

EISPC Energy Zones Mapping Tool: <u>http://eispctools.anl.gov</u>

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EISPC Energy Zones Mapping Tool Newsletter

March Webinar Demonstration:

Thursday, March 20, at 3pm ET/2 pm CT/1 pm MT

Use the following link to attend the webinar: http://anl.adobeconnect.com/eispc_tool_demo/ (Audio via the webinar or by phone: 1-877-685-5350, participant code: 853223). This demonstration will highlight the many reports in the tool and how they can be used for analysis.

Clean Energy Technology Spotlight: Natural Gas

The tool includes many resources for understanding and analyzing natural gas, including:

- <u>Technology Descriptions</u>
- Over 200 policies related to Natural Gas such as these policies in Indiana.
- Natural gas mapping layers, with access to downloadable GIS data, including:
 - Natural Gas Pipeline
 - o Shale Gas Basin
 - Shale Gas Plays
 - Domal Salt Formation
 - Bedded Salt Formation
- <u>Metadata</u> for all mapping layers describing the data sources and other details.
- User-run <u>reports</u> including:
 - Corridor
 - Pipeline
- User-configurable suitability <u>models</u> for New Combined-Cycle Gas Turbine (CCGT), Above Ground Natural Gas storage and Underground Natural Gas storage. The **default** suitability model results for Above Ground Natural Gas storage are displayed in this map.



March Mapping Tool Tips and Tricks

Reports can be run in several ways:

- Click Analyze, then click the Run This Report action for any report in the Reports section.
- Click Analyze, then click the Run this Report action for any of the reports.
- Click Areas/Corridors, create an analysis area or corridor, and then click the Run a Report on this Feature action.
- Click **Results**, then click the **Run Model Results Report** action for any model run.

All of the approaches above open the **Report Run Launcher** with the options preconfigured to fit the chosen action. Change any settings, then click **Launch Report**. Click **Results** to access report runs and view the finished reports.

Reports cover many different topic areas:

- Energy Infrastructure
 - Power Plants
 - Electrical Transmission
 - o Pipelines
- Energy Resource Study Results
 - o Demand-Side Resource
 - Existing Hydropower Dams
 - EPA Brownfields
 - Methane from Animal Manure Processing

- Methane from Landfills
- o Methane from Water Treatment Plants
- Non-Powered Dams
- o Pulverized Coal
- Pumped Storage
- o River and Tidal Hydrokinetic Project Permits
- Wave Energy
- Environmental
 - o Habitat
 - Imperiled Species
 - Protected Lands
- Model Results

Other report tips:

- Many of the graphs are interactive. Click the legend items to turn them on and off.
- Green section titles in the reports usually correspond to layers in the mapping catalog.
- Metadata for report data sources is accessible from the source data links.

See the tool <u>Help Manual</u> or help videos such as <u>Running a Report</u> for more details in using the tool. These are available at the top right of the <u>Home Page</u>.

Analysis Highlight: Habitat Data

In the tool, a habitat screening layer is included in the default models for all nine clean energy resource types. The habitat screening layer is a composite made up of over 75 individual datasets. An Environmental Focus Group (EFG) was created to determine the appropriate environmental spatial data to include in the habitat composite screening layer. The EFG included subject matter experts from federal and state agencies, environmental non-governmental organizations (NGOs), and industry stakeholders.

In order to create the composite habitat screening layer, a three-tier sensitivity categorization utilizing orange, yellow, and background was applied to each individual dataset. These sensitivity categorization levels (see graphic) for clean energy resource development are defined as follows:

- Orange (Develop with extreme caution): Areas where development would likely pose a high risk to important habitat;
- Yellow (Develop with caution): Areas where development would likely pose a moderate risk to important habitat; and
- Background (Likely low conflict area): Areas where development would have the lowest impact on habitat.



A Habitat Report can be run on an area of interest to identify potential environmental conflicts. The report summarizes the total area falling within each habitat sensitivity category, and lists details from each individual dataset that contributed to the composite map in that location. The cited individual datasets can then be added to the map and queried for more details, and links under each table in the report connect to metadata for the individual dataset.

Including high-quality habitat data in the EZ Mapping Tool allows environmental factors to be incorporated and considered at the beginning of the planning process to reduce the risk of public opposition, regulatory intervention, and litigation later in the development process. The tool also includes similar modeling layers, data content, and reports for protected lands and imperiled species.

Section 4 of the <u>final report for the EISPC Energy Zones Study</u> further describes the methodology for the composite environmental modeling layers in the tool, and Appendix D provides details about each input habitat dataset and how sensitivity was categorized.

Recent EZ Mapping Tool Updates

- Added biomass modeling data layers and 12 new biomass models
- Added **pipeline** and **EPA brownfields** reports
- Updated Natural Gas Pipeline, Refined Product Pipeline, and Crude Oil Pipeline data layers (Existing and Planned)
- Updated Corridor, Habitat, and Protected Lands reports
- Updated Help Manual and added new Help Videos