



## OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

### MONTHLY REPORT

**March 2025**

**(February 16<sup>th</sup>, 2025 – March 15<sup>th</sup>, 2025)**

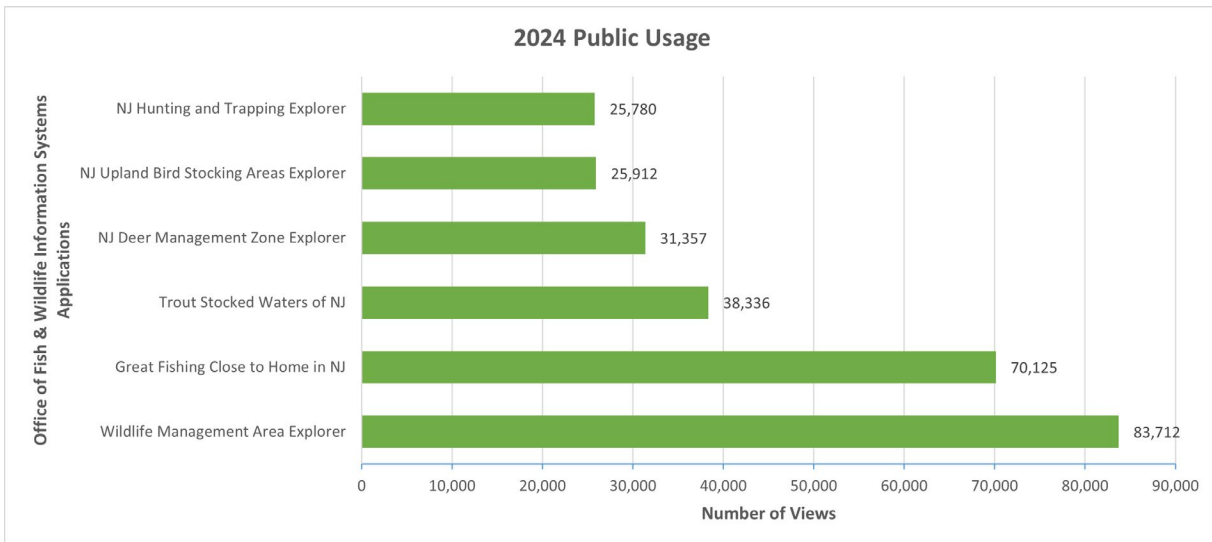
Patrick Woerner, Geographic Information Systems Specialist  
Kevin Blythe, Geographic Information Systems Specialist  
Brian Henderson, Geographic Information Systems Specialist  
Molly VanWieren, Geographic Information Systems Specialist

Temporary/Seasonal Employees: Joseph DeCeglia  
Catherine “Fern” Tatum  
Libby Witham

### **ADMINISTRATION**

- The Office of Fish and Wildlife Information Systems (OIS) has 45 projects in progress and five new projects requested through the GIS Project Request Form.
- OIS continues to attend several meetings with Motorola on the new Computer-Aided Dispatch (CAD) system for the Bureau of Law Enforcement (BLE) and is engaged in mapping and GIS data development and maintenance related to the CAD system.
- OIS staff attended the NJDEP GIS Users Group Meeting.
- OIS attended the quarterly New Jersey Geospatial Forum (NJGF) Meeting.
- OIS presented on the [Landscape Project](#), Version 3.4 update and applications to the Fish and Game Council.
- At the request of the Fish and Game Council, OIS reviewed and reported on selected road segments and their reason for closure within the Wharton State Park Vehicle Use Map.
- OIS completed its annual federal grant report for TRACs, the tracking and reporting system for conservation and related actions funded by the U.S. Fish and Wildlife Service’s Wildlife and Sport Fish Restoration Program and State Wildlife Grants (SWG) Program. 2024 public usage statics highlights of [Office of Fish and Wildlife Information Systems web map applications](#) are detailed below.

