

Enhancing the Understanding of Environmental Effects of Wind Energy



<https://tethys.pnnl.gov/>

Tethys is a publicly accessible online knowledge base that facilitates the exchange and dissemination of information on environmental effects of renewable energy development, including wind energy.

Tethys supports the wind community by facilitating the knowledge sharing needed to advance wind energy development in an environmentally responsible manner. *Tethys* has been developed to provide researchers, regulators, project developers, and other stakeholders with information and research findings that can support siting, permitting processes, management decisions, and operational strategies while minimizing risk to the environment.

Tethys hosts scientific papers, reports, and other media; creates a collaborative space for researchers, wind developers, regulators, and other stakeholders; and provides a central location for archived webinars, listing of events, contacts for individuals and organizations, and links to related databases.



TETHYS KNOWLEDGE BASE AND MAP VIEWER

Tethys hosts over 3,600 documents pertinent to the environmental effects of wind energy. There are several pathways by which users can find content to suit their needs. Documents available in the *Tethys* Knowledge Base can be easily filtered by content type (e.g., journal article, conference paper), technology type (land-based or off-shore wind), or specific environmental effect (such as bat collisions). Documents that are geotagged can also be found by location on the *Tethys* Map Viewer.





WREN

WREN (Working Together to Resolve Environmental Effects of Wind Energy) is a collaborative initiative of 12 countries under International Energy Agency Wind established in 2012 to address the environmental issues associated with wind energy development. *Tethys* acts as a collaborative space for WREN, hosting white papers, short science summaries, and webinars. Visit <https://tethys.pnnl.gov/about-wren> for more information on WREN activities and products.

WREN WEBINARS

WREN hosts a series of webinars to disseminate new research findings and collaborative efforts to understand wind and wildlife interactions for an international audience. Visit <https://tethys.pnnl.gov/environmental-webinars> to view archived webinars.

WREN WHITE PAPERS

WREN publishes white papers that investigate wind and wildlife topics that are not addressed within the existing literature. Specifically, the white papers focus research findings to support management of wind energy development, to promote discussion of these issues within the wind community, and to support improved outcomes for wind and wildlife interactions. WREN white papers include topics related to:

- ◆ Adaptive Management
- ◆ Individual to Populations
- ◆ Risk-Based Environmental Management

TETHYS BLASTS

Tethys Blasts are bi-weekly newsletters that highlights new documents on *Tethys*; relevant announcements, opportunities, and upcoming events; and news articles of international interest. Visit <https://tethys.pnnl.gov/tethys-blasts/join> to join the mailing list.

TETHYS STORIES

Tethys Stories are short write ups that provide insight into advancing the energy industry in an environmentally responsible manner, contributed from individuals working in the field. The stories feature information on new projects, interesting research findings, and international collaborations relevant to wind and marine renewable energy development activities.



FOR MORE INFORMATION

Visit <http://tethys.pnnl.gov> for a robust collection of papers, reports, archived presentations, and other media on wind energy development.

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