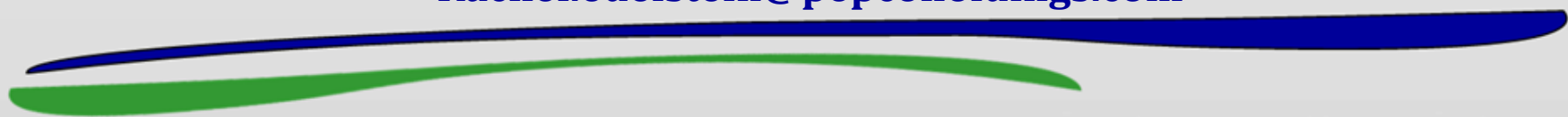


A VIEW FROM THE CLOUD

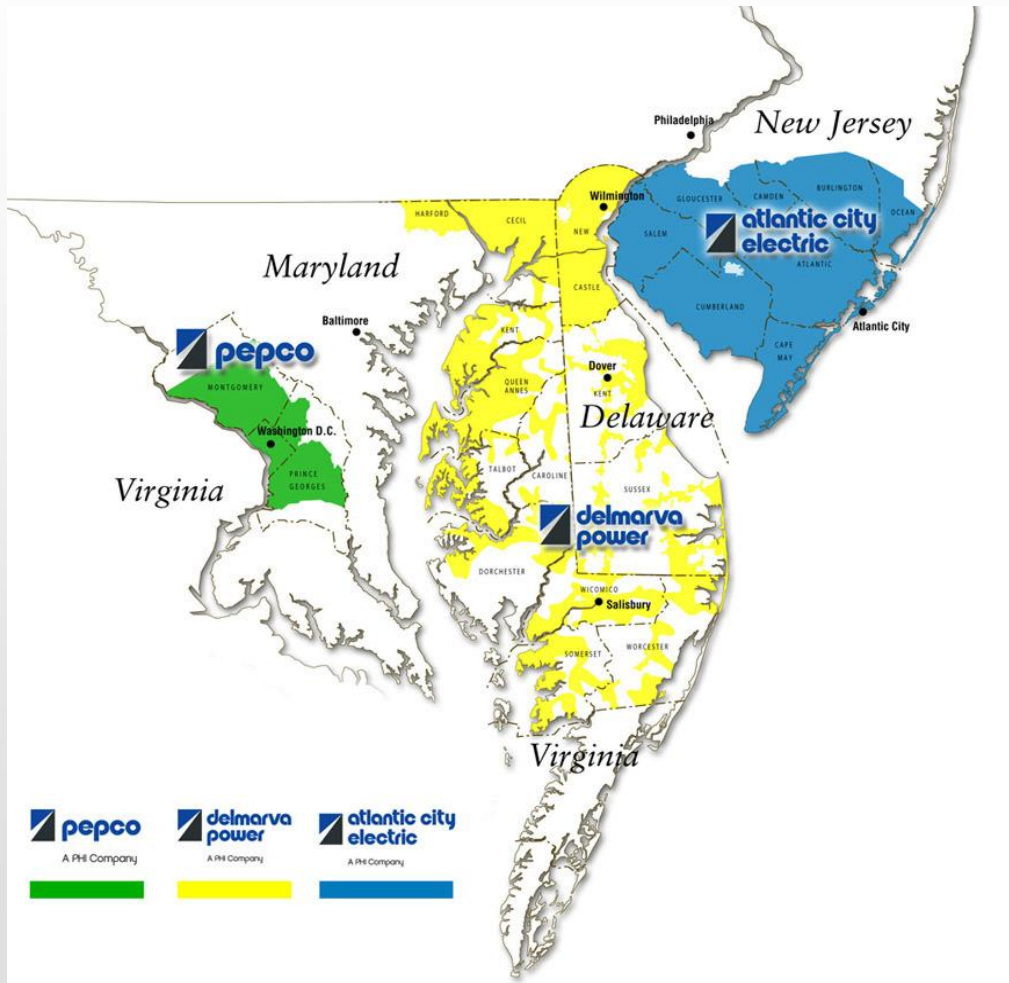
A Cloud-Based GIS Tool Simplifying Site Analysis for PHI



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About PHI



Atlantic City Electric

Customers: 547,000

Headquarters: Mays Landing, NJ

Delmarva Power

Customers: 498,000 (Electric)
123,000 (Natural Gas)

