



**URBAN FLOODING &
INFRASTRUCTURE
MOVING FORWARD FROM HARVEY
CONFERENCE 2018
FEB 21-22, 2018 | BRC, RICE UNIVERSITY**

THANK YOU

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Presentations can be found by clicking on the below presentation titles.



Severe Storm Prediction, Education, & Evacuation from Disasters Center *presents*
**URBAN FLOODING & INFRASTRUCTURE CONFERENCE:
MOVING FORWARD FROM HARVEY**

DAY 1 | WEDNESDAY, FEBRUARY 21

8:00 - 8:45 **Registration & Coffee**

OVERVIEW & KICKOFF

8:45 - 9:00 **Welcome & Introduction**
Reginald Des Roches | Dean of Engineering, Rice University

9:00 - 9:10 **Overview of Conference**
Phil Bedient | SSPEED Center, Rice University

9:10 - 9:35 **Hurricane Harvey's Impact**
Jeff Lindner | Meteorologist, Harris County Flood Control District

SESSION I. **MOVING FORWARD FROM HARVEY** | SESSION LEADER, PHIL BEDIENT

9:35 - 10:00 **The Path to Prevention**
Ed Emmett | Judge, Harris County

10:00 - 10:20 **Harvey Impacts and Flood Resilience Update**
Stephen C. Costello | Chief Resilience Officer, City of Houston

10:20 - 10:50 **BREAK**

10:50 - 11:20 **Future Houston**
Jim Blackburn | SSPEED Center, Rice University

11:20 - 11:40 **Hurricane Harvey: Experiences, Consequences and Public Support for Proposed Policies**
Robert Stein | Professor of Political Science, Rice University

11:40 - 12:00 **Influence of Climate Change on Hurricane Harvey & Future Storms**
Dan Cohan | Associate Professor, Rice University

12:00 - 1:00 **LUNCH**

KEYNOTE **WHEN THE IMPOSSIBLE BECOMES POSSIBLE**
1:00 - 1:30 John Nielsen-Gammon | Texas State Climatologist, Texas A&M University

SESSION II. **URBAN DESIGN FOR FLOOD PROTECTION** | SESSION LEADER, SAM BRODY

1:30 - 1:50 **Flood Risk Reduction & the Urban Built Environment**
Sam Brody | Director of CTBS, Texas A&M Galveston

1:50 - 2:10 **Integrated Approaches for Flood Risk Reduction & Urban Development**
Anne Loes Nillesen | Principal, Defacto Architecture & Urbanism

2:10 - 2:30 **Hurricane Harvey: Come Hell or High Water**
Phil Bedient | SSPEED Center, Rice University

2:30 - 3:00 **BREAK**

SESSION III. **URBAN FLOOD POLICY** | SESSION LEADER, CHARLES PENLAND

3:00 - 3:20 **Taking Advantage of the Paradigm Shift – New Policy Opportunities in Development Regulations**
Charles Penland | Senior Principal (Infrastructure), Walter P Moore

3:20 - 3:40 **A Vision for the Future with a Historical Perspective**
Ataul Hannan | Project Manager, Harris County Flood Control District

3:40 - 4:00 **The Future of our Flood Resiliency & Infrastructure Development**
Jim Thompson | Chief Executive Texas & Gulf Coast Infrastructure, AECOM

4:00 - 4:30 **Risk-Based Solutions for Urban Flood Risk Reduction**
Marten Hillen | Director Water, Royal HaskoningDHV

CLOSING & RECEPTION

4:45 - 6:30 **Reception & Poster Presentations**
Sponsored by AECOM, Arcadis, LAN, & Walter P Moore