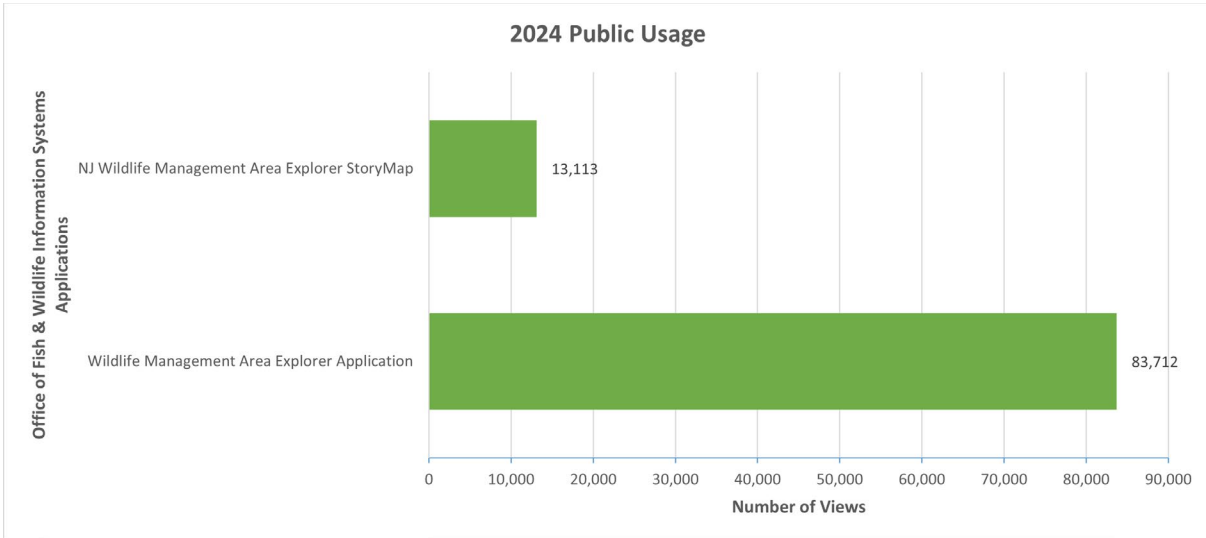
**2024 public usage of the most popular web mapping applications developed by the Office of Fish and Wildlife Information Systems:**



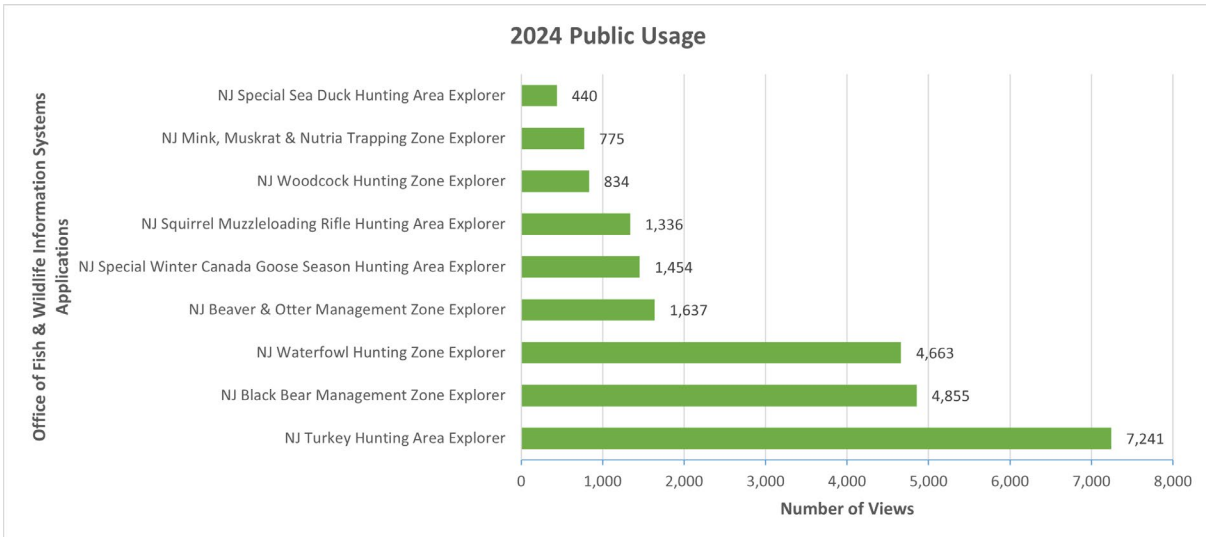
- The [Wildlife Management Area Explorer](#) application targets listed and game species and all habitat types and infrastructure assets on New Jersey's Wildlife Management Areas. With 83,712 views in 2024, the Wildlife Management Area Explorer was the 3<sup>rd</sup> most used NJDEP web mapping application in 2024 out of approximately 135 applications.
- The [Great Fishing Close to Home in NJ](#) app targets freshwater sportfish species and with 70,125 views in 2024, it is the 5th most used NJDEP web mapping applications out of a total of approximately 135 apps.
- The [Trout Stocked Waters of NJ](#) app targets farm raised trout species and had 38,336 views in 2024 and it is the 9th most used NJDEP web mapping applications.
- The [NJ Deer Management Zone Explorer](#) targets White-tailed deer and with 31,357 views in 2024, it was the 11th most used NJDEP web mapping application in 2024.
- The [NJ Upland Bird Stocking Area Explorer](#) targets ring-necked pheasant and quail and had 25,912 views in 2024, making it the 15th most used NJDEP web mapping application in 2024.
- The [NJ Hunting and Trapping Explorer](#) application targets the following species: deer, black bear, squirrel, turkey, waterfowl, woodcock, Canada goose, sea ducks, beaver and otter, and mink, muskrat, and nutria. With 25,780 views in 2024, the Hunting and Trapping Explorer was the 15th most used NJDEP web mapping application in 2024 out of a total of approximately 135 applications.
- The [NJ Fish and Wildlife License Locator](#) application targets all species that require a license and/or permit to hunt, fish or trap and had 21,527 views in 2024, making it the 17th most used NJDEP web mapping application out of ~135 apps.

