



US Army Corps
of Engineers®
New Orleans District

Louisiana Coastal Area (LCA), LA Ecosystem Restoration Study



Vol. 2, Issue 1

FACT SHEET

January 2005

STUDY STATUS

Location. The study area, which includes 20 parishes in Louisiana's coastal area from Mississippi to Texas, is comprised of two wetland-dominated ecosystems, the Deltaic Plain of the Mississippi River and the closely linked Chenier Plain, both of which are influenced by the Mississippi River. For planning purposes, the study area was divided into four subprovinces, with the Deltaic Plain comprising Subprovinces 1, 2, and 3, and the Chenier Plain comprising Subprovince 4.

Authority. The LCA Study is authorized through resolutions of the U.S. House of Representatives and Senate Committees on Public Works, 19 April 1967 and 19 October 1967.

Purpose and Scope.

- Identify the most critical human and natural ecological needs of the coastal area;
- Present and evaluate conceptual alternatives for meeting the most critical needs;
- Identify the kinds of restoration features that could be implemented in the near-term (within 5 to 10 years) that address the most critical needs, and propose to address these needs through features that provide the highest return in net benefits per dollar of cost;
- Establish priorities among the identified near-term restoration features;
- Describe a process by which the identified priority near-term restoration features could be developed, approved, and implemented;
- Identify the key scientific uncertainties and engineering challenges facing the effort to protect and restore the ecosystem, and propose a strategy for resolving them;
- Identify, assess and, if appropriate, recommend feasibility studies that should be undertaken within the next 5 to 10 years to fully explore other potentially promising large-scale restoration concepts; and
- Present a strategy for addressing the long-term needs of coastal Louisiana restoration beyond the near-term focus of the LCA Plan.

FINAL ARRAY OF ALTERNATIVES

Initial Near-Term Critical Restoration Features (Programmatic Authorization)

1. Mississippi River Gulf Outlet Canal
2. Small diversion at Hope Canal
3. Barataria Basin barrier shoreline restoration
4. Small Bayou Lafourche reintroduction
5. Medium diversion with dedicated dredging at Myrtle Grove

Other Near-Term Critical Restoration Features (Future Authorization)

6. Multi-purpose operation of the Houma Navigation Canal Lock
7. Terrebonne Basin barrier shoreline restoration, E. Timbalier, Isle Dernieres
8. Maintain land bridge between Caillou Lake and Gulf of Mexico
9. Small diversion at Convent/Blind rivers
10. Increase Amite River Diversion Canal influence by gapping banks
11. Medium diversion at White's Ditch
12. Stabilize Gulf shoreline at Pointe Au Fer Island
13. Convey Atchafalaya River water to northern Terrebonne marshes
14. Re-authorization of Caernarvon Diversion – optimize for marsh creation
15. Re-authorization of Davis Pond – optimize for marsh creation

RECOMMENDED PLAN

1. Five Near-Term Critical Restoration Features that have some planning and design already underway
2. Ten Additional Near-Term Critical Restoration Features
3. Beneficial Use of Dredged Material
4. Authority to Initiate Studies of Modifications to Existing Water Control Structures
5. Science and Technology Program Demonstration Projects
6. Science and Technology Program
7. Studies on Long-Term, Large-Scale Restoration Concepts

PARTNERSHIP

LCA is jointly funded and managed on a 50/50 basis by the U.S. Army Corps of Engineers and the Louisiana Department of Natural Resources.

STRATEGIES

- Freshwater and sediment re-introductions by diverting some Mississippi River flows into hydrologic basins
- Barrier island restoration through placement of sand from offshore sources or the Mississippi River to sustain key geomorphic structures
- Hydrologic modifications to help restore salinity and marsh inundation patterns and provide fishery access in previously unavailable habitats
- Create a marsh platform for habitat in areas near existing navigation channels through the beneficial use of maintenance dredging materials.

COSTS

The LCA Plan is the Recommended Plan and includes both river diversions and restoration of geomorphic structures. The LCA Plan would facilitate the implementation of critical restoration features, essential science and technology demonstration projects, increased beneficial use of dredged material, and modification of selected existing projects to support coastal restoration objectives. The Science and

Technology Program would provide for acquisition of data and development of analytic tools to further resolve scientific uncertainties and support program implementation. The remaining recommended plan components would provide the basis for continued restoration within an established framework. The cost of the five Near-Term Critical Restoration Features recommended for specific Congressional authorization, with implementation subject to Secretary of the Army review and approval of feasibility-level decision documents, (referred to as “conditionally authorized”) is an estimated \$859,300,000. The total cost of the Science and Technology Program, the Demonstration Projects, the Program for the Beneficial Use of Dredged Material, and Investigations of Modifications of Existing Structures is an estimated \$310,000,000. The combined total cost of the previously stated components of the LCA Plan is an estimated \$1,169,300,000. The total cost of the ten Near-Term Critical Restoration Features Recommended for Study and Future Congressional Authorization is an estimated \$767,200,000. The total cost for currently authorized investigations (including Large-Scale and Long-Term Concept Detailed Studies) is an estimated \$60,000,000. The total cost of the LCA Plan is an estimated \$1,996,500,000. Currently, the annual operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) costs are estimated at \$7,883,000. OMRR&R costs are the responsibility of the non-Federal sponsor.



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