



OFFICE OF FISH AND WILDLIFE INFORMATION SYSTEMS

MONTHLY REPORT

March 2024

(February 16th, 2024 – March 15th, 2024)

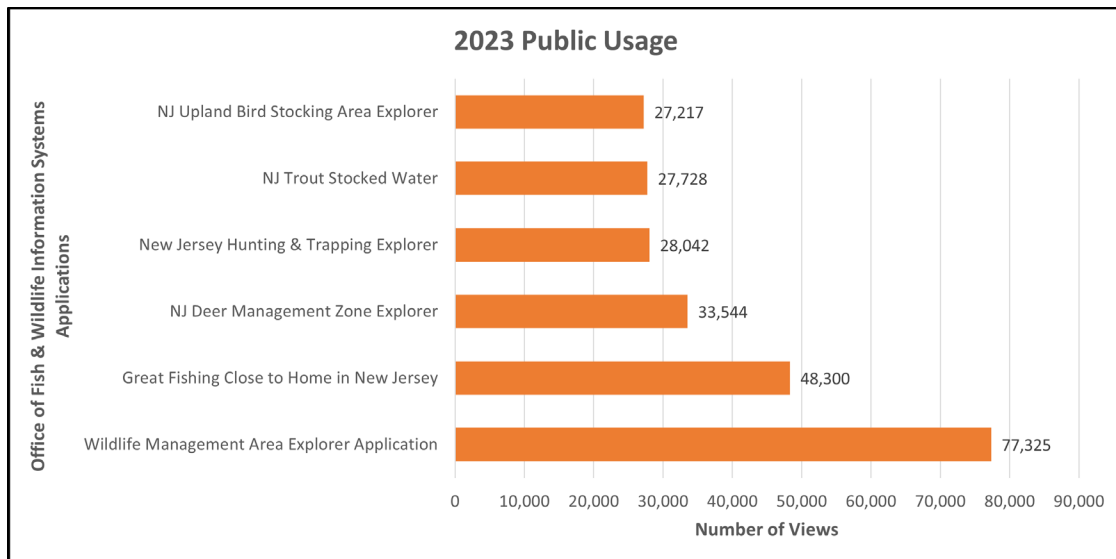
Patrick Woerner, Geographic Information Systems Specialist
Kevin Blythe, Geographic Information Systems Specialist
Brian Henderson, Geographic Information Systems Specialist
Molly VanWieren, Geographic Information Systems Specialist

Temporary/Seasonal Employees: Joseph DeCeglia
Olivia Hrymoc

ADMINISTRATION

- The Office of Fish and Wildlife Information Systems (OIS) has 39 projects in progress and 0 new projects requested through the GIS Project Request Form.
- OIS attended the quarterly New Jersey Geospatial Forum (NJGF) Meeting.
- OIS represented NJFW at the NJDEP GIS User Group Program Representative Meeting.
- OIS attended several meetings and is involved in GIS development and maintenance of a new Computer-Aided Dispatch (CAD) System for the Bureau of Law Enforcement (BLE).
- OIS presented on the [Hunting & Trapping Explorer](#) at the NJ State Federation of Sportsmen's Club Convention in Princeton, NJ.
- OIS is managing the Landscape Project update that will include several additions of species to be newly listed.
- 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. 2023 public usage statics highlights of [Office of Fish and Wildlife Information Systems web map applications](#) are detailed below.

2023 public usage of the most popular web mapping applications developed by the Office of Fish and Wildlife Information Systems:

