"ESI in Google Earth" Users Guide

To load the kmz file to Google Earth (GE):

1. From the **ESI** _online_ website located at :://esionline.researchplanning., navigate to the "ESI in Google Earth" tab, and save the "ESI in Google Earth.kmz" file to the desktop or a folder of choice.

2. This demo only works correctly with GE version 5. (The GE version 5 upgrade can be found at ://earth.google.com/)

3. Simply drag and drop the kmz file to the "Temporary Places" folder found under the "Places" tab in the left frame of GE.

4. GE will access the online data server and load the most recent Environmental Sensitivity Index (ESI) data.

5. The user is now ready to view these data.

Please note that this is a demo version of what we envision "ESI in Google Earth" to be. Once funding is secured, we anticipate that the completed product will contain:

- _Shoreline Classification;_

- _Available Oblique Aerial Images;_

- _Threatened/Endangered (T/E) Grids;_

- _Biological Data (Birds, Fish, Invert, Marine Mammals, Reptiles, Terrestrial Mammals, etc.);_

- _Socio –economic Data (Marinas, Boat Ramps, Management Areas, Access points, etc.);_

- _Links to available PDF documents for each ESI atlas (Current Maps and Data Tables, Historical Maps and Data Tables, Metadata Documents, Introductory Pages, etc.); and_

- _Links to NOAA, Research Planning, Inc. (RPI), and other response websites, if appropriate._

