Ike Dike Research Principles
Center for Texas Beaches and Shores

The research centered on the feasibility, costs, and benefits of the “Ike Dike” seeks to blend the best characteristics of science and policy. From a policy perspective, Ike Dike research aims to provide guidance to policy and decision-makers on courses of action to protect the upper Texas Gulf Coast from hurricane-induced storm surge. However, this guidance can only be appropriately developed through the use of interdisciplinary science. Translating science to policy requires several intermediate steps, many of which generate data and models. One of the hallmarks of any scientific or research endeavor is assuring that the data, methods, and models generated and created throughout the process are transparent and replicable.

Policy Statement
All Ike Dike related research will be transparent, publically accessible and replicable.

Transparent
- Assumptions clearly stated
- Model outputs and efforts will describe the exact model used, boundary conditions, and initial conditions.
- All results will be presented in full and assessed for applicability and methodological limitations.

Information Publically Accessible
Results, data inputs, and critical intermediate results will be archived and readily available. Due to the inherent spatial nature of modeling storm surge and associated damages, critical spatial data and results will be made accessible through the use of a web-based Geographic Information System (GIS). This will allow stakeholders, decision-makers, and the greater public to view the results and intermediate steps used to generate the results in a user-friendly fashion. More advanced analysts and users will be provided with the ability to download data in commonly used spatial data formats accompanied by FGDC formatted metadata.

Results Repeatable and Expandable
Research results will be documented and accompanied with initial conditions, data sources, models, and other associated information such that interested parties will have the ability to repeat the calculations and get the same results. Additionally, methods, assumptions, and limitations will be clearly stated, allowing other researchers to expand on the results and/or incorporate into other analyses.