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## ATTACHMENT A

Presentation One: Gulf of Mexico Accomplishments Presentation Two: Gulf of Mexico Alliance Accomplishment Presented by Gloria Car, EPA/GMP

### **ATTACHMENT B**

LUMCON: A Historic Overview Presented by Nicole Cotton, LUMCON

## ATTACHMENT C

Presentation One: Sugarcane Production Presentation Two: Sugarcane Fertilizer Recommendations Presentation Three: Managing Soil Acidity Presentation Four: Nitrogen Fertilizer Research Presented by Dr. Benjamin Legendre, LSU's Ag Center



# GULF OF MEXICO PROGRAM CITIZENS ADVISORY COMMITTEE

## **FEBRUARY 27-28, 2008**

## LOUISIANA UNIVERSITIES MARINE CONSORTIUM (LUMCON)

# USDA's SUGARCANE RESEARCH UNIT

## **MEETING SUMMARY**

February 27, 2008

### Members in Attendance:

Patty Caranna William Fontenot Eva Golson James Kachtick Paul Maclean Eliska Morgan Michael Waguespack Don Waller Mary Ellen Whitworth J.R. Wilson

## **GMP/EPA Staff Attendance:**

Gloria Car Drew Puffer LaKeshia Robertson

### Louisiana Universities Marine Consortium Staff Attendance:

Nicole Cotton Ed Chesney Lora Pride

### Introductions were led by Gloria Car.

### **Gulf of Mexico Update (Presentation)**

Gloria Car, Deputy Director, Environmental Protection Agency's Gulf of Mexico Program, presented accomplishments of the Gulf of Mexico Program. This presentation encompassed both the Gulf of Mexico Alliance and Gulf of Mexico Program's activities. The following topics were discussed in each presentation:

- Gulf of Mexico Program
  - Gulf Priorities
  - Water Quality
  - Water Quality/Public Health
  - Nutrient Reduction
  - o Environmental Education
- Gulf of Mexico Alliance
  - o Actions completed, on track, and pending
  - Priority Issue Teams 2008 Plans

The presentations are located in Attachment A.

### **Gulf of Mexico Fisheries and Threats to a Sustainable Future (Presentation)**

Dr. Edward Chesney, Associate Professor, with Louisiana Universities Marine Consortium, presented the following:

- Status of Gulf Fisheries
- Gulf of Mexico Fisheries Landing
- Environmental Effects of Hypoxia on Fish Production
- Controversial Issues Concerning Aquaculture and Stock Enhancement.

Due to ongoing research, a copy of this presentation is not attached.

### **Gulf of Mexico Hypoxia (Presentation)**

Lora Pride, Research Associate, with Louisiana Universities Marine Consortium, presented on the following:

- Nutrients, Increased Growth, Low Oxygen
- Green Lands to Blue Waters
  - More Nutrients → leads to More Phytoplankton → leads to More Carbon
    → Reaches the Bottom → leads to More Oxygen Consumed → leads to More Hypoxia
- Long term trends in discharge and nutrient loading
- Predicting Hypoxia in Summer
- Nutrient changes over a 50 year span
- Sources of nutrients delivered to the Gulf of Mexico.
  - Nitrogen and Phosphorus
    - Corn and soybean crops
    - Other crops
    - Pasture and range
    - Urban and population-related sources

- Atmospheric deposition
- Natural land
- Hypoxia in the Northern Gulf of Mexico: An Update by the EPA Science Advisory Board
  - Nitrogen loading drives timing and extent of hypoxia
  - Phosphorous loads are significant in primary production and water quality impairments in watersheds and the Gulf of Mexico
  - Dual Nitrogen and Phosphorous reduction strategy is needed for hypoxia remediation

Due to ongoing research, a copy of this presentation is not attached.

## LUMCON: A Historic Overview (Presentation)

Nicole Cotton, Marine Education Associate, with Louisiana Universities Marine Consortium gave an overview of the history of LUMCON. The following topics were discussed:

- When, Who and Why: LUMCON's Inception
- Environmental Monitoring Program
- Education Program

The presentation is located in Attachment B.