## Web App Usage by Explorer Type

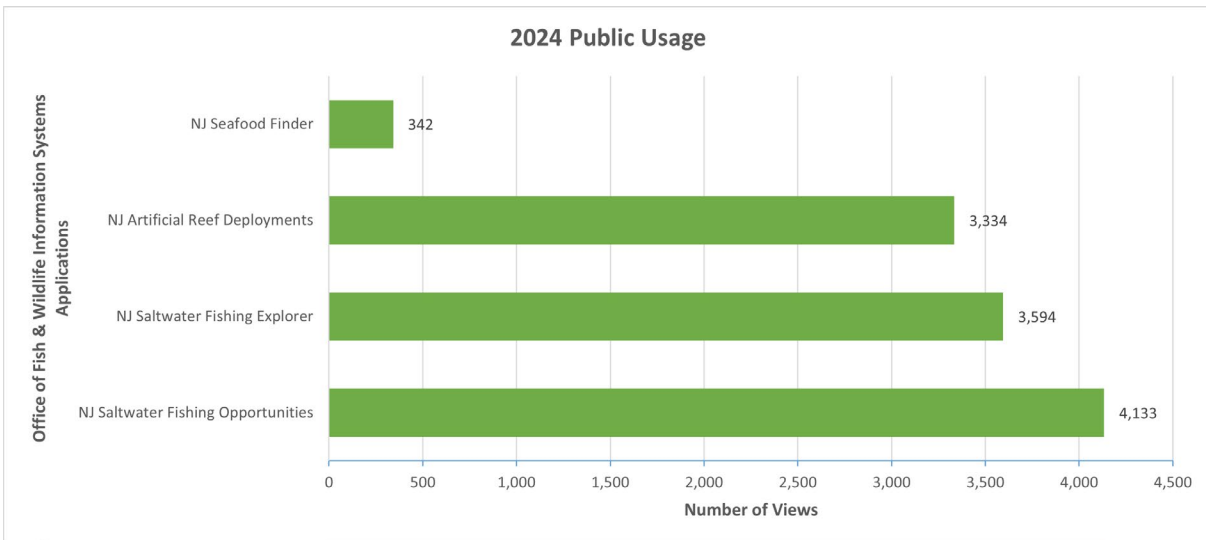
### Wildlife Management Area Explorer:



