

# Use Storm Surge Barriers to Expand Oyster Production

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Properly positioned storm surge barriers will fit within the State's Master Plan for Coastal Protection and Restoration. They provide a way for dredging and diversion to build dry or wet land in the Coastal Zone and will encourage the expansion of the oyster industry. **Currently, investment in the oyster industry is discouraged** by the uncertainty over what will happen to fresh water flows and existing oyster bottoms. Storm surge barriers will reduce this uncertainty by providing the physical and regulatory stability to encourage new investment in the oyster industry---investment that could double or triple Louisiana oyster production within the foreseeable future<sup>1</sup>. Most importantly for moving forward with Coastal Protection and Restoration, properly positioned storm surge barriers provide a solution that many Coastal interests will support politically and financially. For the oyster industry this is a path to a better future welcomed by many non-oyster interests.

Storm surge barriers come in several forms. They can be floating or fixed. Fixed storm surge barriers can be vertical, like bulkheads or like levees. They can surround a piece of land like ring-levees. They can be relatively short and straight like the new barriers behind Grand Isle. Or, like the barrier (see artist rendering above) being considered for New York City.



Perhaps the most useful barriers are those built for suburban developments. Lakeshore Estates at Slidell is a good example. See picture below and webpage: <http://lakeshorelouisiana.com/> These barriers can provide space for multiple uses: housing, marinas, sports fishing, oyster production, etc. **Most impressive**, the storm surge barriers at Slidell were



built with a minimum of public subsidy. The developer paid for the environmental and engineering studies required and spent months obtaining public approval to construct these barriers.

Imagine what storm surge barriers would be built if the State provided pre-approved locations, construction plans, and construction subsidies for barriers that combined storm surge protection with expanded oyster production.

Some barriers might be positioned to protect newly developed oyster growing areas from **too much fresh water**. If the barriers were close to a source of higher-salinity water, that water could be used to manage the salinity in the newly developed oyster growing areas to maximize oyster growth.

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<sup>1</sup> NMFS Ten Year (2005-2014) Average Annual La. oyster landings value is \$42 million, equals 1,800,000 sacks. Well-managed per acre production in Louisiana is 200 sacks/acre. The number of well-managed acres required to produce those annual landings is 9,000 acres. In La., a single company may own 100,000 acres of coastal marsh. Before reopening leasing, La. had 400,000 acres of leased oyster bottoms.