



## **OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS**

### **MONTHLY REPORT**

**October 2023**

**(September 16<sup>th</sup>, 2023 – October 15<sup>th</sup>, 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  
Patrick Lombardi

### **ADMINISTRATION**

- The Office of Fish and Wildlife Information Systems (OIS) has 37 projects in progress and three new projects requested through the GIS Project Request Form.
- OIS prepared three poster presentations and one technical presentation for the annual Northeast Arc Users Conference (NEARC) in New Haven, Connecticut.
- OIS collaborated with the Wildlife Futures Program at UPenn that presented on the Shared Wildlife Health Information System (SWHIS) to the Joint NJ Fish and Game Council and Endangered and Nongame Species Advisory Committee.
- OIS staff attended the quarterly New Jersey Geospatial Forum (NJGF) meeting.

### **GIS DATA DEVELOPMENT**

#### **Shellfish Aquaculture Lease Lot Data**

- OIS has provided training to the Bureau of Shellfisheries on the process of editing shellfish lease lot data through versioned editing.
- OIS is meeting with BGIS to discuss versioned shellfish lease lot data editing and NJEMS interoperability.

#### **Freshwater Fishing Opportunities and Access**

- OIS met twice with the Bureau of Freshwater Fisheries (BFF) regarding development of a freshwater fishing regulations web map application. With the exception of one remaining question on the formatting of popups to be discussed this coming week, there was general consensus on moving forward with the statewide application.

### **New Jersey Statewide Trails Dataset**

- No update.

### **Diadromous Fish Habitat Mapping and Timing Restrictions**

- OIS is continuing to analyze streams based on dams and anadromous inventory points that are being reviewed by the Bureau of Freshwater Fisheries.

### **Wildlife Management Area Boundary Alignment**

- OIS staff completed QC of the parcels that have been mapped and continue to organize files and update the mapping guide to make it easier for people new to the project to become involved in the future with less individual guidance required.

### **Landscape Project**

- OIS continues to manage the Landscape Project mapping update in coordination with ENSP.
- ENSP is working on selecting habitat preferences for species to be newly listed so that they can be modeled in the next version of Landscape.
- OIS received a draft species occurrence area (SOA) file and is currently reviewing it for suitability of inclusion in the next version of the Landscape Project.
- The new listing rule should be proposed by the end of 2023 and public release of version 3.4 of the Landscape Maps is estimated to be in July 2024.

### **Hard Clam (Estuarine) Survey Mapping**

- OIS submitted the final version of the estuarine inventory dataset for incorporation into the NJDEP Enterprise System. The dataset is expected to be publicly released within the next month.

### **Wildlife Management Area System Inventory**

- 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 is in the process of reviewing and modifying nearly 20,000 habitat patches to ensure accurate recording of related WMA activities.
- OIS trained all of Bureau of Land Management field crew staff on ArcGIS Field Maps so that every worker can record management activities on a per patch basis with a mobile device. OIS completed a corresponding dashboard for tracking and reporting of activities by patch type, activity type, WMA, region, etc.

## **Digitization of Law Enforcement's Marine Patrol Areas**

- OIS staff received feedback from Law Enforcement concerning the marine patrol areas and will make the necessary changes in the upcoming weeks.

## **GIS ANALYSIS**

### **Ocean Trawl Survey Environmental/Biological Analysis**

- No update.

### **Habitat Change Analysis Project (HCAP)**

- OIS continues to collaborate with Rowan University staff regarding the HCAP and is drafting a proposed scope of work.

### **Identifying Potential Encroachments on WMAs**

- OIS has identified hundreds of *potential* encroachments and has calculated acreage for each potential encroachment.
- OIS has created a draft survey for reporting encroachments, along with a key and definition document for understanding the backend of the survey.

## **CARTOGRAPHIC PRODUCTION**

### **Marine Patrol Areas Map**

- OIS staff received feedback from Law Enforcement concerning the marine patrol areas and will make the necessary changes in the upcoming weeks.

### **Bear Incident Mapping for Sustainable Waste Management**

- OIS staff is waiting to receive feedback on the sample maps submitted to Sustainable Waste Management.

### **Northeast Arc Users Group (NEARC) participation**

- OIS staff submitted three posters for the poster session: NJ Saltwater Fishing Explorer poster and story map, Developing a Protocol for Using Multispectral Drone Imagery to Study Salt Marsh Vegetation Health and NJ's Wildlife Management Area System which also included a presentation.

## **WEB MAP/APP PRODUCTION**

### **Deer Disease Sighting Survey**

- No updates.

### **Hunting & Trapping Explorer**

- Updates to the various web map applications were made to reflect current season dates and regulations

### **Wildlife Management Area Explorer**

- Updates were made to the Upland Bird Stocking schedule and areas.

### **Saltwater Fishing Explorer**

- No updates.

### **Freshwater Fishing Explorer**

- The Fall 2023 trout stocking schedule was updated within the Trout Stocked Waters application.

### **Conservation Focal Area Application**

- No updates.

### **Marine Resources GeoHub**

- No updates.

### **Shared Wildlife Health Information System (SWHIS)**

- OIS has received a draft link to the feature service and NJ data was uploaded to a user test version of 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**

- No updates.

### **Turkey Permit Sales and Harvests Dashboard**

- No updates.

### **Northeast Regional Conservation Priorities web application**

- OIS is near completion of an ArcGIS Experience Builder web map application to display the Northeast conservation design data in New Jersey.

### **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 staff collected GPS data of infrastructure assets on several WMAs in the southern region.
- OIS, BGIS, and Science and Research, having completed fieldwork for the multispectral drone project at Forsythe NWR and Great Bay Boulevard WMA, will complete the GIS analysis this winter. A poster presentation about the project was prepared for the Fall NEARC 2023 Conference.

### **GIS TECHNICAL GUIDANCE**

- OIS met with NJDEP Forestry staff to discuss analysis of successional habitats through the Habitat Change Analysis Project (HCAP) and the potential for future collaboration.
- OIS staff provided internal training on ArcGIS Field Maps.
- OIS staff responded to internal and external inquiries regarding various datasets and applications, including Landscape Project and the Hunting & Trapping Explorer.