



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

July 2021
(June 16th, 2021 – July 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: Nick Myers

ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 46 projects in progress and nine new projects requested through the DFW GIS/IT Project Request Form.
- OIS staff attended the virtual DEP GIS Users Group Meeting.
- OIS staff attended the virtual annual Esri Users Conference.
- OIS staff attended the Rutgers Cooperative Extension Marine Program Seminar Series.

GIS DATA DEVELOPMENT

Fishing Opportunities and Access

- OIS staff went through the Freshwater Fishing Digest and the Fish Code to identify areas to map. The purpose of this effort is to identify all possible feature classes for a future app or to build on the Great Places to Fish Close to home web map.

Pheasant and Quail Stocking

- OIS updated the pheasant and quail stocking areas and are in the process of preparing the data for use in app.

Wildlife Management Area Boundary Alignment

- OIS staff scanned 70 maps and mapped 15 parcels. Manasquan River Wildlife Management Area is nearing completion.

Conservation Focal Areas

- OIS submitted updated Wildlife Action Plan Conservation Focal Areas (CFA) GIS data for publication and will subsequently develop a web mapping application featuring the dataset.

Landscape Project

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

Georeferencing & Digitizing of Historic Shellfisheries Charts and Maps

- Metadata is in development for shellfish, SAV, sediment, and survey station data based upon historic, georeferenced maps from 1963 and the 1980's. Upon completion of metadata, layers will be reviewed for public release.

Georeferencing of Historic Subaquatic Vegetation Maps

- Metadata is in development for SAV data based upon historic, georeferenced aerial images 1979. Upon completion of metadata, layers will be reviewed for public release.

Hard Clam (Estuarine) Survey Mapping

- Working with Bureau of Shellfisheries (BSF) staff, OIS staff have developed a methodology for mapping hard clam densities and other estuarine survey data collected by BSF since 2000. BSF staff are now completing final processing of the survey data to complete mapping.

Prime Fishing Areas from APAIS sites

- At the request of BSF staff, a new feature layer displaying Access Point Angler Intercept Survey (APAIS) locations has been developed for public use. The GIS layer is currently being reviewed prior to being publicly released.

Developing a Spatial Planning Tool for Shellfish Aquaculture

- Supporting the Bureau of Shellfisheries' collaboration with Rutgers in their project developing a GIS-based tool for spatial planning and management of shellfish, OIS is receiving data from the Endangered and Nongame Species Program to develop a draft mapping methodology.

Wildlife Management Area Planning Tool Development

- OIS and BLM are working to review completed drafts of habitat management patch files for Assunpink and Greenwood Wildlife Management Areas and will develop plans to expand to other WMAs.

GIS ANALYSIS

Summer flounder distribution by size and sex

- No update.

Habitat Change Analysis Project (HCAP)

- No update.

CARTOGRAPHIC PRODUCTION

Artificial Reef Guide Update

- GIS staff have created 17 draft maps of all artificial reefs currently within the Artificial Reef Program to update the Artificial Reef Guide created in 2007. Draft maps as well as a draft of a key to all deployments have been reviewed by BMF staff and are now being updated. OIS staff is being assisted by I&E staff with a graphic design project to update Reef Profile images to insert into each reef map. GIS staff have processed artificial reef deployment data provided by the Bureau of Marine Fisheries for public release. Metadata for the deployment layer as well as a layer of the Artificial Reef Full Access Zones have been drafted and validated. Both datasets will soon be reviewed for public release and web application development.

Hackettstown Hatchery Demolition/Construction Site

- OIS staff prepared a site map of the buildings at Hackettstown Hatchery for the siting of a new facility.

WEB MAP/APP PRODUCTION

Hunting & Trapping Explorer

- OIS staff is developing two new layers to add to the Hunting & Trapping Explorer application. One is an annotation feature class of the Deer Management Zones to address an ArcGIS Online default labeling issue on the DMZ layer. The other is an identifier layer that

will allow for the configuration of a pop-up on the DMZ so it displays DMZ along with Deer Management Units (DMU), municipality and county.

- At request of Wildlife Management, OIS decommissioned the desktop version of the Hunting & Trapping Explorer and opted to just serve up [one version](#) for mobile and desktop.
- OIS is working with Bureau of Information & Education on a script and steps for the production of a tutorial video on the application.

Artificial Reef Web Map Application

- GIS staff have processed artificial reef deployment data in preparation for public release and web application development.

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 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.
- OIS staff met with the DEP's Offshore Wind Research & Monitoring Team as well as Marine Fisheries' Wind Energy Team. OIS staff also attended a virtual presentation by Orsted on Fisheries Monitoring at the Ocean Wind lease site and a virtual workshop organized by BOEM regarding scientific work being conducted relevant to offshore wind.
- Staff entered seven LMR projects that were submitted for review in addition to sending out reminders and status updates for previously entered LMRs.
- Staff continue their efforts to acquire a drone and the required training in order to assist bureaus with mapping and analysis.

IT PROCUREMENT

- IT Procurement Detail:**

| Type | IT Products on Order | IT Products Deployed |
|--|----------------------|----------------------|
| Computer Hardware | | |
| Laptop | 16 | 5 |
| Desktop | 2 | |
| Removable Storage Devices | | |
| Seagate Expansion Desktop external hard drive | 2 | |
| Keyboard/Mouse | 1 | |
| Monitors | 16 | 9 |
| Monitor/Docking Station Hub | 4 | |
| Printers | 0 | |
| USB Monitor Camera | 0 | |
| Cellular Devices | | |
| State Cell Phone | 0 | |
| Hot Spot | 1 | |
| Software | | |
| NA | | |
| Special Orders | | |
| Docking Station | 21 | 4 |
| Projector | 1 | |
| S O N Y Camera/Video | 2 | |
| Dell Battery | 4 | |
| Computer Bags | 16 | 5 |
| Trimble Unit | 2 | |
| SonarWiz 7 Sidescan Sonar Post-processing Software | 0 | |
| GPS | 3 | |
| GO-PRO,HERO8 | 2 | |
| Security box Spartan Camera | 0 | |
| Drone | 1 | |

- George Miragliuolo continues to be the DFW's point of contact to set up meetings and webinars with GoToWebinar/GoToMeeting in order to communicate with constituents outside of DEP.
- DOIT is moving away from the Dell Docking Stations and moving forward with a Dell 24 Video Conferencing Monitor/Docking Station combo.
- OIS met with the Natural and Historic Resources IT Coordinator to review Purchase Orders that are in process and upcoming.

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)

- No update.