

## **JUNE 11 – JUNE 13**

Hilton St. Petersburg Bayfront - 333 1st Street, SE

## Decadal Visioning Workshop

THE FUTURE OF COASTAL PROCESSES RESEARCH



**AGENDA** 

## **WORKSHOP OBJECTIVE**

Bring together Federal agencies, stakeholders, and academia to identify and prioritize key management challenges and high priority science gaps to guide the next decade of coastal research.

## **DAY 1 - TUESDAY, JUNE 11**

9:30 am - 12:30 pm

## **REGISTRATION**

St. Petersburg Ballroom Foyer

12:30 - 12:45 pm

## **WELCOME & OPENING REMARKS**

**Session Objective:** Orient participants to the workshop, its objectives, and establish a mindset to contribute.

» Dr. Nicole Elko, Executive Director, American Shore and Beach Preservation Association, Co-Executive Director, U.S. Coastal Research Program (USCRP)

12:45 - 12:55 pm

## **AGENDA REVIEW, LOGISTICS, EXPECTATIONS**

» Linda Manning, President, The Council Oak, LLC

12:55 - 1:15 pm

## PRESENTATION: 10 YEAR REVIEW AND STATE OF NEARSHORE RESEARCH

**Session Objective:** Establish a common understanding of previous coastal efforts and context to inform deliberations and priorities formulated during the workshop.

- » **Dr. Diane Foster**, Professor and Director of the School of Marine Science and Ocean Engineering, University of New Hampshire, Co-Executive Director, USCRP
- » Dr. Bret Webb, Professor and Director of Applied Coastal Engineering and Science, University of South Alabama, Co-Executive Director, USCRP

## **DAY 1 - TUESDAY, JUNE 11**

### 1:15 - 1:30 pm

## PRESENTATION: HISTORICAL PERSPECTIVES ON NEARSHORE RESEARCH

**Session Objective:** Provide participants with a common understanding of previous coastal efforts and context to inform deliberations and priorities.

» Dr. Rob Holman, Professor Emeritus, Oregon State University

## 1:30 - 2:15 pm

## PANEL DISCUSSION: STAKEHOLDER PERSPECTIVE OF LOCAL SOCIETAL CHALLENGES

**Session Objective:** Establish a common understanding of coastal community challenges.

### **PANELISTS:**

- » Dr. John Bishop, Coastal Management Coordinator, Pinellas County Florida
- » Dr. Barnali Dixon, Professor and Executive Director of the Initiative on Coastal Adaptation and Resilience (iCAR)
- » Dr. Jonathan Simm, Technical Director of Resilience, HR Wallingford
- » Beau Suthard, Program Director, Coastal, Ports & Marine Lead, APTIM
- » MODERATOR: Amanda Stolz, Social Scientist, U.S. Geological Survey

### 2:15 - 2:30 pm

## **BREAK** (travel to breakout rooms)

## 2:30 - 3:15 pm

## BREAKOUT SESSION #1: PRIORITIZING COASTAL COMMUNITY CHALLENGES

**Session Objective:** Compile a set of prioritized coastal community challenges that will serve as the stepping off point for future breakouts and in meeting summary synthesis.

## 3:15 - 3:45 pm

## **BREAK** (travel back to plenary)

## 3:45 - 4:00 pm

## **REPORT OUT FROM BREAKOUT #1**

Technical leads will share top prioritized coastal community challenges from breakout group discussions.

## **DAY 1 - TUESDAY, JUNE 11**

## 4:00 - 4:45 pm

## PANEL DISCUSSION: SUMMARY OF RESEARCH PRIORITIES FROM FEDERAL AGENCIES

**Session Objective:** Provide an overview of research foci for federal agencies, including major challenges.

### **PANELISTS:**

- » Mark Osler, Senior Advisor for Coastal Inundation and Resilience, National Ocean Service, National Oceanographic and Atmospheric Administration
- » Dr. Hilary Stockdon, Program Coordinator, Coastal-Marine Hazards and Resources Program, U.S. Geological Survey
- » Dr. Benjamin Hamlington, Research Scientist in Climate Change, Jet Propulsion Laboratory, National Aeronautics and Space Administration
- » **Dr. Julie Rosati**, Technical Director Civil Works Research and Development, U.S. Army Corps of Engineers, Co- Executive Director, USCRP
- » MODERATOR: Dr. Stephanie Patch, Associate Professor, University of South Alabama

## 4:45 - 5:30 pm

## PANEL DISCUSSION: SUMMARY OF RESEARCH PRIORITIES FROM ACADEMIA

**Session objective:** Provide an overview of the immediate and long-term research foci for academia, including major challenges.

