

# Compound Flooding Virtual Convening

## The State of Scientific and Engineering Research and Practice

Thursday, October 29, 2026

*This virtual convening aims to bring together **leading scientists and researchers with engaged partners** to gain a common understanding of **available and emerging science, research, and applied practice on compound flooding** to inform total flood hazard analyses and design in the **New York-New Jersey Harbor and Tributaries Region and beyond**.*



### AGENDA

*\*all times in EDT*

9:00 AM

#### I. Welcome

**Moderator:** Marjorie Kaplan, Sr. Associate Director, Rutgers Climate and Energy Institute; Co-Director, New Jersey Climate Change Resource Center

9:10 AM

#### II. Level Setting: New York-New Jersey Harbor and Tributaries Study Region and Section 8106

**Moderator:** Melissa Tier, Postdoctoral Research Associate, Princeton University

- **New York New Jersey Harbor and Tributaries Feasibility Study**  
Stephen Couch, Acting Chief, Planning Division, U.S. Army Corps of Engineers, New York District
- **WRDA Section 8106 Guidance & NYNJ Non-Federal Partners Request**  
Paul Gallay, Director, Resilient Coastal Communities Project, Columbia University
- **New York City**  
Laurian Farrell, Deputy Commissioner, Bureau of Coastal Resilience, New York City Department of Environmental Protection
- **New York State**  
Matt Chlebus, Chief, Coastal Erosion Management Section, New York State Department of Environmental Conservation
- **State of New Jersey**  
Dennis Reinknecht, Director, Division of Resilience Engineering and Construction, New Jersey Department of Environmental Protection

9:45 AM

### III. Considering Compound Flood Risk: USACE Federal Studies

**Moderator:** Rachel Rhode, Manager, Environmental Defense Fund

- **St. Augustine, FL Coastal Storm Risk Management Study**  
Martin Durkin, Planning Technical Lead, Jacksonville District, U.S. Army Corps of Engineers  
Michelle Vieira, Senior Coastal Engineer, Jacksonville District, U.S. Army Corps of Engineers
- **Tangipahoa, LA Flood Risk Management Study**  
Joel Asunskis, MVD HH&C Technical Lead in Planning Studies (RTS), St. Louis District, U.S. Army Corps of Engineers  
Kathryn Fechter, Planner, Regional Planning and Environmental Division North-St. Louis, U.S. Army Corps of Engineers  
Brandon Schneider, U.S. Army Corps of Engineers
- **Texas General Land Office Flood Studies**  
Mohammad "Shahidul" Islam, Professional Engineer, Galveston District, U.S. Army Corps of Engineers

**BREAK** (10 min)

10:20 AM

### IV. Evolving Syntheses of Practice

**Moderator:** Thomas Wahl, Professor, Civil, Environmental and Construction Engineering, University of Central Florida

- **Compound Flooding Strategy for the U.S. Army Corps of Engineers**  
Ceyda Polatel, Infrastructure and Installation Resilience Engineer, Jacksonville District, U.S. Army Corps of Engineers
- **Compound Flooding Manual of Practice for Engineers from the American Society for Civil Engineers**  
Jayantha Obeysekera, Director and Research Professor in the Sea Level Solutions Center, Florida International University
- **ASCE-NOAA Task Force on Climate Resilience in Civil Engineering Practice: NOAA Efforts to Address Compound Flood Modeling Through Civil Engineering Practice**  
Dan Walker, Senior Geologist, EA Engineering, Science, and Technology, Inc. (PBC) and Faculty Assistant, Center for Technology and Systems Management, University of Maryland  
Christopher J. Anderson, National Service Line Program Manager, Climate Services EA Engineering, Science, and Technology, inc.

**BREAK** (10 min)

11:10 AM

**V. Emerging Research to Inform Practice: Driver Specific Topics and Questions, Part 1**

**Moderator:** Christian Braneon, Research Physical Scientist, NASA Goddard Institute for Space Studies

- **Riverine Flooding**  
Avantinka Gori, Assistant Professor, Civil and Environmental Engineering, Rice University
- **Rainfall as a Driver of Urban Flooding: Modeling Uncertainties and Planning Implications**  
Ashish Shrestha, Postdoctoral Associate, Urban Systems Lab, New York University
- **Groundwater: Update from New York City Panel on Climate Change**  
Bernice Rosenzweig, Professor, Environmental Science, Sarah Lawrence College
- **Groundwater: Regional Assessment of Compound Flood Hazard from the Combined Effects of Coastal, Stormwater and Groundwater Emergence Flooding**  
Liv Herdman, Hydrologist, USGS New York Water Science Center
- **Pluvial Modeling, Flooding, and Compound Flood Modeling**  
Avantinka Gori, Assistant Professor, Civil and Environmental Engineering, Rice University

**MID-MEETING/LUNCH BREAK (45 min)**

1:00 PM

**VI. Emerging Research to Inform Practice: Driver Specific Topics and Questions, Part 2**

**Moderator:** Sönke Dangendorf, Associate Professor, River-Coastal Science and Engineering, Tulane University

- **Tidally Induced Flooding**  
Philip Orton, Research Associate Professor, Civil, Environmental and Ocean Engineering, Stevens Institute of Technology
- **Sea Level Rise: Projections**  
Robert Kopp, Distinguished Professor, Earth and Planetary Sciences, Rutgers, The State University of New Jersey
- **Sea Level Rise: Factoring in Vertical Land Motion (local high resolution)**  
Marin Govorcin, Research Scientist, RF Remote Sensing and Systems Technology, Active Microwave Science Group, Jet Propulsion Laboratory, NASA
- **Tropical cyclones (rain and surge) and Extratropical Cyclones (rain/snow and surge)**  
Ning Lin, Professor, Civil and Environmental Engineering, Princeton University

**BREAK (10 min)**

2:10 PM

## VII. Risk Analysis and Design Implications Panel Discussion, Session A

**Moderator:** Michael Oppenheimer, Professor of Geosciences, International Affairs, and the High Meadows Environmental Institute

### Session A Panelists

- Robert Jane, Research Assistant Professor, Civil, Environmental and Construction Engineering, University of Central Florida
- David F. Muñoz, Assistant Professor, Civil and Environmental Engineering, Virginia Tech
- Muthu Narayanaswamy, Director, Coastal and Compound Flood Risk, The Water Institute
- Ahad Tanim, Scientist III/Hydraulic Modeler, Gwinnett County Department of Water Resources
- Thomas Wahl, Professor, Civil, Environmental and Construction Engineering, University of Central Florida

**BREAK** (10 min)

3:20 PM

## VIII. Risk Analysis and Design Implications Panel Discussion: Session B

**Moderator:** Malgosia Madajewicz, Associate Research Scientist, Center for Climate Systems Research, The Climate School, Columbia University

### Session B Panelists

- Charles Hess, Adjunct Professor, River-Coastal Science and Engineering, Tulane University
- Yuki Miura, Assistant Professor, Mechanical and Aerospace Engineering and Center for Urban Science and Progress, New York University
- Franco Montalto, Professor, Department of Civil, Architectural, and Environmental Engineering, Drexel University
- Philip Orton, Research Associate Professor, Civil, Environmental and Ocean Engineering, Stevens Institute of Technology

4:20 PM

## IX. Observations and Wrap Up

**Moderator:** Lisa Auermuller, Executive Director, Megalopolitan Coastal Transformation Hub Rutgers, The State University of New Jersey

