



Collecting and Disseminating Environmental Effects Research to Support the Marine Renewable and Wind Energy Industries

2018 UPDATE

The *Tethys* knowledge management system, launched in 2012, provides information on environmental effects of marine renewable (such as wave and tidal) and wind (land-based and offshore) energy to support a growing user community. To view *Tethys* go to <https://tethys.pnnl.gov>

TETHYS CONTENT

Tethys content is regularly updated with recent research that has the potential to progress the marine renewable energy (MRE) industry in an environmentally responsible manner. The *Tethys* Knowledge Base provides access or links to thousands of publications including journal articles, reports, and other media to reflect the current state of knowledge on environmental effects. *Tethys* also hosts a suite of archived webinars, metadata information on MRE projects and research studies worldwide, expert forums to discuss technical challenges, *Tethys* stories, and *Tethys* Blast newsletters on MRE findings, events, and industry news. The content of *Tethys* is curated to ensure the content is up to date, searchable, and easily accessible to the international MRE community.

2.63 AVERAGE PAGES/SESSION
 1,523 ORGANIZATIONS 48 TETHYS STORIES
 2,530 GEOTAGGED DOCUMENTS
 692,227 PAGEVIEWS
 191,682 USERS 288 EVENTS
 5,620 DOCUMENTS 42 WEBINARS
 29 REGULATORY FRAMEWORKS
 757 USER ACCOUNTS 124 TETHYS BLASTS
 158 ANNEX IV METADATA FORMS
 219 COUNTRIES VISITING

TOP PAGES ACCESSED BY USERS IN 2018 (PAGEVIEWS)

1. Home page (8,339)
2. Mutriku Wave Power Plant (2,006)
3. 11th International Conference Sustainable Energy and Environmental Protection SEEP 2018 (1,925)
4. La Rance Tidal Barrage (1,889)
5. Roosevelt Island Tidal Energy Rite Project Demonstration (1,610)
6. About *Tethys* (1,494)
7. Knowledge Base (1,486)
8. Sihwa Tidal Power Plant (1,413)
9. About WREN (1,366)
10. University California Los Angeles UCLA (1,297)

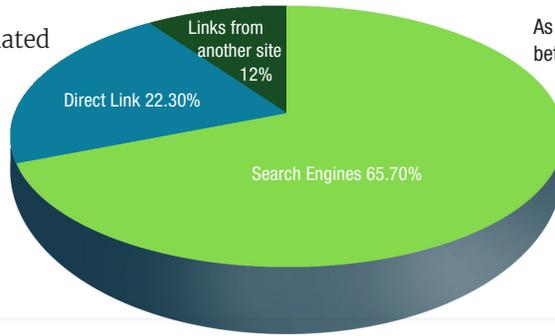
To track the relevance and usefulness of *Tethys* content, metrics are used to judge the specific uses of *Tethys*. For example, pageviews is a measure of overall use of the site.

Tethys has been developed specifically for these uses:

- ◆ **MRE Project Developers** can view research findings to assist with siting renewable projects while minimizing risk to the environment;
- ◆ **Regulatory Agency Staff** will find support for permitting processes and natural resource management decisions to assist with streamlining the permitting process;
- ◆ **Stakeholders** may be interested in the industry or in a proposed project's location and/or associated environmental studies; and
- ◆ **Researchers** can easily sift through relevant environmental documents to plan research studies and identify important gaps in knowledge.

GROWTH AND CONNECTEDNESS OF TETHYS

Since 2012, *Tethys* has collected and disseminated information on the environmental effects of MRE and wind energy, growing each year. *Tethys* is extensively used in many countries throughout the world and continues to be widely recognized in countries pursuing MRE development.

