



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

### **MONTHLY REPORT**

**May 2021**  
**(April 16<sup>th</sup>, 2020 – May 15<sup>th</sup>, 2021)**

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### **ADMINISTRATION**

- The Office of Fish and Wildlife Information Systems (OIS) has 45 projects in progress and nine new projects requested through the DFW GIS/IT Project Request Form.
- The 2021 Marine Digest (<https://www.njfishandwildlife.com/digmar.htm>) was released which includes an article highlighting OIS web map applications and story maps recently released and in development which pertain to marine fisheries.
- OIS staff attended the 76<sup>th</sup> Annual NEAFWA Meeting.
- OIS will be responsible for coordinating the Land Management Review (LMR) process for NHR while the LMR Coordinator is on leave.
- OIS is in the process of refining draft work plans for high priority data development and analysis projects.

### **GIS DATA DEVELOPMENT**

#### **Conservation Focal Areas**

- OIS met with ENSP staff regarding updates to the Wildlife Action Plan Conservation Focal Areas mapping. OIS staff updated CFAs to incorporate habitat in the lower 20 kilometers of the Cape May Peninsula due to importance for migratory birds. OIS is also updating habitat

and open space acreages for each CFA using the most recent data available. Updated CFA GIS data will be published and served up in a web mapping application.

### **Anadromous Fish Habitat Mapping**

- OIS met with Freshwater Fisheries staff to discuss barriers to fish passage, how to more accurately map anadromous waterways, and what data should be made available to the public.

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

- OIS staff met in Trenton with Green Acres and Land Use staff to review file locations, ask permission of Land Use for the use of their scanner, and work out a schedule for scanning survey maps.

### **Landscape Project**

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

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

- OIS staff have completed digitizing shellfish, submerged aquatic vegetation, sediment, and survey station data based upon historic, georeferenced maps 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 submerged aquatic vegetation data based upon aerial images from 1979. 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 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. Staff are now processing survey data to complete mapping.

### **Saltwater Fishing Access Sites**

- 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. Resultant GIS data for test sites have been reviewed by BSF. Staff are now processing survey data to complete mapping.

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

- OIS and BLM completed drafts a habitat management patch file for Assunpink and Greenwood Wildlife Management Areas and will discuss expanding to other WMAs with BLM staff.

## **PSE&G Delaware Bay Trawl Survey**

- OIS acquired data related to PSEG Delaware Bay trawl survey for use by Bureau of Marine Fisheries.

## **GIS ANALYSIS**

### **Solar Siting Analysis Tool**

- OIS compiled DFW-specific data that will be used as input to a solar-siting tool that the Bureau of Energy & Sustainability is developing/revising.

### **Holly Farm Green Acres Event**

- OIS conducted a GIS analysis of habitats, wildlife species, E, T and SC species on the Holly Farm property acquisition to highlight benefits of land protection/preservation of Green Acres program for a June 3rd Press Event highlighting acquisition and GA 60th anniversary.

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

- No update

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

- No update.

## **CARTOGRAPHIC PRODUCTION**

### **Artificial Reef Guide Update**

- OIS staff have mapped and made several corrections to the recently received artificial reef deployments data. OIS staff are continuing to refine the data based upon feedback from Marine Fisheries staff. Once the deployments data has been completed, it will be added to the already completed reef maps.

## **Tuckahoe Waterfowl Hunting Map**

- A Tuckahoe WMA waterfowl draw map co-sponsored by Ducks Unlimited was produced. The map shows the various impoundment areas at Tuckahoe WMA, the locations of duck blinds, where hunters can park to access each blind, and where the lottery shed will be located for an upcoming planned hunt.

## **Law Enforcement Marine Districts maps**

- Revised the maps Law Enforcement uses to determine who will respond to calls so that they more accurately reflect the marine districts as they exist in 2021.

## **Offshore Wind Energy Mapping**

- During this reporting period, several new maps were produced for the Marine Fisheries Wind Energy Team, DEP Offshore Wind Coordination Team, and the Commissioner. These maps display offshore wind energy lease areas, proposed cable routes, and vessel transit counts as well as marine resources located at proposed landfall locations of proposed cable routes.

