internal and external inquiries regarding various datasets and applications, including Landscape Project and the Hunting & Trapping Explorer.
- OIS participated in the NJ Conservation Blueprint Steering Committee with the goal of accelerating the preservation of the most important remaining natural and cultural land resources that support healthy and vibrant communities in New Jersey.
- OIS continues to coordinate with Motorola and Bureau of GIS to develop and compile data suitable for inclusion in a new computer-aided dispatch (CAD) system for NJDEP law enforcement personnel, including Conservation Police Officers (CPOs) in NJFW Bureau of Law Enforcement.