



First Wetland Restoration after the Deepwater Horizon Spill



Restore the Earth Foundation, Inc. secured funding and implemented the very first marsh restoration using its Gulf Saver™ bag initiative on oil soiled wetlands in response to the Deep Water Horizon oil spill, in partnership with Louisiana Department of Wildlife & Fisheries. Following this initiative, multiple Gulf Saver wetland restorations have resulted in successful Louisiana wetland and wildlife habitat restoration.

The project was successfully deployed December 2010 at Pass-a-Loutre Wildlife Management Area.

Direct target of the oil spill, Pass-a-Loutre Wildlife Management Area is located in southern Plaquemines Parish at the mouth of the Mississippi River, approximately 10 miles south of Venice, and is accessible only by boat. This area is owned by the Louisiana Department of Wildlife and Fisheries and encompasses some 115,000 acres.

The area is characterized by river channels with attendant channel banks, natural bayous, and man-made canals which are interspersed with intermediate and fresh marshes.

It is a critical habitat of major significance to migratory birds accessing the Mississippi Flyway connecting South America and North America.

PROJECT DETAILS

Location:

Pass-a-Loutre Wildlife Management Area
"Bird's Foot Delta", State of Louisiana

Date:

December 2010

Project Attributes:

- Remote Location
- Variable Tidal Range
- High wave energy
- Substantial discharge
- Rates on-site

PROJECT BENEFITS

- Exception rapid establishment of functional wetland (<2 years)
- Re-vegetation of project area 5 times faster than bare root planting
- Better shore resistance with less plant loss
- "Hurricane Proof": survived Hurricane Isaac in 2012
- Replicable and scalable
- Coast-wide application
- Easily incorporated into existing projects
- Custom compost remediates soil conditions on challenging sites

PROJECT RESULTS

- 90% total cover of native vegetation within one year
- 8m of lateral growth in 17 months
- Creation of wildlife habitat including rookeries
- Erosion protection



At planting



9 months after planting



*Image: 12.28.2010
2 Weeks Post Plant
Approx. 887 square meters of spatial extent*



*Image: 9.14.2011
Approx. 9 months post plant
Approx. 2846 square meters spatial extent*

Gulf Saver™ bag is a biodegradable, self-contained package of native plants with its own site-specific custom mix supply of natural nutrients to support, feed and protect native vegetation. The bag is a stability kit that jump starts growth and survivability in the face of storm surge, wave action and rapid erosion, unlike traditional methods of planting plugs. Gulf Saver bags provide a supportive environment for accretion, slowing water flow, trapping sediment to build and add nutrients to soil. Natural oil eating microbes were introduced to the custom compost for added protection against oil impact at the site.



Gulf Saver Bags at 4 months



Gulf Saver Bags at 7 months



Gulf Saver Bags at 9 months