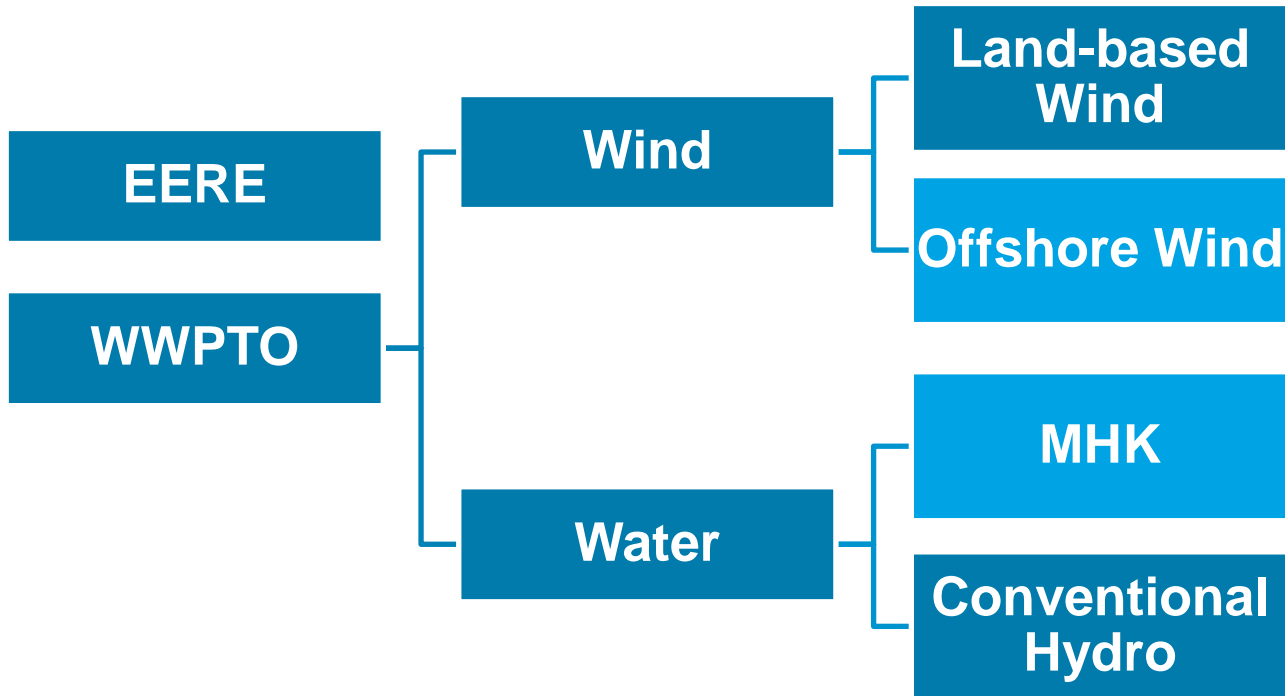


International Ocean Renewable Energy Environmental Information Sharing Partnerships

Jocelyn Brown-Saracino
New West Tech. LLC in support of:
US Department of Energy
Wind and Water Power Technologies
Office



- **Goals:**
 - Compile information from monitoring and mitigation efforts around deployed wave and tidal energy devices from around the world;
 - Develop and populate a publicly accessible database to house this information; and
 - Disseminate information and metadata to marine energy researchers, developers, and regulators
- **Annex IV: Phase 1 2010-2012:**
 - Publicly accessible *Tethys* knowledge base including papers and “metadata” about ongoing research and monitoring
 - Final Annex IV report
- **Annex IV Phase 2 2013-2016**
 - Update and maintain Tethys collection
 - Workshops & quarterly webinars
 - International Annex IV Conference
 - State of the Science Report
- **Partners**
 - US: DOE, FERC, BOEM, NOAA
 - Phase 1 International Partners: Canada, Ireland, Spain, New Zealand, Norway, South Korea
 - Phase 2 International Partners: Ireland, Canada, Spain, New Zealand, Norway, Portugal, South Africa, Chile, and United Kingdom





[Register](#) [Login](#)

[Search](#)

[HOME](#) [ABOUT](#) [TETHYS CONTENT](#) [CONNECTIONS](#) [BROADCASTS](#) [BLOG](#) [HELP](#)

EIMR International Conference 2014 will be held in
Stornoway, Scotland on 30th April to 2nd May 2014
- www.eimr.org



Environmental Effects of Renewable Energy from the Sea

[Welcome to Tethys](#)

[What is MHK?](#)

[What is Annex IV?](#)

[What is Offshore Wind?](#)

As industry, academia, and government seek to develop new renewable energy sources from tides, waves, and offshore wind, potential environmental effects must be evaluated and measured to ensure that aquatic and avian animals, habitats, and ecosystem functions are not adversely affected, nor that important coastal and ocean uses are displaced.



