

Guiding Principles for a Sage Alternative: *Protection of People and Property from Flooding and Storm Surge*

Together with conservation groups across the Greater Houston-Galveston region, we present a vision for an environmentally-preferable alternative for flood and storm surge protection. This proposal is premised on the following two key concepts that such an alternative must:

- Work with, rather than against nature; and
- Keep people out of harm's way.

This alternative should, to the maximum extent practicable, employ non-structural means, such as: preservation and enhancement of prairies, riparian areas, barrier islands and wetlands; buyouts and strategic withdrawal from areas that cannot be adequately protected; and, appropriate land use regulation to give effect to those concepts.

We believe that any alternative or combination of alternatives must be fully analyzed for environmental impacts, as well as cost:benefit ratio, and that in evaluating the alternatives we must consider the future effectiveness of our selected remedy. Given the rapidly changing climatic conditions, and its effect on the coastal area, we believe that 100 years is an appropriate projection.

We believe that the following principles must be applied in formulating a successful flood and storm surge protection strategy:

1. Public, Private and Corporate Responsibility

- An industrial facility should provide its own first line of defense. All industrial facilities in the Greater Houston area should be required to protect themselves from anticipated storm surge and flood waters. This will further protect the general public from the contamination from flood-caused releases of hazardous materials.
- Our political subdivisions must pass regulations that prevent development in floodways and floodplains. This will have the effect of keeping people out of harm's way. To prevent contamination of surface water and disruption of essential services, must not permit infrastructure, such as wastewater treatment plants or drinking water treatment plants, in the floodways and floodplains.
- Our development community must recognize that even a rare event, such as flooding from Hurricane Harvey, is an unacceptable disaster when thousands of people and billions of dollars in property have been deliberately placed in harm's way, for profit.

2. Preserve and Restore Riparian Capacity, Open Space and Barrier Islands

- Conserve lands that provide more open space and flood capacity, by either the purchase of lands or private conservation easements. Our bayous, given sufficient floodplain, are our natural storm drains and detention systems. Preserving these areas also provides the important secondary benefit of recreational green space.
- Preserving the lands obtained through buyouts of flooded homes and other structures, such as riparian green space, will also increase the capacity of our natural floodways and floodplains. Banning redevelopment of these acquired lands will also contribute to keeping people out of harm's way.
- Preserving land on our barrier islands and along our Bayfront keeps people out of harm's way and provides a buffer zone to naturally absorb storm surge.

3. Minimize Building Dams, and Dikes and Elevating Roads

- Dams, dikes, and raised roadways should only be employed where nonstructural alternatives, to protect lives and critical infrastructure from storm surge and flooding, are not feasible. These structural alternatives are working against nature, rather than with it. They also may have the secondary effect of encouraging development in vulnerable areas, effectively moving people into harm's way.

Supporting Organizations

Artist Boat
Bayou City Waterkeeper
Christmas Bay Foundation
Defenders of Wildlife
Galveston Bay Foundation
Galveston Island Nature Tourism Council
Gulf Restoration Network
Lower Brazos Riverwatch
National Wildlife Federation
Turtle Island Restoration Network
Sierra Club - Houston
Sierra Club – Lone Star Chapter
Surfrider Galveston