This website and these data are developed with the user in mind. User feedback is essential to the continual development and overall effectiveness of the **ESI** _online_ website and its associated data. Please do not hesitate to provide RPI with any input (suggested changes, modifications, likes/dislikes, etc.). Also, please identify any additional content that should be considered for incorporation into the database. To do so, please use the online "Contact Us" form located on the **ESI** _online_ website, which is located under the "Main Menu" tab.

Navigating the Data: The GE "Places Frame" - "Temporary Places" Folder

The kmz file contains various components of the ESI data set from selected ESI atlases. The data included will vary from atlas to atlas. See the file structure below for data that are currently included.

Clicking on the "Read Me" link opens the window shown below.

Also included as part of this kmz file are "Active Links" to various websites, such as:

    NOAA Logo (links to the OR&R website)

    RPI Logo (links to RPI website)

    Other Links will redirect you to the appropriate sites

    Clicking the "Video Introduction/Tutorial" will play a short ESI in Google Earth training video. Double click to see a larger version of the video in YouTube.

Clicking on the other links/folders/layers (PDF Maps, ESI Shoreline, Access Points, Oblique Photos, T/E Species) in the "Temporary Places" folder in GE's left frame will provide information about each layer. For example, clicking on the ESI Shoreline link/folder opens the window shown below:
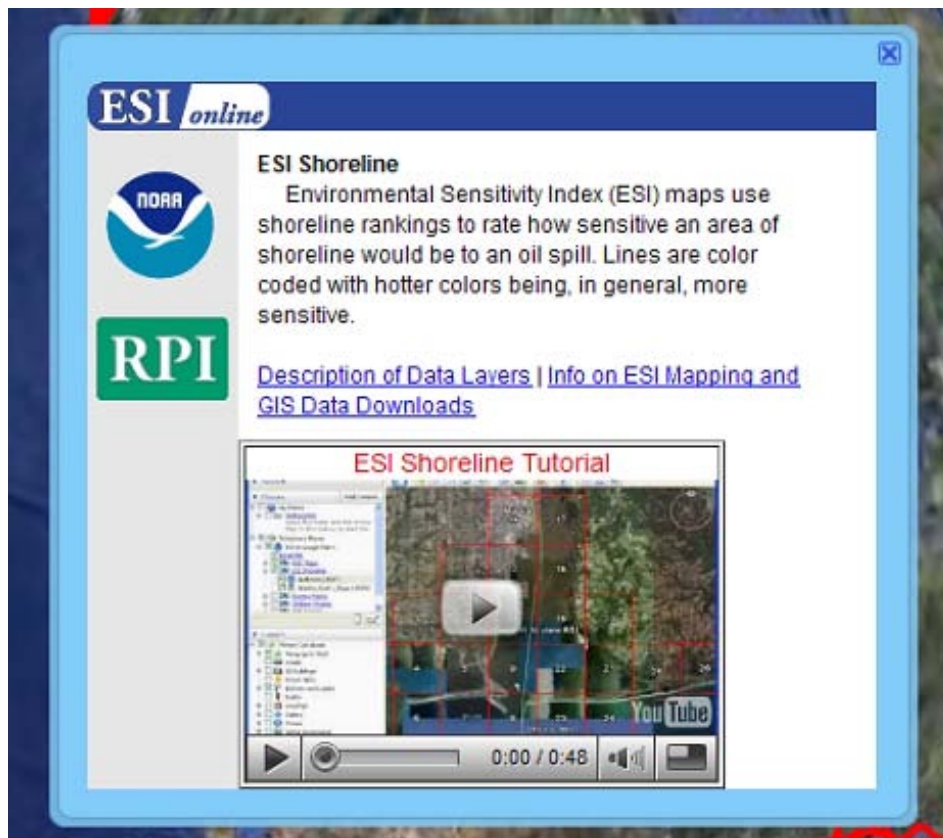
The training video "ESI Shoreline Tutorial" is specific to the ESI shoreline layer. Click to view the ESI Shoreline Tutorial (Double click to view larger version in YouTube).

