

Only you can boost Jefferson County's marsh system survival!
Please file comments in support of two Deepwater Horizon restoration grants.

By Jeff R. Branick, Jefferson County Judge

Jefferson County is home to a 139,000-acre Chenier marsh system that is the largest contiguous coastal marsh in Texas. This marsh runs roughly from Highway 73 south to the Gulf of Mexico. It is an ecological wonder and extremely important to preserving the future of Jefferson County. It is important recreationally as it is used by hunters, fishermen, bird watchers, beach goers and kayakers. It is important ecologically as it is a fin fish, shrimp, crab and waterfowl nursery habitat and over 95% of the species in the Gulf of Mexico depend on these marshes at some point in their life cycle for their survival.

A total of twenty state or federal threatened or endangered species inhabit the marsh. Eleven state or federal comprehensive conservation management plans apply to Jefferson County's marsh species from migratory waterfowl, to shorebirds and wading birds, and the Gulf Coast Joint Venture connecting the marsh with a flyway from the Canadian Arctic and Alaska, to Mexico, the Caribbean, Central and South America.

The Chenier marsh is also a commercial fishing powerhouse as a nursery for millions of pounds of seafood harvest. Two recent years' harvest statistics (2012-13) show that Jefferson County is the top Texas commercial fishing port measured by pounds at 11,332,816 per year and catch value at \$50,391,307 per year. A healthy coastal marsh system is the mainstay of Jefferson County's annual harvest, supporting around 1,200 local jobs based upon a renewable resource.

Our coastal marsh is also critical to the safety and survival of the residents of Jefferson County because it acts as a hurricane storm surge suppression buffer. Had it not been for this marsh the storm surge from Hurricane Ike would have destroyed billions of dollars of homes, businesses and energy infrastructure. The BP oil spill and the related fines and civil penalties which will be awarded to the State of Texas has provided us with a once in a lifetime opportunity to address issues that have plagued the Salt Bayou marsh for the last 80 years.

The degradation of the marsh began in the 1930's with the digging of the Gulf Intracoastal Waterway (the busiest section for inland waterway commerce in the US is in Jefferson County). The construction of the GIWW cut off the lower elevation marshes to the south from the normal sheet flow of fresh water from the higher elevation marshes on the north, altering fresh water flow patterns and leaving the southern marsh far more dependent on rain events to combat high salinity levels.

Then, in 1977, a fish pass was cut from the Sabine Neches ship channel into the Keith Lake system and erosion, over a period of years, substantially widened and deepened the cut causing salinity levels to increase 300% over what was necessary for a healthy marsh. Then in 2005 and 2008 hurricanes completely destroyed our beach dune system

such that at even normal high tides salt water was entering the marsh system from the south.

Looking at satellite photographs of the marsh system prior to and after Hurricane Rita in 2005, you can see that salt water inundation caused one acre ponds to turn into 20 acre lakes because of vegetative death. Failing to take action to ameliorate the effects of salt water intrusion will lead to the death of the entire marsh and would cause the Gulf Intracoastal Waterway to become susceptible to the wave action of the Gulf of Mexico, a problem that would cost over a billion dollars to address.

The Salt Bayou Marsh Workgroup, made up of representatives of Jefferson County Engineering Department, Texas Parks and Wildlife, US Fish and Wildlife, Ducks Unlimited, the Texas General Land Office, the US Army Corps of Engineers, NOAA and others studied the problem for over 10 years eventually producing the Salt Bayou Watershed Restoration Plan. It called for a 4 prong approach to preservation of the marsh:

- 1.) Construct a fish pass baffle at the Keith Lake fish pass to lessen salinity intrusions from the east;
- 2.) Engineer and construct siphons underneath the GIWW to carry fresh water from the higher elevation northern marsh to the south; and,
- 3.) Reconstruct the 20 miles of gulf beach berm and re-establish the sand beach dunes that will bring Jefferson County's southern boundary back to where it was 100 years ago, which is 400 feet further into the Gulf of Mexico.
- 4.) Beneficial use of dredge material to restore marsh subsidence.

Thanks to donations to Jefferson County from Texas Parks and Wildlife Foundation, Golden Pass LNG and Sempra Energy, the Keith Lake fish pass baffle has been engineered and constructed and preliminary reports are that it is working marvelously. We have also received a \$4.5 million dollar grant from the National Fish and Wildlife Foundation that will pay for the construction of the siphons under the Gulf Intracoastal Waterway to re-establish fresh water inflows from the north. It is anticipated that final engineering and permitting will allow the siphons to be constructed and put into operation within the next 12 months.

The last part of the equation/solution requires the re-establishment of our beach dune system. When sand is on a beach it is in a constant state of recession and redeposition because of wave action. Because of hurricane caused loss of the sand on our beach we have lost 358 feet of Jefferson County into the Gulf of Mexico since Hurricane Rita...clay dissolves into the Gulf and does not redeposit like sand.

Using funds of Jefferson County, US Fish and Wildlife and the Texas General Land Office a new berm has been constructed along the entire coastline of Jefferson County. This berm will act as the foundation for sand dunes which will be constructed by dredging from a sand source 1 ½ miles out into the Gulf of Mexico.

The total anticipated cost is approximately \$60 million. Thus far and using funds provided by Texas Land Commissioner George P. Bush, we have placed sand on 3 miles of our beach which was completed just two weeks ago. Already, 100's of terns

have started nesting in the newly reinvigorated dunes. The terns vote for restoration with nest sites and hatchlings!

To complete the dune project will require approximately \$45 million more in funding. Thankfully, two grant proposals have been made this year to significantly expand project funding.

In February, Texas Commission on Environmental Quality Commissioner Toby Baker announced a Multi-year Implementation Plan for RESTORE Act bucket 1 with a \$10 million grant for restoring the “Salt Bayou Watershed Project.”

A public comment process is running right now until 5 pm June 30th and individuals, companies, associations, elected bodies, etc. can file comments electronically at rcomments@tceq.texas.gov. I strongly urge you to take action and express yourself in support of the proposed \$10 million for the “Salt Bayou Watershed Project” which will be awarded on a coast-wide competitive basis in Texas involving 25 other grant projects. Your comment counts!

Then, this May, the Texas Trustee Implementation Group (Texas TIG) proposed another \$15 million grant for Jefferson County’s coastal marsh called “McFaddin Beach and Dune Restoration Project.” The project is identical to the above named “Salt Bayou Watershed Project.” These funds are dedicated to species and ecosystems with a strong ‘link to injury’ and that is precisely what fits the Salt Bayou watershed lying just inside the McFaddin Beach and Dune system. This proposed grant is also currently out for public comment and comments can be filed electronically until June 19th at www.gulfspillrestoration.noaa.gov or directly at <https://parkplanning.nps.gov/document.cfm...> If you prefer, comment letters can be sent by mail to U.S. Fish and Wildlife Service, P.O. Box 49567, Atlanta, GA 30345.

Remember, the Salt Bayou Watershed Project and the McFaddin Beach and Dune Restoration are the same project.

Lastly, most of the species in the Gulf of Mexico depend on Jefferson County’s marsh system. The rest of the United States depends on the gas, diesel and chemicals produced right here in Jefferson County. The Salt Bayou marsh protects us from storm surge and it deserves to be protected by us. Thank you in advance for your assistance with this worthy cause.