OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

December 2020
(November 16th – December 15th)

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 47 projects in progress and three new project(s) requested through the DFW GIS/IT Project Request Form.
- OIS attended the quarterly NJ Geospatial Forum (NJGF) meeting.
- OIS is currently in the process of hiring part-time GIS staff to assist with various projects.
- OIS represented the Division of Fish & Wildlife at the GIS User Group Program Representative Meeting.
- OIS staff attended the NJDEP GIS Users Group Meeting.
- OIS compiled public comments on the proposed amendments to Game Code and exported them to a usable format for the Bureau of Wildlife Management.

GIS DATA DEVELOPMENT

Anadromous Fish Habitat Mapping

- 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

- Instructions were created to help seasonal employee take on some of this work beginning in January.

Landscape Project

- 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.
- OIS will be meeting with ENSP in early January regarding species occurrence data for use in the next version of Landscape.

Georeferencing & Digitizing of Historic Shellfisheries Charts and Maps

- Work continues on georeferencing historic shellfisheries maps and is approximately 90% complete.

Georeferencing of Historic Subaquatic Vegetation Maps

- Staff completed georeferencing 26 subaquatic vegetation maps from 1979 and is involved in internal QA/QC.

Shellfish GIS Data Organization and Standardization

- 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 21 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

- 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

- 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)

- HCAP is currently on hold pending updated species range extents, incorporation of the 2015 Land-use/Landcover (LULC) into analysis models, and continuation of a service agreement with Rowan University.

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.

Tuckahoe Waterfowl Hunting Map

- A map was provided to the Bureau of Information and Education and Ducks Unlimited as serve as a basis for a waterfowl hunting map that Ducks Unlimited will ultimately produce to match a series they have produced for hunting locations across the U.S.

WEB MAP/APP PRODUCTION

License Agents

- OIS have made several updates to the License Agents data displayed within the "Fishing and Hunting License Agent Locator" (https://www.nj.gov/dep/dfwlicenseagents) application.

Wildlife Rehabilitators

- 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 as a result of the on-going COVID-19 pandemic.

Great Places to Fish Close to Home

- OIS is currently meeting with Freshwater Fisheries staff to ensure consistency in naming and acreage between internal records and those in the latest National Hydrography Dataset (NHD) for the waterbodies chosen as great places to fish in New Jersey. Next steps include finalize the metadata, data publication, and 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

- 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

- 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

- OIS staff began work on an application to assist municipalities in collecting DVA data such as the location, type of roadway, weather conditions, gender and age of deer. Approximately 85% complete and undergoing final revisions.

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 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.

IT PROCUREMENT

- **IT Procurement Detail:**

Type	IT Products on Order	IT Products Deployed
Computer Hardware		
Laptop	19	1
Desktop	0	
Removable Storage Devices	4	
Keyboard/Mouse	6	
Monitors	27	1
Printers	0	
USB Monitor Camera	0	
Cellular Devices		
State Cell Phone	5	
Software		
NA	0	
Special Orders		
Docking Station	15	1
Dell Battery	2	
Computer Bags	2	
Trimble AC power supply	3	
External GNSS Patch Antenna	2	
Spartan Camera	0	
Security box Spartan Camera	0	

- All Teleconference equipment for the CRO conference room has been delivered to DOIT and is awaiting installation, currently delayed due to COVID19.
- Fish and Wildlife has procured an annual subscription of Citrix's GoToWebinar/GoToMeeting for the division to utilize and communicate with constituents outside of DEP. George Miragliuolo will be the point of contact for use and to set up meetings and webinars.

IT 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.