

The New York Ocean and Great Lakes Atlas: Data Portal—Improving Data Discovery

Stone is working with the New York Ocean and Great Lakes Ecosystem Conservation Council to design and build The New York Ocean and Great Lakes Atlas & GeoPortal (<http://portalnyoglecc.stone-env.com/geoportal/>), a web site to provide universal access to geospatial datasets for use in Ecosystem-Based Management planning processes.

Promoting Data Discovery

Improving the *discovery* of GIS datasets has been a primary focus for many organizations and government bodies in recent years as the number of geospatial datasets available through online mapping applications continues to grow. The New York Ocean and Great Lakes Ecosystem Conservation Council, an entity mandated by the New York Ocean and Great Lakes Ecosystem Conservation Act in August 2006, has implemented the *New York Ocean and Great Lakes Atlas: Data Portal*.

The purpose of the Atlas and GeoPortal is to improve *discovery* of ocean and Great Lakes ecosystem datasets.

Recently, Stone upgraded the original implementation that used ESRI GIS Portal Toolkit v.9.3 technology. The current version uses ArcGIS Server v. 10's GeoPortal Extension. These new features include:

- a GeoPortal search widget that enables users to search the GeoPortal directly from within a Flex mapping application or on an independent Web page (see Figure 2);
- federated searching that allows users to search multiple catalogs registered with the NY OGL GeoPortal all at once;
- registered users can now provide feedback on the quality and usefulness of a resource by adding ratings and comments;

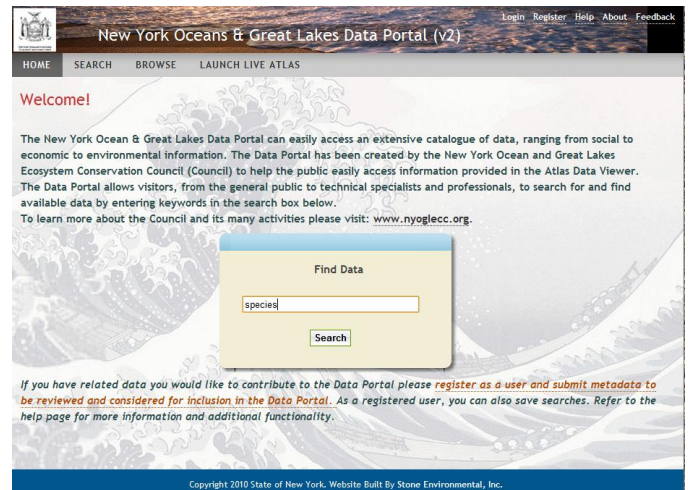


Figure 1: New York Ocean and Great Lakes GeoPortal Home Page

- users can view resources that are related to one another as defined in the resources' metadata;
- enhanced data publishing by simplifying the registration of new data resources;
- a new harvesting tool and service; and
- the GeoPortal will regularly and automatically check the registered resource for changes and update the GeoPortal catalog; and
- supports for the Open Geospatial Consortium (OGC) ISO Application profile and INSPIRE Discovery service.

The GeoPortal was designed to mimic the look and feel of the already existing Data Viewer. The front page was customized to provide information about the Council and their mission as well as brief instructions on how to use the portal (Figure 1).

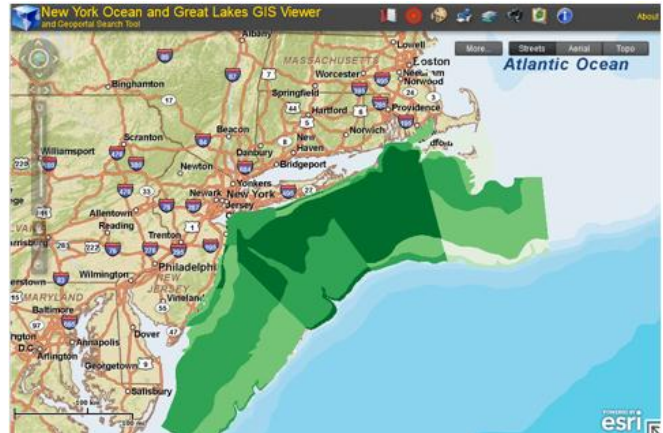
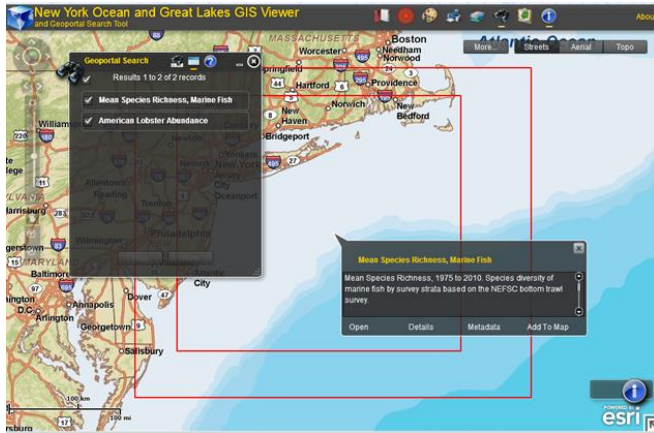


Figure 2. FLEX GeoPortal Widget

User Interface: Advanced Searching

The GeoPortal provides users the ability to search metadata for over three hundred GIS datasets through a user-friendly interface and to view and access datasets directly through an FTP site or through the Data Viewer. Data searches can be performed on keywords, data type, data category (ISO), date modified, and by geographic location. Search results can be saved to a user profile, to a GeoRSS feed, viewed as html or fragment or in Google Earth. The user can download the data in three different GIS formats including ESRI shapefile, MapInfo Tab files, and Google Earth kml files.

Data Provider Interface: Publishing Tools

The GeoPortal is designed to provide data stewards many avenues to publish GIS holdings. Through the portal interface, data stewards may publish records by uploading metadata or creating metadata through web forms. Stewards can also establish a data harvesting relationship with the GeoPortal through a sub-portal or web-accessible folder.

In 2009, Stone assisted the Tug Hill Commission in developing the first sub-portal to the New York Ocean and Great Lakes GeoPortal

The Tug Hill Commission has developed several datasets as a part of an Ecosystem-Based Management pilot project. A separate Data Portal was developed using ESRI's Geoportal Toolkit where the Commission can manage geospatial data holdings. These records are then shared with the New York Ocean and Great Lakes Atlas: Data Portal through a harvesting protocol.

Data Portal Network

Stone's experience with Data Discovery, Documentation, and Access technology can smooth the path into least costly data management solutions. The advent of Internet data portal technologies allows one's organization to be engaged in a distributed network of data providers without being an active data harvester and disseminator of data. New technologies, such as ESRI's ArcGIS Server Geoportal Extension, allow data to be searched from anywhere, and using WMS or WFS services from other data providers minimizes the need to keep your own data inventory current. Stone envisions that systems like the New York Ocean and Great Lakes Atlas: Data Portal will become more common as a method for sharing spatial data.

Contact

David Healy
 Tel. / 802.229.1879
 E-Mail / dhealy@stone-env.com



535 Stone Cutters Way
 Montpelier, Vermont
 05602 USA

Phone / 802.229.4541
 Fax / 802.229.5417
 Web Site / www.stone-env.com