Headquarters:
New Castle Region - Wilmington,
DE

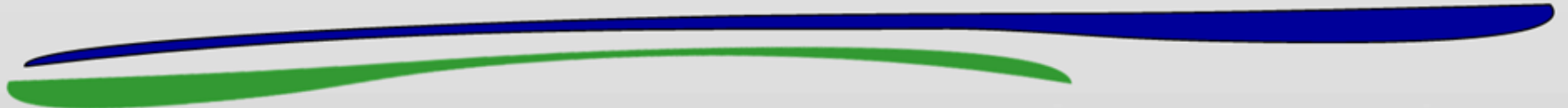
Pepco

Customers: 778,000

Headquarters: Washington, DC

PHI Environmental Policy

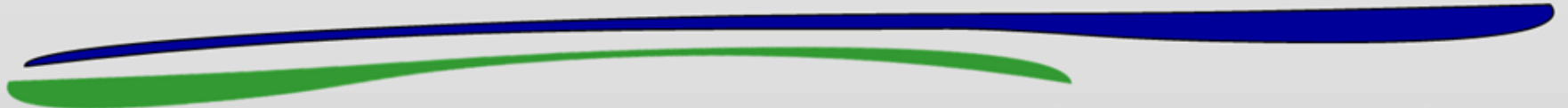
PHI is dedicated to conducting business activities with respect and care for the environment. We focus on providing safe, reliable, and affordable energy to our customers while striving to minimize environmental impacts that result from our operations.



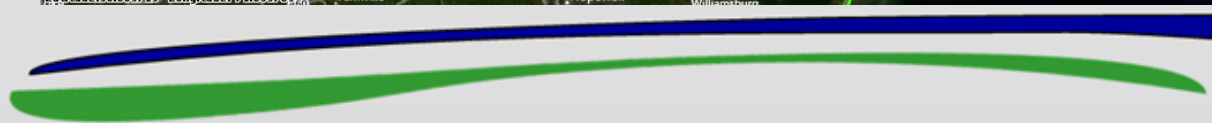
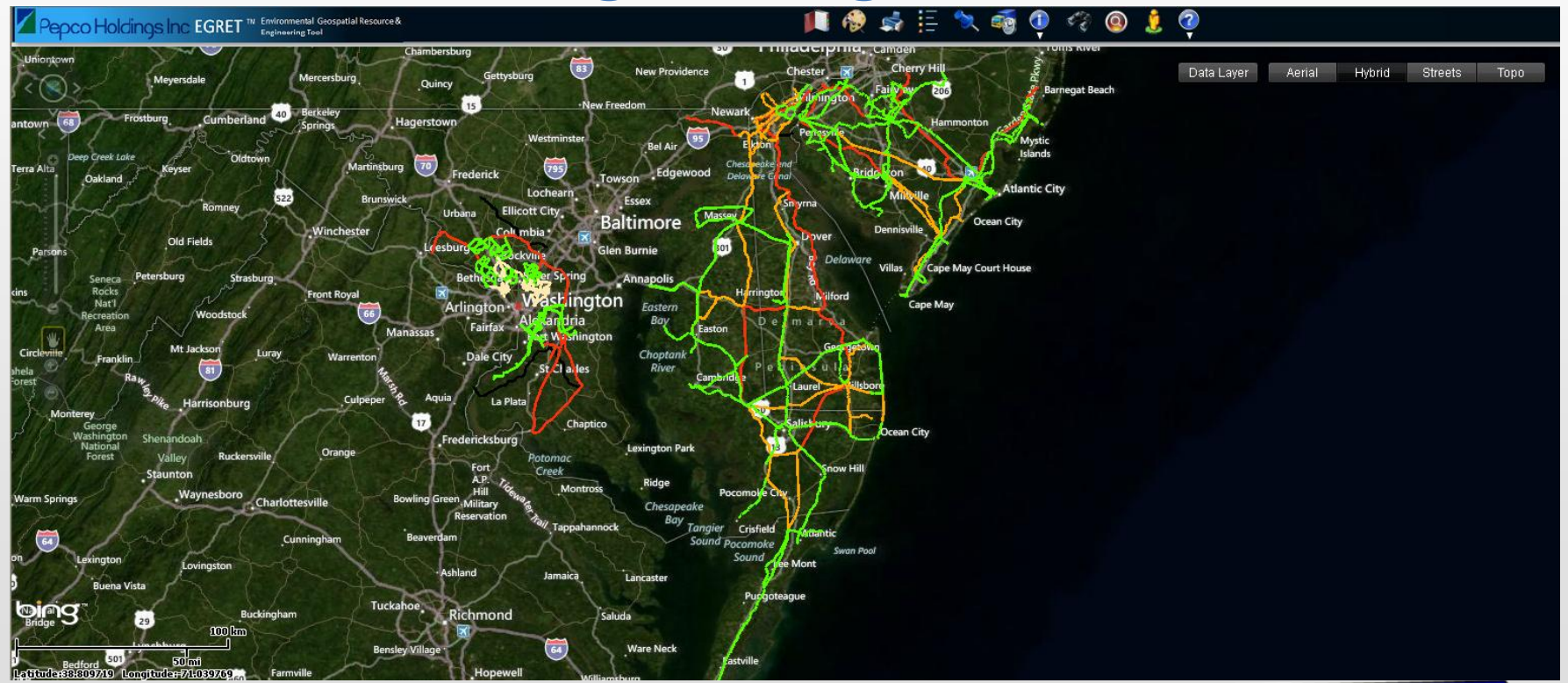
Environmental Planning