Training Tutorial Videos:
Training tutorial videos are provided for each layer. In most cases, the tutorials are no more the 60 second long and provide detailed information on how to access the data associated with each layer. The tutorials will also help the user to better understand the data that is being veiwed.

Navigating the Data: Active Layers Displayed in GE
Each ESI data layer can be turned on or off by selecting the check box to the left of each layer. Each layer is briefly described below. Again, the user is encouraged to watch the Training Tutorial Video for each layer.

PDF Maps:

A single click on "PDF Maps" will display a description of that layer, links to various websites, as described above, and access to the training tutorial video. Double clicking the "PDF Maps" will zoom to the complete extent of this layer. The user can use the standard GE tools to zoom in and out or pan to any desired location. With "PDF Maps" active, click inside the index grid to gain access to the ESI Map, Data Table, Metadata, etc (see below). These PDFs for current and historical data are accessed directly from NOAA's NOS data server located at :://oceanservice.noaa.gov/dataexplorer/.
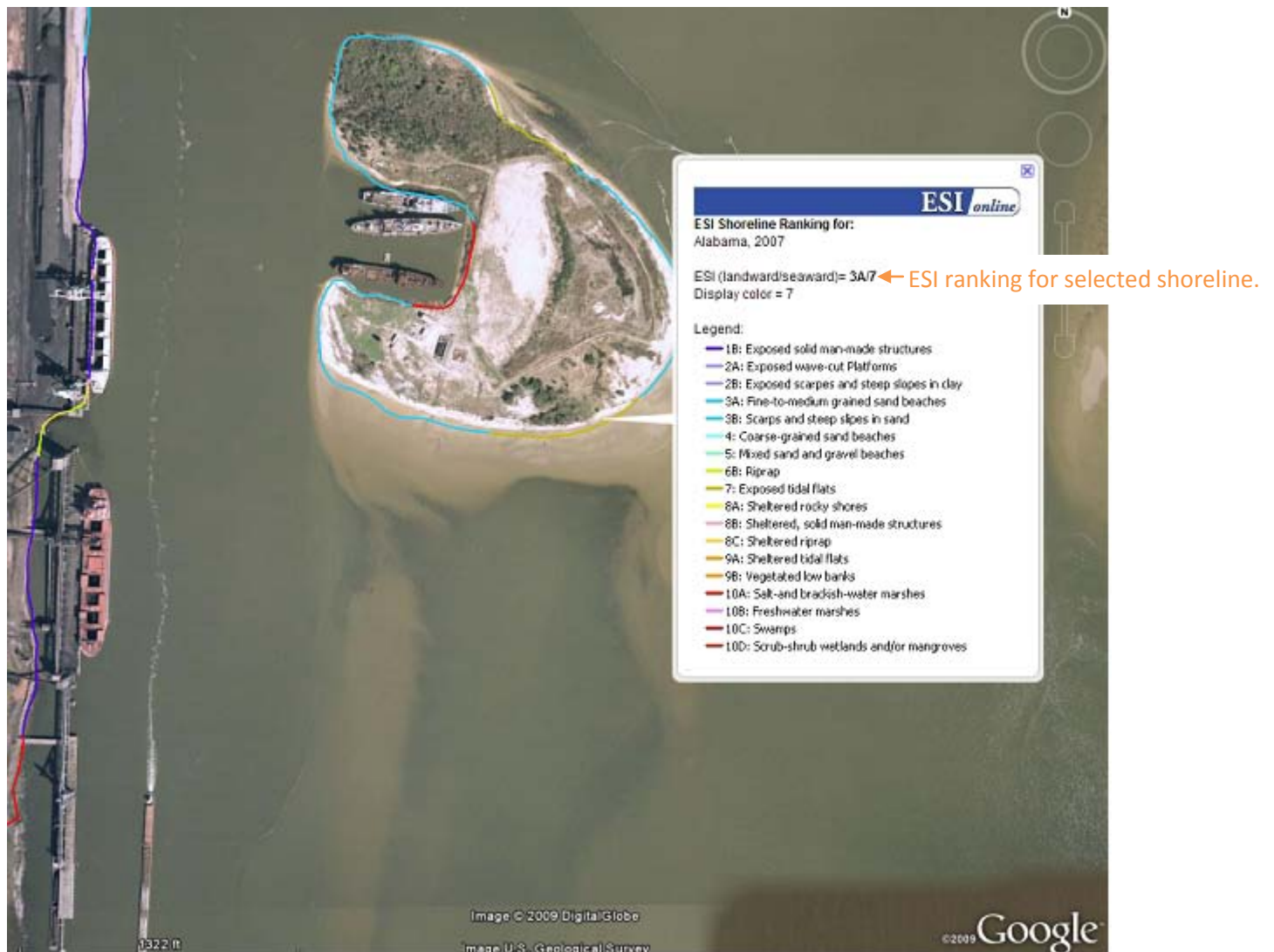