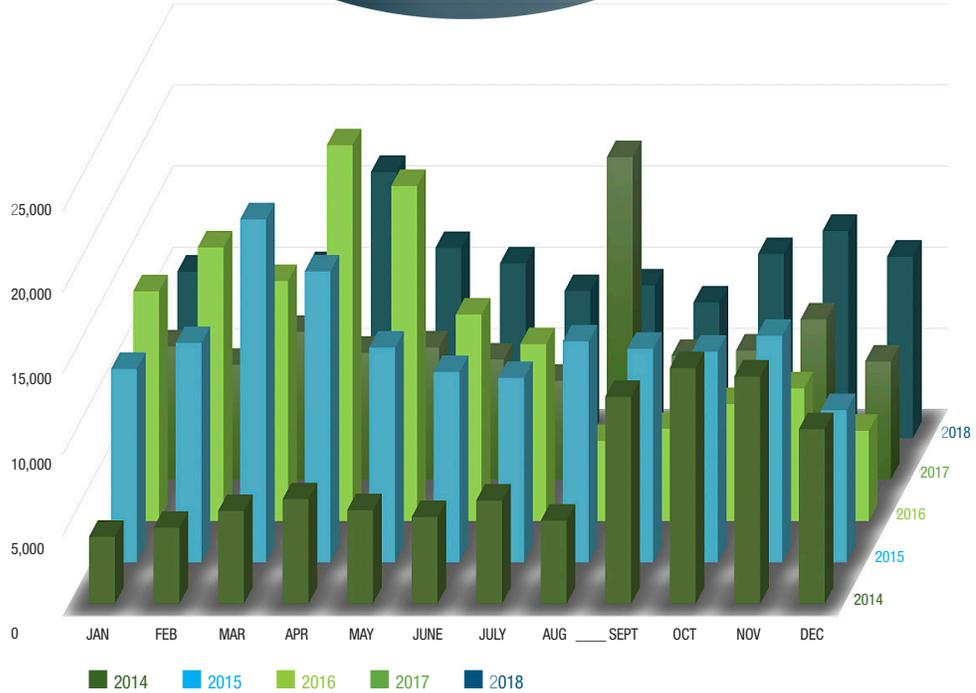


FINDING TETHYS

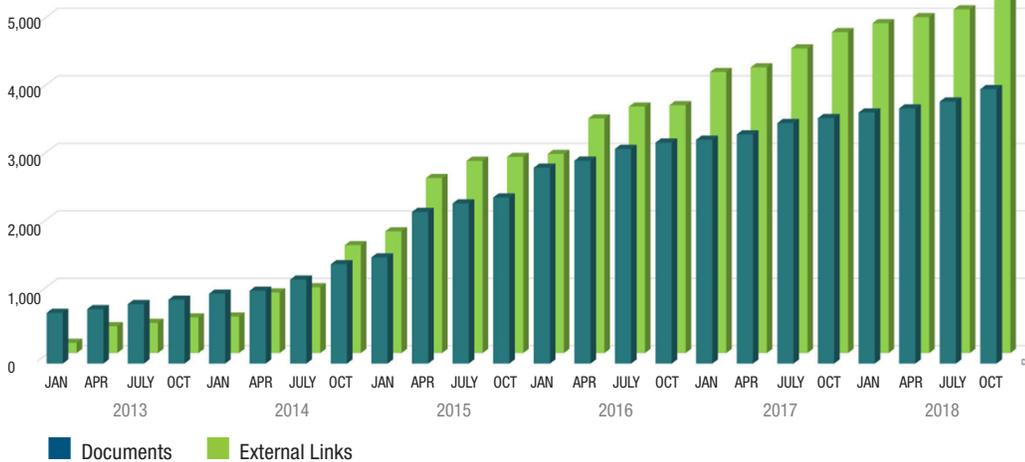
As *Tethys* grows and has become better known, users find their way to *Tethys* from several different entry points: search engines; links and bookmarks within online documents including *Tethys* Blasts; external websites; and social media.

PAGEVIEWS BY MONTH AND YEAR

Pageviews are a good measure of use of the site, representing how many people visit the website and the specific focus of their interest. This 3-D plot showcases the growth in *Tethys* use from 2014-2018, as the content has increased and the site has become better known. Between 2014-2018 monthly pageviews show seasonal trends that peak in spring and fall, perhaps mirroring increased use by educational institutions. (Data normalized by days per month)



NUMBER OF DOCUMENTS AND EXTERNAL LINKS ON TETHYS (2013-2018)



The content of *Tethys* has grown significantly since 2012 and continues to expand and connect users to the most relevant and up to date information on MRE environmental effects. Although *Tethys* contains over 4,700 documents, each one is hand-selected for its relevance to the environmental effects of MRE. Additionally, as the *Tethys* collection increases users are directed to an increasing number of resources, demonstrating the connectedness of the site and the wide variety of information available to *Tethys* users.

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