

## Restoration History

In order to understand how Bayou Lafourche received the funds to begin the restoration projects, a little history lesson is in order. Over the past three decades, both Federal and State governments have established policies and programs that are intended to halt and reverse the loss of Louisiana's coastal wetlands and to restore and enhance their functionality. Key initiatives (among others) include: the Federal Coastal Zone Management Act (1972), Louisiana Coastal Wetlands Conservation, Restoration and Management Act (1989), Louisiana Act 6 (1989), Barataria-Terrebonne National Estuary Program (1990), The Gulf of Mexico Program (1991), and Sections 204, 206, and 1135 of the Water Resources Development Acts (of 1986, 1992, and 1996). The information obtained in this section was adapted from the LCA Fact Sheet April 2004, Vol.1, Issue1, Evolution of Coastal Restoration in Louisiana.

The passage of the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) or fondly known as the Breaux Act, provided Federal authorization and funding to address coastal wetland losses in Louisiana and elsewhere in the Nation. CWPPRA specifically created a multi-agency task force tasked to curtail the rapidly mounting wetland losses in Louisiana. The CWPPRA Program, matched with state authorities, has and continues to serve as a vehicle for implementing Federal and State cost-sharing projects that yield restoration benefits at local scales.

The "Coast 2050: Towards a Sustainable Coastal Louisiana report (1998) known as the *Coast 2050 Plan*, was the next step. The Coast 2050 Plan identifies the river diversions, marsh creations, barrier island restoration and protection, and hydrologic restoration as examples of the project types that offer solution that can be applied in a strategic context in each of four regions - collectively consisting of nine distinct hydrologic basins - comprising the Louisiana coastal zone.

State and Federal participants agreed it was imperative to develop one in-depth, comprehensive, equally cost-shared assessment of coastwide restoration in Louisiana. The decision led to the formation of the Louisiana Coastal Area (LCA) Comprehensive Coastwide Ecosystem Restoration Study Team in March 2002.

This multi-agency LCA team worked to submit the next level of analysis and documentation necessary to obtain Federal funding through the 2004 Water Resources Development Act to conduct the coastwide feasibility study.

Louisiana legislators are currently fighting to get Louisiana the aid it needs. Getting actively involved in coastal issues is the best defense we have. Urge your students to write to the newspapers, their legislatures, and even the President of the U.S. asking for help in saving our land and resources.



### Different types of Coastal Restoration Projects:

River Diversion	<ul style="list-style-type: none"> <li>➤ There are two types of river diversions:               <ul style="list-style-type: none"> <li>a) Controlled diversions – where gates or siphons are used to regulate the volume of water flow</li> <li>b) Uncontrolled diversions – where a gap is cut in a river levee and natural land– building processes promote the creation of new marsh in place of open–water areas</li> </ul> </li> </ul>
Outfall Management	<ul style="list-style-type: none"> <li>➤ maximize the benefits of a river diversion project. This technique can regulate water levels and direction of water flow</li> <li>➤ water flow may be regulated by a combination of gates, locks, weirs, canal plugs, &amp; gaps cut in artificial levee banks.</li> </ul>
Hydrologic Restoration	<ul style="list-style-type: none"> <li>➤ involve reverting human–altered drainage patterns toward more natural drainage patterns</li> <li>➤ large scale may involve locks &amp; gates on major navigational channels</li> <li>➤ smaller scale may involve blocking dredging canals or cutting gaps in levee banks created by canal dredging</li> </ul>
Marsh Management	<ul style="list-style-type: none"> <li>➤ historically used to manage land for waterfowl &amp; furbearers</li> <li>➤ involves controlling the water level &amp;/or salinity in an impounded marsh area</li> <li>➤ a variety of structures may be used</li> </ul>
Shoreline Protection	<ul style="list-style-type: none"> <li>➤ involve techniques designed to decrease or halt shoreline erosion</li> <li>➤ some rock berms may be applied directly to the eroding shoreline</li> <li>➤ segmented breakwaters&amp; wave damping fences are placed in adjacent open water to decrease the wave’s energy before it hits the shoreline</li> </ul>
Barrier Island Restoration	<ul style="list-style-type: none"> <li>➤ protect and restore the features unique to La.’s barrier island chains</li> <li>➤ may incorporate the placement of dredged material to increase island height and width</li> <li>➤ placement of structures to protect the island from erosive forces</li> <li>➤ placement of sand–trapping fences used in conjunction with vegetation planting</li> </ul>
Dredged Material/ Marsh Creation	<ul style="list-style-type: none"> <li>➤ involve the beneficial use of sediment frequently dredged for maintenance of navigation channels &amp; access canals</li> <li>➤ material is placed in deteriorated wetland at specific elevations so that desired marsh plants will colonize &amp; grow</li> </ul>

Sediment and Nutrient Trapping	<ul style="list-style-type: none"> <li>➤ involve structures that are designed to slow water flow &amp; promote the buildup of sediment</li> <li>➤ examples include brush fences (Christmas Tree Project) &amp; shallow bay terraces</li> </ul>
Vegetation Planting	<ul style="list-style-type: none"> <li>➤ used both alone &amp; in conjunction with shoreline protection, barrier island restoration, marsh creation, &amp; sediment &amp; nutrient trapping restoration techniques</li> <li>➤ involve the use of flood-tolerant marsh plants that will hold sediments together and stabilize the soil with their roots</li> </ul>
Demonstration Projects	<ul style="list-style-type: none"> <li>➤ small-scale, short-term projects</li> <li>➤ allows CRD (Coastal Restoration Department) &amp; others to evaluate new restoration techniques</li> <li>➤ provide useful information for the design of future large-scale projects</li> </ul>

See examples of each restoration project at <http://www.savelawetlands.org/site/alphabet.html>.

### Restoration Programs in Lafourche Parish

There are several restoration projects that are in effect in Lafourche Parish.

State	CWPPRA	Project Name
BA-01		Davis Pond <a href="http://www.mvn.usace.army.mil/pao/dpond/davispond.htm">http://www.mvn.usace.army.mil/pao/dpond/davispond.htm</a>
BA-02	BA-02	<a href="#">GIWW (Gulf Intercoastal Waterway) to Clovelly Hydrologic Restoration</a>
<a href="#">BA-18</a>	BA-18	Fourchon
<a href="#">BA-22</a>	PBA-34	Bayou L'Ours Ridge Hydrologic Restoration
<a href="#">BA-27</a> -a	XBA-63	Barataria Basin Land Bridge Shoreline Protection, Phase 2, Increment 1
BA-27-b	XBA-63ii A	Barataria Basin Land Bridge
LA-01		<a href="#">DNR Dedicated Dredging Program</a>
TE-10	XTE-49	<a href="#">Grand Bayou / GIWW Freshwater Introduction</a>
TE-23	PTE-27	<a href="#">West Belle Pass Headland Restoration</a>
TE-25	XTE-67	<a href="#">East Timbalier Island Sediment Restoration #1</a>
TE-30	XTE-45/67b	<a href="#">East Timbalier Island Sediment Restoration #2</a>