The example provided above will allow the user to download North Slope ESI Map #9, published in 2005, in PDF format. The user can also download all other associated PDF files for the ESI atlas published in 2005, as well as the Summary Maps, also in PDF format, which were published in 1999.

ESI Shoreline:

        Read Me -Click on this link to see an introductory/tutorial video on 'How to Use ESI in Google Earth'.
    PDF Maps -Activate this layer to see ESI index and access PDFs (maps, legends, data tables, etc.). Otherwise leave off.
    ESI Shoreline -**Activate this layer to see ESI Shoreline. Zoom to area of interest, click on line feature for ESI value**
    Access Points -Activate this layer to see Access Points. In GE zoom to area of interest, click on icon to see legend.
    Oblique Photos -Activate this layer to see oblique images captured from overflight video. Also displays flightline.
    T&E Species -Activate this layer to see Threatened/Endangered (T/E) species grid. In GE, zoom to area of interest,
            click   on the grid to see the number of T/E species in the selected grid
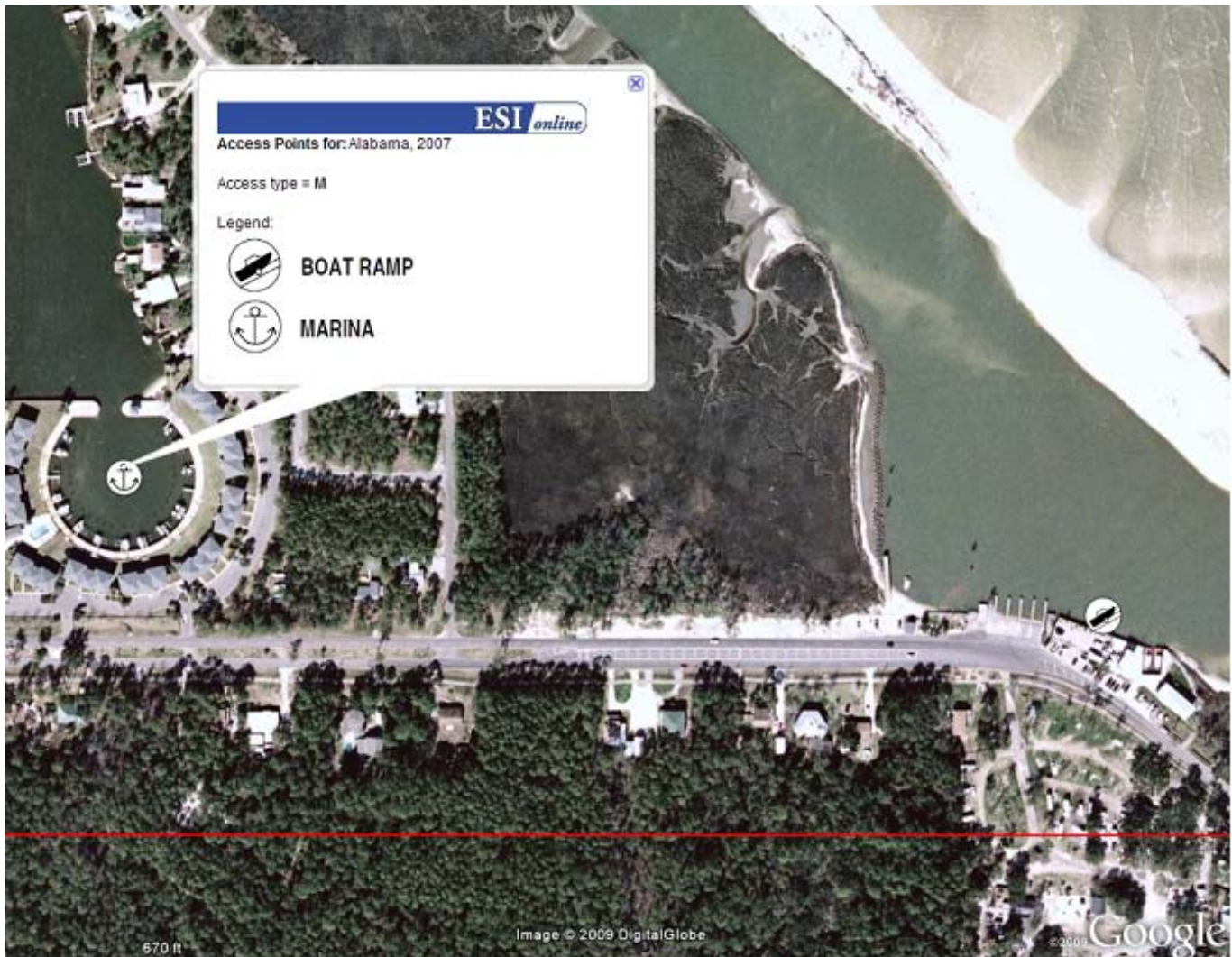
A single click on "ESI Shoreline" will display a description of that layer, links to various websites, as described above, and access to the training tutorial video. Expand the "ESI Shoreline" folder and double click on the ESI atlas of interest. Double clicking the atlas name will zoom to the complete extent of the selected atlas layer. The user can use the standard GE tools to zoom in and out or pan to any desired location. With "ESI Shoreline" active, click on the shoreline to display the ESI value of the shoreline selected (see below).

Access Points:

