

Elmer's Island Refuge
Owned and Operated
By The
Louisiana Department of Wildlife and Fisheries



Management Plan Addendum
Goals and Objectives, Project Proposals

March 10, 2017

Julia Lightner
jlightner@wlf.la.gov

Elmer's Island Refuge is located approximately 50 miles south of New Orleans, at the southern end of Jefferson Parish, where the Barataria Estuary meets the Gulf of Mexico. The refuge is bordered by Highway 1 to the north, Caminada Pass and Grand Isle to the east, Lafourche Parish to the west and the Gulf of Mexico to the south.

Saltwater marsh, coastal dunes and beaches are the prevalent ecologic features in the area. The refuge property includes a tidal zone, natural and restored dunes, and an expanse of open area leading to a back bay, which is surrounded by mangrove and salt water marsh habitat.

A majority of Louisiana's coastline is comprised of saltwater marsh, small mangrove islands, and some barrier islands, accessible only by boat. The Elmer's Island Refuge property provides an area of beachfront and marsh that the public can access. This access is regularly used for recreational fishing, bird watching, restoration projects, outdoor education programs and volunteer opportunities.

The mission statement of the Department of Wildlife and Fisheries is: To manage, conserve, and promote wise utilization of Louisiana's renewable fish and wildlife resources and their supporting habitats through replenishment, protection, enhancement, research, development, and education for the social and economic benefit of current and future generations; to provide opportunities for knowledge of and use and enjoyment of these resources; and to promote a safe and healthy environment for the users of the resources.

Goals and objectives for the management of the refuge include the following:

1. Providing access for outdoor activities, education and recreational fishing opportunities;
2. Encouraging and supporting research on the wildlife and fisheries resources at Elmer's Island;
3. Restoring the habitat to benefit the native ecosystem;
4. Engaging volunteers and educational organizations in projects on the refuge;
5. Protecting endangered and threatened species through regulatory and habitat management;
6. Coordinate with adjacent landowners, local government and non-governmental organizations.

Possible projects include the following:

- A. Routine and emergency road maintenance
- B. Routine litter and marine debris removal
- C. Construct launches with enhanced parking areas
- D. Construct elevated boardwalks
- E. Repairs to breeches and wash out areas
- F. Improve hydrologic flow to the marsh (install culverts under access road)
- G. Improve birding opportunities through enhanced parking, guided pathways and resource protection
- H. Create pedestrian access to the northern spit
- I. Plan and build a visitor's center
- J. Plan and build bathroom facilities

A. Routine and emergency road maintenance

Estimated cost: \$75,000/year for operation and maintenance of the road (includes permit applications, bid process, any necessary survey information, rip rap, emergency repairs);

The 1.5 mile access road at Elmer's Island Refuge is maintained by LDWF. Maintenance and emergency repairs are required in order to provide access to the refuge. Damages to the road can be caused by heavy rain events, vehicular wear and tear, and hurricanes. In 2012, damages that occurred during Hurricane Isaac closed off any vehicular traffic to the beach; these damages were repaired as an emergency measure for oil spill abatement, to

provide access for the USCG and other associated workers. Routine maintenance such as grading, adding limestone, and clearing drainage areas is required for continued operation of the road. A maintenance and repair plan for the road, including drainage assessment and requirements, will also be beneficial long term.

Elmer's Access Road - storm damage and routine "wear and tear"



Road repairs, 2009 to current:

Year	Cause	Material	Unit	Amount
2009	Wash-out	Mex. Limestone	1342 tons	\$47,320
2012	Storm damages	Mex. Limestone	2699 tons	\$118,517
2013	Wear and tear	Course limestone	1125 tons	\$117,000
	Shore up sides	Rip-rap		
2015	Wear and tear	610 limestone	87 ton	\$3,371*
2016	CAM II	Limestone	2000 tons	Paid from NFWF funds (Cam II)

* Weeks Marine graded and leveled the limestone

This is not a complete record – contractors have made (and paid for) improvements to the road without contacting LDWF.

