

HOUSTON/BAY AREA STORM WATER FLOODING FORUM

Harvey, Ike, and the Future: What Can Be Done?

The Forum Sponsors (UH-CL Environmental Institute, AIAA-Houston, Americans United in Action, JSC Speakers Program) are *deeply* grateful to the panelists for sharing their valuable time and expertise on this vital issue.

Panelists

Neal F. Lane, Ph.D. (moderator) is the Senior Fellow in Science and Technology Policy at Rice University's Baker Institute for Public Policy. He is also the Malcolm Gillis University Professor Emeritus, and Professor of Physics and Astronomy Emeritus, at Rice University. Previously, Professor Lane served in the federal government as Assistant to the President (William J. Clinton) for Science and Technology, and Director of the White House Office of Science and Technology Policy (OSTP), from August 1998 to January 2001, and he also served as Director of the National Science Foundation (NSF) and member (ex officio) of the National Science Board from October 1993 to August 1998. See: <http://www.bakerinstitute.org/experts/neal-f-lane/>

Jim Blackburn, B.A., M.S., J.D., is a professor in the Civil and Environmental Engineering Department at Rice University and teaches courses in sustainable development and environmental law. He is also a practicing environmental lawyer with the Blackburn Carter law firm in Houston, and a Rice faculty scholar at the Baker Institute. At Rice, Professor Blackburn serves as co-director of the Severe Storms Prevention, Education and Evacuation from Disaster (SSPEED) Center and as director of the undergraduate minor in energy and water sustainability. See: <https://www.bakerinstitute.org/experts/jim-blackburn/>

John Branch, B.B.A., B.S., President, Clear Lake City Water Authority (CLCWA), currently leads the CLCWA board of directors. Mr. Branch is a veteran and served as an officer in the Army. He is very proud of what the CLCWA has been able to accomplish for the local area by maintaining low cost and high service levels, and is enthusiastic about what the Clear Lake City Water Authority and Exploration Green Conservancy can achieve to enhance the quality of life in the Clear Lake area. During Hurricane Harvey, Phase One of Exploration Green is credited with saving 100+ homes from flooding. See: <https://www.explorationgreen.org/board> and <http://www.clcwa.org/>

Stephen Costello, B.S., Chief Resilience Officer, City of Houston, is an engineer with a background in flood control and drainage. He served as Houston City Council Member At Large for 6 years from January of 2010 to December of 2015. In May of 2016, Mayor Turner appointed Mr. Costello as the city's Chief Resilience Officer. His initial task is to focus on the flooding and drainage issues facing the city, which is why he's been labeled the "Flood Czar." As an authority on flooding and storm water management, Mr. Costello has served as an expert witness for Harris County and TxDOT on drainage related issues. His depth of experience has been sought out by governmental agencies including large and small municipalities, county, and state governments. See: <https://www.contractsinfive.com/bio-stephen-costello>

André Droxler M.S., Ph.D., is a Professor of Earth, Environmental and Planetary Sciences at Rice University. His particular area of research is the regional and global evolution of coral reefs through time, and the paleo-oceanographic/climatic/sea level records that have been deposited in sediments around reefs and other carbonate platforms. Professor Droxler has conducted field research in the Bahamas, offshore Jamaica, along the Belize margin, in the western Gulf of Mexico, in the Maldives (Indian Ocean), along the Australian Great Barrier Reef, and in the Gulf of Papua (Papua New Guinea). See: <https://earthscience.rice.edu/directory/user/15/> and <https://earthscience.rice.edu/>

Lisa Gonzalez, B.S., M.A., President & CEO, Houston Advanced Research Center (HARC), is responsible for the strategic direction of HARC and its research programs which are designed to facilitate sustainable management of air, energy, and water resources. She served as Vice President and Chief Operating Officer of HARC from 2012-2016, overseeing the implementation of HARC's 5-year strategic plan, development of HARC's communication strategy, a reorganization of administrative operations and the design and construction of HARC's new green headquarters. In addition to leading

HARC, Ms. Gonzalez is active in research focused on the analysis and dissemination of data concerning the health and productivity of Texas Gulf Coast bays, estuaries, and watersheds. See: <http://www.harcresearch.org/people/lgonzalez>