### **CAC Members General Discussion**

- Recruiting new members
  - Vacant Representation
  - Succession Planning
    - Support from Policy Review Board and Management Committee on CAC recruitment
    - Construct Federal Registrar Notice for the purposes of recruitment
    - Membership appointment by the Governors' of each state
- Future Meetings
  - August 19, 2008 in conjunction with GOMA Alliance Annual Meeting
  - October 28, 2008 in conjunction with 20<sup>th</sup> Anniversary Celebration

### Field Trip (RSV Acadian Boat Educational Cruise)



This vessel is outfitted to support research and educational activities in Louisiana coastal bays and nearshore waters. The CAC membership was taken out on the R/V Acadiana to learn more about the Barataria-Terrebonne Bay complex. In addition to discussions about characteristics and function of this estuarine system, CAC members observed demonstrations of various sampling techniques for water quality, sediment quality, and species population and diversity.

The R/V Acadiana was designed and built by Breaux's Bay craft, Inc. in Loreauville, LA with funding for her construction provided by the Louisiana Universities Marine Consortum. Home port is at the Defelice Marine Center in Cocodrie, LA.

### February 28, 2008

### Members in Attendance:

Patty Caranna William Fontenot Eva Golson James Kachtick Paul Maclean Eliska Morgan Don Waller Mary Ellen Whitworth J.R. Wilson

## **GMP/EPA Staff Attendance:**

Gloria Car Drew Puffer LaKeshia Robertson

### USDA's Sugarcane Research Staff:

Edwis Dufrene Benjamin Legendre Edward Richard Thomas Tew

### Introductions were led by Paul Maclean.

### **Overview of USDA's Sugarcane Research Unit**

Dr. Edward Richard, Research Leader, with USDA's Research Station, presented on the following:

- USDA's Mission
  - Sugarcane production efficiency

- Ethanol Production from Corn
- Fire Ants Destroy Sugarcane Borers (helps to improve production)

### **Broad Overview on Sugarcane Production (Presentation)**

Dr. Benjamin Legendre, Sugarcane Specialist and Professor, with Louisiana University Ag Center, presented on Sugarcane Production, Sugarcane Fertilizer Recommendations, Managing Soil Acidity, and Nitrogen Fertilizer Research. The following topics were discussed in each presentation:

- Sugarcane Production (How it's Made)
  - o Water
  - Soluble Solids
  - Insoluble Solids
  - o Fiber
- Sugarcane Fertilizer Recommendations
  - Essential Nutrients
- Managing Soil Acidity
  - Effect of Soil pH on Nutrient Availability
  - Why does the soil pH decrease?
  - Why and how should I apply lime?
  - How long will it take for the lime to work?
- Nitrogen Fertilizer Research
  - o USDA, Nitrogen Fertilizer Experiments-2007
  - LSU Nitrogen Fertilizer Experiments
  - Varietal Response to Nitrogen Fertilizer
  - Effect of Nitrogen Fertilizer on Sugar
  - Nitrogen Fertilizer Recommendations for 2008

Each bullet represents a presentation. The presentations are located in Attachment C.

### Video Viewing of Sugarcane Production and Burning

The video viewing was led by Dr. Legendre.

### Tour of Sugarcane Research Station-Observation of Sugarcane Growth

Dr. Thomas Tew, Research Geneticist, with USDA's Sugarcane Research Unit, led the tour. CAC members participated in discussions surrounding the development of sugarcane production.

# ATTACHMENT A

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# ATTACHMENT B

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## ATTACHMENT C

Presentation One: Sugarcane Production Presentation Two: Sugarcane Fertilizer Recommendations Presentation Three: Managing Soil Acidity Presentation Four: Nitrogen Fertilizer Research

Presented by Dr. Benjamin Legendre, LSU's Ag Center