- Permitting and Licensing for Substation, Transmission, and Distribution projects
- Avoid and Minimize environmental impacts as practical
- Avian Protection Program
- Outreach programs
- Developed and manages the EGRET system used throughout PHI

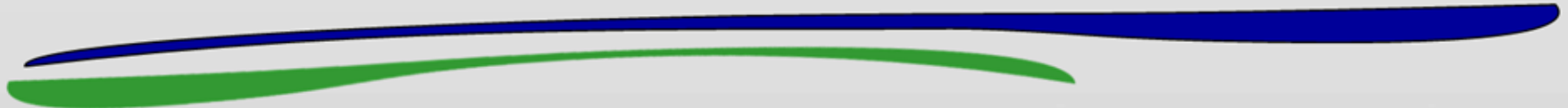


Environmental Geospatial Resource and Engineering Tool



How EGRET Works

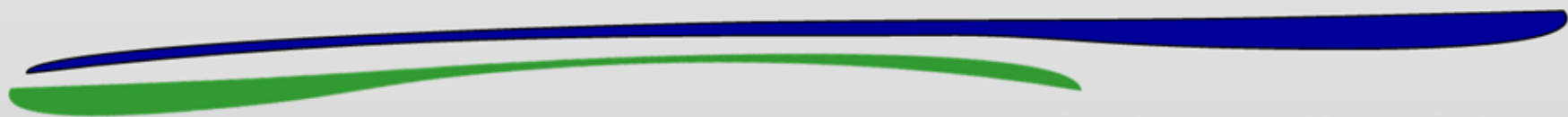
- Cloud-based GIS system
- Developed with help from Photo Science
- PHI provides Photo Science with survey data to be imported/uploaded
- Uses ESRI's ArcGIS managed by Photo Science staff
- Allows user to select layers to show on aerial map
- Features include:
 - Draw and Measure
 - Identify
 - Saving Projects
 - Printing Maps



Layers

The screenshot displays a GIS application interface. The main map area shows Cape May, NJ, with various utility lines and facilities overlaid on a satellite-style background. The legend on the right side of the map is expanded, showing the following layers:

- Facilities**
 - Office/Service Centers
 - Transmission Facilities**
 - Structures (Partial) (1:100,000)
 - Existing Substations (Point)
 - Proposed Substations (Point)
 - Substation Properties (Partial)
 - Centerlines
 - Transmission ROW (Partial)
 - Street Light (20,000)
 - Communication Towers (Partial)
 - Service Territory
- Distribution Facilities**
- Project Siting**
- Avian Risk Assessment**

