Baratadia Bay Waterway
Wetland Restoration (BA-19)

Project Status
Approved Date: 1991  Project Area: 510 acres
Approved Funds: $1.16 M  Total Est. Cost: $1.16 M
Net Benefit After 20 Years: 445 acres
Status: Completed December 1998
Project Type: Marsh Creation
PPL #: 1

Location
The project is located on Queen Bess Island north of Grand
Isle and east of the Barataria Bay Waterway in Jefferson
Parish, Louisiana.

Problems
Between 1956 and 1989, subsidence and erosion caused
Queen Bess Island to shrink dramatically. Its average loss
across this period was nearly 1 acre per year. The island's
reduction in size from 45 to 17 acres only increased the
frequency of storm-induced overwash, further degrading its
role as a crucial nesting habitat for Louisiana's state bird, the
endangered brown pelican (Pelecanus occidentalis).

Restoration Strategy
The initial project design was to use maintenance-dredged
sediments to create marsh in shallow water areas adjacent to
the Barataria Bay Waterway. However, oyster leases in or
adjacent to the proposed marsh creation sites prohibited the
use of all sites. As an alternative, in cooperation with the
operations and maintenance of the channel, dredged material
was used to enlarge Queen Bess Island.

An additional 9 acres of vegetated wetland were created
adjacent to the state-funded Queen Bess project (BA-05b) by
constructing a rock dike and filling the containment area
with dredged material from the Barataria Bay Waterway. A
breach was built on the north side of the rock dike to allow
effluent to be routed from the containment area through the
BA-05b project area and the original Queen Bess Island.

For more project information, please contact:

Federal Sponsor:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-1597

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736

October 2002
Cost figures as of: November 2019

The bounded area of open water on the left side of the island in the foreground
is the BA-19 project area. Immediately adjacent to the project area is the thin
strip of the BA-05b project area, with the original Queen Bess Island just to its
right.

Progress to Date
The size of Queen Bess Island increased from 17 acres in 1989 to
34.6 acres in 1996 from the combined efforts of this project and
the state-funded (BA-05b) project.

Vegetation has not colonized in this project's area because of its
low elevation and persistent inundation with water.

There is a sediment deposition rate of 0.14 feet per year in the
state-funded (BA-05b) project area and deposition rate of 0.31 feet
per year on the original island. These rates indicate that the
containment dike breach created by this project allowed a
substantial amount of effluent to settle, as intended, in adjacent
wetlands outside of the dredge-fill area.

This project was completed for $945,678, more than $250,000
under its original budget. Remaining funds may be used to clear
marsh creation sites of oyster leases. The oyster lease sites would
be used as marsh creation areas under the U.S. Army Corps of
Engineers Barataria Bay Waterway Navigation Project.

This project is on Priority Project List 1.