



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

January 2021
(December 16th, 2020 – January 15th, 2021)

Patrick Woerner, Geographic Information Systems Specialist
Kevin Blythe, Geographic Information Systems Specialist
Michael Davenport, Geographic Information Systems Specialist
Brian Henderson, Geographic Information Systems Specialist
George Miragliuolo, Information Technology Specialist

Temporary/Seasonal Employees: Vacant

ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 49 projects in progress and three new project(s) requested through the DFW GIS/IT Project Request Form.
- OIS is currently in the process of hiring part-time GIS staff to assist with various projects.
- OIS has entered the first year of its five-year federal grant period focused on GIS conservation tools and technical guidance.

GIS DATA DEVELOPMENT

Anadromous Fish Habitat Mapping

- No update - GIS staff continue to develop a new GIS feature class representing anadromous waterways with timing restrictions for certain activities, such as dam creation, dredging, or substantial pile driving or other in-water work. The objective of the timing restrictions is to protect the spawning and egg/larvae (nursery) stages of select species' life histories. Anadromous fish data provided by the Bureau of Freshwater Fisheries (BFF) has been processed by OIS staff into a GIS layer and shared with BFF for review prior to use in developing an anadromous waterways layer. Preliminary methodology is in development.

Wildlife Management Area Boundary Alignment

- A seasonal employee will be contributing to this project once hired.

Landscape Project

- OIS staff met with ENSP regarding ENSP GIS projects, focusing primarily on the Landscape Project.
- ENSP will provide updated species occurrence area (SOA) data when ready. Once received, OIS will review and begin update work on Landscape Project that will include an economic impact analysis summarizing new area ranked 3-5 because of newly listed species.
- As time allows, OIS will continue to prep 2015 Land-use/Landcover (LULC) and impervious surface (IS) for the creation of an updated Landscape Project base layer.
- To the extent possible, habitat data is being prepped for species that will be newly mapped in the next version of the Landscape Project due to potential listing/species status changes.

Georeferencing & Digitizing of Historic Shellfisheries Charts and Maps

- OIS staff has completed georeferencing the historic maps which are currently undergoing a quality control check and then work to digitize the features on the maps will begin.

Georeferencing of Historic Subaquatic Vegetation Maps

- Georeferenced subaquatic vegetation (SAV) maps from 1979 are undergoing internal QA/QC review.

Shellfish GIS Data Organization and Standardization

- No update - OIS staff have continued to compile, organize, and standardize Bureau of Shellfisheries GIS data to share with Rutgers as they develop a GIS-based tool for spatial planning and management of shellfish aquaculture. Thus far, a total of 25 feature classes have been created. OIS is awaiting a list from ENSP on species and occurrence types that have potential to be impacted by aquaculture activity, in order to develop relevant mapping approaches.

Wildlife Management Area Planning Tool Development

- OIS has begun to compile data on Sparta Mountain Wildlife Management Area relevant for WMA planning purposes.
- Efforts continue to develop a schema that will allow for the combination of data from all three regions as well as fit the reporting needs for BLM staff in those regions.

GIS ANALYSIS

Summer flounder distribution by size and sex

- No update - OIS is working to summarize NEFSC data and evaluating sample size, especially among older age classes. The next step is how best to combine data from two studies and to graphically display the data and show trends, if possible, without inaccuracies.

Habitat Change Analysis Project (HCAP)

- No update.

CARTOGRAPHIC PRODUCTION

Artificial Reef Guide Update

- GIS staff have begun to process reef deployment data provided by the Marine Fisheries Administration for eventual public release. GIS staff have created several draft maps of several reefs to be reviewed by MFA staff as an update to the Artificial Reef Guide created in 2007. Additionally, a web map application featuring the reefs and deployment data is currently in development.

Offshore Wind Project Review

- GIS staff have created several maps for the Marine Fisheries Administration displaying Barnegat Bay shellfish and SAV resources related to proposed cable routes for the Orsted Offshore Wind Project.