Expected Outcomes and Application of Results

- Upkeep and maintenance of the only access road at Elmer’s Island
- Emergency repairs to the road, post-storm events
- Provides access for recreational anglers to Elmer’s Island Beach and Caminada Pass
- Provides access for all other non-consumptive activities on Elmer’s Island, such as birding

B. Routine litter and marine debris removal

Estimated cost: \$750,000 over 15 years



Litter and marine debris removal is organized through LDWF with various organizations, utilizing volunteer effort. Although this provides some public education on the issues, litter and marine debris continue to be a problem. Litter is an eyesore along the beach, and can lead to entanglement issues and ingestion of debris by wildlife. Continued and routine removal is needed to maintain the refuge for visitors and for wildlife.

LDWF proposes a weekly clean up, during the summer months and monthly during the “off-season” (October – April).

Workplan:

(This plan uses 4 team members for 1 10-hour day of work/week)

Month	Week	Team members	Vehicles	Dumpster	total
May	1	4	1	1	1500
	2	4	1	1	1500
	3	4	1	1	1500
	4	4	1	1	1500
June	1	4	1	1	1500
	2	4	1	1	1500
	3	4	1	1	1500
	4	4	1	1	1500
July	1	4	1	1	1500
	2	4	1	1	1500
	3	4	1	1	1500
	4	4	1	1	1500

August	1	4	1	1	1500
	2	4	1	1	1500
	3	4	1	1	1500
	4	4	1	1	1500
September	1	4	1	1	1500
	2	4	1	1	1500
	3	4	1	1	1500
	4	4	1	1	1500
October	1	4	1	1	1500
November	1	4	1	1	1500
December	1	4	1	1	1500
January	1	4	1	1	1500
February	1	4	1	1	1500
March	1	4	1	1	1500
April	1	4	1	1	1500
Oversight					9,500
					\$50,000

Expected Outcomes and Application of Results

- Removal of trash and marine debris from Elmer’s Island Refuge
- Improve consumptive and non-consumptive recreational experiences at the refuge
- Improve habitat for resident wildlife and fish

C. Kayak launches with enhanced parking areas

The marshes, canals and back bay area of Elmer’s Island Refuge could be better utilized by anglers and other user groups by adding improved parking and kayak launches. This project would add material, such as crushed limestone or sand to create improved parking areas, and add sand at the water’s edge to create a gentle slope for launching kayaks, or other small or non-motorized vessels. Several locations are being proposed for this purpose.

1. This project would create approximately 2.6 acres of parking and 0.30 acres of kayak launches, with an estimated cost of \$100,000.





2. Back bay and canal access, estimated cost \$200,000.

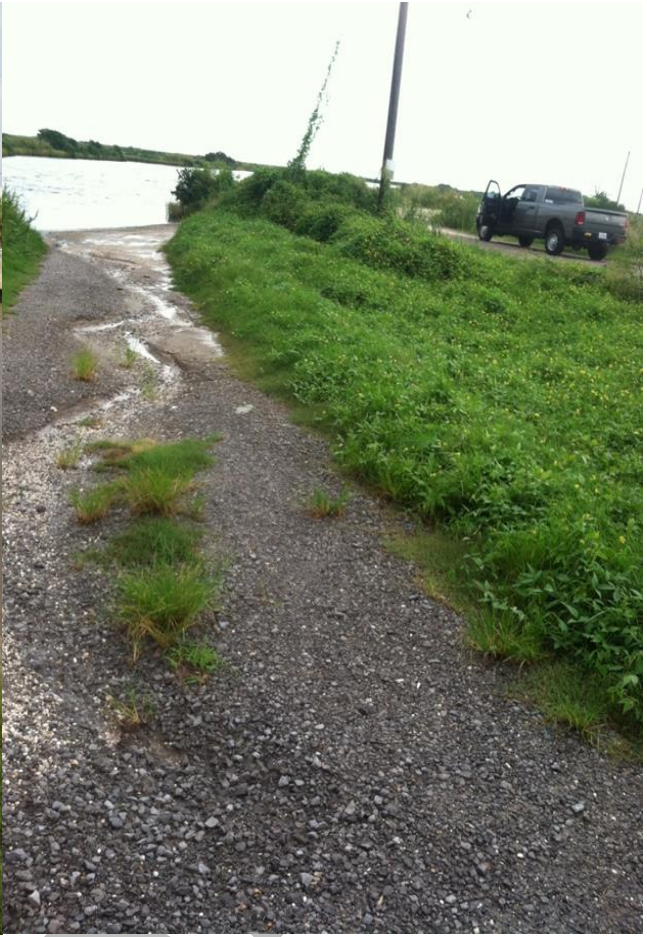
Includes 0.4 acres of parking and 0.1 acres for launch. This parking area could also be expanded and utilized for the proposed elevated boardwalk and fishing pier. Road improvements to the parking area and to the kayak launch would be included in this project.