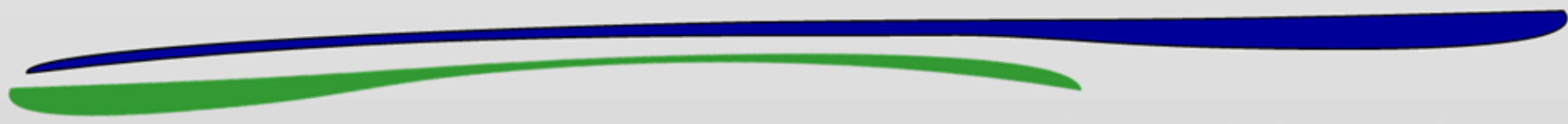


Layers

The screenshot displays a GIS application interface. The main map area shows a coastal region with various wetland layers overlaid in different colors (green, blue, purple). The map includes labels for locations like CORSON DENNIS, OCEAN VIEW, SEA ISLE, SWAINTON, COURT, PEERMONT, STONE HARBOR, MIDDLE RIO GRANDE, LAKE AVENUE, FERN, and CAPE MAY. The map is bordered by Delaware to the west and the Atlantic Ocean to the south. A toolbar at the top contains various navigation and tool icons. On the right side, a legend panel is open, showing a list of layers with checkboxes and expand/collapse icons. The legend is organized into a tree structure under the heading 'Data Layer'. The 'Wetland' layer is expanded, showing several sub-layers, most of which are checked. The 'National Wetland Inventory Data' layer is also visible at the bottom of the legend.

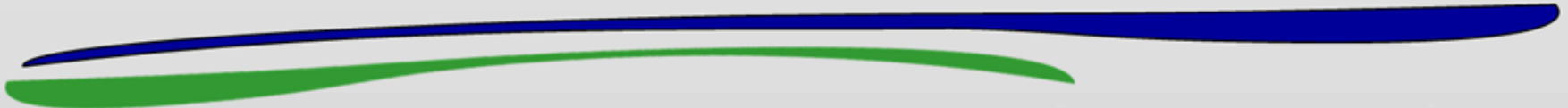
Legend:

- Wildlife
- Cultural Resources
- Wetland
 - PHI Surveyed Wetland Areas
 - Wetlands- DNR
 - Wetlands Of Special State Concern
 - Delaware Wetland Data
 - New Jersey Wetland Data
 - NJ Emergent
 - NJ Forested Wetlands
 - NJ Tidal Nonforested Wetland
 - NJ Nontidal Forested Wetland
 - NJ Nontidal Nonforested Wetland
 - NJ Unknown
 - National Wetland Inventory Data

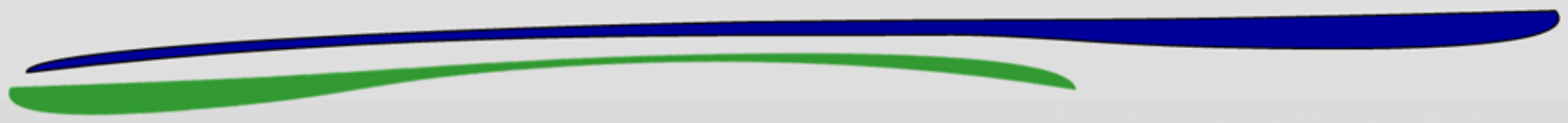
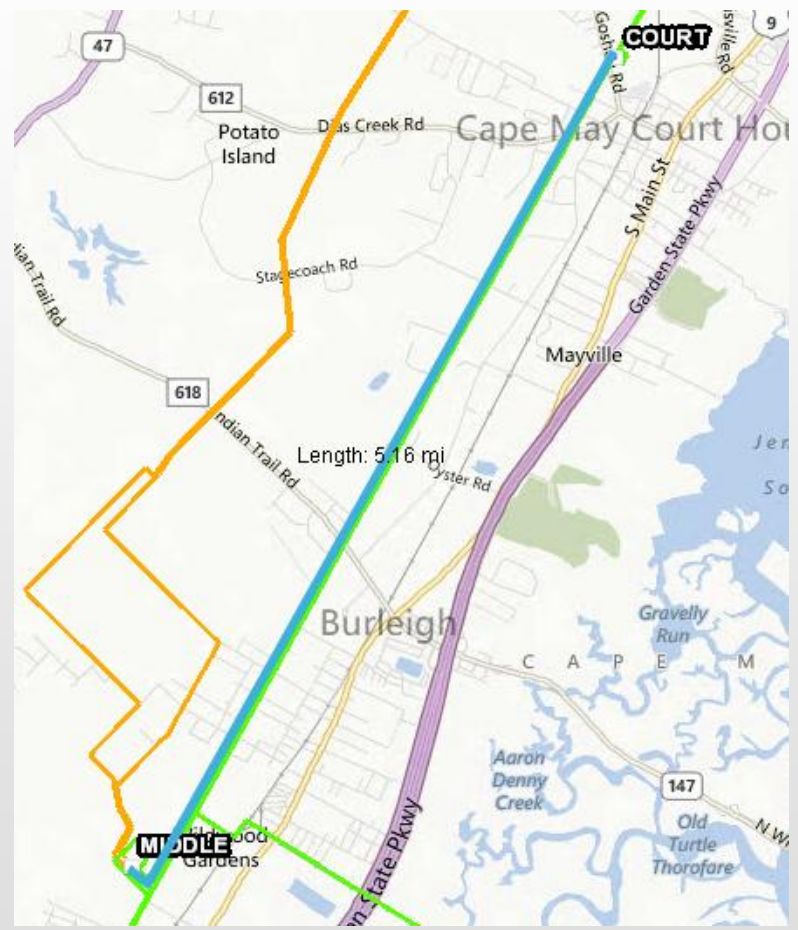


