

MHK Track 2

Reducing Barriers to Testing and Data Sharing
Grand Ballroom C

Reducing Barriers to Testing and Data Sharing Peer Review Panel



- Chris Bassett, University of Washington (Panel Lead)
- Anu Kumar, U.S. Navy, Living Marine Resources Program
- Gayle Zydlewski, University of Maine
- Jason Wood, SMRU Consulting
- Martin Wosnik, University of New Hampshire
- Whitney Hauer, BOEM Pacific OCS Office













THANK YOU, REVIEWERS!

Time Keeping



- Project presentations will be kept to a strict 20 minutes, with 10 minutes of Q&A following, unless otherwise stated on the agenda.
- A yellow card will be flashed at the last 5 minutes, and then a red card will be held when time is up.
- Please respect your fellow presenters by keeping within your allotted time.
- The Review Panel Lead will kick off the Q&A, then allow questions from the other reviewers, and then the audience, time permitting.
- Any questions left unanswered due to time limitations can be addressed during the Endof-session Networking Activity.



Track 2: Agenda-at-a-Glance

Tuesday, October 8th

Plenary

MHK Program
Overview

WPTO Support to Testing

Reducing Barriers to Testing

Wednesday, October 9th

PacWave

Reducing Barriers to Testing Thursday, October 10th

Data Sharing and Analysis

Powering the Blue Economy

Town Hall

Track 2: Tuesday, October 8th

Start	End	Agenda Session	Presenter	Affiliation	Track
1:20 PM	1:40 PM	Overview of Reducing Barriers to Testing	Steve DeWitt	WPTO	Testing & Data
1:40 PM	1:50 PM	Introduce Lab Projects	Simon Gore	WPTO	Testing & Data
1:50 PM	2:20 PM	MHK Regulatory Initiatives Analysis	Bo Saulsbury	PNNL	Testing & Data
2:20 PM	2:50 PM	MHK Environmental Compliance Cost Assessment	Jesse Roberts	SNL	Testing & Data
2:50 PM	3:20 PM	Hydrodynamic and Acoustic Models for Quantitative Environmental Assessment	Jesse Roberts	SNL	Testing & Data
3:20 PM	3:35 PM	End-of-Session Networking Activity	All recent presenters	All recent presenters	Testing & Data
3:35 PM	3:50 PM	Coffee Break			
3:50 PM	4:00 PM	Introduce Lab Projects	Dana McCoskey	WPTO	Testing & Data
4:00 PM	4:30 PM	MHK Performance Measurement and Instrumentation	Rick Driscoll	NREL	Testing & Data
4:30 PM	5:00 PM	Video Analysis Software Development	Shari Matzner	PNNL	Testing & Data
5:30 PM	5:45 PM	End-of-Session Networking Activity	All recent presenters	All recent presenters	Testing & Data
5:45 PM	6:15 PM	Peer Reviewer Only Meetings			

National Laboratory Core R&D



Annual Operating Plans

- EERE is committed to funding multi-year project plans
- Plans include Go/No-go decisions in 12-18 month period
- Merit reviewed externally on a 3-year cycle project cycle
- Reviewed and approved by WPTO annually



Track 2: Agenda-at-a-Glance

Tuesday, October 8th

Plenary

MHK Program
Overview

WPTO Support to Testing

Reducing Barriers to Testing

Wednesday, October 9th

PacWave

Reducing Barriers to Testing Thursday, October 10th

Data Sharing and Analysis

Powering the Blue Economy

Town Hall

Track 2: Wednesday, October 9th

Start	End	Agenda Session	Presenter	Affiliation	Track
9:50 AM	9:55 AM	Introduce Mammal Study	Corey Vezina	WPTO	Testing & Data
9:55 AM	10:25 AM	Marine Mammal Behavioral Response to Tidal Turbine Sound	Brian Polagye	University of Washington	Testing & Data
10:25 AM	10:35 AM	Introduce Triton & FOA 1418	Dana McCoskey	WPTO	Testing & Data
10:35 AM	11:15 AM	Triton Initiative	Meg Pinza	PNNL	Testing & Data
11:15 AM	11:30 AM	Coffee Break			
11:30 AM	12:00 PM	NoiseSpotter: Cost-effective, Real- time Acoustic Characterization and Localization System	Kaus Raghukumar	Integral Consulting Inc.	Testing & Data
12:00 AM	12:30 PM	DAISY: A Drifting Acoustic Instrumentation System	Brian Polagye	University of Washington	Testing & Data
12:30 PM	1:15 PM	Lunch			

FOA 816: MHK Environmental Effects Assessment and Monitoring ENERGY Energy Efficiency & Renewable Energy

Date:

• Issued 4/25/2013; Selections announced 2013

Objective:

• Support the collection of environmental monitoring and experimental data from MHK devices and analyses of existing data.

