

Why Coastal Texas Plan Must Change

Sierra Club Comments

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BAY AREA STORM SURGE FLOOD FORUM

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Important Words



“A barrier Island is a dynamic geomorphic feature; it must be allowed to move and change shape in adjustment to the energy and sediment conditions. Any interference with these natural processes threatens the integrity and maintenance of the barrier island system.”

Steven P. Leatherman, in his “Barrier Island Handbook”, University of Maryland, 1982.

Introduction

- ▶ Coastal Texas Protection and Restoration Feasibility Study” (Coastal Texas Study). Otherwise known as “Ike Dike” or “Coastal Barrier” Alternative.
- ▶ Corps of Engineers and Texas General Land Office released “Draft Integrated Feasibility Report and Draft Environmental Impact Statement (DEIS) for the Coastal Texas Protection and Restoration Feasibility Study” (Coastal Texas Study).
- ▶ At stake: Galveston Bay, Galveston Island, Bolivar Peninsula, shoreline and bayside communities, and the natural coastline, marshes, dunes, beaches, prairies, and wildlife habitats.
- ▶ Initial Public Comment period closed Feb. 8, but still accepting input



What is Ike Dike?

- ▶ 70-mile levee/seawall/floodwall from High Island, down Bolivar Peninsula/Galveston Island, to San Luis Pass
- ▶ 18 to 21 feet tall and 600 or more feet in width
- ▶ Two-mile series of gates at Bolivar Roads
- ▶ Gates at Clear Lake/Dickinson Bayou/High Island Gulf Intracoastal Waterway
- ▶ Ring levee around East Galveston
- ▶ Galveston Bay ecosystem restoration projects
- ▶ \$21 to \$30 billion estimated construction cost



What Does Ike Dike Do?



- Reduces storm surge in Galveston Bay about 50%

Ike Dike Doesn't Do:

1. Prevent ebbtide flooding (slosh)
2. Mitigate rainfall flooding
3. Prevent sea level rise
4. Allow Galveston Island/Bolivar Peninsula to move toward mainland to keep up with sea level rise
5. Allow creation and maintenance of backbay marshes
6. Protect beaches, dunes, freshwater wetlands, coastal prairies, and structures from erosion in front of levee.
7. Reduce storm surge on Galveston Island/Bolivar Peninsula Gulf shorelines
8. Allow normal circulation and mixing of freshwater, seawater, nutrients, organic matter, and organisms in Galveston Bay
9. Protect wildlife habits and public and private protected lands from destruction, fragmentation, and isolation.
10. Protect Piping Plover & Kemp's Ridley Sea Turtle feeding/nesting habitats
11. Protect West Galveston Bay
12. Doesn't protect Galveston Island/Bolivar Peninsula vistas





What are some alternatives?

- ▶ Houston Sierra Club has a “Double E (Economically and Environmentally) Storm Surge Alternative.”
- ▶ Bayou City Waterkeeper and other environmental groups has a similar alternative called “Sage Alternative”.
- ▶ These two alternatives have not been developed and analyzed by Corps of Engineers.
- ▶ We strongly recommend those actions by the Corps.



What additional solutions?

- ▶ Individual levees around industrial plants/units to reduce impacts of oil/chemical spills on Houston Ship Channel and other ports
- ▶ Removal, elevation, tie-down, and strengthening of vulnerable storage tanks
- ▶ Resolution of environmental justice problems for those who live in coastal zone near large public works and industrial facilities
- ▶ Use planned withdrawal (buyouts) in areas with sensitive ecological lands and solutions are expensive to build, operate, finance, maintain, repair, and replace
- ▶ Acquisition of land buffers that allow marshes and other natural ecosystems to migrate inland as sea level rises
- ▶ Solutions should be specifically prepared and focused locally on individual areas
- ▶ Use long-term planning (200 years) to take climate change and sea level rise into account
- ▶ See handouts!

Who should pay?



- ▶ The public pays 100% of construction costs, 65% federal and 35% GLO.
- ▶ What about the Houston Ship Channel and other Galveston Bay industries?
- ▶ What about cities, counties, and other public entities?

What's needed for public review?



- ▶ DEIS is not adequately prepared and ready for public review/comment. Inadequate detail about alternatives, environmental impacts, and mitigation for environmental impacts makes it impossible to choose or support an alternative.
- ▶ Corps must commit to a supplemental DEIS with public review/comments because the current document is deficient.
- ▶ Corps must implement an extensive public outreach/input program for all of Texas so that the public knows what is at stake and that DEIS is available for review/comment.
- ▶ Local communities must have accurate and detailed information about alternatives and how they may impact them.
- ▶ Texas and United States taxpayers have significant environmental, social, and economic investments and concerns about the DEIS.

What's needed?



- ▶ Alternatives should focus on non-structural solutions or structural solutions adapted to specific areas with lower environmental impacts.
- ▶ Houston Ship Channel industries and Galveston Bay industrial areas must be responsible for protection of their own facilities and should pay for most costs to protect these facilities from storm surge.
- ▶ All alternatives must address Hurricane Harvey rainfall and floodplain flooding.

What to do now?



Send your comments:

- ▶ Email to CoastalTexas@usace.army.mil or swgpao@usace.army.mil
- ▶ Mail to: **USACE, Galveston District, Attention: Mrs. Jennifer Morgan, Environmental Compliance Branch, Regional Planning and Environmental Center, P.O. Box 1229, Galveston, Texas 77553-1229.**
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Want more information?

- ▶ Contact Brandt Mannchen, 832-907-3615, brandtshnfbt@juno.com.

Thank you.