Tuckahoe Waterfowl Hunting Map

- No update.

Mad Horse Creek WMA Elevation Maps

- OIS created maps of Mad Horse Creek WMA near the Hope Creek nuclear facility for the purpose of identifying potential areas to place dredge material.

WEB MAP/APP PRODUCTION

License Agents

- OIS have made several updates to the “Fishing and Hunting License Agent Locator” (<https://www.nj.gov/dep/dfwlicenseagents>) application.

Wildlife Rehabilitators

- No update - OIS staff have developed a draft GIS layer representing Wildlife Rehabilitators and drafting of a web map application featuring this data has begun. This project is currently on-hold because of the on-going COVID-19 pandemic.

Great Places to Fish Close to Home

- OIS met with the regional managers from Freshwater Fisheries staff to clarify issues regarding some of the waterbodies. We are now moving on to the creation of a public-facing interactive mapping application.

Recreational Saltwater Angler Survey

- The final version of the Recreational Saltwater Angler Survey web application has been submitted for approval prior to public release.

Marine Protected Species Reporter Application

- After further review with Marine Fisheries staff, the final version of the Marine Protected Wildlife Reporter web application has been submitted for approval prior to public release.

Support NJ Seafood Story Map

- No update - Staff are continuing to expand the story map to include more retail markets and add on wholesale distributors, delivery/pick-up businesses and restaurants who sell seafood that has been landed, grown, or harvested in New Jersey.

Offshore Wind GeoHub

- No update - GIS staff updated the Offshore Wind & Fisheries GeoHub application with new data pertaining to the Atlantic Shores project.

Artificial Reef Web Map Application

- GIS staff have begun to process reef deployment data provided by the Marine Fisheries Administration for eventual public release. In addition to the creation of an Artificial Reef Guide, a web map application featuring the reefs and deployment data is currently in development.

Deer Vehicle Accident (DVA) Application

- This project was temporarily put on hold, but is expected to be completed in February.

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 the Bureau of Marine Fisheries' Marine Statistical Analysis Group.
- OIS staff met with the Support NJ Seafood project partners team.
- OIS staff continue to support the Bureau of Shellfisheries' collaboration with Rutgers in their project developing a GIS-based tool for spatial planning and management of shellfish aquaculture in New Jersey. During this reporting period, staff participating in a meeting of the Shellfish Aquaculture Technical Advisory Committee.
- OIS staff participated in a meeting with ENSP to discuss plans and necessary steps before the creation and release of the next version of the Landscape Project.
- OIS resurveyed GIS leads and others within the Division about their sUAS needs.

IT PROCUREMENT

• IT Procurement Detail:

Type	IT Products on Order	IT Products Deployed
Computer Hardware		
Laptop	19	
Desktop	0	
Removable Storage Devices	3	
Keyboard/Mouse	6	
Monitors	27	
Printers	0	
USB Monitor Camera	0	
Cellular Devices		
State Cell Phone	4	
Software		
NA	0	
Special Orders		
Docking Station	15	
Dell Battery	2	
Computer Bags	2	
Trimble AC power supply	0	
External GNSS Patch Antenna	0	
Spartan Camera	0	
Security box Spartan Camera	0	

- If any employee in Fish and Wildlife needs to utilize GoToWebinar/GoToMeeting to communicate with constituents outside of DEP, George Miragliuolo is the point of contact to set up meetings and webinars.
- The Division is still waiting on DOIT to deliver and set up all Teleconference equipment for the CRO conference room.

IT INVENTORY

- If any State IT Equipment (monitors, keyboards, printers, computer workstations, etc.) other than State laptops have been taken home for work purposes staff should notify George Miragliuolo, so that he can properly manage the Inventory.
- The Division's IT inventory continues to be updated. The IT inventory is being revised monthly to update deactivated equipment that was sent to surplus.

IT SUPPORT (non-DEP HelpDesk)

- OIS staff continues to assist Division personnel as needed with OneDrive and Teams during remote work due to COVID-19.