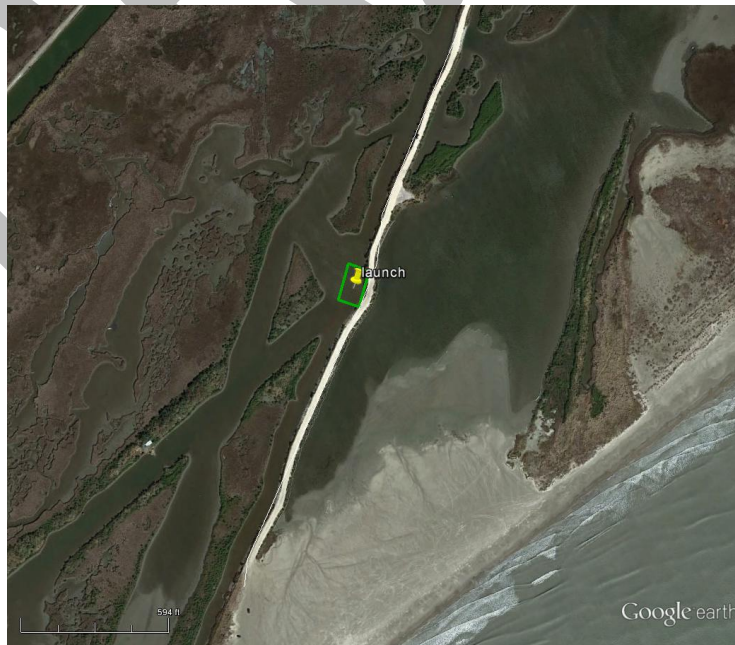


3. Near the entrance at Highway 1. This will provide access to the eastern canal, the back bay and the cut through to Caminada Pass, estimated cost \$50,000.
Provides 0.1 acres of parking, and almost 0.1 acres of launch.





4. Launch of northern side of access road, providing access in canals and southern marsh area.
Estimated cost \$50,000.



D. Elevated boardwalks

This project would construct an elevated walkway from Elmer's Island Road to the beach, providing access to the eastern end of Elmer's Island. This would increase accessibility for visitors and may also require construction of a parking area. The boardwalk could also serve as a fishing pier. This project would require engineering and design, permitting as well as construction costs. Provides approximately 0.5 miles of boardwalk and possible fishing pier in the back bay area.

Estimated cost \$1,500,000.