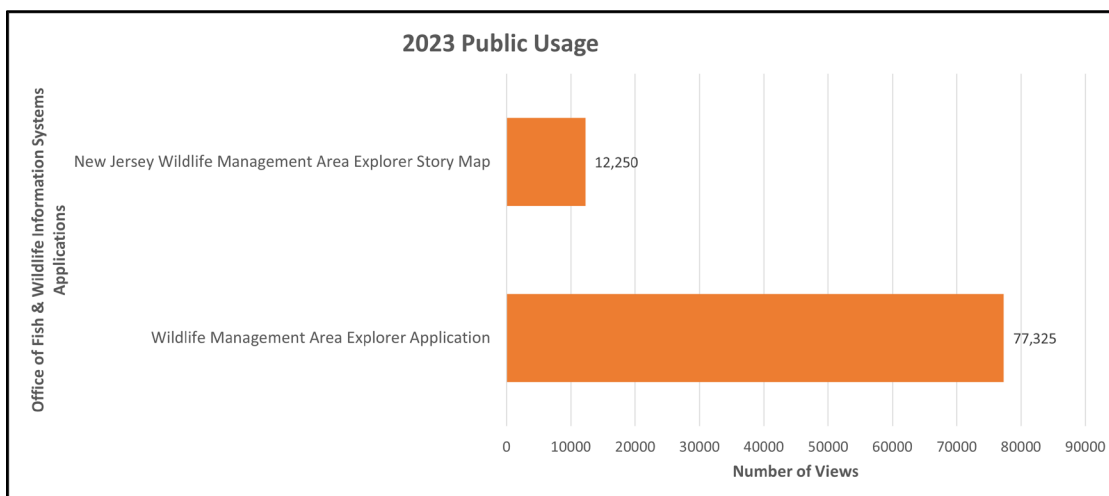


- The [Wildlife Management Area Explorer](#) application targets listed and game species and all habitat types and infrastructure assets on New Jersey's Wildlife Management Areas. With 77,325 views in 2023, the Wildlife Management Area Explorer was the 3rd most used NJDEP web mapping application in 2023 out of approximately 100 applications.
- The [Great Fishing Close to Home in NJ](#) app targets freshwater sportfish species and with 48,300 views in 2023, it is the 4th most used NJDEP web mapping applications out of a total of approximately 100 apps.
- The [NJ Deer Management Zone Explorer](#) targets White-tailed deer and with 33,544 views in 2023, it was the 5th most used NJDEP web mapping application in 2023.
- 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 28,042 views in 2023, the Hunting and Trapping Explorer was the 7th most used NJDEP web mapping application in 2023 out of a total of approximately 100 applications.
- The [Trout Stocked Waters of NJ](#) app targets farm raised trout species and had 27,728 views in 2023 and it is the 8th most used NJDEP web mapping applications.
- The [NJ Upland Bird Stocking Area Explorer](#) targets ring-necked pheasant and quail and had 27,217 views in 2023, making it the 9th most used NJDEP web mapping application in 2023.

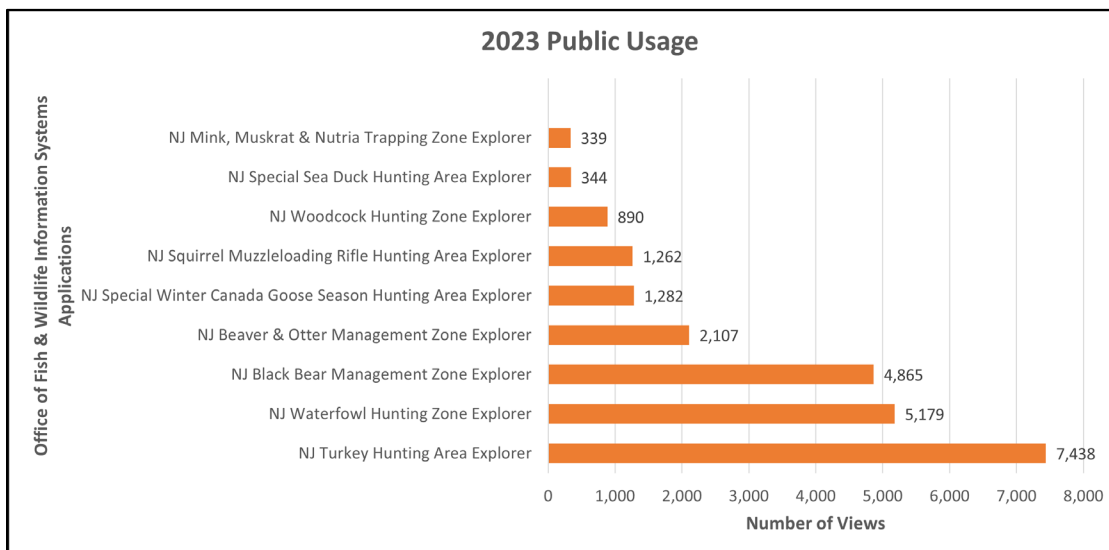
- The [NJ Fish and Wildlife License Locator](#) application targets all species that require a license and/or permit to hunt, fish or trap and had 18,551 views in 2023, making it the 15th most used NJDEP web mapping application out of ~100 apps.