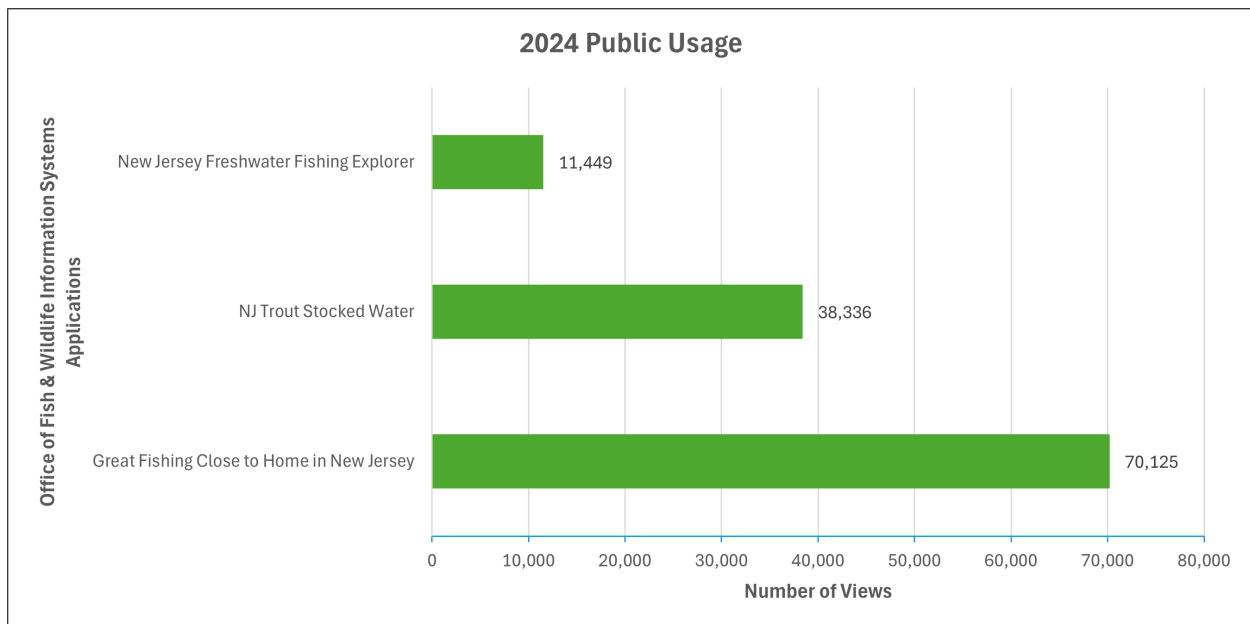
### Hunting & Trapping Explorer:



### [Saltwater Fishing Explorer:](#)



### [Freshwater Fishing Explorer:](#)



## **GIS DATA DEVELOPMENT**

### **Shellfish Aquaculture Lease Lot Data**

- OIS continues to review any edits to the current shellfish lease lot data and posts the edits for shellfisheries staff.
- OIS is working with shellfisheries staff to include Aquaculture Development Zone (ADZ) lots in the dataset.

### **Freshwater Fishing Opportunities and Access**

- OIS provided a demonstration of the new Freshwater Fishing Regulations web map application to the Bureau of Freshwater Fisheries and the Bureau of Law Enforcement and the application was approved for public release ahead of the spring trout season.

### **New Jersey Statewide Trails Dataset**

- No updates.

### **Diadromous Fish Habitat Mapping and Timing Restrictions**

- No updates.

### **Wildlife Management Area (WMA) Boundary Alignment**

- OIS staff scanned the documentation for 29 parcels at 2 WMAs and mapped the boundaries of 5 parcels on 5 WMAs.
- OIS staff are working with Land Management and Green Acres Program staff to survey the boundaries of WMA parcels that have possible encroachments from adjacent properties, re-surveyed using modern methods to establish if there are encroachments and pursue a resolution if encroachments are identified. Two surveys were awarded and we received completed survey documents for two other surveys.

### **Landscape Project**

- OIS developed an internal version of the Landscape Project mapping that includes sensitive occurrence types for those species susceptible to human disturbance or illegal collection.

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

- OIS is working to update the subaquatic vegetation data to improve mapping accuracy.

### **Wildlife Management Area System Inventory**

- OIS is processing additional WMA assets for inclusion in the [WMA Explorer](#) application.

### **Law Enforcement CAD System**

- OIS completed additional GIS revisions to the Flex/CAD system maps in preparation for the “go-live” date in April.

## **GIS ANALYSIS**

### **Ocean Trawl Survey Environmental/Biological Analysis**

- OIS continues the mapping analysis with Bay anchovy, bluefish, horseshoe crab, spiny dogfish, sturgeon, and weakfish catch data.

