EISPC Energy Zones Mapping Tool Newsletter

November Webinar Demonstration:

Wednesday, November 19, at 3pm ET/2 pm CT/1 pm MT
Use the following link to attend the webinar: [http://anl.adobeconnect.com/eispc_tool_demo](http://anl.adobeconnect.com/eispc_tool_demo)
(Audio via the webinar or by phone: 1-877-685-5350, participant code: 853223).
This one-hour demonstration will highlight the corridor analysis capabilities currently in the tool, and the planned corridor enhancements will be described.

Planned Updates for Energy-Water Data and Analysis

Addition of energy-water and climate change data, and related reports, to the Energy Zones Mapping Tool has been funded by the U.S. Department of Energy's Office of Electricity Delivery and Energy Reliability, including:

- Power plant water use data,
- 2014 National Climate Assessment data, and
- Water Availability, Cost, and Future Demand data.

Two Advisory Groups Being Formed

- A voluntary Energy-Water Focus Team is being formed to review the plans and provide feedback about the new corridor analysis tools as they are developed. Subject-matter experts with experience in the many connections between energy production and water, climate change, and the data listed above are especially welcome.
- A similar Corridor Focus Team will review the plans and provide feedback about the new corridor analysis tools as they are developed. Subject-matter experts with experience in the factors that most significantly influence corridor routes, available GIS data associated with those factors, and challenging conflicts such as crossing National Trails, are needed.

Participation in either the Corridor Focus Team or Energy-Water Focus Team will include e-mail discussion and several teleconferences. **To be considered for either team, e-mail eispctools@anl.gov** by November 14, 2014. In the message, indicate which team you are
interested in, your organization name, and provide a short bio about your relevant expertise and interests.

Clean Energy Technology Spotlight: Hydropower

The tool includes many capabilities for understanding and analyzing hydropower, including:

- **Technology Descriptions** for Geothermal technologies.
- Over 200 policies related to Hydroelectric Power such as these policies in Connecticut.
- Pre-made PDF maps, such as this map of Hydropower Resources: Tidal Kinetic Power Density.
- Hydroelectric Energy mapping layers, with access to downloadable GIS data, including:
  - Energy Potential of Non-Powered Dams
  - Existing Hydropower Dams
  - Sites with issued and pending permits for hydrokinetic projects
  - Dams and Locks
  - Wave energy
  - Tidal energy: Current speed, and Power Density
- **Metadata** for all mapping layers describing the data sources and other details.
- User-run reports to identify existing non-powered dams with the potential to generate at least 1 MW of power within a specified area and other information.
- Reports, including:
  - Potential Installed Capacity of Non-Powered Dams
  - Hydropower Dams with Potential for Efficiency Improvements
  - River and Tidal Hydrokinetic Project Permits
  - Wave Energy
- A user-configurable suitability model for Marine Tidal Hydrokinetic energy generation.
- Links to other web-based hydropower resources, including the NREL Marine and Hydrokinetic Atlas, and the Georgia Tech Tidal Power Web Application.

Recent White Paper: Applications of the Energy Zones Mapping Tool

The *Applications of the Energy Zones Mapping Tool* White Paper prepared by the Illinois Institute of Technology includes 20 examples using the EZ Mapping Tool in electricity transmission corridor evaluations. The White Paper also assesses processes, benefits, and potential obstacles for using the tool to evaluate transmission planning options, including those potentially crossing environmentally sensitive areas such as national trails or protected


**Recent EZ Mapping Tool Updates**

The user interface was upgraded to improve system performance. The improvements resolve slow loading of the Library, Areas/Corridors, Analyze, and Results dialogs. Also, the Biodiversity and Wildlife Habitat Assessment (NC) layer was updated in the mapping library.

All of the suitability models and many of the model layers have been revised to match the updated mapping library layers available in the tool. The pre-computed default model runs that are accessible in the Results window of the tool were also updated. Updated model layers include:

- Existing transmission lines (several capacity levels)
- Planned transmission lines (new layer)
- Existing natural gas pipelines
- Planned natural gas pipelines (new layer)
- 100-year flood plains
- Ports
- Airports
- Land cover
- Habitat
- Protected areas
- Imperiled species

*This message is being sent to registered users of the EISPC Energy Zones Mapping Tool (http://eispctools.anl.gov) who indicated in their profile they are interested in e-mail updates. If you are no longer interested you can log in and change this preference by using the Profile option under the My Account menu at the top right of the home page, or simply reply to this message with a request to unsubscribe to the updates.*