Photo by Adam Fagen



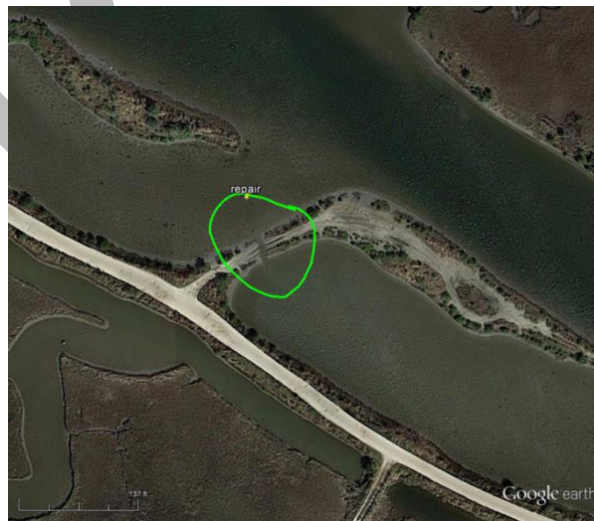


Expected Outcomes and Application of Results

- Creation of wheelchair accessibility to eastern end of Elmer's Island
- Creation of wheelchair accessibility for fishing, from the boardwalk
- Improve consumptive and non-consumptive recreational access to the eastern end of Elmer's Island
- Provides space and location for outdoor educational outings
- Use of boardwalk as fishing pier and birding location

E. Repair to breeches and wash outs; access to canal

1. Repairing this small washout would allow access to the fishing "island", located in the canal on the eastern end of the LDWF property. This project would use rocks to line the edges and sand and rock for the repair. Prior to the washout, this area was used for fishing access in the canal. Estimated cost \$50,000.





2. Repair the breach at Caminada Pass

This cut developed in 2011, and separates the “spit” from the rest of the refuge. LDWF submitted a permit application to repair this cut in 2012.



F. Improving hydrologic flow (install culverts under access road)

Estimated cost \$500,000

The wetlands in the area provide habitat for shorebirds such as herons, egrets, ibis and spoonbills, as well as migratory water fowl and native wetland species. Diamond back terrapins reside in the marsh, and have been documented to nest in the near dunes. Recreational fish species such as southern flounder, red drum and spotted sea trout are consistently landed.

The area undergoes constant change, depending on the weather; storm surges, hurricanes, drought, and freshwater intrusion all contribute to the health of the system.

Portions of the marsh located directly north of Elmer's Island have become impounded, partially due to the access road. Over the years, culverts were located underneath the road, or the road had been cut through from storms; water flowed from the back-bay, and from the Gulf of Mexico, into the marsh. Water also flowed from the Gulf through various washovers on the beach, which have since been repaired and restored during the Caminada Headland beach and dune restoration project. Installing culverts under the access road will restore the hydrology of the back area marshes, and provide improved fishing access in those areas.

Expected Outcomes and Application of Results

- Restoration of historic tidal flow through the saltwater marsh near Elmer's Island
- Improved Dissolved Oxygen levels in the water along the marsh
- Decrease in fish kill occurrences
- Fish passage from Caminada Pass into the marsh
- Increased recruitment of larval species into the marsh

G. Improved birding opportunities

1. Improve existing road and parking area for birding access at the "FAA lot". This area is surrounded by a berm, and somewhat protected from the winds, which attracts several species of wading birds and ducks. The road currently located on the northern end of the pond is elevated and dry (covered in shell/rock at one point), and significant parking could be created at the end of the road.

Estimated cost \$25,000.





2. Build observation towers and blinds for improved birding.

H. Create pedestrian access to the northern spit

Currently, access to the northern spit is limited to private land owners adjacent to the property. Adding an entrance to the beach from the fishing pier, such as stairs leading from the pier to the beach or a walkway extended from HWY 1, would allow public access. The parking area next to the pier may need improvements for increased numbers of visitors. This would allow easy access to the beach for surf fishing, crabbing and other recreational activities.



Expected Outcomes and Application of Results

- Provide easy access to surf fishing opportunities at Caminada Pass
- Increased access to the LDWF Refuge property

I. Plan and build a visitor's center

A visitor's center located near the entrance (convenient for utilities) could provide interpretive materials, education programs, regulatory information, office space, staff contact and bathroom facilities for the Refuge. Currently, no facilities are located on Elmer's Island, and any addition would increase public accessibility. Cost would vary depending on location, and facilities provided, with an estimated range between \$350,000 and \$6,000,000.



Photo: Steve Hillebrand, USFWS

J. Plan and build bathroom facilities

Providing bathroom facilities (without a visitor's center) would increase the accessibility of Elmer's Island for many visitors. Locations might include the entrance, near Highway 1, the "parking area" on the beach, or somewhere along the access road. Cost would be variable and dependent on location.

DRAFT