OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

July 2024
(June 16th, 2024 – July 15th, 2024)

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ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 42 projects in progress and one new project requested through the GIS Project Request Form.
- OIS is in the process of hiring an hourly GPS Technician to collect infrastructure and resource assets on Wildlife Management Areas.
- OIS is managing the updated of the Landscape Project Maps and participated in several Landscape Project and E&T Rule update meetings.
- OIS attended several meetings with Motorola on the new Computer-Aided Dispatch (CAD) system for the Bureau of Law Enforcement (BLE) and is engaged in mapping and GIS data development and maintenance related to the CAD system.
- OIS participated in a meeting with Shellfisheries and Division of Information Technology (DOIT) regarding managing Aquaculture Lease lots and related data in GIS and achieving interoperability with the NJ Environmental Management System (NJEMS).
- OIS led a meeting on the development of an encroachment tracking tool for use by Bureau of Law Enforcement, Bureau of Land Management and NJFW administration in order to record and resolve encroachments that occur on Wildlife Management Areas. An encroachment policy and resolution process with clearly defined roles for each organizational unit needs to be formalized in order for the tool to be effectively developed and implemented by NJFW.

GIS DATA DEVELOPMENT

Shellfish Aquaculture Lease Lot Data

- OIS continues to review any edits to the current shellfish lease lot data and posts the edits for shellfisheries staff.
- OIS participated in a meeting with Shellfisheries and Division of Information Technology (DOIT) regarding managing Aquaculture Lease lots and related data in GIS and achieving interoperability with the NJ Environmental Management System (NJEMS).

Freshwater Fishing Opportunities and Access

- OIS met with BFF and BLE to review the freshwater fishing regulations application. BLE suggested that in addition to mapping the saltwater/freshwater boundary points, OIS code those waterbodies and stream segments below those points that don't require a freshwater license.

New Jersey Statewide Trails Dataset

- No updates.

Diadromous Fish Habitat Mapping and Timing Restrictions

- No updates.

Wildlife Management Area Boundary Alignment

- OIS staff mapped the boundaries for ten parcels on six WMAs.

Landscape Project

- OIS continues to manage the Landscape Project mapping update in coordination with ENSP, Bureau of Freshwater Fisheries and Bureau of Marine Fisheries.
- Approximately 70% of the species/habitat components are complete.

Hard Clam (Estuarine) Survey Mapping

- OIS met with shellfisheries and others to discuss changes to present-day Submerged Aquatic Vegetation (SAV) data. OIS made necessary changes from polygon to point data for 2001, 2011, 2012, 2015 SAV data and have submitted for publication in order to overwrite what is currently published.

Wildlife Management Area System Inventory

- OIS staff continues to work through field collection data for several Wildlife Management Areas for inclusion in the WMA inventory data.
- OIS is in the process of hiring a new GPS Field Technician for continued data collection on WMAs.

Law Enforcement CAD System

- OIS is engaged in mapping CAD zones from patrol area delineations for NJFW inland and marine Conservation Police Officers and State Parks Police.
- Refinements were made to the law enforcement zones for their final inclusion in the Flex/CAD system.
- Additional datasets were prepared and sent to BGIS for inclusion in the Flex/CAD system and others are still being developed.
- OIS staff attended weekly meetings on the administrative workflow of the Flex/CAD system.
- OIS is engaged in developing ArcMap document files (mxds) for the Flex Viewer and mobile map packages (MMPs) for the mobile version of Flex to be used by Conservation Police Officers.

GIS ANALYSIS

Ocean Trawl Survey Environmental/Biological Analysis

- OIS is regenerating black sea bass distribution maps.

Habitat Change Analysis Project (HCAP)

- OIS continues to coordinate analysis with Rowan University's Geospatial Research Lab (GEOLAB).
- OIS is provided new species range extents, habitat requirements, and new standardized statewide habitat base layers for 1986, 1995, 2002, 2007, 2012, 2015, 2020 to GEOLAB.

Tracking Encroachments on WMAs

- OIS met with BLM, BLE to review the encroachment tracking system again. An encroachment policy and resolution process with clearly defined roles for each organizational unit needs to be formalized in order for the tool to be effectively developed and implemented by NJFW.
- Potential encroachments that OIS identified were also discussed and are going through review by BLM staff.

CARTOGRAPHIC PRODUCTION

Marine Patrol Areas Map

- No updates.

Bear Incident Mapping for Sustainable Waste Management

- No updates.

WEB MAP/APP PRODUCTION

Deer Disease Sighting Survey

- A new form was published and is being utilized by the Office of Fish & Wildlife Health and Forensics and the Bureau of Wildlife Management.

Hunting & Trapping Explorer

- OIS is in the process of making several updates, including season dates for the upcoming seasons.

Wildlife Management Area Explorer

- OIS is in the process of updating closure and restricted areas within the application.

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.
- OIS is working on an internal and public reporting form until SWHIS creates their own.

Wild Turkey Brood Sighting Survey

- No updates.

Turkey Permit Sales and Harvests Dashboard

- No updates.

Northeast Regional Conservation Priorities web application

- OIS has reached out to ENSP about coordinating this update with the update of the State Wildlife Action Plan (SWAP).

Fishing and Hunting License Agent Locator web application

- Updates were made to license agents.

GPS/FIELD DATA COLLECTION

- OIS partnered with BGIS in collecting drone imagery at Paulinskill WMA. Imagery was collected over the two northern Hyperhumus sections and video collected over a central section. The central and western sections were mostly inaccessible and without areas to land or maintain visual sight of the drone. Full imagery was not acquired for those sections.

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 coordinated the installation and configuration of the multifunction printer ordered from Hewlett-Packard.