Web App Usage by Explorer Type:

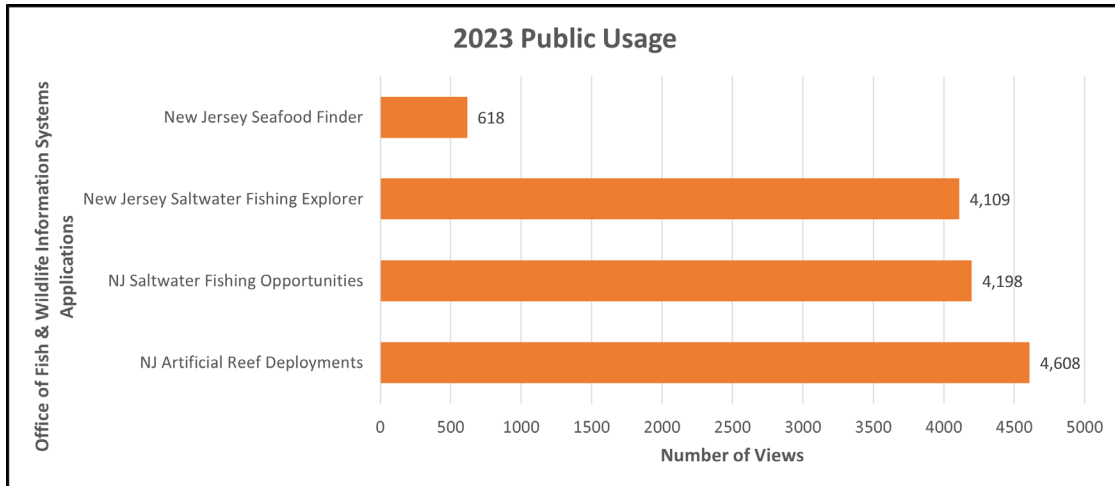
Wildlife Management Area Explorer:



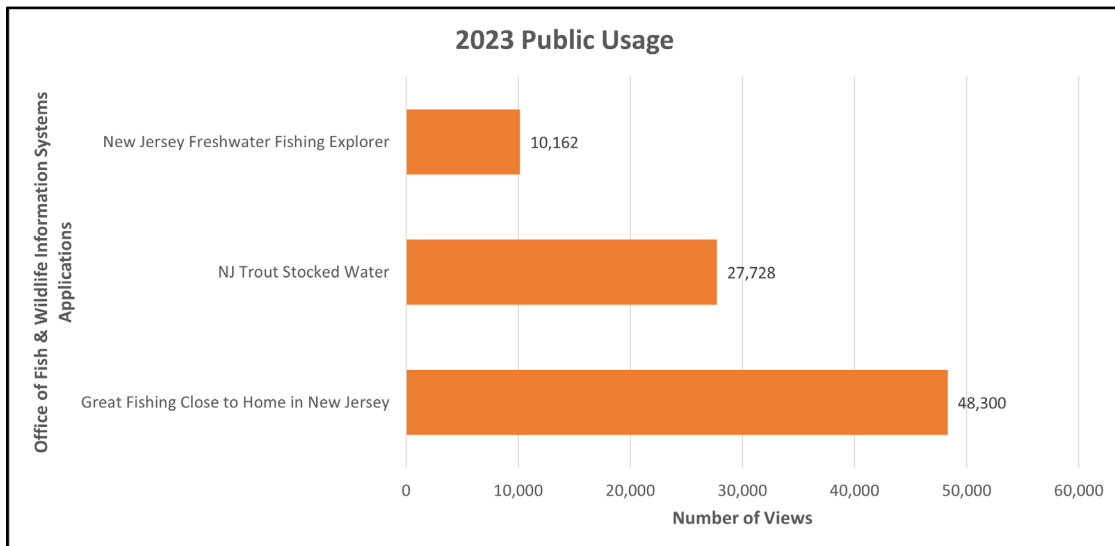
Hunting & Trapping Explorer:



Saltwater Fishing Explorer:



Freshwater Fishing Explorer:



GIS DATA DEVELOPMENT

Shellfish Aquaculture Lease Lot Data

- OIS staff met with Shellfisheries staff again to go over processing steps again and to answer any lingering questions. Shellfisheries staff will continue making edits in a branch versioning environment and OIS staff will continue reviewing those edits.