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

- OIS met with Rowan University’s GeoLab to review the changes that were made to the dashboard depicting habitat change for public consumption. OIS will provide GeoLab staff with suggestions for the dashboard and updated feature description data for species.

### **Tracking Encroachments on WMAs**

- OIS developed a draft tool in Survey123 to record and resolve encroachments. An encroachment policy and resolution process with clearly defined roles for each organizational unit needs to be formalized by management in order for the tool to be finalized and implemented by NJFW.
- Potential encroachments that OIS identified are going through review by BLM staff.

## **CARTOGRAPHIC PRODUCTION**

- OIS staff completed a trail map for Pequest Wildlife Management Area.

## **WEB MAP/APP PRODUCTION**

### **Fishing & Hunting License Agent Locator**

- Modifications (additions, removals, edits) were made to the license agent locator GIS dataset.

### **Deer Disease Sighting Survey**

- No updates.

### **Hunting & Trapping Explorer**

- No updates.

### **Wildlife Management Area Explorer**

- Edits are being made to existing points of interest and assets.

- OIS corrected several records in the WMA summary reports data that were impacted by a glitch in versioned editing.
- OIS has begun the process of updating summary report data by WMA properties as represented in a generalized version of the State Open Space.

### **Saltwater Fishing Explorer**

- No updates.

### **Freshwater Fishing Explorer**

- OIS is working on a new section withing the [Freshwater Fishing Explorer](#) application to host the Freshwater Fishing Regulations application.
- The Spring 2025 trout stocking numbers and dates were added to the Trout Stocked Waters web application.

### **Conservation Focal Area Application**

- No updates.

### **Marine Resources GeoHub**

- OIS continues to update this internal application upon request and as necessary.

### **Shared Wildlife Health Information System (SWHIS)**

- OIS staff continues to collaborate with Wildlife Futures Program (WFP) at UPenn and the Timmons Group on the development of SWHIS and a feature service that will include wildlife health events, including animal morbidity and mortality information.

### **Wild Turkey Brood Sighting Survey**

- No updates.

### **Turkey Permit Sales and Harvests Dashboard**

- No updates.

### **Northeast Regional Conservation Priorities web application**

- No updates.

### **Upland Bird Stocking Areas**

- No updates.

### **Landscape Project ArcGIS StoryMap and Experience Builder**

- Minor updates were made since release on 1/6/2025

### **New Jersey Aquatic Invasive Species Reporting Form**

- OIS continues to develop an Aquatic Invasive Species Reporting tool. OIS met with the AIS team and Freshwater Fisheries staff to review the aquatic invasive species reporting form. Fisheries staff have requested changes to the form and OIS is in the process of updating the form to get it ready for publication.

### **Wild Bird Disease Reporting Form**

- OIS met with Health Forensics staff to discuss final edits and suggestions on the Wild Bird Disease Reporting Form.
- OIS is in the process of working with BGIS to publish this form for public use.

### **Youth Fishing Challenge**

- OIS mapped all new participant groups and their locations for the June 2025 Youth Fishing Challenge.

## **GPS/FIELD DATA COLLECTION**

### **WMA Asset and Infrastructure data collection**

- Having completed the initial GPS data collection of WMA infrastructure assets, staff are now working on a new online data entry form in ArcGIS Field Maps.

### **Shellfish Lease Ground Investigation**

- OIS met with Shellfisheries staff to review the forms created for shellfish lease observations and biological assessment surveys.

### **Deer Drone Surveys**

- OIS staff met up with Warren County Community College staff and students twice this past month for nighttime drone test flights at Pequest WMA.

### **Deer Spotlight Surveys**

- OIS has been developing field collection GIS tools for the Bureau of Wildlife Management's Deer Project team for deer spotlight surveys and to replace paper forms currently used. A Survey123 form is still in development and OIS will begin testing the form in the field soon.

## **GIS TECHNICAL GUIDANCE**



- OIS staff responded to internal and external inquiries regarding various datasets and applications, including the Landscape Project and the Hunting & Trapping Explorer.
- OIS continues to support NJ Fish and Wildlife's SharePoint site by administering sharing privileges upon request.