#### Coastwide Reference Monitoring System for the Coastal Protection and Restoration Authority of Louisiana











#### Introductions:

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- Leigh Anne Sharp, CRS Supervisor, CPRA Lafayette Regional Office
- Stephanie Horvath, CPRA Support Services Section
- David Guidry, Administrative Program Director, DNR



#### **Presentation Overview:**

- Administrative and General Information
- Scope of Work
- Evaluation Criteria
- Performance Standards
- Sources For More Information

#### **Overview of Administrative and General Information**

Schedule of Events: RFP was distributed Pre-proposal Conference Deadline for written questions Proposal Deadline Notice of Intent to Award Contract Initiation

March 18, 2015 March 30, 2015 April 6, 2015 April 17, 2015 May 8, 2015 Planned for August 1, 2015

Proposal Submittal: 1 signed original and 6 copies

Must be delivered to DNR Contracts and Grants Management Division - NO LATER THAN 3:00PM, April 17, 2015



Scope of Work Overview

- Three Main Tasks:
- A. Environmental Studies and Reports
- Environmental site assessments
- Description of habitats and populations
- Ecological analyses
- Programmatic review and recommendations
- Literature reviews
- •Evaluation of restoration projects



### Three Main Tasks (cont'd)

### **B.** Environmental Surveys and Data Collection

- \*\* primary component of the CPRA monitoring program: CRMS-Wetlands and project-specific monitoring
- Environmental and biological surveys
- Damage assessments
- Data collection: vegetation, hydrological, surface elevation, accretion, and soil properties.

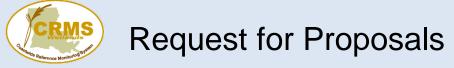


### Three Main Tasks (cont'd)

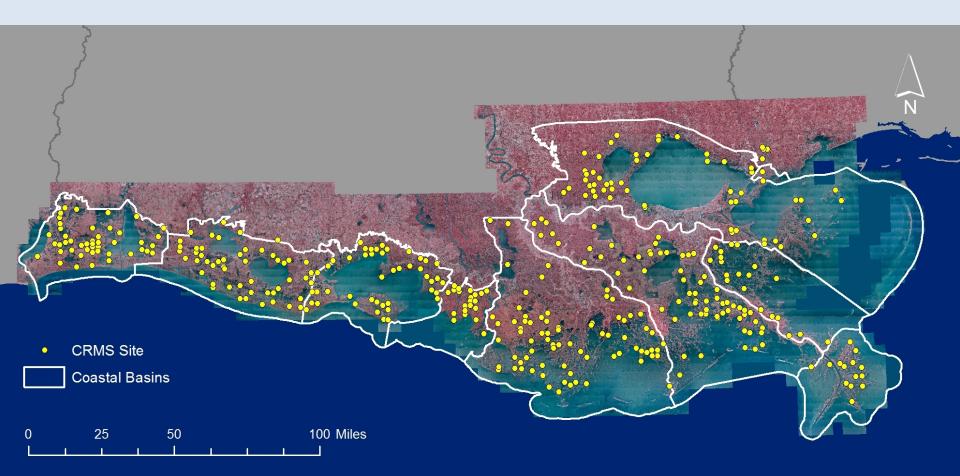
#### C. <u>Statistical Data Analysis and Management</u>

\*\*primary component of the CPRA monitoring program: CRMS-Wetlands and project-specific monitoring

- Assembling data from a variety of sources
- Quality assurance/quality control (QA/QC)
- Statistical analysis of data
- Developing conclusions and making recommendations based on analyses
- Developing and operating geographic information systems (GIS)



#### **Coastwide Reference Monitoring System - Wetlands**





### Number of Sites and Major Classes

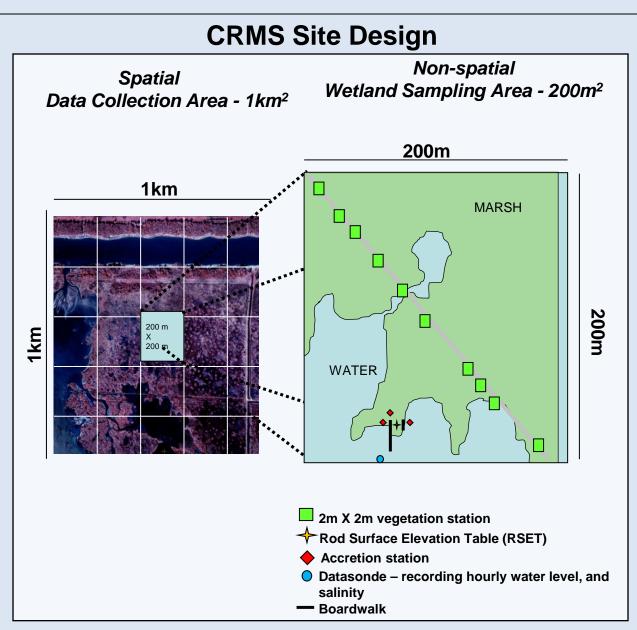
- 381 Total CRMS Sites
  295 are Herbaceous wetlands
  36 are Floating Marsh
  50 are Swamp Sites
- Quantity and class of sites are subject to change



Overview of Continuous Recorders and Discrete stations for monthly sampling and annual Discrete Vegetation: Project Specific Monitoring









## **Vegetation Composition and Cover**

### **Emergent (herbaceous) Marsh**

- 10 permanent 2m x 2m plots along transect within data collection area (DCA)
- Sampled annually from mid July-Sep



