



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

May 2022
(April 16th, 2021 – May 15th, 2022)

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

Temporary/Seasonal Employees: Molly VanWieren
Joe DeCeglia

ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 34 projects in progress and two new projects requested through the DFW GIS Project Request Form.
- OIS staff attended the monthly sUAS Committee meeting
- OIS staff attended a summer flounder seminar, part of the Marine Extension Program Seminar Series (MEPSS) through Rutgers Cooperative Extension
- OIS continues to meet with the Wildlife Futures Program at the University of Pennsylvania on the Shared Wildlife Health Information System (SWHIS) to facilitate management, analysis of wildlife health data including morbidity and mortality events.
- OIS hired an hourly worker, Joseph DeCeglia, to work on GPS field collection of Wildlife Management Areas (WMA) assets, roads and other features relevant to planning on WMAs
- OIS is in the process backfilling a GIS position that has been vacant since October of 2021.

GIS DATA DEVELOPMENT

Shellfish Aquaculture Lease Lot Data

- Lease lot Enterprise data was provided to Rutgers for inclusion in the Aquaculture spatial planning tool in development.
- OIS is working with BSF and ENSP to finalize an "Imperiled Species Aquaculture Screening" dataset based on spatial data related to endangered and threatened species. The

layer will be provided to Rutgers for inclusion in the Aquaculture spatial planning tool in development.

Fishing Opportunities and Access

- OIS discussed next steps on the Freshwater Fishing Explorer app with BFF and will start mapping wild trout streams.

Artificial Reef Sites and Ocean Fishing Grounds

- OIS is reorganizing and developing data related to Ocean Fishing Grounds and Artificial Reef Sites. Reef deployment data is being finalized for submittal into NJDEP's Enterprise GIS data and Ocean Fishing Grounds and shore-based saltwater fishing access sites are being packaged together. These data will form the basis of a series of web maps to be released this summer.

Diadromous Fish Habitat Mapping and Timing Restrictions

- No update.

Wildlife Management Area Boundary Alignment

- OIS staff met with a new seasonal staff member to go over the methodology, naming conventions and other details so they can begin work on the project.

Landscape Project

- OIS continues to coordinate with ENSP regarding the next version of the Landscape Maps.

Hard Clam (Estuarine) Survey Mapping

- OIS staff continues to work with Shellfisheries staff to complete the following historical datasets: Hard Clam Harvest Value of 1963, Associated Shellfish Species Production Areas of 1963, Submerged Aquatic Vegetation of 1979, Hard Clam Abundance of 1980s, Associated Shellfish Distribution of 1980s, and Submerged Aquatic Vegetation of 1980s. OIS is waiting for Shellfisheries staff to review and provide any further edits or suggestions.
- OIS staff is working with Shellfisheries staff to update and complete the following recent datasets: Hard Clams Abundance and Associated Species Distribution of Raritan Bay and Sandy Hook Bay, and Hard Clams Abundance, Associated Species Distribution, and SAV Distribution of Navesink River, Shrewsbury River, Little Egg Harbor Bay, and Barnegat Bay.

Wildlife Management Area Planning Tool Development

- OIS staff has completed creating datasets for Wildlife Management Areas line assets and for Wildlife Management Areas Regions and is now working on metadata. OIS staff has created datasets for WMA Dog Training Areas and Ranges and is waiting for BLM to review.
- OIS staff is working with Bureau of Land Management to review all roads throughout Wildlife Management Areas.

- OIS staff has completed review of the Central and Southern Wildlife Management Area habitat patches and is continuing work on the Northern Wildlife Management Area patches.

Regional Habitat Data Adoption

- OIS staff continues to work on the metadata and documentation needed to submit for incorporation into NJDEP's Enterprise GIS data.

Horseshoe Crab Impingement Data

- OIS is currently reviewing and developing metadata for horseshoe crab impingement data submitted by the Wetlands Institute and Manomet for submission as a NJDEP enterprise dataset

GIS ANALYSIS

Ocean Trawl Survey Environmental/Biological Analysis

- No update.

Summer flounder distribution by size and sex

- OIS staff produced 21 maps showing MFA ocean trawl, NMFS, and NEAMAP summer flounder catch data by length (<14, 14, 15, 16, 17, 18+ inches).

Habitat Change Analysis Project (HCAP)

- No update.

CARTOGRAPHIC PRODUCTION

WMA Wall Map

- No update. Awaiting review by I&E.

Artificial Reef Guide Update

- OIS staff met with the Bureau of Marine Fisheries to go over the final changes to the guide, which will be made public on NJ Fish & Wildlife's website in the near future.

WEB MAP/APP PRODUCTION

Hunting & Trapping Explorer

- No update.

Artificial Reef Web Map Application

- Deployment data was submitted for inclusion in NJDEP's Enterprise data. Once published, OIS will build a web app focused on saltwater fishing opportunities in New Jersey.

Offshore Wind Energy GeoHub

- OIS staff has been working with Marine Resources Administration to update the Offshore Wind Energy GeoHub with new datasets.

Wild Turkey Brood Sighting Survey

- The [Wild Turkey Brood Sighting Survey](http://www.NJFishandWildlife.com/turkeybroodsurvey) has been published and was released on 5/15/22: www.NJFishandWildlife.com/turkeybroodsurvey

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 staff continues to work with Bureau of Shellfisheries regarding their collaboration with Rutgers in a project developing a GIS-based tool for spatial planning and management of shellfish aquaculture in New Jersey.
- OIS staff assisted with drone flights at the Lighthouse Center for Natural Resources Education to document the installation of wave attenuation devices for shoreline protection.