



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

December 2021

(November 16th, 2021 – December 15th, 2021)

Patrick Woerner, Geographic Information Systems Specialist

Kevin Blythe, Geographic Information Systems Specialist

Brian Henderson, Geographic Information Systems Specialist

Temporary/Seasonal Employees: Molly VanWieren
Nick Myers

ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 38 projects in progress and four new projects requested through the DFW GIS/IT Project Request Form.
- OIS met with Bureau of Shellfisheries to identify priority for GIS projects.
- OIS staff attended the New Jersey Geospatial Forum (NJGF) Meeting.
- OIS staff attended the quarterly DEP GIS Users Group Meeting.

GIS DATA DEVELOPMENT

Shellfish Aquaculture Lease Lot Data

- OIS had several meetings with Bureau of Shellfisheries to consolidate shellfish aquaculture lease lot data into one statewide file. Development of a standard schema for both the lease lots and lessee data is underway.
- Topology edits will be performed on both the Atlantic Coastal and Delaware Bay region lot data prior to finalizing the consolidation.
- Once complete data will be published and Shellfisheries staff will be able to manage the centralized dataset through multi-user versioned editing.
- OIS is schedule to meet with NJEMS staff in January to coordinate data needs.

Fishing Opportunities and Access

- BFF is conducting a second review of the two feature classes of trout stocked waters comprising 86 lakes and ponds and 95 rivers and streams. Once final edits are made, the

waterbodies will be linked to the spring trout stocking schedule with the goal of producing an online mapping application similar to the upland bird stocking mapping application.

- OIS continues work on a GIS model to update the trout catchment layer to a new higher definition level used by the Eastern Brook Trout Joint Venture.

Diadromous Fish Habitat Mapping and Timing Restrictions

- OIS met with staff from the Bureaus of Freshwater and Marine Fisheries to review data inputs for the development of a model to map stretches of stream for diadromous fish

Wildlife Management Area Boundary Alignment

- OIS staff scanned 40 WMA survey maps and mapped 45 parcels.

Landscape Project

- OIS is awaiting updated species occurrence data from ENSP for use in Landscape.

Hard Clam (Estuarine) Survey Mapping

- OIS is working closely with the Bureau of Shellfisheries to map hard clam data, associated species and subaquatic vegetation. Currently work is being performed to map 2012 SAV habitat.

Wildlife Management Area Planning Tool Development

- OIS met with Bureau of Land Management (BLM) to go over habitat patch files for Millville, Maple Lake, Clinton, and Black River Wildlife Management Areas. BLM will code patches according to type and management categories by mid-January and then OIS will pursue finalization and internal publication of a WMA Habitat Patch layer.
- OIS is working on setting up an internal GeoHub application for BLM staff to review WMA infrastructure asset data prior to publication.

GIS ANALYSIS

Summer flounder distribution by size and sex

- No update.

Habitat Change Analysis Project (HCAP)

- No Update.

CARTOGRAPHIC PRODUCTION

Artificial Reef Guide Update

- OIS staff met with the Bureau of Marine Fisheries to discuss status of the printed version of the Artificial Reef Guide plus any corrections that need to be made to the deployments layer that will be used in both the print guide and an interactive online mapping application.

Raritan Bay Bathymetry

- OIS produced maps showing the bathymetry of Raritan and Sandy Hook bays at one-foot depth increments down to 25ft.

Wildlife Management Area Poster & Range Maps

- A poster-sized map highlighting the state's Wildlife Management Areas was submitted to the Bureau of Information & Education along with a separate brochure map of shooting ranges on WMAs. OIS is gathering feedback and will meet with representatives of BLM and I&E to finalize both maps in January.

Deer Management Zone Map/Poster

- A poster-sized map of the Deer Management Zones was created and printed for review by the Bureau of Wildlife Management.

WEB MAP/APP PRODUCTION

Hunting & Trapping Explorer

- 2020 aerial photos were added as an optional base layer to the Deer Management Zone & Unit Explorer application.

Artificial Reef Web Map Application

- Marine Fisheries continues to review the Reef Guide for any corrections that need to be made. Once complete, the corrections will be made and work will begin on the web map/application.

Offshore Wind Energy GeoHub

- No update.

Conservation Focal Area Application

- OIS staff created and configured a web map and application to display information about the Conservation Focal Areas (CFAs) created for the state Wildlife Action Plan. The application is scheduled to be released in January.

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 met with Bureau of Shellfisheries staff 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 accompanied BGIS staff and others to the Lighthouse Center for Natural Resources Education adjacent to Upper Barnegat Bay WMA to capture drone imagery in advance of work to protect the shoreline.
- OIS staff met with staff from the Wetlands Institute, Manomet, and ENSP to discuss data collection and mapping of horseshoe crab entrapment hazards and volunteer rescue efforts.
- OIS staff entered two LMRs and sent notifications and reminders related to submissions entered previously before Heater Korski returned from her leave of absence. Following her return OIS staff met to update her on how LMRs went while she was out and to apprise her of where things stood with LMR projects at the time of her return. She is once again handling all LMR responsibilities.
- OIS staff met with Health & Forensics to discuss what would be needed to create a Health and Forensics reporting form that could be used to collect and display information from the public events such as Chronic Wasting Disease in deer occur.