

## DRAFT CoPe Workshop Schedule

**NSF Funded CoPe Workshop: Interoperability and data needs of models for understanding vulnerability of coastal systems to stresses and shocks associated with climate change and sea level rise**

Dates: September 8, 2020

Duration: 1 day (9 am to 4:15 pm)

**All times indicated below in Eastern Standard Time (EST)**

### Workshop Objectives:

1. Understand the interactions of biophysical, social-behavioral, and economic systems in coastal regions
2. Explicitly define new data gaps that can be addressed by nongovernmental, local, regional, and federal networks for the formulation of a comprehensive Coastal Observatory
3. Develop interoperability requirements of data and models

### **Plenary Welcome**

0900-0910 **Workshop Objectives and logistics.** Jayantha ('Obey') Obeysekera

0910-930 Todd Crowl, Director, Institute of Environment, Florida International University  
**Welcome and Key Note: A Vision for Observations and Models in Physical, Social, and Economic Systems in Coastlines**

### Session I. Behavioral/Social Science Observations and Models

0930-0945 Christopher Emrich, University of Central Florida

**Topic: Hazard Vulnerability Science: From Background to Metrics, Models, and Measurements**

0945-1000 Sam Brody, Center for Texas Beaches and Shores

**Topic: Texas Disaster Information System (TDIS)**

1000-1015 Jonathan Gilligan, Vanderbilt University

**Topic: Accounting for human behavior in models of coupled natural and human systems**

1015-1030 Ali Mostafavi, Texas A&M University

**Topic: Complex Modeling for Robust Adaptation Planning of Infrastructure Systems to Sea-level Rise Impacts**

1030-1040 Break

### Session II. Economic Observations and Models

1040-1055 Jeff Adkins, Senior Economist, NOAA

**Topic: Defining and Measuring the U.S. Ocean Economy**

1055-1110 David Ryder, ICF

**Topic: Economic modeling of hazards in coastal systems**

1110-1125 Jeff Czajkowski, Center for Insurance Policy and Research (CIPR)

**Topic: Understanding Economic Impacts of Flooding**

1125-1140 Plenary Q and A

### Session III. Biophysical Observations and Models

1140-1155 Carl Gouldman, IOOS Program Office

**Topic: Biological Observations and Models**

1155-1210 Debra Hernandez, SECOORA

**Topic: Opportunities and innovations in monitoring for improving coastal hazard resilience**

1210-1225 Tom Shyka, NERACOOS

**Topic: Coastal Inundation Forecast Systems**

1225-0100 Lunch break

### Session III (Continued)

0100-0115 Topic and Speaker to be determined

0115-0130 Jim Morris, University of South Carolina

**Topic: The evolution of marsh equilibrium theory: from marshes to mangroves**

0130-0145 Margaret O'Brien, Marine Science Institute, University of California, Santa Barbara

**Topic: Incorporating Heterogeneous Ecosystem Research Data into Synthesis and Model Validation**

0145-0200 Jon Derek Loftis, Virginia Institute of Marine Science

**Topic: Validating Operational Flood Forecast Hydro Models at the Street-Level Using Sensors and Citizen Science**

0200-0215 Scott Hagen, Louisiana State University, Center for Coastal Resiliency

**Topic: Shifting the Paradigm of Climate Change Assessment at the Coastal Land-Margin: A Decade of Progress on the Coastal Dynamics of Sea Level Rise**

0215-0230 Patrick Bernard, US Geological Survey

**Topic: Developing a nationally-consistent approach for assessing future coastal hazards**

0230-0245 Robert Lempert, RAND

**Topic: Decision Support for Risk Management of Integrated Physical, Social/Behavioral, and Economic System**

Session IV. **Plenary Discussion**

0245 – 0400

**Interoperability of Models and Observatory Systems associated with Coastal Regions**

0400-0415 Closing