URBAN FLOODING & INFRASTRUCTURE: MOVING FORWARD FROM HARVEY



DAY 2 | THURSDAY, FEBRUARY 22

8:00 - 8:30	Coffee & Pastries		
KEYNOTE	PROGRESS: A LOOK BACK AT TROPICAL CYCLONE FORECASTING OVER THE PAST 40 YEARS		
8:30 - 9:00	Bill Read Former Director, National Hurricane Center		
SESSION I.	U.S. ARMY CORPS OF ENGINEERS SESSION LEADER, PHIL BEDIENT		
9:00 - 9:25	U.S. Army Corps of Engineers Flood Risk Management Programs & the Uncertainties Associated with the 100-Year Flood Jerry Cotter Chief of Water Resources Management, USACE (Ft. Worth)		
9:25 - 9:40	Harvey and the State and Federal Response Coraggio Maglio Chief of Hydraulics & Hydrology, USACE (Galveston)		
9:40 - 9:45	Status of Future Corps Studies on Flood Risk Management Sheridan Willey Deputy Chief, Project Management Branch, USACE (Galveston)		
SESSION II.	COMMUNICATING CURRENT & FUTURE FLOOD RISK SESSION LEADER, JIM BLACKBURN		
9:45 - 10:05	Communicating Flood Risk Bill Wheeler Deputy Emergency Management Coordinator, Office of Emergency Management		
10:05 - 10:25	How the Public Processes Flood Forecasting, & How to Reach Them Afterward Eric Berger Editor, Space City Weather		
10:25 - 10:45	Harvey, Jet Stream & Climate Change Pedram Hassanzadeh Assistant Professor, Rice University		
10:45 - 11:00	BREAK		
SESSION IIIA.	FLOOD WARNING SYSTEMS SESSION LEADER, NICK FANG	SESSION IIIB.	LAND USE ISSUES SESSION LEADER, ANTONIA SEBASTIAN
11:00 - 11:20	Advanced Flood Warning System & Its Performance during Harvey Nick Fang Assistant Professor, University of Texas at Arlington	11:00 - 11:20	Predicting Urban Development in the Houston-Galveston Area Russell Blessing Postdoctoral Research Associate, Texas A&M
11:20 - 11:40	Flood Warning Systems in Highly Urbanized Environments Jacob Torres Senior Hydrologist, Lockwood, Andrews & Newnam, Inc.	11:20 - 11:40	Modeling the Influence of Urbanization on Flooding Antonia Sebastian Postdoctoral Research Associate, Rice
11:40 - 12:00	Lies, Damned Lies, & Statistics - Communicating Risk Andy Yung Principal (Infrastructure), Walter P Moore	11:40 - 12:00	Land Use Issues in Greater Houston Nikki Brand Researcher, TU Delft
12:00 - 1:00	LUNCH		
SESSION IVA.	COASTAL INFRASTRUCTURE IMPACTS SESSION LEADER, CLINT DAWSON	SESSION IVB.	WATER QUALITY SESSION LEADER, HANADI RIFAI
1:00 - 1:20	Storm Surge Forecasting and Impacts from Hurricane Harvey Clint Dawson John J McKetta Centennial Energy Chair in Engineering, UT Austin	1:00 - 1:20	Environmental Impacts of Severe Storms John Pardue, Ph.D. Professor, Louisiana State University
1:20 - 1:40	Urban Flooding Impacts on Transportation Infrastructure Ioannis Gidaris Postdoctoral Research Associate, Rice University	1:20 - 1:40	Sediment & Water Quality Post Hurricanes & Severe Storms Hanadi Rifai Professor, University of Houston
1:40 - 2:00	Protecting the Houston-Galveston Region from Coastal Flooding: A Systems Approach (H-GAPS) Larry Dunbar Project Manager, SSPEED Center	1:40 - 2:00	Impact of Hurricane Harvey on the Distribution of Chemical & Microbial Contaminants Qilin Li Professor, Rice University
2:00 - 2:15	BREAK		
SESSION V.	NATIONAL PERSPECTIVE SESSION LEADER, PHIL BEDIENT		
2:15 - 2:40	The Impact of Small Things Rob Rogers, FAIA Founder, ROGERS PARTNERS Architects + Urban Designers		
2:40 - 3:05	Comments on What We've Heard - Looking Backward and Forward from Harvey David Conrad Consultant, Water Resources Policy		
3:05 - 3:30	Hurricane Harvey: An NFIP Perspective on Recovery and What it Takes to Build a Culture of Preparedness Roy Wright Deputy Associate Administrator for Insurance and Mitigation, FEMA		
CLOSING			
3:30 - 3:35	Closing Remarks		