Legislation Text

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Presentation regarding Surge Suppression System/Ike Dike by Dr. Sam Brody, Director of the Center for Texas Beaches and Shores Presentation regarding “Surge Suppression System/Ike Dike” by Dr. Sam Brody, Director, Center for Texas Beaches and Shores (City Manager)

Dr. Sam Brody is the Director of The Center for Texas Beaches and Shores (CTBS) at Texas A&M University at Galveston which was established in 1993 by the Texas Legislature to address beach erosion and wetlands loss throughout the state. CTBS seeks to become the gateway for research on coastal sustainability and resiliency. It is dedicated to the conservation and protection of the Texas shoreline, bays and waterways through innovative research in cooperation with government and private sector agencies. Its focus is to develop comprehensive, holistic approaches to Texas coastal research and restoration solutions while incorporating natural, economic and political processes.

The Texas Coast is one of the most productive and ecologically distinctive shorelines in the World. It is dynamically being reshaped by both natural and man-made forces. CTBS aims to gain further understanding and educate the Texans living in this 18-county coastal region. CTBS has worked to create the Texas Coastal Planning Atlas using detailed geographic information that assists in providing guidance in decision-making, policy, and planning. As of 2016, the Atlas is the most comprehensive online, interactive database ever compiled about the Texas coast. This system offers anyone with an Internet connection critical information on the consequences of living on the coast, from regional issues down to an individual structure. This Atlas interlinks the flood risk reduction and environmental monitoring programs and gives them a visual reality.

The Ike Dike is a coastal barrier that, when completed, would protect the Houston-Galveston region including Galveston Bay from hurricane storm surge. The project was conceived by Professor Bill Merrell of Texas A&M University at Galveston in response to the extensive surge damage caused by Hurricane Ike in September of 2008. The project would extend the protection afforded by the existing Galveston Seawall along the rest of Galveston Island and along the Bolivar Peninsula, with a 17ft high revetment near the beach or raising the coastal highways. The addition of flood gates at Bolivar Roads, the entrance to the Houston, Texas City, and Galveston ship channels, and at San Luis pass would complete a coastal spine that would provide a barrier against all Gulf surges into the Bay. Merrell argues that the Ike Dike could be built using existing, proven technology such as the gates and barriers currently used in the Delta Works project located in the Netherlands.

FUNDING
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