

NOAA Protected Species Information Portal

NOAA, (The National Oceanic and Atmospheric Administration), uses an application developed using eSpatial's iSMART Geospatial Platform to provide an intuitive web based portal for biologists and consultants to view, track, analyze and update real time real time information regarding endangered and protected marine species.

PSIP is designed by and for non-GIS specialists to provide more effective resource management capability using GeoSpatial technology delivered to any web browser.

Background:

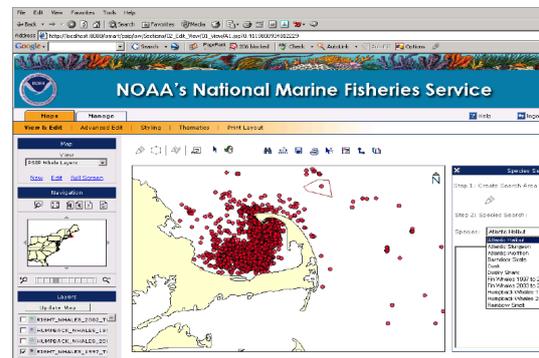
Protected species are species listed as threatened or endangered under the Endangered Species Act (ESA) and species protected under the Marine Mammal Protection Act (MMPA). Species of Concern are those species for which uncertainties exist regarding status and threats, information is lacking, and listing is not currently being considered. While Species of Concern do not receive any substantive or procedural protection under the ESA, proactive conservation efforts are encouraged for these species in order to prevent the need to list them under the ESA.

Key Requirements for NOAA:

The Northeast Regional Office's Protected Resources Division required an application in order to provide their constituents with information on protected species and Species of Concern in an easy to use Web-based format.

eSpatial's Solution:

The PSIP application allows users to select an area on the map and determine which protected species are located in that area.



Links to other important information such as Recovery Plans and status reviews are also available in order to provide regulatory and research agencies with information on the status, abundance, general distribution and other life history information for these species. Each layer within PSIP has an associated Oracle database table associated with it. Each element with a layer has a single record of information that describes something about the element (id, date, latitude, longitude).



Online Editing of Species Data

A unique feature of PSIP is the ability for users with appropriate permissions to edit the underlying data from any web browser.



Users can select a “Feature” (an element within the “map” window), in order to inquire about attributes of that “Feature.” Once selected, users can edit the attributes and apply or save those changes live to the PSIP database. Users can also edit spatial data (e.g. location of sightings of Right Whale points) a customized editor tool is provided to facilitate this.

Key Benefits:

- **Intuitive interface for non GIS users**
- **Access to multiple spatial and non-spatial data sources**
- **Roles based access to single application**
- **Pure web update of existing data and capture of new data**
- **Export of reports to desktop tools (e.g. Spreadsheet)**
- **Enterprise grade web deployed system**

Species Data on PSIP

There are many disparate resources that contain various information about protected species and SOC. PSIP combines information available through many resources in a single application; thereby, making the information more useful and accessible. All original data used has undergone quality control prior to being incorporated into the PSIP application.

“The Protected Species Information Portal represents an exciting new direction for NOAA” said Mary Colligan of NOAA.

PSIP allows us to gather data from disparate sources and to present, analyse and update this data in a controlled manner. PSIP provides a “one stop shop” for our users from any web browser eliminating the need for us to produce separate reports for each customer.”

About eSpatial

An Oracle Certified partner based in Ireland and the USA, eSpatial provides an advanced development and deployment environment for embedded spatial applications and web services in a standard enterprise IT environment. Its iSMART® Suite allows organizations to build new applications, or extend existing ones, to include spatial functionality such as displaying a map or calculating an area or distance. eSpatial’s technology is used in every area of IT including public sector, defense, telecommunications, and utility organizations.