Draw and Measure

- Use text for later reference
- Save drawn layers
- Measure length and area
- Helpful to determine area of impact to determine permitting required
- Leads to alternative analysis recommendations to minimize environmental impacts

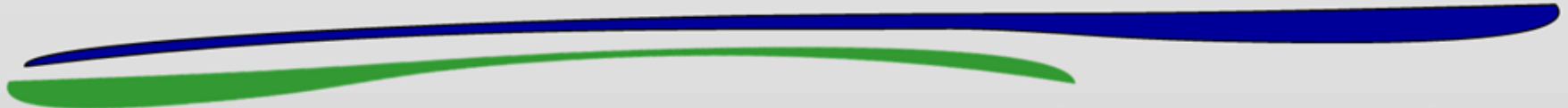
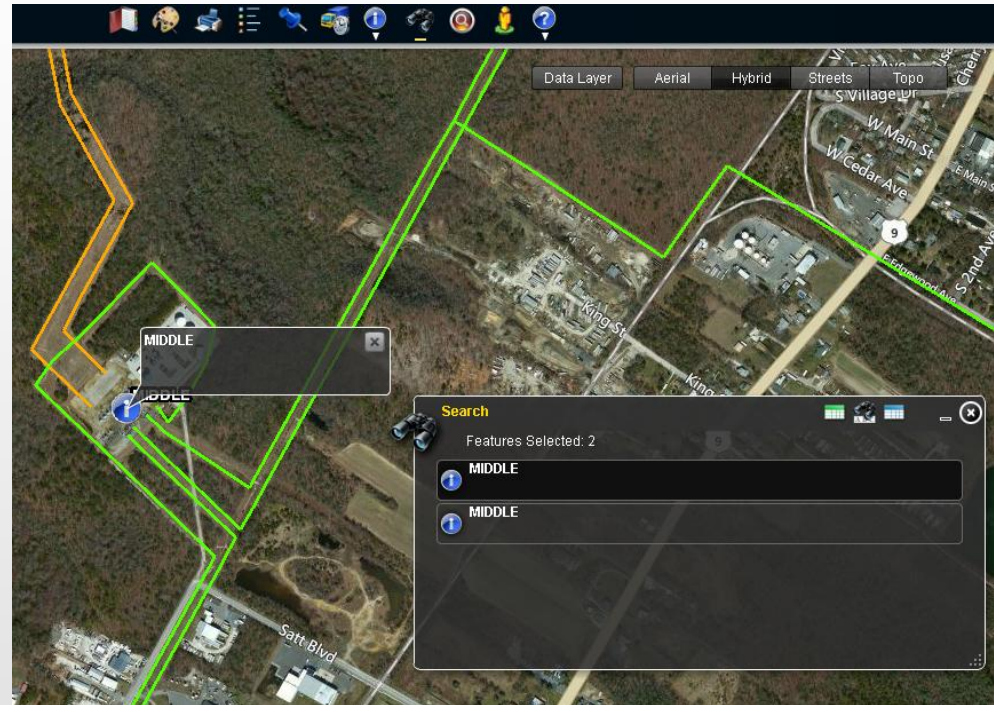


