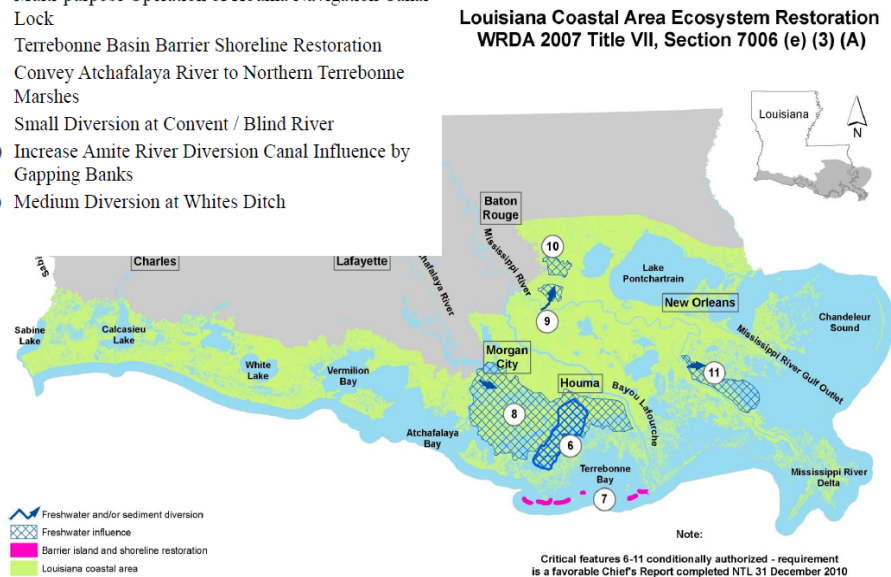


# Louisiana Coastal Area (LCA) Ecosystem Restoration, LA Six Conditionally Authorized Projects

27 August 2010

- 6) Multi-purpose Operation of Houma Navigation Canal Lock
- 7) Terrebonne Basin Barrier Shoreline Restoration
- 8) Convey Atchafalaya River to Northern Terrebonne Marshes
- 9) Small Diversion at Convent / Blind River
- 10) Increase Amite River Diversion Canal Influence by Gapping Banks
- 11) Medium Diversion at Whites Ditch



**Abstract:** In 2004, USACE completed the Louisiana Coastal Area (LCA) Near-Term Report, and a Chief's Report was signed in January 2005, culminating other studies that had examined long-term solutions for preserving and restoring Louisiana coastal ecosystems. While large-scale systemic restoration measures are needed to sustain coastal ecosystems, the LCA Near-Term Report was developed to identify cost-effective, near-term (ten year implementation period) restoration features addressing the most critical

needs of coastal Louisiana. The goal of the LCA Near-Term Report was to reverse the degradation trend of the coastal ecosystem of Louisiana. The plan that resulted from the LCA Near-Term Report focused on the restoration strategies that would reintroduce historical flows of river water, nutrients, and sediments; restore hydrology to minimize saltwater intrusion and maintain structural integrity of coastal ecosystems.

The 2004 LCA Near-Term Report identified critical projects, multiple programmatic authorizations, and ten additional required feasibility studies for LCA. Title VII of the Water Resources Development Act (WRDA) of 2007 authorized the LCA Near-Term Plan. The authority requires feasibility-level analysis of six of the ten near-term projects. The tentatively selected plans (TSP) for the six conditionally authorized projects fulfill the original purpose of the LCA Near-Term Report.

## Six near-term projects

### Convey Atchafalaya River Water to Northern Terrebonne Marshes / Multipurpose Operation of the Houma Navigation Lock

These two projects were combined for analysis because of hydrologic connectivity. The TSP recommends a series of water management features that would result in a net gain of 9,655 acres of marsh habitat and would yield 3,463 Average Annual Habitat Units (AAHUs). Benefits are derived from increased freshwater flows and nutrients into the Study Area. The fully funded cost estimated for construction would be \$311,030,000. The Federal cost-share for construction of the TSP would be \$202,169,500, while the non-Federal cost-share would be \$108,860,500.

### Amite River Diversion Canal Modification

The TSP would benefit 1,602 acres of freshwater swamp and create a net of 679 AAHUs. Canal spoil banks would be opened to allow water exchange into the swamp creating 5 acres of bottomland hardwood habitat, reducing the likelihood of the swamp conversion to marsh or open water. Restoring natural hydrology will

promote germination and survival of bald cypress and other tree seedlings, and improve biological productivity, and reduce further habitat deterioration. The fully funded project cost estimated for construction would be \$7,770,000, which is under the Section 902b cost limit of \$11,086,600. The Federal cost-share for construction of the TSP would be \$5,050,000 and the non-Federal cost share would be \$2,720,000.

#### **Small Diversion at Convent / Blind River**

The TSP would benefit 21,369 acres of bald cypress-tupelo swamp that are in various stages of deterioration and generate 6,421 AAHUs by diverting Mississippi River water into the southwestern Maurepas swamp. The fully funded project cost estimated for construction would be \$123,140,000; which is under the Section 902 cost limit of \$134,440,000. The Federal cost-share for construction of the TSP would be \$80,041,000 and the non-Federal cost share would be \$43,099,000.

#### **Medium Diversion at White Ditch**

The TSP recommended for authorization would deliver freshwater, sediment, and nutrients from the Mississippi River into the marshes bordering western Breton Sound. It would create a net of 13,355 AAHUs by building and nourishing approximately 41,206 acres of fresh, intermediate, brackish, and saline tidal wetlands. The fully funded project cost estimated for construction would be \$387,620,000 (exceeds authorized cost limit). The Federal cost-share for construction of the TSP would be \$251,953,000 and the non-Federal cost share would be \$135,667,000.

#### **Terrebonne Basin Barrier Shoreline Restoration**

Whiskey Island Plan C is the TSP for construction to remain within the WRDA 2007 authorized cost. The TSP will add 469 acres of island habitat to the existing 803-acre island footprint. This includes 65 acres of dune, 830 acres of supratidal habitat, and 377 acres of intertidal back-barrier marsh habitat. The fully funded project cost estimated for construction would be \$119,000,000, which is under the Section 902 cost limit of \$180,900,000. The Federal cost-share for construction of the recommended increment would be \$77,500,000 and the non-Federal cost share would be \$41,800,000. The NER Plan that is being recommended for authorization will increase the longevity of the geomorphologic form and ecologic function of four islands in the Terrebonne Basin barrier system by creating a total of 4,792 acres of beach/dune and 1,048 acres of marsh.

**Report Documentation:** Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- [CWRB Agenda](#)
- [Project Summary](#)
- [CWRB Briefing Slides](#)
- [CWRB Lessons Learned](#)
- CWRB Meeting Record
- State & Agency Review Comment Letters
- Documentation of Review Findings
- Proposed Chief of Engineers Report for CWRB
- ASA(CW) Memo to OMB
- OMB Response
- Congressional Notification
- Signed Record of Decision
- Authorization

#### **Additional Information:**

[Mississippi Valley Division](#)

[New Orleans District](#)