Tethys is a knowledge management system that gathers, organizes, and provides access to information on the environmental effects of marine and hydrokinetic (MHK) and offshore wind development. This information is made available by collaboration at local, national, and international levels. Tethys, named after the mythical Greek titaness of the seas, supports programs at the U.S. Department of Energy's [Wind](#) and [Water](#) Power Technologies Office.

Tethys also supports a growing community of MHK and offshore wind researchers, regulators, and developers through outreach and communication channels including the [Tethys blog](#), links to pertinent [research institutions](#), other

Featured Links

[EIMR International Conference 2014](#)
[Final Annex IV Report 2013](#)
[New Features](#)
[Contributing to Tethys](#)

Recently Added

[Environmental Life Cycle Assessment of...](#)
[Modeling of in-stream tidal energy...](#)
[Marine Mammal and Seabird Data](#)
[Marine Data Exchange](#)

Recent Blog Articles

[Whale Interactions with Wave Device...](#)



[Register](#) | [Login](#)

[HOME](#) [ABOUT](#) [TETHYS CONTENT](#) [CONNECTIONS](#) [BROADCASTS](#) [BLOG](#) [HELP](#)

[Home](#) » [Noise](#) » [Marine Mammals](#) » [Knowledge Base](#)

Knowledge Base

The Knowledge Base compiles relevant documents, Annex IV metadata forms, and U.S. permitting sites into one table. Columns may be sorted alphabetically by clicking on the headers, while results can be narrowed by keyword searches and by selecting values in the boxes to the right. Learn more about the filtering [here](#). More entries will load as you scroll down.

Tethys Map Viewer

[Clear All Filters](#)

| Title | Author* | Date** | Type of Content | Technology Type | Stressor | Receptor | Project |
|--|----------------------|---------------|-----------------|--------------------|--|--|---------|
| Cobscook Bay Tidal Energy Project: 2013 Environmental Monitoring Report | ORPC Maine LLC | March 2014 | Report | Tidal | Dynamic Device, Energy Removal, Noise | Farfield Environment, Fish, Invertebrates, Marine Mammals, Nearfield Habitat | Tethys |
| Responsible Practices for Minimizing and Monitoring Environmental Impacts of Marine Seismic Surveys with an Emphasis on Marine Mammals | Nowacek, D., et. al. | November 2013 | Journal Article | MHK, Offshore Wind | Noise | Marine Mammals | Tethys |
| Marine Renewable Energy: A Global Review of the Extent of Marine Renewable Energy Developments, the Developing Technologies and Possible Conservation Implications for Cetaceans | James, V. | November 2013 | Report | MHK, Offshore Wind | Chemical Leaching, EMF, Noise, Static Device | Marine Mammals | Tethys |

Current search

Search found 139 items

- (-) Noise
- (-) Marine Mammals

Text Search

Tethys Text Search finds items containing the exact words entered, in any order. Phrases can be searched using quotations.

Content Type



[Register](#) | [Login](#)

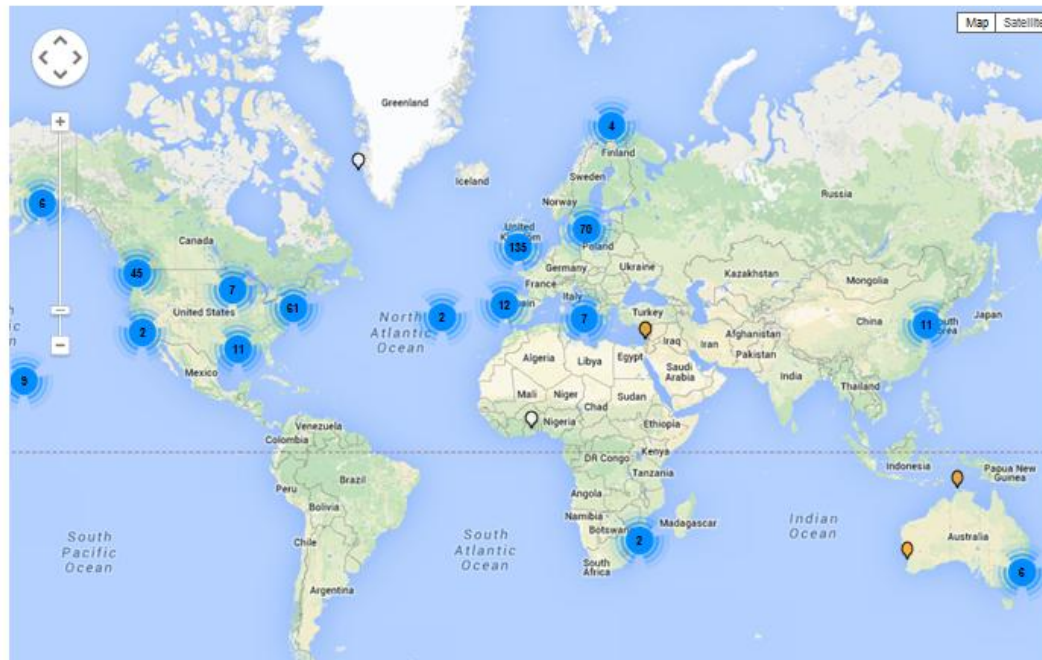
[HOME](#) [ABOUT](#) [TETHYS CONTENT](#) [CONNECTIONS](#) [BROADCASTS](#) [BLOG](#) [HELP](#)