George Guillen, B.S., M.S., Ph.D., University of Houston-Clear Lake (UHCL) is Executive Director of the Environmental Institute of Houston and a professor of biology and environmental science at UHCL. Previously, Professor Guillen served as chief of the Fisheries and Contaminants Program at the U.S. Fish and Wildlife Service office in Arcata, Calif., from 2000–2004. From 1998–2000 he worked at the Minerals Management Service, in New Orleans, La., as the Toxicology and Risk Assessment Unit Chief. Prior to this, Professor Guillen worked for 10 years with the TCEQ predecessor agencies (TNRCC and TWC) as District Manager and Program Manager. During his tenure as a state and federal employee, he managed various research and monitoring projects focusing on the effects of pollutants and instream flows on aquatic and marine organisms. Professor Guillen's research interests include evaluation of the impacts of pollutants, altered hydrology, and habitat modification on fish and wildlife populations, with a focus on estuarine systems.

See: <https://www.uhcl.edu/environmental-institute/people/staff/guillen>

John Jacob, B.S., M.S., Ph.D., is the director of the Texas Coastal Watershed Program, and Professor and Extension Specialist with a joint appointment with the Texas A&M Sea Grant Program and the Texas AgriLife Extension Service through the Department of Recreation, Parks, and Tourism Science. His current project, Coastal CHARM (Community Health and Resource Management), focuses on enabling coastal communities in Texas to improve quality of life in cities and towns while preserving and enhancing the natural coastal environment. Professor Jacob is registered as a Professional Geoscientist with the State of Texas and is a Professional Wetland Scientist. He is a recognized expert on Texas wetlands, and has been active in consulting and research aspects of wetlands for more than 20 years.

See: <https://tcwp.tamu.edu/about/staff-bio-john-jacob/#.Wg4-uEqnEdU>

Brandt Mannchen, Sierra Club, Houston Group, Brandt has been an active and dedicated Sierra Club volunteer for over thirty years. Brandt's distinguished history with the Club is marked both by his high level of commitment as well as by an impressive breadth of involvement in Club committees and chapter activities. During his tenure, Brandt has served as the Chair, Vice Chair, and Secretary of the Houston Sierra Group; he has been on the Executive Committee for both the Houston and Lone Star Chapters, and he has served on committees dealing with a range of issues, from wildlife and endangered species to offshore drilling. Brandt is proud to have worked to contest the first Outer Continental Shelf (OCS) National Pollutant Discharge Elimination System (NPDES) permit issued by the U.S. Environmental Protection Agency off the Texas coast. In recent years, Brandt has been primarily involved in forestry issues, serving as the Forestry Chair for the Houston Group, and the Big Thicket Chair for the Lone Star Chapter.

See: <https://content.sierraclub.org/environmentallaw/profile/legal-hero/brandt-mannchen>

Bob Stokes, B.A., J.D., President, Galveston Bay Foundation, is a 1990 graduate of Yale University and a 1994 graduate of the University of Texas School of Law. After practicing law for ten years, Mr. Stokes joined the Galveston Bay Foundation as President in June, 2004. He had served on the board of the Foundation for five years prior to taking over as President and had served as the board's chair for the previous two years. Mr. Stokes has also served on the Houston Wilderness Board of Directors since 2004, and on the Governing Board of Earth Share of Texas beginning in 2007. See: <http://galvbay.org/>

Len Waterworth, M.S., M.S., Executive Professor, Texas A&M University Galveston (TAMUG), joined TAMUG in the Department of Maritime Administration in 2014. Colonel Waterworth was also appointed as a senior research associate in the Center for Texas Beaches and Shores. Colonel Waterworth's duties include coordinating Ike Dike hurricane surge protection research activities with Texas A&M Galveston faculty and research partners at Delft University of Technology, Delft, Netherlands, the largest and oldest Dutch public technical university; the Institute for Regional Forecasting at the University of Houston and the Homeland Center of Excellence at Jackson State University in Mississippi, as well as public outreach efforts with businesses, municipalities, and non-governmental organizations in the Houston/Galveston region.

See: <http://www.tamug.edu/mara/FacultyBios/LeonardWaterworth.html>