Chuck Perrodin
Public Information Officer

TOLL FREE
WEIR INFORMATION
PHONE NUMBER

(855) 532-9955
10,000 Years Ago

LAST ICE AGE

Cameron was more than 100 miles inland from the coast

Literally, no salt water in sight

Sea Level was 350’ lower
Sabine, Calcasieu, Mermentau Rivers
(former channels of Red River)
deposited sediment & fresh water
The earliest European settlers moved into a freshwater swamp/marsh environment. It remained mostly fresh through the 1800s.
Southwest Louisiana
SHOWING BOTH
SOLID LAND AND
MARSH

2011
USGS Map Info
Southwest Louisiana
SHOWING
SOLID LAND ONLY

2011
USGS Map Info
Cameron Creole Watershed
Watershed is lower than the lake
WATER EVAPORATES
Leaving salt behind

With no adequate freshwater source (or too much flooding)
marsh becomes saltier and weak
Intermediate/Brackish Marsh
Desirable for the fish, shrimp and crabs we have today

TOO SALTY
We could lose the habitat for larval fish, shrimp and crabs
General Gulf of Mexico Salinity

33 ppt
(parts per thousand)

North Calcasieu Lake

Readings as high as
29.0 ppt
STRESS SALINITY

CYPRESS TREES
2 ppt

BRACKISH MARSH
8 ppt

SALTWATER MARSH
40 ppt
CYPRESS TREES
2 ppt

BRACKISH MARSH
8 ppt

SALTWATER MARSH
40 ppt

STRESS SALINITY

60 ppt
2011
Ship Channel
first created in 1874

1874
80’ wide
5’ deep
1903
200’ wide
13’ deep
Until 1910, Calcasieu Lake was fresh enough to be used for rice irrigation.

- **1903**
  - 200’ wide
  - 13’ deep
Ship Channel completed from the Gulf to Lake Charles

1941
250’ wide
30’ deep
1949  Levee first proposed

1952  Geographer warned of area becoming future Lake Pontchartrain

1962  Salt water control structure on the Calcasieu River 2 miles north of Lake Charles
1949  Levee first proposed

1981  Construction of Levee begins

1987  Construction of Weirs begins
      Resource Management Plan adopted
      Advisory Committee created

1989  Weirs completed
      Controlled operation begins
By following the MANAGEMENT PLAN the marsh started to come back: 
±82 acres GAINED per year through 2004

2005-2010 MANAGEMENT PLAN was not followed
±362 acres LOST per year
13 monitoring stations
6 of them “live”
Management Plan takes into account more than just marsh salinity readings.

Other factors include:
Water levels in lake and marsh
Seasonal migration
Lunar migration
Frontal systems and wind direction
Storm systems and tides
Water temperatures
What is CPRA’s role?
• CPRA does not own the marsh
• CPRA does not own the Refuge
• CPRA does not own the levee
• CPRA does not own the weirs
• CPRA didn’t create the Management Plan
• CPRA is not on the Committee
• CPRA advises, it does not decide
January 2012

CPRA began assisting local authorities by taking the scientific measurements and advising the committee in charge on the readings and how conditions are trending.
What does CPRA do?

- Help out with maintenance & costs
- Take scientific measurements
- Inform and advise Committee
- Close or open weirs on instructions from the Committee
Cameron Creole Advisory Committee

- Cameron Parish Police Jury
- Cameron Parish Gravity Drainage District 3
- Cameron Parish Gravity Drainage District 4
- U.S. Fish & Wildlife Service
- U.S. Natural Resources Conservation Service
- U.S. Army Corps of Engineers
- NOAA (National Oceanic & Atmospheric Administration)
- La. Dept. of Wildlife & Fisheries
- Miami Corporation
ADJUSTABLE CREST WEIR STRUCTURES

Peconi & Lambert
ADJUSTABLE CREST WEIR STRUCTURES

Peconi & Lambert
No-Name and Mangrove are FIXED CREST Weirs
FIXED CREST WEIR STRUCTURES
No-Name & Mangrove

FIXED CREST SILL

GATE  GATE  GATE  GATE
FIXED CREST WEIR STRUCTURES

No-Name & Mangrove
FIXED CREST WEIR STRUCTURES

No-Name

CREST ELEVATION LOW AT NO-NAME
FIXED CREST WEIR STRUCTURES

Mangrove

CREST ELEVATION HIGH AT MANGROVE
BOAT BAY at Grand Bayou
Salt water flows into the marsh and evaporates
The marsh becomes dangerously saline
Too much water can drown the marsh
The weirs hold salt water out and allow rainwater to freshen the marsh
CPRA helps out with scientific measurements and advises the Committee
The Committee is in control and the Committee makes the decisions
The goal is to have sustainable marsh, shrimp, crabs, fish and the protective buffer the marsh affords