



## Aquatic Interactions with MHK Devices

September 14, 2011

**Simon Geerlofs**

Pacific Northwest National Laboratory  
[Simon.geerlofs@pnl.gov](mailto:Simon.geerlofs@pnl.gov)

## Development of Webinar Series:

- Subgroup of the Federal Renewable Ocean Energy Working Group  
NOAA, BOEMRE, DOE, EPA
- Pacific Northwest National Laboratory—  
Provides technical assistance and houses webinars within the environmental database, *Tethys*

## Series Goals:


1. To identify gaps and priority areas for future research efforts.
2. To communicate ongoing studies and results.
3. To help inform siting and permitting efforts.



Additional webinars:

1. Data Management, Risk Assessment, and Cumulative Effects Analysis (July 27th)

2. Aquatic Animals and Device Interactions (August 29<sup>th</sup>)



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<b>Navigation</b>	<b>July 27 2011 webinar</b> <b>Marine Hydrokinetic Environmental Webinar #1</b> <b>Environmental Data Management, Cumulative Impacts and Risk Assessment</b> Emerging marine and hydrokinetic (MHK) technologies convert wave and salinity-gradient power into electricity. These technologies have many regions of the United States. In order to assure the response developed, a number of different agencies, federal research institutions and universities are working to research the potential environmental impacts of MHK technologies. The Department of Energy (DOE) and federal agencies involved in reviewing, permitting, and regulating are working to coordinate and collaborate on MHK environmental research as well as disseminate resulting products to other labs, federal agencies, industry, and interested stakeholders. This webinar series aims to increase awareness of current research efforts.
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The first webinar in the series, "**Environmental Data Management, Cumulative Impacts and Risk Assessment**" was held on Wednesday, July 27. Approximately 160 participants were online for the presentation. The presenters, in order of appearance, were:

**Introduction to webinar series and specific webinar topic (An**

**Webinars can be accessed at:**

[http://mhk.pnnl.gov/wiki/index.php/DOE\\_MHK\\_Webinar\\_Series](http://mhk.pnnl.gov/wiki/index.php/DOE_MHK_Webinar_Series)

## September 14, 1-3:30 EDT Monitoring Technologies and Strategies for Marine and Hydrokinetic Devices

- **Acoustic Monitoring of Fish and Their Interactions with the Ocean Renewable Power Company (ORPC) Device** ([Gayle Zydlewski, University of Maine](#))
- **Kinetic Hydropower Operational Monitoring Strategies and Technologies for Pilot Arrays** ([Mary Ann Adonizio, Verdant Power Inc.](#))
- **Lessons Learned at the World's First Commercial Scale Tidal Turbine – SeaGen in Strangford Lough, Northern Ireland** ([David Ainsworth, Marine Current Turbines, Ltd.](#) and [Frank Fortune, Royal Haskoning](#))
- **Integrated Post-Installation Monitoring: A Discussion of Post-Installation Monitoring for Marine Life Interactions, Acoustics, Water Quality, and Inflow Velocity on a Tidal Turbine, Including the Development Pathway for a New Stereo Imaging System** ([Brian Polagye, University of Washington](#))
- **Characterizing Biological Communities at Marine Renewable Energy Sites** ([John Horne, University of Washington](#))
- **Passive Acoustic Based Compliance Monitoring for Tidal Turbines** ([Tom Carlson, Pacific Northwest National Laboratory](#))
- **Long-Range Active Acoustic Detection, Localization, Tracking and Classification for Offshore Renewable Energy Applications and Radiated Noise Measurements in a High-Current Environment Using a Drifting Noise Measurement Buoy** ([Peter Stein, Scientific Solutions Inc.](#))

# DISCUSSION PERIOD—HOW TO ASK A QUESTION

The screenshot shows a virtual meeting interface. At the top, there is a menu with 'File', 'View', and 'Help'. Below that is an 'Attendee List' window showing 118 attendees and 3 staff members. The attendees are listed in a table with columns for name and status. The names listed are Vembu Subramanian, Wade Cooper, William Forney, William McAnally, and Zack Steele. Below the attendee list is an 'Audio' section with options for 'Telephone' (selected) and 'Mic & Speakers'. It also displays dial-in information: Dial: +1 (312) 878-0511, Access Code: 207-162-944, and Audio PIN: 181. A red box contains the instruction: 'If you're already on the call, press #181# now. (and additional numbers ...)'. Below the audio section is a 'Talking:' indicator showing 'melissa foley'. At the bottom of the interface, there is a 'Questions' section with a green text box containing the instruction: 'To ask the presenters questions, raise your virtual hand to be unmuted or type your question into the question area.' Below this is a text input field with the placeholder text '[Enter a question for staff]' and a 'Send' button.

This is a close-up view of the 'Questions' section. It features a green text box with the instruction: 'To ask the presenters questions, raise your virtual hand to be unmuted or type your question into the question area.' Below the text box is a text input field with the placeholder text '[Enter a question for staff]' and a 'Send' button.

- 15 minute presentation, 5 minute Q&A following each presentation
- Please submit questions using the question chat feature. We will NOT be using the virtual hand raise function.
- Staff will compile questions and pose to presenters at appropriate Q&A periods.