A single click on "Access Points" will display a description of that layer, links to various websites, as described above, and access to the training tutorial video. Expand the "Access Points" folder and double click on the ESI atlas of interest. Double clicking the atlas name will zoom to the complete extent of the selected atlas layer. The user can use the standard GE tools to zoom in and out or pan to any desired location. With "Access Points" active, click on the point (Icon) to display the access type (see below).
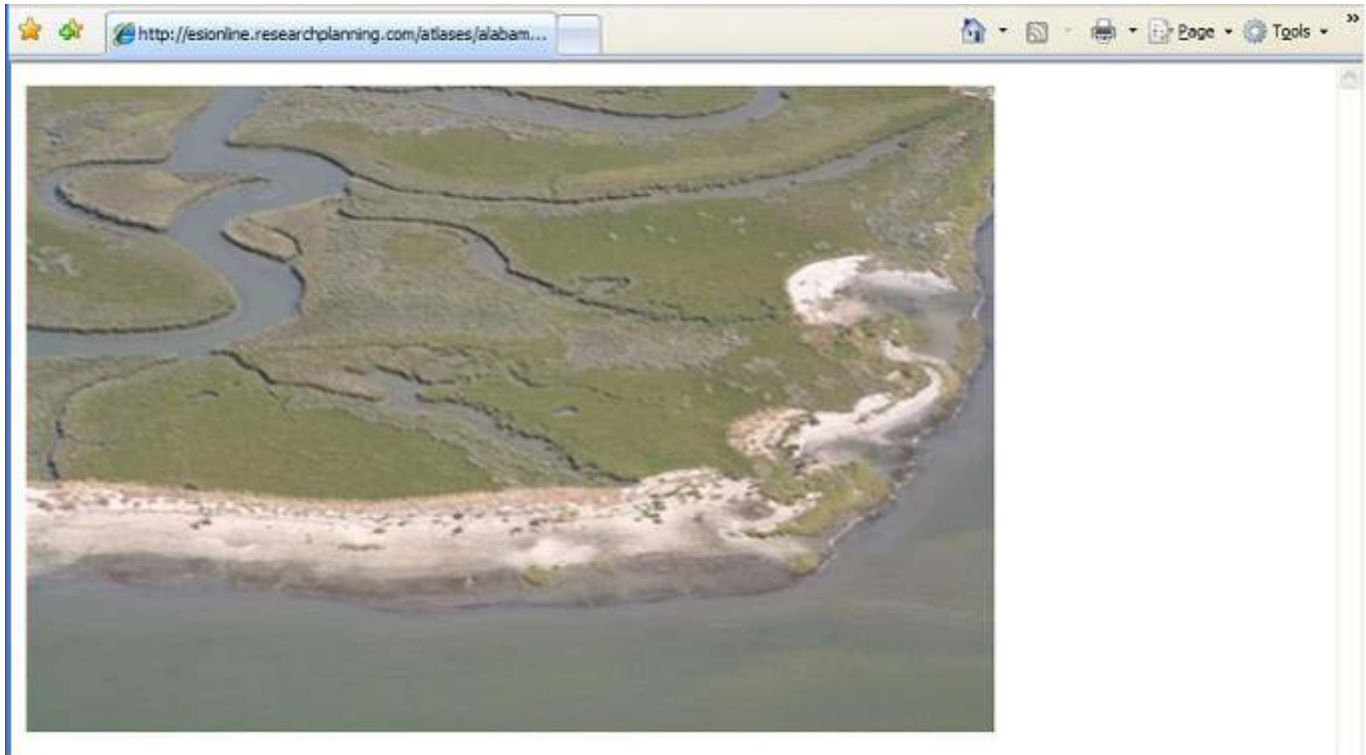
Oblique Photos:

A single click on "Oblique Photos" will display a description of that layer, links to various websites, as described above, and access to the training tutorial video. Expand the "Oblique Photos" folder and double click on the ESI atlas of interest. Double clicking the atlas name will zoom to the complete extent of the selected atlas layer. The user can use the standard GE tools to zoom in and out or pan to any desired location. As the user zooms in, small yellow dots that represent the flightline will appear. Zooming in closer, yellow arrows will appear that represent each oblique photo; More specifically, the direction of the arrow indicates the general direction of the camera lens for each oblique photo. With "Oblique Photos" active, click on the arrow to view a thumbnail of the oblique photo (see below).

Clicking on the thumbnail will open a larger, higher resolution image in the browesr (see below).

Thumbnail opened in internet explorer.

T/E Species:

A single click on "T/E Species" will display a description of that layer, links to various websites, as described above, and access to the training tutorial video. Expand the "T/E Species" folder and double click on the ESI atlas of interest. Double clicking the atlas name will zoom to the complete extent of the selected atlas layer. The user can use the standard GE tools to zoom in and out or pan to any desired location. With "T/E Species" active, click in the grid to display the number of T/E species that occur within the selected grid (see below).

Threatened and Endangered Species Count:
Alabama, 2007

Count = 13 ← Number of T/E species.

Legend (species counts):
0
1-3
4-6
7-9
10-12
13-15