



# Landmarks

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## EXPLORING PELICAN ISLAND

In 2002, the Coastal Wetlands Planning, Protection and Restoration Act Task Force approved the proposed Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass (BA-38). The goal of the project was to restore the eroded Chaland Headland and create a protection area for the Plaquemines/ Barataria shoreline.

Wetlands, dune, and swale habitats within the project area have undergone substantial loss due to subsidence, sea-level rise, oil and gas activities (e.g., pipeline construction), and marine and wind induced shoreline erosion (i.e., gulfside and bayside). Marine processes acting on the abandoned deltaic headlands rework and redistribute previously deposited sediment. The shoreline has breached in several locations, resulting in the formation of new tidal inlets.

The project is located along two sections of the Plaquemines/Barataria Shoreline. The Chaland Headland segment is about 3.1 miles long, and is located between Pass La Mer and Chaland Pass. Pelican Island is located immediately east of the Empire Waterway; restoration of this segment will maintain the integrity of about 2.4 miles of shoreline. Both segments are in south Plaquemines Parish, Louisiana.

The project's primary goals are:

- 1) to prevent breaching of the barrier shoreline by increasing its width and average height and
- 2) to protect and create dune, swale, and intertidal marsh habitats.

Restoration of Chaland Headland will result in the restoration and creation of about 180 acres of dune, beach and berm, and the restoration and creation of about 246 acres of intertidal saline marsh. *(continues on Page 2)*



Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass (BA-38)

## IN THIS ISSUE...

Exploring Pelican Island . . . . .	2
More About Shoreline Protection . . . . .	3
Wetshop 2014 . . . . .	3
CWPPRA Goes to Arkansas . . . . .	4

## DATES TO REMEMBER...

Sept. 11	Technical Committee Meeting	Baton Rouge, LA
Sept. 27	National Hunting and Fishing Day	Woodworth, LA
Oct. 18	Wild Things Festival	Lacombe, LA
Oct. 23	Task Force Meeting	New Orleans, LA
Oct. 28	Ocean Commotion	Baton Rouge, LA

*(Exploring Pelican Island continued from page 1)*

About 2.5 million cubic yards of sand and silt will be mined from an offshore borrow area in the Gulf of Mexico to construct the dune and marsh features. Additional features include installation of sand fencing concurrent with dune construction, dune and marsh vegetative plantings, and post construction gapping of retention dikes and creation of tidal features.

The Pelican Island project will restore about 134 acres of dune, beach and berm as well as approximately 264 acres of intertidal saline marsh. Two offshore borrow areas will be used to mine about 2.4 million cubic yards of sand and silt. Other project features include installation of sand fencing concurrent with dune construction, both dune and marsh vegetative plantings, and post-construction gapping of retention dikes.

On August 4, 2014, the CWPPRA Outreach Team visited the completed Pelican Island project in preparation for an upcoming field session for journalists from around the country to visit while in New Orleans for the Society of Environmental Journalists conference.

While on the island, the team observed the positive impact of the restoration, marsh grass planting, and sand fencing installed as a part of the project. Sand and sediment deposits have accumulated to further strengthen the island and provide it with a greater capacity to withstand wave and wind erosion.

Below are a few photos provided by the team, showing the impact of the large scale restoration project. More photos can be found on the CWPPRA Facebook website as well as the CWPPRA homepage at [www.LaCoast.gov](http://www.LaCoast.gov). ■





## MORE ABOUT SHORELINE PROTECTION

As the adage goes, “An ounce of prevention is worth a pound of cure.” For Louisiana’s wetlands—where it is easier and often less expensive to protect what is left than replace what has been lost—this is especially true. Louisiana’s shorelines are eroding at a drastic pace, some at rates up to 50 feet per year. The fertile but fragile soils found in the wetlands are susceptible to wave energy. As land is lost, water bodies merge together, which can increase wave fetch and shoreline erosion. Behind these shorelines lie communities, highways, and infrastructure that are at risk of washing away.

Various techniques to defend the coastline have been tested and applied under CWPPRA. Rock revetments, oyster reefs, concrete panels, and other fabricated materials have been constructed along otherwise unstable shorelines to abate wave energy and reduce erosion. These structures are designed to break waves, and they often trap waterborne sediments behind the structures that over time can become new land.

Through the course of the CWPPRA program, advancements have been made in shoreline structures that have helped maintain natural processes while providing critical protection. Such advancements have included using lighter weight materials that require less maintenance and can be constructed on organic sediments. Other

advancements include low-relief structures that are designed to trap sediments and natural breakwaters such as reefs that can self-maintain and support other ecological functions. Other natural shoreline protection measures include vegetative plantings, whose roots help secure soils and can promote accretion. These projects are implemented with consideration for minimizing impacts to the surrounding environment. Although some shoreline structures may look foreign in a natural landscape, they are necessary features that physically protect communities and hold wetlands in place by mitigating the harsh forces that move to destroy them. ■

## WETSHOP 2014

During the week of July 6 through 11, 2014, Louisiana teachers participated in one of the premier wetland education trainings in the nation. Teachers spent more than 70 hours learning about various watershed topics. The Louisiana Department of Wildlife and Fisheries lead the weeklong training. BTNEP, LA Sea Grant, TNC, LUMCON and CWPPRA were active partners helping to provide for a well-rounded week of experiential learning.

Teachers had field experiences including visiting wetland restoration sites, seining, creating wetland transects, birding, wetland plant identification, dock fishing, boat fishing, and learning about water quality testing techniques. Additionally these hardworking educators had lessons on the Mississippi River history, Grand Isles' maritime forest, edible wetland plants, and invasive species. Teachers also learned about some of the economic value of Louisiana's wetlands by visiting Port Fourchon, trawling for shrimp, and learning about oyster ecology and harvesting. The CWPPRA outreach team provided information on land loss and coastal restoration efforts across the state.

The teachers weren't finished when they left Grand Isle, LA. These lead educators are returning to their home communities with plans to either host wetland education trainings for their peers or have their students work on coastal stewardship projects.

To learn more about WETSHOP contact Angela Capello at [ACapello@wlf.louisiana.gov](mailto:ACapello@wlf.louisiana.gov) ■



Barataria Basin Landbridge Shoreline Protection, Phase 4 (BA-27d).

## CWPPRA GOES TO ARKANSAS

The Arkansas Environmental Education Association (AEEA) looked to Louisiana's coastal restoration wetlands community for inspiration during their two-day July 2014 AEEA Expo: Natural Education Partnerships. CWPPRA Public Outreach Coordinator, Susan Testroet-Bergeron, delivered the keynote address at this year's AEEA event. Susan shared information about the working partnership activities in Louisiana's coastal wetlands as a model for increasing collaborative activities. In addition to the presentation, CWPPRA shared products and educational tools that have been developed with various Louisiana wetlands partners. During this biennial conference the AEEA also provided members with a chance to network and gather information on various environmental topics.

The AEEA's primary purpose is to promote and advocate for environmental education which incorporates a number of disciplines including conservation and natural resource education. The Expo brings together a host of environmental education enthusiasts. The organization works with educators, students, business, government, and the general public to increase the awareness

and knowledge about the environment. AEEA also works with environmental education providers to promote programs and increase capacity building of education programs in Arkansas. AEEA is the only Arkansas statewide network of environmental educators.



AEEA President Brad Roberston (left) welcomes guests to AEEA.



## COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT

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