## **PANELISTS:**

- » Dr. Peter Ruggiero, Professor, College of Earth, Oceanic, and Atmospheric Sciences, Director of the Cascadia Coastlines and Peoples Hazards Research Hub, Oregon State University
- » Dr. Christine Angelini, Associate Professor, Director of Coastal Solutions, University of Florida
- » **Dr. Ryan Mieras**, Assistant Professor of Coastal Engineering, University of North Carolina Wilmington
- » **Dr. Mara Orescanin**, Associate Professor, Director for the Consortium for Robotics and Unmanned Systems Education and Research, Naval Postgraduate School
- » MODERATOR: Dr. Jack Puleo, Professor and Chair of the Department of Civil and Environmental Engineering, University of Delaware

## 5:30 pm

### **DAY ONE WRAP UP**

## 5:30 - 6:00 pm

## OPTIONAL: PROTOTYPE DEMONSTRATION AND USER FEEDBACK SESSION FOR SEALEVEL.GOV

The Interagency Task Force on Sea Level Change will present a short demonstration of an early prototype of SeaLevel.gov, an interagency effort to deliver joint information on the latest sea level research coupled with educational content. Participants will have the opportunity to provide direct feedback to the developers on the prototype at an early stage in the development process.

## 6:00 pm

### **HAPPY HOUR - ST. PETERSBURG BALLROOM FOYER** (cashless bar)

## **DAY 2 - WEDNESDAY, JUNE 12**

### 8:30 - 8:45 am

### **DAY TWO WELCOME**

» Dr. Julie Rosati, Technical Director Civil Works Research and Development, U.S. Army Corps of Engineers, Co- Executive Director, USCRP

### 8:45 - 10:15 am

## PRESENTATIONS: EXAMPLES OF CO-DEVELOPED SOLUTIONS TO COASTAL CHALLENGES

**Session objective:** Provide examples of big-picture solutions to spur thinking for breakout sessions.

» Mitigating Coastal Erosion With Natural and Nature-based Features

**Dr. Amanda Tritinger**, Research Hydraulic Engineer and Deputy Program Manager for the Engineering With Nature Program, U.S. Army Corps of Engineers

» Coastal Community Resilience In the Face of Increased Flooding and Sea Level Change

**Dr. Katherine Serafin**, Assistant Professor, Department of Geography, University of Florida

» Adapting Using Strategic Realignment and Managed Retreat

**Dr. A.R Siders**, Assistant Professor, Disaster Research Center, Director, Climate Change Hub, University of Delaware

» Engagement Strategies for Awareness, Evacuation, and Decision Making

**Dr. Tracie Sempier**, Resilience Engagement Lead, Mississippi-Alabama Sea Grant

### 10:15 - 10:45 am

**BREAK** (travel to breakout rooms)

## 10:45 - 11:45 am

## BREAKOUT SESSION #2: DEVELOPING SOLUTIONS TO ADDRESS COASTAL COMMUNITY CHALLENGES

**Session objective:** Develop a prioritized list of co-developed solutions to priority stakeholder challenges identified in Breakout #1.

## 11:45 am - 1:15 pm

**LUNCH** (on your own)

## **DAY 2 - WEDNESDAY, JUNE 12**

## 1:15 - 1:45 pm

## **REPORT OUT FROM BREAKOUT #2**

Technical leads will share top ranked co-developed solutions from breakout group discussions.

## 1:45 - 2:45 pm

5:30 pm

## PRESENTATIONS: EXAMPLES OF APPLIED RESEARCH OPPORTUNITIES TO IMPLEMENT SOLUTIONS

Session objective: Describe the state of the science to inform breakout sessions...

