

# FLOOD MAPPING WORKSHOP



## MAAPNext & the Future of Flood Risk Assessment “Transforming Modeling and Data into Actionable Insights for Safer Communities”

**Friday, October 24, 2025**

8:00 a.m. – 1:30 p.m.

**O’Quinn Great Hall, Alumni Center**

University of Houston

Houston, Texas 77204

### HOSTED BY

**Department of Civil and Environmental Engineering, University of Houston**

### ORGANIZING COMMITTEE

**Dr. Keh-Han Wang, Rafael Ortega, P.E., Billy M. Cooke, P.E., Dr. Roberto Ballarini**

### WORKSHOP OVERVIEW

Flooding has long been one of the most devastating natural hazards in Harris County, Texas. This workshop presents topics related to Harris County’s next generation flood mapping (MAAPNext) that relies on the use of updated historical data and advanced methodologies and modeling techniques to create innovative floodplain maps for risk assessments, floodplain management, and increased public awareness.

The session is tailored for civil and environmental engineers, urban planners, floodplain managers, and others involved in flood risk management and infrastructure development. Attendees will gain hands-on knowledge of how MAAPNext will impact all civil engineering projects, including drainage analysis and how it reshapes the design criteria for civil engineers, particularly for those involved in hydrology and hydraulics.

Attendees will also receive critical insights into how the FEMA’s new flood maps will help communities prepare for and respond to flood events.

**Flood Risk Mitigation Begins with Knowledge. Help us build a safer, more resilient Harris County.**

## PROGRAM AGENDA

### REGISTRATION, CHECK IN, & NETWORKING (LIGHT BREAKFAST)

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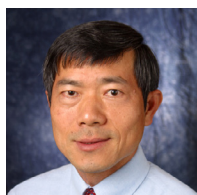
8:00 AM - 8:50 AM



#### Welcome Remarks

**Dr. Roberto Ballarini**, Chair of Department of Civil and Environmental Engineering

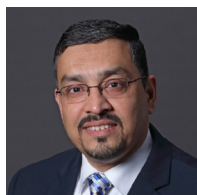
8:50 AM - 8:55 AM



#### Overview of the Hydrosystems Graduate Program and Aspects of Hydraulic Modeling Applied to Drainage Analysis

**Dr. Keh-Han Wang**, Professor of Department of Civil and Environmental Engineering

8:55 AM - 9:15 AM



#### HCFCF's MAAPnext Effort

**Ataul Hannan**, Planning Division Director for Harris County Flood Control District

9:15 AM - 10:00 AM



#### North Houston Highway Improvement Project (NHHIP)

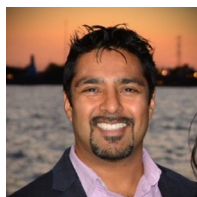
**Milad Ajir**, NHHIP Project Manager, TXDOT

10:00 AM - 10:45 AM

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### COFFEE BREAK

10:45 AM - 11:00 AM



#### Planning for City Infrastructure

**Paresh Lad**, Division Manager, Transportation & Drainage Operations and **Jesse Rose**, Staff Analyst, City of Houston

11:00 AM - 11:45 AM



#### Developing Comprehensive Drainage Models To Enhance City Planning

**Andrew Moore**, Water Resources Team Leader, Halff

11:45 AM - 12:30 PM

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### LUNCH & NETWORKING OPPORTUNITY

12:30 PM - 1:30 PM

## KEY BENEFITS

- Learn the Development of MAAPNext: Understand how the MAAPNext project is shaping the future of FEMA flood maps for Harris County.
- Explore the Impact of New Flood Maps: Delve into how updated flood maps will influence drainage design analysis and risk assessments.
- Essential Engineering Adjustments: Discover the adjustments or training needed for engineers to adopt the new flood map-based design criteria.
- Advanced Modeling Techniques: Gain insight into the latest hydrological and hydraulic modeling methods that will enhance flood risk evaluations.
- Attendees will earn 4 hours of continuing education. Certificates will be issued at the end of the workshop

## REGISTRATION

**\$175.00** (Advance Registration by 10/15/2025)

**\$200.00** (On-site Registration)

 [Click here to register](#)

## PARKING INFORMATION

Participants can park in Zone A lot (see below). The link will become available for attendees to register their cars for the parking permit (included in the registration fee).



For more information on the workshop, please contact: Dr. K.H. Wang at (713) 743-4277 or send email via [khwang@uh.edu](mailto:khwang@uh.edu).



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