## **Shellfish Leasing Policy Mapping**

- Per the request of the Bureau of Shellfisheries, OIS staff have created an automated approach for creating maps for the BSF document “Shellfish Aquaculture Leasing Policy of the Atlantic Coast Section of the New Jersey Shellfisheries Council”. The new method for producing the 45+ maps for the document will greatly expedite the amount of time required to produce the maps, enhance their appearance, and reduce the potential for human error within the resultant maps. The process will be expanded to produce poster-sized lease maps for BSF offices.

## **WEB MAP/APP PRODUCTION**

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

- Staff completed and launched an [ArcGIS Online web map application](#) showing freshwater places to fish in New Jersey and associated information. The map application and data development were the first steps in a larger project to map access to fishing in New Jersey and present fishing regulations in a location-based manner.

### **Recreational Saltwater Angler Survey**

- With the public release of the Marine Digest, the Recreation Saltwater Angler Survey application has officially been released. The survey platform is optimized for smartphone use, but may also be used on other devices and will enable the public to submit catch data on

recreationally important marine finfish species. Information collected through this voluntary survey will provide data that may support alternative management strategies that increase fishing opportunities for the public. <https://www.nj.gov/dep/marineanglersurvey>

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

- With the public release of the Marine Digest, the Marine Protected Wildlife Reporter application has officially been released. This application allows members of the public to report sightings of and interactions with federally listed Endangered or Threatened marine species including marine mammals, sea turtles, and sturgeon, as well as prohibited shark species. Compatible with smartphones, tablets, and desktop computers, citizen scientists will be able to report the species that was encountered, the location of the sighting, and other pertinent information such as size and condition. Users will also be able to upload any pictures they have captured of the animal. This valuable information will be used by Division biologists to track habitat use and collect biological samples in order to more effectively manage the recovery of these important natural resources.  
<https://www.nj.gov/dep/njmarinewildlife>

### **NJ Seafood Finder Story Map Application**

- As per the Marine Fisheries Administration and partnering group's recommendation, the name of the story map application was changed from Support NJ Seafood to New Jersey Seafood Finder during this reporting period.

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

- OIS staff have mapped and made several corrections to the recently received artificial reef deployments data. OIS staff are continuing to refine the data based upon feedback from Marine Fisheries staff.

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

- No update, awaiting outside information for further development.

## **GIS TECHNICAL GUIDANCE**

- OIS staff met with I&E regarding training and outreach for the Hunting & Trapping Explorer and other online interactive mapping application.
- 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. During this reporting period, staff provided Rutgers with a geodatabase comprised of 2 feature classes representing the 1979 submerged aquatic vegetation distribution along the NJ Atlantic coast.

- OIS staff met with the DEP's Offshore Wind Coordination and Offshore Wind Research & Monitoring Teams as well as Marine Fisheries' Wind Energy Team.
- Created a basic web Comment Form to meet the public comment requirements related to the Waterloo Road amphibian tunnel project. Monitored the web form for comments and relayed those comments to ENSP.
- Land Management Review (LMR) – OIS will be responsible for responding to and handling LMRs for NHR while the LMR Coordinator is on leave. OIS staff with Heather Korski, and others to go over the steps and procedures involved in the LMR process.

## **IT PROCUREMENT**

### **• IT Procurement Detail:**

<b>Type</b>	<b>IT Products on Order</b>	<b>IT Products Deployed</b>
<b>Computer Hardware</b>		
Laptop	31	4
Desktop	2	
Removable Storage Devices	0	
Seagate Expansion Desktop external hard drive	2	
Keyboard/Mouse	5	1
Monitors	0	6
Printers	0	
USB Monitor Camera	0	
<b>Cellular Devices</b>		
State Cell Phone	1	
<b>Software</b>		
NA	0	
<b>Special Orders</b>		
Docking Station	29	3
Dell Battery	2	
Computer Bags	28	3
Trimble Unit	3	
SonarWiz 7 Sidescan Sonar Post-processing Software	0	
GO-PRO,HERO8	1	

Security box Spartan Camera		
DJI P4 MULTISPECTRAL DRONE	1	
Airband HH w/Bluetooth Radios	0	3
Laptop Stand	0	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.

### **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, GoToMeetings, GoToWebinars and Teams during remote work due to COVID-19.
- OIS set up a resource email account so DFW staff can have access and set up meetings and webinars with GoToWebinar/GoToMeeting in order to communicate with constituents outside of DEP.