Draw and Measure



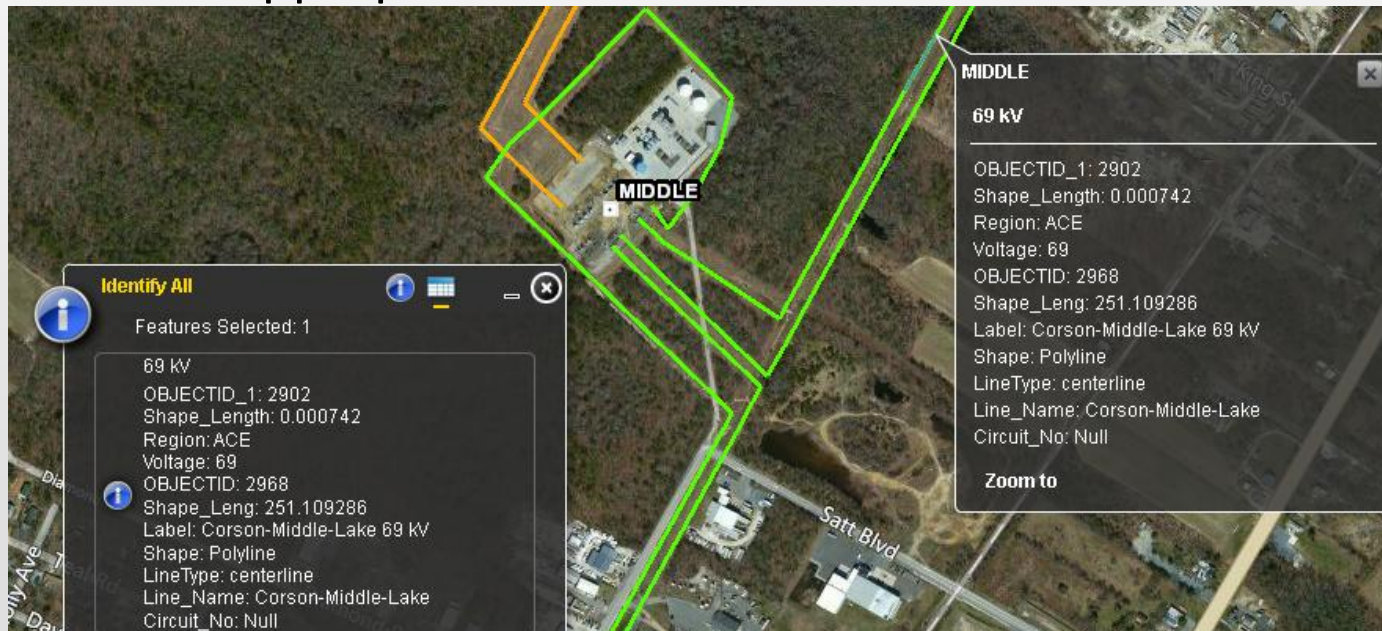
Search

- Ability to search for PHI substations, offices, transmission lines, etc.
- Rather than searching for an area, the EGRET system allows the user to fly there directly
- Immediately provide feedback about environmental concerns



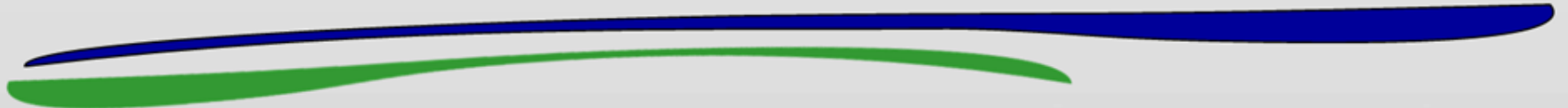
Identify

- Identify specifications about PHI infrastructure as well as environmental layers
- Identify several features simultaneously
- Ability to follow the ROW to find areas of concern and make appropriate recommendations



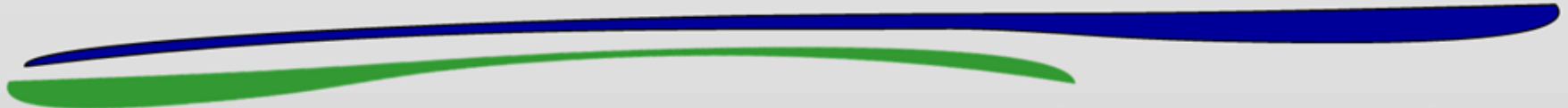
Saving and Printing

- Save drawn layers for later reference
- Save as .txt file that can only be opened in EGRET or as a Shape File to be opened in other GIS software
- Ability to e-mail and print saved project maps to share with agencies and project team
- Print maps with a title and description
- Quickly produce maps for regulatory agencies



