

Tethys and Annex IV Quarterly Report Q3 FY2013
Pacific Northwest National Laboratory
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The purpose of this document is to report on the *Tethys* and Annex IV activities carried out within Q3 of FY 2013. A majority of the *Tethys* and Annex IV activities in Q3 consisted of data and metadata collection for the knowledgebase. Both the *Tethys* and Annex IV milestones are discussed in the report, including an update on the *Tethys* Metrics and Goals for Q3. Several discussions and meetings were also held to discuss the future use of Semantic-Media Wiki as the main platform for the site, which is further discussed in the Highlights and Key findings section.

Milestones

Tethys (MHK and OSW)

Q3 Milestone: Annual peer review of *Tethys* completed by a minimum of five experts drawn from the Annex IV nations, using criteria developed by PNNL and DOE, and summarized in a quarterly report.

Annex IV

Q3 Milestone: Description of the review process and identification of experts to review the Annex IV database and to identify expertise for scoping and preparations of case study reports.

Progress: PNNL has begun to identify potential peer reviewers of the *Tethys* and Annex IV knowledge base, but because phase 2 of Annex IV was authorized six months later than anticipated, the annual peer review and associated work with member nation analysts has been delayed by the same amount of time.

Highlights and key findings for Q3 FY2013

- A Broadcast tab was added to *Tethys* in Q3 of FY2013. This new tab in the menu bar provides users with access to video/audio files for presentations, webinars and symposia relating to the environmental effects of marine energy and offshore wind. This tab was inspired by the DOE MHK webinar series, and will begin to expand as additional audio/video files of webinars and symposia are collected.
- PNNL has begun to collaborate with the developers of the Crown Estate's new Wave and Tidal Knowledge Network (WTKN) which contains information and data on the UK's wave and tidal industry. These conversations have been focused on how *Tethys* and WTKN can efficiently collaborate and share information so that their efforts are not duplicated. Several lists of

articles, reports and database entries have been shared between the two parties, and conversations on overall strategy will continue as the WTKN site matures.

- Due to Semantic MediaWiki's (SMW) recent lack of funding and reduced levels of security and faceted browsing extensions, the PNNL web development team has suggested to transfer *Tethys* away from using SMW and begin using Drupal as the primary web platform. Drupal is very similar to Semantic MediaWiki in terms of functionality, but Drupal has a larger community of users including the U.S. federal government which has used Drupal for many high profile sites such as the White House, Department of Energy, and Department of Homeland Security. While the PNNL web development team did not refuse to continue to work on *Tethys* as a Semantic MediaWiki site, they did express concern for the overall security of *Tethys* and funding issues particularly when significant changes and/or fixes to the site are required. For this reason, PNNL has decided that *Tethys* will be switched to Drupal in the beginning of FY14.
- *Tethys* had a total of **5,736 Unique Visitors** in Q3 of FY2013, which refers to the number of unduplicated (counted only once), visitors to your site over a specified amount of time. Q3 **Bounce Rate** (visits in which a person left *Tethys* from the home or entrance page) was **74.08%**, suggesting that roughly **1,487** of the unique visitors were actually users of the site. It should be noted that although the number of unique visitors has increased from Q2 (Q2: 3624; Q3: 5209), the bounce rate also increased (Q2: 66.76% Q3:74.08%). The reason for this increase is unclear; it could be due to simply an increase in site traffic, or possibly additional external sites linking to *Tethys* which may possibly help explain the increased bounce rate.
- *Tethys* saw a total of **7,433 Visits** (total # of visits to the site including duplicates) in Q3 of FY2013.
- Total **Pageviews** for Q3 was **13,469 (~25% increase from Q2)**. Note this metric only accounts for actual web pages, not downloaded PDFs.
- The top 10 most frequented media pages for *Tethys* were:
 1. San Juan Islands Tidal Currents
 2. Environmental Risk Evaluation System (ERES)
 3. Recent Developments in Research on the Environmental Effects of MHK Technologies
 4. Environmental Impacts of Tidal and Wave Energy Technology in Canada
 5. April 24 2013 Webinar
 6. La Rance Tidal Barrage
 7. Offshore Windmills and the Effects of Electromagnetic Fields on Fish
 8. Pico Oscillating Water Column
 9. Shiwa Tidal Power Plant
 10. Cobscook Bay Tidal Energy Project

- **Pages/Visits** ration was roughly **1.81**, including repeated visits of a single page. This is roughly a **15% decrease** from Q2.
- *Tethys* saw a **74.4% New Visitor** rating for Q3. When both the bounce rate (74.08%) and total number of visits (7433) are factored in, this equates to roughly 1316 new visits to the site
 $7433 * .7408 = 5506$ bounced
 $7433 - 5506 = 1927$ did not bounce
 $.744 * 1927 = 1434$ new visits to the site excluding those that bounced from the start.
- The **Average Visit Duration** for *Tethys* in Q3 was **1:52**, a 20 second decrease from Q2.
- Roughly **23** external links were identified linking to *Tethys*, which is an additional 11 links recorded in Q2.

Performance Metrics for Q3 FY2013

The table below lists the metrics and goals identified in the *Tethys* Website Metrics and Goal Plan, as well as the data collected in Q3 (April 1 2013 – June 30 2013) for the nine metrics and goals. More information on the metrics can be found at: <http://mhk.pnnl.gov/wiki/index.php/Deliverables>.

Metric	Goal	Q3 Progress	Based on Q2 Data
Total user sessions	10% increase on annual basis, based on first year of operation, to be tracked on revolving quarterly basis.	7,433 visits; 5,736 unique visitors	4,780 Visits; 3,624 Unique Visitors; 45% increase in visits; 42% increase in unique visitors
Total page impressions	10% increase on annual basis, based on first year of operation, to be tracked on revolving quarterly basis.	13,469 Pageviews	10,187 Pageviews; 32% increase in Pageviews
Average page impressions per user session	30% increase over the baseline (October 2012) average page impression per user session.	1.81 pages/visit	2.13 pages/visit; 15% decrease in pages/visits
Number of documents indexed	Increase by 40 documents per quarter, through FY12-FY13	880 Documents indexed	807 documents indexed; +73 documents. 40 OSW, 28 MHK, 5 Unspecified.
Number of websites linked from <i>Tethys</i>	Increase by 10 links to external websites per quarter, through FY12-FY13	447 Links	397 external websites linked from <i>Tethys</i> in Q2; + 50 links
Number of external websites linked to <i>Tethys</i>		23 external sites linked to <i>Tethys</i>	An additional 11 links from Q2
Percentage of valid links in the <i>Tethys</i> knowledge base	90% of all links working at any time	100% of all links are functioning properly.	No change

Increased functionality and usefulness of the site	Continued improvements annually.	This metric has yet to be evaluated.	N/A
Availability of information useful to users	Majority of site users are satisfied with the information they retrieved from Tethys	This metric has yet to be evaluated.	N/A