Freshwater Fishing Opportunities and Access

- OIS performed quality control checks on statewide stream and waterbody layers coded for the freshwater fishing regulations application to ensure waterbodies and underlying stream

segments match. OIS is finalizing the schema for the feature classes and tables and will publish a new web map application this month.

New Jersey Statewide Trails Dataset

- No update.

Diadromous Fish Habitat Mapping and Timing Restrictions

- OIS staff is continuing to analyze streams based on confirmed fish species in collaboration with Bureau of Freshwater Fisheries.

Wildlife Management Area Boundary Alignment

- OIS staff scanned the paper documents for 17 parcels and 21 parcels were mapped.

Landscape Project

- OIS continues to manage the Landscape Project mapping update in coordination with ENSP.

Hard Clam (Estuarine) Survey Mapping

- Shellfisheries provided edits to metadata and the Estuarine Inventory of New Jersey dataset was published to [NJDEP Open Data](#) and [ArcGIS Online](#) as of February 14, 2024.

Wildlife Management Area System Inventory

- No update.

Law Enforcement CAD System

- OIS staff continues to meet with Motorola, Law Enforcement and BGIS to prepare the various datasets so they are ready to be added to Enterprise and loaded into the CAD system.
- OIS is coordinating with several partners including ENSP, to gather relevant data for incorporation into BLE's new CAD system.

GIS ANALYSIS

Ocean Trawl Survey Environmental/Biological Analysis

- No update.

Habitat Change Analysis Project (HCAP)

- OIS is working with grant coordinators, DEP procurement and Rowan University to begin the next phase of this analysis.

Identifying Potential Encroachments on WMAs

- OIS located 412 potential encroachments on WMAs and created an internal web map app to allow for other units within NJFW to review the potential encroachments.
- OIS also created a draft Encroachment Review Survey123 application for recording and tracking encroachments
- OIS staff presented findings to BLE, BLM, and staff in the Director's Office.

CARTOGRAPHIC PRODUCTION

Nacote Creek Swap Area

- No updates.

WEB MAP/APP PRODUCTION

Deer Disease Sighting Survey

- OIS met with Bureau of Wildlife Management and Office of Fish and Wildlife Health and Forensics regarding modifications, access and data management related to the Deer Disease Sighting Survey.

Hunting & Trapping Explorer

- No updates. OIS presented at the NJ State Federation of Sportsmen's Clubs (NJSFSC) on March 1st.

Wildlife Management Area Explorer

- OIS staff is working on updates associated with an Esri bug impacting ArcGIS Field Maps.

Saltwater Fishing Explorer

- No updates.

Freshwater Fishing Explorer

- OIS published updates to the Trout Stocked Waters application. The application now has the spring 2024 trout allocation numbers and closure dates.

Conservation Focal Area Application

- No updates.

Marine Resources GeoHub

- OIS staff added new data that was given by Marine Resources Administration staff.

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.
- OIS staff reviewed the necropsy data sent to SWHIS and compared it to the data uploaded by SWHIS.

Wild Turkey Brood Sighting Survey

- No updates.

Turkey Permit Sales and Harvests Dashboard

- No updates.

Northeast Regional Conservation Priorities web application

- No updates.

Fishing and Hunting License Agent Locator web application

- Updates were made

GPS/FIELD DATA COLLECTION

sUAS Deer Surveys

- OIS, the Bureau of Wildlife Management, and faculty and students from Warren County Community College's drone program made both daytime and nighttime visits to Pequest WMA to test several drones with thermal imaging capabilities. Warren CCC is working on a protocol for using search and rescue software to identify and count deer, which might provide an alternate method for BWM to conduct deer population censuses.

GIS TECHNICAL GUIDANCE

- OIS is training Bureau of Shellfisheries on branch versioned editing for aquaculture lease lots and lease holders.
- OIS staff gave a presentation on using the NJ Hunting and Trapping Explorer web application at the NJ State Federation of Sportsmen's Club Convention on March 1st.

- OIS staff responded to internal and external inquiries regarding various datasets and applications, including Landscape Project and the Hunting & Trapping Explorer.