

WATER SCIENCE AND TECHNOLOGY BOARD



Future-Proofing Flood Management:

Water Science and Technology Board Fall Meeting 2024

November 14, 2024 Keck Center 500 5th St NW, Washington DC Room 100

MEETING OBJECTIVE

The WSTB Fall 2024 Meeting will bring together experts in science, technology, and policy to tackle pressing challenges of flood management in a changing world. It will focus on the themes of cutting-edge data and technology, novel solutions and strategies, and planning for a future when past observations are no longer reliable predictors of risk. The sessions will offer solutions-oriented insights and the latest scientific advances in flood management, with an emphasis on addressing the complexities of flash flooding, non-stationarity, and the integration of novel solutions into infrastructure and communities.

Register here

Eastern Time

12:45 pm Welcome

David Sedlak, WSTB Chair

12:55 pm Fireside Chat: Flooding as a National Security Issue

Alice Hill, Council on Foreign Relations, in conversation with

David Sedlak, WSTB Chair

1:25 pm Session 1: Novel Solutions under Climate Uncertainty

Moderator: Robert Hirsch, WSTB Member

The Future of Design-Flood Estimates: Adjusting for Non-Stationarity in Floods

• Stacey Archfield, U.S. Geological Survey

Resilience to Climate Disasters: An insurance perspective

• Raghuveer Vinukollu, Munich Reinsurance America

Sponge Planet: A Holistic Unified Water-Based Solution to the Climate Emergency

• Kongjian Yu, Peking University/Turenscape

Flooding: Challenges and Solutions through the Lens of Community Resilience

• Maureen Lichtveld, University of Pittsburgh

2:50 pm Break

3:05 pm Session 2: The Role of Data and Technology

Moderator: Branko Kerkez, WSTB Member

The Surface Water and Ocean Topography Mission: A New Eye in

the Sky for Floods

Tamlin Pavelsky, University of North Carolina

Future-Proofing Flood Management

Machine Learning for Flood Forecasting • Grey Nearing, Google Research Flood Impact on the Road Transportation System • David Maidment, University of Texas 4:10 pm **Keynote Talk – The Economics of Water and Beyond** Moderator: David Sedlak, WSTB Chair Henk Ovink, Global Commission on the Economics of Water 4:40 pm **Group Discussion** Moderator: David Sedlak, WSTB Chair 5:05 pm **Closing Thoughts** Branko Kerkez, WSTB Member and David Sedlak, WSTB Chair 5:15 pm **Adjourn**