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Fact Sheet

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Louisiana Coastal Area (LCA) Ecosystem Restoration, LA (General Investigations): Comprehensive Coastwide Ecosystem Restoration Feasibility Study

STUDY AUTHORITY: Senate Resolution 19 April 67 and House Resolution 19 October 67.

STUDY SPONSORS: The State of Louisiana – Louisiana Department of Natural Resources (LADNR).

STUDY AREA: The study area is Louisiana's coastal area from Mississippi to Texas. Louisiana parishes included in the study area include Ascension, Assumption, Calcasieu, Cameron, Iberia, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Vermilion. The entire Louisiana coast includes 9 hydrologically distinct basins, subdivided in 4 subprovinces.

PROBLEMS & IMPACTS: The coast of Louisiana is experiencing massive loss of wetlands. This loss is having a profoundly negative impact on the Nation. Louisiana's wetlands contain 45 percent of intertidal coastal marshes and 90 percent of the total coastal marsh loss in the lower 48 states. This loss of wetlands includes the various functions and values: commercial harvests of fisheries, furbearers and alligators; recreational fishing, hunting, and eco-tourism (some of the finest in North America); habitats for threatened and endangered species; water quality improvements; navigation corridors and port facilities, etc. The public use value alone is estimated to be in excess of $37 billion by 2050. The need for prompt and united action is acute. In addition to the irreplaceable cultural and natural resources, over $150 billion worth of municipal and industrial infrastructure is at risk, including roads, pipelines, ports, and related facilities. Without protection of the wetlands, these assets may have to be abandoned over the next 40-50 years, resulting in a negative impact on the economy and security of the Nation.

Land Loss

- As a result of the human activities and natural coastal processes, coastal Louisiana has lost over 1.2 million (1,900 sq.mi.) acres during the 20th century.
- As recently as the 1970s, the loss rate for Louisiana's coastal wetlands was as high as 25,600 acres per year. The current rate of loss is about 16,000 acres per year, much of which is due to the residual effects of past human activity.

- Without action, it is estimated that coastal Louisiana will lose an additional 430,000 acres (670 sq.mi.) by the year 2050.
- In accordance with the loss rate of 16,000 acres per year, an estimated 48,000 acres of land will be lost if authorization of the LCA program is delayed beyond WRDA 2004.
- Coastal Louisiana is home to over 2 million people, representing 46 percent of the state's population.
- The loss of land and habitat places these wetland functions and values at risk: commercial harvest of fishery resources of national importance; oil and gas production; petrochemical industries; recreational saltwater and freshwater fisheries; North American Central Flyway waterfowl wintering habitat; resting and refueling areas for neotropical migrants; ecotourism habitats for nationally endangered and threatened species; strategic petroleum reserve storage sites; flood control, including hurricane storm surge buffers; navigation corridors and port facilities for commerce and national defense, and the intangible value of land settled 300 years ago and passed down through generations.
- Storm Surge Mitigation - It has been documented that coastal landscape features such as barrier islands and wetlands provide an important buffering effect serving to reduce hurricane induced storm surges in inland areas. FEMA uses a factor of approximately 1-foot reduction in storm surge height for every 3 miles of buffering wetlands. Obviously, continued significant losses of this buffer area over time will increase storm surges at inland, metropolitan areas in Louisiana. For the most part, levees protecting cities and towns in these coastal areas were designed with the assumption that this buffering action will remain intact for future storms.

Fisheries

- Louisiana caught approximately 125 million pounds of shrimp in 2001 (which was over 45 percent of United States' total landings) with revenue at approximately $188 million.
- Louisiana produced 37 percent of the nation's oyster meats, with a revenue of approximately $27.5 million.
- Dockside revenues for commercial fisheries in Louisiana were $345 million in 2001.

Recreation

- Anglers account for approximately $1.26 billion (2002 dollars) per year for the Louisiana economy.
- Coastal Louisiana is the winter home to 70% of the waterfowl within the Mississippi River Flyway.
- Migratory bird hunting related expenditures in Louisiana approximately $55 million per year.

Navigation

- In 2000, port facilities located along the Mississippi River between the Head of Passes and Baton Rouge (Ports of Plaquemines, New Orleans, South Louisiana, and Baton Rouge) handled approximately 431 million tons of cargo. Additionally, the Port of Lake Charles handled approximately 53 million tons in 2000. Four of the top ten and five of the top 15 ports in the U.S. (ranked by total tons) are located in south Louisiana.

- In 2000, Louisiana shipped over 258 million tons and received over 288 million tons of commodities valued at approximately $40 and $42 billion, respectively.
- Port Fourchon, located in Lafourche Parish at the Gulf of Mexico, serves as the hub of offshore support services activity in the Central Gulf of Mexico by supporting 75% of the deep-water activity in the Gulf of Mexico. As a result of the continuous advancements in the field of deepwater oil and gas technology, coupled with the projections of oil and gas reserves in the Gulf of Mexico, Port Fourchon has currently exceeded its year 2030 implementation plan projections and indicates that the activity currently ongoing at Port Fourchon will be sustained for the next forty years.

Oil & Gas

- If Louisiana did not produce oil, the US would have to import 30% more oil from OPEC countries than it currently does.
- Louisiana has 13 major crude oil pipelines, nine major product pipelines, and 13 Liquefied Petroleum Gas pipelines in the state. Eighteen petroleum refineries distill a combined crude oil capacity of more than 2.7 million barrels per day - the second highest in the nation after Texas.
- Louisiana currently provides over 28% of the total crude oil produced in the U.S.
- Louisiana currently provides over 26% of the total natural gas produced in the U.S.
- If Louisiana did not produce natural gas, at the same level of consumption the US would have to import 133% more gas from other countries than it currently does.
- Oil reserves estimated at 40 billion barrels were recently discovered in the Gulf of Mexico, necessitating a substantial expansion of the LA oil industry infrastructure to extract, transport and process these reserves.
- Most of this onshore production of oil and gas occurs in the southern part of the state. Those facilities in the coastal areas are the ones most at risk due to degrading coastal landscape.
- Refined products from Louisiana refineries are valued at $64 billion (2001 prices), $36 billion of which are delivered to out-of-state markets.
- Recent discussions with Shell Oil Company representatives revealed that the company is spending approximately $5 million per year on pipeline protection measures to combat erosion impacts.

STUDY PURPOSE: The purpose of the study is to identify near-term ecosystem restoration needs, and explore long-range, large-scale ecosystem restoration plans, to restore and protect coastal Louisiana. This study has identified projects that ultimately support the environmental management and restoration of the coastal wetlands of Louisiana. The projects will sustain a coastal ecosystem that supports and protects the environment, economy, and culture of Southern Louisiana and that contribute to the economy and well being of the nation by achieving the following:

- A sustainable coastal ecosystem with the essential functions, assets, and values of the natural ecosystem.
- A restored ecosystem having the highest practicable acreage of healthy, productive and diverse wetlands.

- An accomplished restoration through an integrated program that has multiple use benefits; benefits not solely for wetlands, but for all communities, industries, and resources of the coast.
- A design that is comprehensive and is coordinated and consistent with other major land use and infrastructure features, particularly with respect to navigation, hurricane protection/flood control, and oil and gas production.
- Vertical accumulation to achieve sustainability of ecosystems; maintain estuarine gradients to achieve habitat diversity; restore historic unique ecotypes (wooded cheniers, floatant marshes, etc.); and maintain exchange and interface to achieve ecosystem linkages.

STUDY SCHEDULE: The study has been completed to provide for inclusion in a WRDA in 2005.