- » Improvements In Observations Including Satellites, In-situ, and Real Time Data Delivery
  - Dr. Katherine Brodie, Senior Research Oceanographer, U.S. Army Corps of Engineers
- » Modeling Approaches Including Artificial Intelligence and Machine Learning
  - **Dr. Gregory Dusek**, Senior Scientist, National Oceanographic and Atmospheric Administration
- » Operational Models for Decision Support Tools
  - Dr. Margaret Palmsten, Research Oceanographer, U.S. Geological Survey

2:45 – 3:15 pm	BREAK (travel to breakout rooms)
3:15 – 4:30 pm	BREAKOUT SESSION #3: TOOLS AND APPROACHES TO SUPPORT SOLUTIONS
	<b>Session objective:</b> Identify tools and methods promising to implement priority codeveloped solutions developed in Breakout #2.
4:30 – 4:45 pm	BREAK (travel back to plenary)
4:45 – 5:00 pm	REPORT OUT FROM BREAKOUT #3
	Technical leads will share most promising tools or methods from breakout group discussions.
5:00 – 5:30 pm	PRESENTATION: RESEARCH EXAMPLE — SEDIMENT TRANSPORT
	Session objective: Describe the state of the science to inform breakout sessions.
	» <b>Dr. Gregory Wilson</b> , Associate Professor, Oregon State University

**DAY TWO WRAP UP** 



## **DAY 3 - THURSDAY, JUNE 13**

## 8:30 - 8:40 am

### **DAY THREE WELCOME**

» **Dr. Diane Foster**, Professor and Director of the School of Marine Science and Ocean Engineering, University of New Hampshire, Co-Executive Director, USCRP

### 8:40 - 8:55 am

## PRESENTATION: RESEARCH EXAMPLE — COMPOUND FLOODING

**Session objective:** Describe the state of the science to inform breakout sessions.

» Dr. Thomas Wahl, Associate Professor, University of Central Florida

### 8:55 - 9:10 am

**BREAK** (travel to breakout rooms)

### 9:10 - 10:10 am

## **BREAKOUT SESSION #4: RESEARCH QUESTIONS AND DATA GAPS**

**Session objective:** Identify key research questions and data gaps associated with approaches and tools identified in Breakout #3.

### 10:10 - 10:30 am

**BREAK** (travel back to plenary)

### 10:30 - 10:45 am

## **REPORT OUT FROM BREAKOUT #4**

Technical leads will share top ranked prioritized research questions or data gaps from breakout group discussions.

### 10:45 - 11:30 am

## PLENARY DISCUSSION: ARTICULATING WORKFORCE DEVELOPMENT NEEDS

**Session objective:** Utilize a combination of polls and facilitated discussion to gather the highest priority skills, capabilities and education needed in coastal communities, federal agencies and academia and collect ideas about how to fill these priority needs.

- » Dr. Tiffany Briggs, Chair and Associate Professor of Department of Geoscience, Florida Atlantic University
- » Moderator: Dr. Bret Webb, Professor and Director of Applied Coastal Engineering and Science, University of South Alabama, Co-Executive Director, USCRP

## 11:30 am - 12:00 pm

## **SUMMARY, PATH FORWARD, AND CLOSING REMARKS**

**Session Objective:** Present key takeaways, describe what will come next in developing a workshop report, and how to get involved.

### 12:00 pm

### **ADJOURN**

## 12:15 - 1:00 pm

## **OPTIONAL WRITING TEAM INTEREST MEETING**

Discuss intended process to develop the Decadal Workshop Report and gather interest in post-meeting participation.



# HOW THE AGENDA BUILDS TO ACTIONABLE RESEARCH

This graphic describes the main steps participants will be guided through in this workshop with the ultimate goal of identifying actionable research. Panels and presentations will be sprinkled throughout the workshop to synthesize state-of-the science, provide examples of solutions, and share information about research priorities. Beginning with a first breakout group on prioritizing articulated community challenges, we will walk through identification of prioritized solutions, articulate promising tools and approaches needed to implement solutions, and finally, the key research questions associated with those tools and methods. We will refer to this graphic throughout the workshop to orient participants as to where we are in this process.



Use this QR code to access background information, speaker bios and other workshop information.

## **Presentations**

## **Spark ideas & conversation:**

Listen to our lineup of speakers and panelists discuss progress and perspectives on coastal challenges and priorities for the next 10 years of coastal research.





## **Community Challenges**

**Discuss what the community needs:** 

What challenges will we face in the next 10 years?

## Co-developed Solutions

**Discuss how we move forward:** 

How can we address these challenges?





## Tools and Approaches

**Discuss implementation strategies:** 

What ways will we achieve the solutions?

## Research Questions

## Discuss the gaps:

What basic research questions and data gaps need to be addressed in order for the tools and approaches to be successful?