#### VEGETATION PLOT (2m x 2m) PVC pole marks SE corner and remains in marsh along established transect





### **Vegetation Composition and Cover**

### **SWAMP**

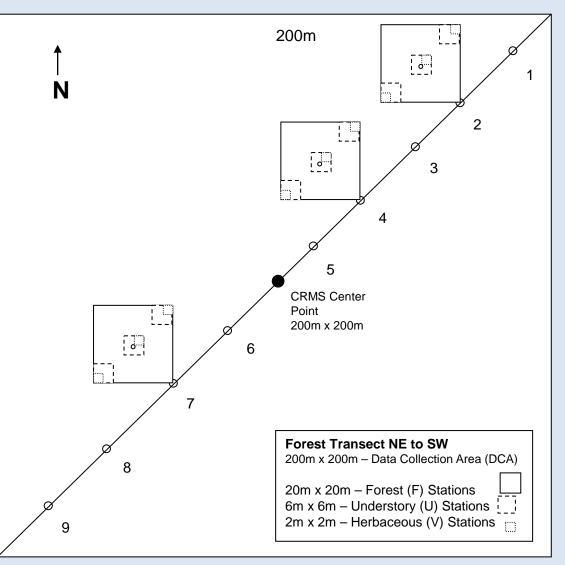
- <u>Canopy layer</u>: 3 plots, 20m x 20m
  Sampled every three years, mid Jul Sep in 2015
- <u>Understory layer</u>: 3 nested 6m x 6m plots = 9 total Sampled every three years in conjunction with canopy layer
- <u>Herbaceous layer</u>: 3 nested 2m x 2m plots = 9 total sampled annually and in conjunction with forest plots in overlapping years



#### **Swamp Site Design**



swamp herbaceous vegetation station





# Hydrology

- Continuous recorder stations:
  - 1) open-water
  - 2) well
  - 3) floating marsh (true floating and static)
- Data recorded to file hourly
- Stations surveyed to NAVD88, Geoid 12A
- Continuous recorder serviced 6 12 times per year
- Continuous recorders supplied by contractor
- Discrete porewater salinity measured at CRMS boarkwalk during RSET and Vegetation sampling trips.
- Porewater salinity will also be measured at each herbaceous vegetation plot during vegetation sampling.



#### **Continuous Recorder – Open Water**





#### **Continuous Recorder – Well**





#### **Floating Marsh Mat Recorder**





#### **Static Marsh Mat Recorder**





### **Surface Elevation**

- A Rod-Surface Elevation Table (RSET) was installed at each non-floating marsh site.
- In floating marshes, a marsh-mat recorder is used to monitor marsh-mat movement.
- Sampled twice per year during Mar-Apr and Sep-Oct.
- Sampling outside of seasons for appropriate water levels or landowner restrictions may be permitted.



#### **Rod Surface Elevation Table (RSET)**





### Accretion

• Accretion is measured at the boardwalk over a feldspar marker horizon twice per year, Mar-April and Sep-Oct coinciding with RSET sampling.

•  $\frac{1}{2}$  m by  $\frac{1}{2}$  m accretion plots are established in sets of 3 in the spring of even years (2016 and 2018).

 Plots cored each year rotate according to a defined schedule. The number of plots sampled will vary from 3 to 9 per site per sampling period.



#### FELDSPAR PLOT FOR MEASURING ACCRETION RATES PVC pole marks plot corner and remains in marsh





### Site Access

- Contractor <u>must</u> notify or acquire permission from landowners prior to accessing their property.....see landowner agreements for specifics
- Site access often restricted and in some cases prohibited during hunting seasons
- Staff will at times encounter lessees unaware of landowner agreements
- Landowner requirements can and will change
- It is recommended that the Contractor maintain at least one full time position to handle landrights responsibilities



### **Quality Control/Quality Assurance**

•All data must meet minimum data-quality standards outlined in the SOP (Folse et al. 2014)

•Contractor must adhere to field and QA/QC procedures, timelines, data formats, etc. outlined in SOP (Folse et al. 2014) - procedures can change

•Final quality-checked data in the proper format to be uploaded remotely into CIMS Database

•Data analysis and management includes QA/QC, in the field and in the office, data loading/transfer to CIMS, and general documentation of field conditions can account for up to 40-50% of the CRMS-*Wetlands* implementation workload



### **Reporting** (minimum requirements)

- Weekly e-mail report detailing sites serviced and describing maintenance issues encountered on service runs
- Monthly status report to be submitted with invoices indicating the stations serviced, data transferred to CIMS



## **Overview of Evaluation Criteria**

Proposal Review Committee will evaluate and rank proposals according to the following criteria to be weighted according to points listed:

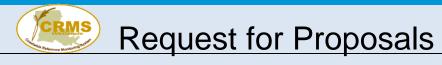
- 1. <u>Technical approach</u> (30) to the project and adequacy of proposal to achieve the requirements of the Scope of Services in sufficient detail.
- 2. <u>Cost</u> (30) Proposals will be rated by following procedure :
  - a. Lowest cost proposal will receive 30 points.
  - All other proposals will be rated by:
    30 x (Lowest Rate Schedule/ Proposer's Rate Schedule)
- 3. <u>Relevant experience</u> (30) of the firm and qualifications of the key personnel assigned to this project
- 4. Hudson/Veteran Small Entrepreneurship Program (10)



### **Overview of Performance Standards**

**Performance Requirements** 

- Timely, complete, and high quality (i.e., error free) data collection and deliverables that meet all protocols explained in SOP
- •
- Regular communication at all levels to include frequent (at least weekly) status reports
- Follow all landowner requirements



### **For More Information**

Additional information (including station locations and maps) provided at http://cims.coastal.louisiana.gov/docs/RFP/2015 CPRA CRMS Field Data Collection/

And on the CRMS website at: http://www.lacoast.gov/crms2/Home.aspx

Thank you! Time for your questions