[Home](#) » [Tethys Content](#) » [Map Viewer](#)

Map Viewer

The Map Viewer compiles documents, U.S. permitting sites, and international Annex IV project sites and research studies that are associated with a geographic location. This view allows panning and zooming, while results can be narrowed by keyword searches and by selecting values in the boxes to the right. Learn more about the filtering [here](#). Clicking on a bubble will open a dialogue box with more information that links to the document page.

Tethys Knowledge Base



[Clear All Filters](#)

Current search

Search found 396 items

Text Search

Tethys Text Search finds items that contain all the words entered, in any order. Exact phrases can be searched using quotations.

Legend

- Documents (269)
- Project Site Annex IV (81)
- Research Study Annex IV (28)
- Permitting Site FERC (18)

Closely-packed items are clustered together. Clicking on the cluster allows you to navigate individual items. You may zoom in to make smaller clusters.

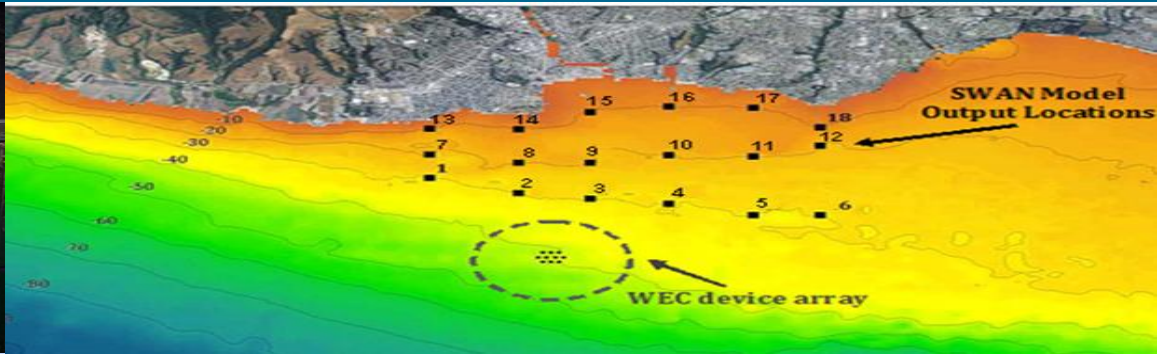
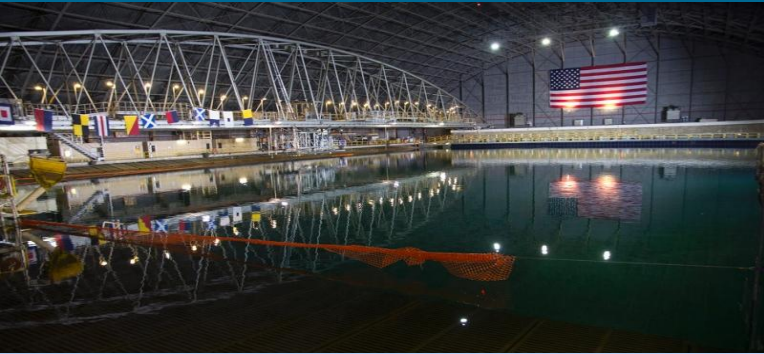
Collection

- Tethys (219)
- Annex IV (177)

Technology Type

Assessment of Environmental Effects and Monitoring Efforts for Wind Energy Systems in the Offshore and Land-Based Setting

- Objective:
 - Facilitate international collaboration to advance the global understanding of environmental effects of offshore and land-based wind energy development.
- Performance Period: May 2013-May 2016
 - Develop “hub” for information sharing
 - Draft one or more white papers on issue of common concern
- Partners
 - US: DOE, FWS, BOEM, NOAA
 - International Partners: Germany, Netherlands, Norway, Sweden, and Switzerland



Thank you!

For further information:
jocelyn.brown-saracino@ee.doe.gov