Environmental and Natural Resource Protection

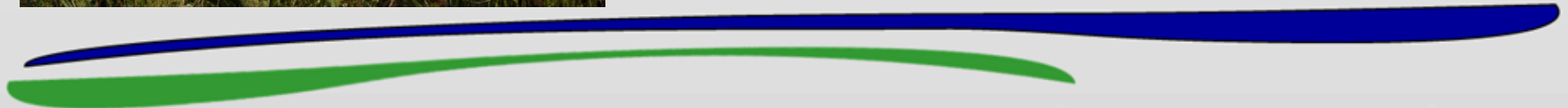
- Ability to aerially analyze potential environmental impacts that may result from a project
- Early analysis leads to minimization and avoidance of environmental impacts
- Proactive planning to address avian protection, particularly for transmission projects
- Avian protection layers uploaded from agency and PHI survey data



Environmental and Natural Resource Protection

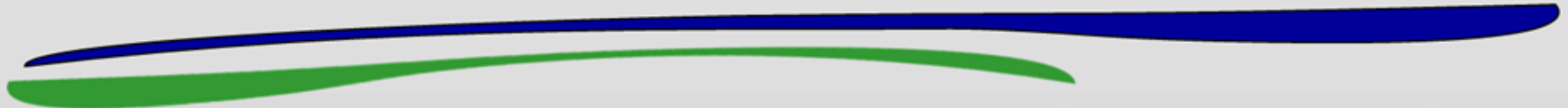
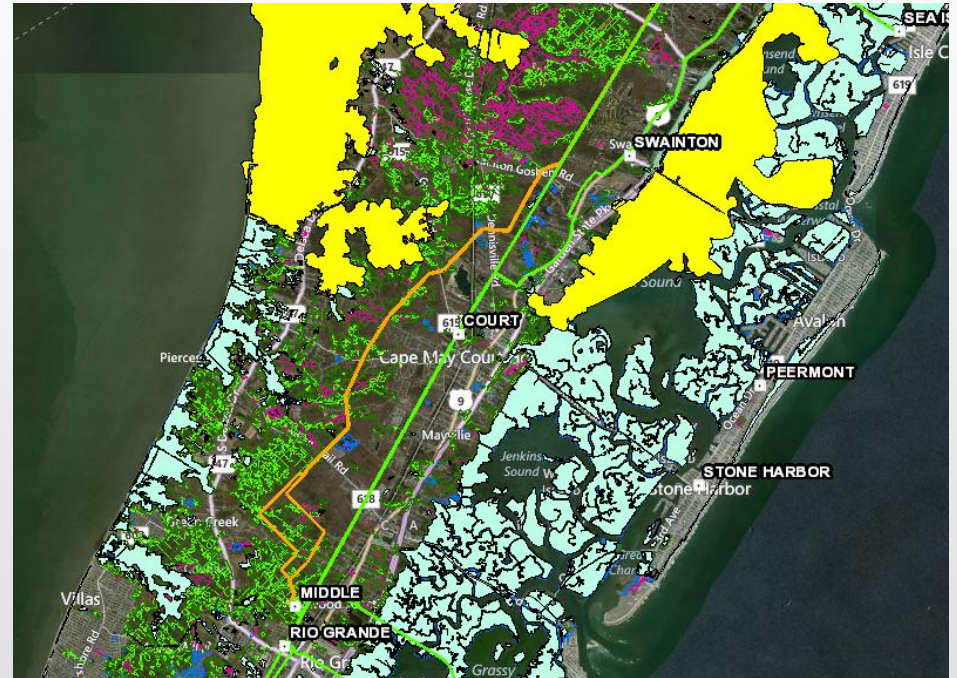


- Provides ability to identify avoidance and minimization efforts early in the planning process
- Leads to a more thorough and efficient environmental analysis to make recommendations and alternatives to projects
- Ultimately protect and enhance the environment



EGRET and PHI

- The cloud-based system allows users to access project information off-site
- Make preliminary determinations of permitting and licensing requirements
- GIS data contained in one system
- Widely used by Company personnel across PHI service territory
- Basis behind new Project Management tool



Questions?



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