

US Army Corps of Engineers New Orleans District

Project Fact Sheet

Official Project Name

Louisiana Coastal Protection and Restoration (LACPR)

Location

The LACPR team is conducting design and analysis for the entire Louisiana coastal area.

Purpose

The purpose of the LACPR effort is to assess flood risk and effectively communicate that risk to policy makers and the general public so informed decisions can be made regarding coastal restoration and mitigation issues. Unlike many other projects described on this Web site, LACPR is not a construction project. Rather, it is a collaborative effort managed by the Corps that will generate a technical report that will provide guidance for Congress and other decision makers in long-term decision making regarding hurricane protection and coastal restoration.

Historically, wetlands have served as a natural hurricane buffer zone for south Louisiana helping to absorb storm surge and reduce the force of high winds. Since 1932, Louisiana has lost about 1,900 square miles of wetlands (approximately the size of Delaware) to coastal erosion attributable to both nature (such as sea level rise) and human activity (such as oil and gas exploration). Typically, 24 miles of shoreline is lost each year, which equals about a football field every 38 minutes. Because land is constantly being lost and the capability of the storm protection system remains constant, the level of risk associated with storm damage across south Louisiana is constantly increasing.

Hurricanes Katrina and Rita eliminated 217 square miles of coastal wetlands. The loss of wetlands that occurred on the two days when each hurricane made landfall exceeded wetlands loss projected to take place over the next 20 years across all of coastal Louisiana. With regard to the greater New Orleans area, the amount of wetlands expected to erode over 50 years was lost in a single day.

Given the enormous challenges associated with restoring Louisiana's coast and protecting the region from hurricane damage, Congress has directed the Corps of Engineers to conduct, in consultation with the state of Louisiana, a comprehensive hurricane protection analysis. The directive requires the Corps to develop a full range of flood control, coastal restoration, and hurricane and storm damage reduction measures for south Louisiana using a comprehensive and integrated system approach that contemplates providing risk reduction for a storm surge equivalent to a "Category 5" hurricane.

To meet the Congressional directive, the Corps is preparing a technical report that will contain:

1. a description of the risk facing coastal Louisiana

- 2. a description of how the report was created
- 3. a discussion of multiple lines of defense as a strategy to address coastal protection problems
- 4. a description of a suite of structural, non-structural and coastal measures that could be implemented
- 5. a description of the hydromodeling analysis (how water behaves)
- 6. a description of the criteria also known as "metrics" used to evaluate the individual alternatives
- 7. a full description of the multi-criteria decision analysis and stakeholder participation
- 8. a proposal on how to proceed, including potential implementation strategies

Status

The Corps has prepared the technical report and an independent review was completed by the National Academy of Sciences (NAS). The NAS review comments are being used to modify the report. Input from subsequent stakeholder meetings will be used to finalize the technical report. An additional round of review of the final report will be conducted by an ITR team as well as NAS.

Benefit to the Community & Project Features

Benefit to the Community

The LACPR initiative represents the first Congressional mandate for coordination of coastal restoration and hurricane risk reduction in Louisiana. It encompasses all of coastal Louisiana and integrates water resources objectives of hurricane protection, flood control and coastal restoration.

Features

A key feature in the report the Corps will present to Congress will be its Risk Informed Decision Framework. Decision frameworks serve business, social science, and medical communities as tools to organize and present data in a format useful for decision making. History shows that storm and flood risks change over time. This is a result of changing weather patterns, land use patterns and/or performance of storm or flood protection projects. Over the course of a project's life, conditions may differ from those anticipated during pre-project planning. LACPR's Risk Informed Decision Framework is being developed to guide planning decisions by providing information to decision makers on a set of possible future conditions. This augmented planning process provides a way to organize information about multiple and diverse objectives and stakeholder values.

LACPR's Risk-Informed Decision Framework will:

- identify, assess, communicate and manage risks to life, health, the environment and economics associated with hurricane-induced flooding and residual risks associated with risk mitigation plans;
- account for the major uncertainties in the planning environment that could affect the performance of plans in the future;
- identify data gaps that could influence decisions;
- provide the basis for ranking the performance of alternative plan formulations based on risk metrics correlated to planning objectives and stakeholder values

• establish confidence levels for planning decisions and recommendations.

Sponsors

The LACPR effort is 100% federally funded, therefore no local financial partner is required. A key partner in the effort is the Louisiana Coastal Protection and Restoration Authority (CPRA), created by act of the Louisiana legislature in January 2006 to integrate state, parish, and local interests, as well as that of non-governmental organizations, for development of a Louisiana Hurricane Protection and Coastal Restoration Master Plan. The CPRA is the single state entity that interfaces with the Corps on project development.

Representatives of other federal, state and local agencies are also integral parts of the team. In addition, the Corps involves the nation's most capable scientists, engineers and planners. The Corps is also working closely with professionals from the Netherlands to collaboratively develop best technologies for coastal protection.

Authority

Energy and Water Development Act of 2006 (P.L. 109-103), 19 Nov 05, and Emergency Supplemental Appropriations Act of 2006, Chapter 3 (P.L.109-148), 30 Dec 05; Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act of 2006 (P. L. 109-234)