Topics Areas:

- Topic Area 1: Fish Behavior and Mortality Around Hydrokinetic Turbines
- Topic Area 2: Environmental Monitoring of MHK Projects
- Topic Area 3: Analysis of Environmental Effects of MHK Surrogate Technologies

Projects For Review:

• University of Washington (EE0006385 – Marine Mammal Behavioral Response to Tidal Turbine Sound)

FOA 1418: MHK Energy Conversion and Environmental Monitoring Tech Advancement ENERGY



Date:

• Issued 3/1/2016; Selections announced 8/30/2016

Objective:

• Support MHK R&D projects in the designing and testing of full-scale MHK systems that integrate advanced hardware and software technologies, as well as the development and innovation of technologies for monitoring the environmental impacts of MHK technologies.

Topics Areas:

- Topic Area 1: Next-Generation MHK Hardware and Software Technologies
- Topic Area 2: Reducing Environmental Monitoring Time and Costs

Projects For Review:

Topic Area 1:

- Oscilla Power, Inc. (EE0007819 Demonstration of Advanced Multi-Mode Point Absorber for WEC)
- ORPC Maine, LLC (EE0007820 Advanced TidGen Power System)

Topic Area 2:

- BioSonics Inc. (EE0007824 Long-range Target Detection)
- Florida Atlantic University (EE0007828 Unobtrusive Multi-Static Serial LiDAR Imager)
- Integral Consulting, Inc. (EE0007822 NoiseSpotter)
- Integral Consulting, Inc. (EE0007826 Benthic Habitat Monitoring Tools)
- University of Washington (EE0007823 DAISY)
- University of Washington (EE0007827 3G-AMP)
- Woods Hole Oceanographic Institution (EE0007825 Combined Electric/Magnetic Field Instrument)

Track 2: Wednesday, October 9th

Start	End	Agenda Session	Presenter	Affiliation	Track
1:15 PM	1:45 PM	A Combined Electric/Magnetic Field Instrument for MHK Environmental Monitoring	Alan Chave	Woods Hole Oceanographic Institution	Testing & Data
1:45 PM	2:15 PM	Benthic Habitat Monitoring Tools for MHK Environmental Assessments	Gene Revelas	Integral Consulting Inc.	Testing & Data
2:15 PM	2:45 PM	Long-Range Target Detection and Classification System for Environmental Monitoring at MHK Sites	Jim Dawson	BioSonics Inc.	Testing & Data
2:45 PM	3:00 PM	Coffee Break			
3:00 PM	3:30 PM	Unobtrusive Multi-Static Serial LiDAR Imager (UMSLI) for Wide-Area Surveillance and Identification of Marine Life at MHK Installations	Anni Dalgleish	Florida Atlantic University	Testing & Data
3:30 PM	4:00 PM	Third-Generation Adaptable Monitoring Package (3G-AMP)	Brian Polagye	University of Washington	Testing & Data
4:00 PM	4:30 PM	End-of-Session Networking Activity	All recent presenters	All recent presenters	Testing & Data
4:30 PM	4:50 PM	End-of-Session Triton & 1418 discussion as a group	All attendees	WPTO	Testing & Data
4:50 PM	5:20 PM	Peer Reviewer Only Meetings			

Track 2: Agenda-at-a-Glance

Tuesday, October 8th

Plenary

MHK Program
Overview

WPTO Support to Testing

Reducing Barriers to Testing

Wednesday, October 9th

PacWave

Reducing Barriers to Testing Thursday, October 10th

Data Sharing and Analysis

Powering the Blue Economy

Town Hall

Track 2: Thursday, October 10th

Start	End	Agenda Session	Presenter	Affiliation	Track
8:45 AM	9:05 AM	Overview of Data Sharing & Analysis and Introduction of Lab Projects	Hoyt Battey	WPTO	Testing & Data
9:05 AM	9:35 AM	Tidal Resource Gaps Analysis	Kevin Haas (on behalf of NREL)	NREL	Testing & Data
9:35 AM	10:05 AM	Model Validation and Site Characterization for Early Deployment MHK Sites and Establishment of Wave Classification Scheme	Levi Kilcher	NREL, PNNL, SNL	Testing & Data
10:05 AM	10:35 AM	International Environmental Data Sharing Initiative (OES-Environmental & Tethys Database)	Andrea Copping	PNNL	Testing & Data
10:35 AM	10:45 AM	Coffee Break			
10:45 AM	11:15 AM	Marine and Hydrokinetic Data Repository (MHKDR)	Jon Weers	NREL	Testing & Data
11:15 AM	11:45 AM	MHK Data Products and User Community Development	Kelley Ruehl	SNL, NREL, PNNL	Testing & Data
11:45 AM	12:05 PM	End-of-Session Networking Activity	All recent presenters	All recent presenters	Testing & Data
12:05 PM	12:25 PM	Closing Remarks on Testing & Data	Steve DeWitt	WPTO	Testing & Data
12:25 PM	1:15 PM	Lunch			