



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

### **MONTHLY REPORT**

**March 2021**

**(February 16<sup>th</sup>, 2020 – March 15<sup>th</sup>, 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 44 projects in progress and ten new projects requested through the DFW GIS/IT Project Request Form.
- An internal interactive dashboard was created to track GIS/IT projects by type, status, Bureau/Unit, etc.
- OIS staff met with Bureau of GIS staff regarding procurement, training, and operation of sUAS (drones) for DFW project applications.
- OIS staff sent one representative to attend the virtual ESRI Federal Users Conference.
- OIS staff presented an overview of DFW GIS projects at the quarterly NJDEP GIS Users Group Meeting.

### **GIS DATA DEVELOPMENT**

#### **Anadromous Fish Habitat Mapping**

- OIS staff have mapped anadromous waterways in three river systems using anadromous fish data provided by BFF, the locations of dams or other impediments to fish passage, and fish ladders. Further review of the methodology and field verification by BFF will be necessary.

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

- Scanning of surveys and the remapping of parcel boundaries continues. Staff are currently focused on completing the scanning of surveys within the files at Assunpink.

## **Landscape Project**

- OIS is awaiting updated species occurrence data from ENSP for use in Landscape.
- BGIS revised and made available a final version of the 2015 Land-use/Landcover. OIS will utilize the revised 2015 Land-use/Landcover (LULC) for the creation of an updated Landscape Project base layer.

## **Georeferencing & Digitizing of Historic Shellfisheries Charts and Maps**

- OIS staff have completed digitizing shellfish data based upon historic, georeferenced maps and aerial images from 1963 and the 1980's. Upon completion of metadata for those layers and QA/QC, those layers will be provided to BGIS for public release.

## **Georeferencing of Historic Subaquatic Vegetation Maps**

- OIS staff have completed digitizing SAV data based upon historic, georeferenced maps and aerial images from 1979 and the 1980's. Upon completion of metadata for those layers and QA/QC, those layers will be provided to BGIS for public release.

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

- Working with Bureau of Shellfisheries (BSF) staff, OIS staff have investigated and developed a methodology for mapping hard clam densities and other estuarine survey data collected by BSF since 2000. Resultant GIS data for test sites have been reviewed by BSF.
- OIS staff are awaiting receipt of the full survey data in order to complete mapping for all survey years.

## **Wildlife Management Area Planning Tool Development**

- OIS continues to work with BLM staff to draft a habitat management patch file for Assunpink Wildlife Management Area that will serve as a statewide model and data structure for all WMAs.
- Assets such as gates, signs, and pull-off parking areas at Sparta Mountain WMA were field collected and post-processed.
- OIS staff assembled various planning-relevant datasets and ran preliminary reports for Sparta Mountain Wildlife Management area for the plan development team to review.

## **GIS ANALYSIS**

### **Summer flounder distribution by size and sex**

- No update.

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

- No update.

### **Bear Management Zones (BMZ) Acreages**

- Staff determined the acreage of land within BMZs 1-7 that was held by the NJDEP, subdivided into the amount that was Parks, Wildlife Management Area and Natural Lands Trust as well as the non-DEP acreages with BMZs 1-7.

## **CARTOGRAPHIC PRODUCTION**

### **Artificial Reef Guide Update**

- No update; awaiting input from MFA staff.

### **Tuckahoe Waterfowl Hunting Map**

- WMA asset data including the proposed locations of hunting blinds were provided to Ducks Unlimited.

### **Evidence map for Law Enforcement**

- Staff prepared a pair of maps showing the location of evidence for Law Enforcement to use.

### **Chronic Wasting Disease (CWD) Surveillance 2020-21**

- Staff began working on maps that will show the number of samples by county, Deer Management Zone (DMZ), broken down by sex for each county and DMZ and broken down by age group by county and DMZ for the Office of Fish and Wildlife Health and Forensics to identify where data came from as well as gaps in their sampling efforts. The maps will be used in various reports and presentations.

## **WEB MAP/APP PRODUCTION**

### **Great Places to Fish Close to Home**

- Great Places to Fish Close to Home data has been finalized as both point and waterbody (polygon) files along with associated fish species. The GIS data is awaiting publication. Once published, development of a web map application will begin.

### **Recreational Saltwater Angler Survey**

- The Recreational Saltwater Angler Survey application has been approved for public release. OIS staff have been coordinating with BMF and I&E staff to plan its promotion and a draft

new web page for the Division has been created to link to the application. A press release is being planned for the application's official launch, together with the Marine Protected Wildlife Reporter application.

### **Marine Protected Species Reporter Application**

- The Marine Protected Wildlife Reporter application has been publicly released. OIS staff have been coordinating with BMF and I&E staff to plan its promotion and a draft new web page for the Division has been created to link to the application. A press release is being planned for the application's official launch, together with the Recreation Saltwater Angler Survey.

### **Support NJ Seafood Story Map Application**

- OIS staff added more businesses which sell seafood that has been landed, grown or harvested in New Jersey to the story map application.

### **Artificial Reef Web Map Application**

- No update; awaiting input from MFA staff.

### **Deer Vehicle Accident (DVA) Application**

- No update; awaiting outside information for further 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 met with the Bureau of Marine Fisheries' Marine Statistical Analysis Group.
- OIS staff classified each of the >40,000 bear nuisance calls received from 2001 to 2020 to the Bear Management Zone (BMZ) it originated from.
- 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
<b>Computer Hardware</b>		
Laptop	24	
Desktop	0	
Removable Storage Devices	0	
Seagate Expansion Desktop external hard drive	2	
Keyboard/Mouse	4	
Monitors	29	
Printers	0	
USB Monitor Camera	0	
<b>Cellular Devices</b>		
State Cell Phone	1	
<b>Software</b>		
NA		
<b>Special Orders</b>		
Docking Station	20	
Dell Battery	2	
Computer Bags	19	
Trimble Unit	1	
SonarWiz 7 Sidescan Sonar Post-processing Software	1	
GO-PRO,HERO8	1	
Security box Spartan Camera		

- 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.

## **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.