

Billy Nungesser, Parish President

PJ Hahn, Director of Coastal Zone Management

# PLAQUEMINES PARISH COASTAL INITIATIVES



### LAND AREA CHANGE IN COASTAL LOUISIANA, 1932-2010



90% of Total Coastal Wetland Loss in U.S. occurs in Louisiana

**Coastwide Land Area Change, 1932-2010**: From 7,546 sq. mi. to 5,663 sq. mi. = -1,883 sq. mi. = **25% Loss** 

Plaquemines Parish Land Area Change, 1956-2006: -248.7 sq. mi.



#### PROJECTED LAND LOSS, 2000-2050









# COASTAL RESTORATION IN PLAQUEMINES PARISH





Currently proposed Restoration Projects (while restoring wetland habitat) have minimal impact on flood protection for Plaquemines Parish residents based on ERDC modeling.

# **REDUCING WAVE HEIGHTS**





Modeling has shown that tree barriers significantly reduce wave action.





# COASTAL RESTORATION IN PLAQUEMINES PARISH



Coastal Restoration in Plaquemines Parish will include:

1.Maintaining adequate flood protection for residents

2.Providing "Forested Ridges" adjacent to levees Phase 1

3. Replenishment of wetlands areasPhase 2

4. Redevelopment of the barrier islands Phase



# **CONSTRUCTION OF FORESTED RIDGES**



**1.** Existing conditions: High wave energies on levee faces

**2.** Historic ridge restored using Mississippi River sediments



**3.** Vegetation can offset subsidence elevation losses over time

**4.** Vegetated ridge will reduce wave energy and wave overtopping

# **CONSTRUCTION OF FORESTED RIDGES**



## **RIDGE RESTORATION PROGRAM**





## FEMA INITIATES LAMP PROGRAM



U.S. Department of Humeland Security 500 C Street, SW Washington, DC 20472 Senator Thad Cochran Page 2 inside the levce system. We trust that you and the other Senators concerned about this issue will help to ensure the public does not develop a false sense of security regarding flood risk as we work through and implement these changes. I am requesting your continued assistance to promote flood insurance in these neighborhoods. The Preferred Risk Policies that are available to many individuals currently not shown in Special Flood Hazard Areas are cost-effective means to buy down their risk. Thank you for your continued interest in this matter and your diligence in helping us find an The Honorable Thad Cochran appropriate resolution. We would be happy to hold a briefing to provide further details on our draft proposal, if that would be helpful. If you need additional information or assistance, please have a United States Senate member of your staff contact the FEMA Legislative Affairs Division by telephone at Washington, DC 20510 (202) 646-4500. Dear Senator Cochran: Thank you for your letter dated February 3, 2011, to the Department of Homeland Security, Federal Emergency Management Agency (FEMA). On behalf of your constituents, you joined a number of other Senators in asking that FEMA discontinue the National Flood Insurance Program (NFIP) use of "without levee" analyses when the levee structure does not meet the regulatory requirements for accreditation and an affected community objects to such analysis in favor of more precise methods of flood modeling. You expressed concern that this type of modeling does not consider the impacts of a levce or flood control structure on the 1-percent-annual-chance flood, and crodes public confidence in FEMA's mapping process. As you are aware, over the past year FEMA has been engaged in a comprehensive review of the NFIP to identify reforms designed to enable FEMA to better address the flood risks faced by the "In order to increase the credibility American public. We recognize that our approach to mapping the flood risk associated with levees that do not meet Federal accreditation requirements has been a concern for many. As such, we have of our FIRMs in areas where levees included this subject as an important consideration in our ongoing NFIP reform efforts, while also exploring short-term resolutions. are not accredited, I have directed Some changes in the program must take place in the near term. In order to increase the credibility of my staff to replace the 'without our Flood Insurance Rate Maps in areas where levees are not accredited, I have directed my staff to replace the "without levee" modeling approach with a suite of methodologies that are technicallysound, credible, and cost-effective. The approach will better meet the needs of our citizens while levee' modeling approach with a providing more precise results that better reflect the flood risk in areas impacted by levees. This will not replace the need for levee owners or the associated communities to remain engaged in flood risk suite of methodologies that are management activities or change the existing requirements for them to provide levec accreditation information as outlined in the Code of Federal Regulations (44 CFR 65.10). technically-sound credible, and cost-The details of this new approach will take some time to finalize. Acknowledging that there are ongoing flood hazard analysis studies where the "without levee" approach has been used, FEMA effective. The approach will better will temporarily withhold issuing Final Determinations for those communities whose levees do not meet accreditation requirements and would clearly benefit from this new approach. This temporary meet the needs of our citizens while delay will allow us to properly evaluate affected levces under the new procedures. While our new procedures are being developed, the risk of flooding remains in many of your providing more precise results that communities - whether caused by unforeseen levee failure or heavy rainfall events causing flooding better reflect the flood risk in areas impacted by levees." www.fema.go

--Craig Fugate, FEMA Administrator

## **BUILDING THE BERMS**





- Largest coastal project in the history of the U.S.
- Permitted in 19 days
- Environmentalists claimed that the berms would decimate the marshes and ecosystem

### THE SAND BERM PLAN





# **MEDIA ATTENTION**





"At this time, LPBF still firmly believes that the project will be beneficial for the islands. We expect the berm will buy some time for the islands and quickly create quality barrier island habitats. The berm at Chandeleur Island is potentially the most significant constructed project contributing to coastal restoration in in the Pontchartrain Basin in 2010."

> -- Dr. John Lopez, PhD. Lake & Coast Magazine, May 2011

# **MEDIA ATTENTION**

OCTOBER 2009



DREDGING AND PORT CONSTRUCTION

MUMBAI Indira Finally Under Way!

ALL ABOUT DEPTH Dredging Focus In South America

PLAQUEMINES PARISH Leading Louisiana's Hurricane Fightback Billy was supported for his efforts not just during the disaster, but also years later.

SUPPORT BILLY'S BARRIER ISLAND

# **BUDMAT PROGRAM UPDATE**



- Plaquemines Parish signed an agreement with USACE-MVN in spring 2013
- Focuses on areas along West Bay and Tiger Pass
- Agreement executed August 6<sup>th</sup>
- Work expected to begin within the next few weeks

# BIRD HABITAT ISLAND RESTORATION PARTNERSHIP



- Plaquemines Parish Government
- Barataria Terrebonne National Estuary Program
- Shell
- Apache Minerals
- Coastal Impact Assistance Program
- American Bird Conservancy
- National Audubon Society

#### Total funds and donations: \$3M







#### Proposed Island:

- 18.90 Ac. at Containment Berm
- 10.4 Ac. at MHW
- 8.5 Ac. of Intertidal Zone
- 0.4 Ac. +4 Top of Island



