Coastwide Reference Monitoring System - Wetlands

Status Report for the CWPPRA Task Force
November 2, 2005
CRMS-Wetlands Status Report

Outline

MILESTONES
- Landrights
- CSA
- SOP Manual
- Contracting
  - Data collection
  - Equipment
- Implementation
  - Training
  - Preliminary Site Visits
  - Secondary Benchmarks
  - Site Construction

PROJECTIONS FOR NEXT FY
INFORMATION MANAGEMENT
- CRMS website

FUNDING AUTHORIZATIONS and CURRENT REQUEST
Coastwide Reference Monitoring System - Wetlands

September 26, 2005 Landrights Status:
- SECURED: 413
- PENDING: 199

LANDRIGHTS
CRMS-Wetlands: Milestones

- Cost Share Agreement
  - finalized on June 8, 2004
  - USGS is the Federal Sponsor
CRMS-Wetlands: Milestones

- SOP Manual
  - Updated in August 2005
  - 226-pages
  - Details of site characterization, site construction, data collection, and QA/QC methods
CRMS-Wetlands: Milestones

- Contracting
  - Data collection contractor, Coastal Estuary Services
  - Equipment contractor, Hach Environmental
CRMS-Wetlands: Implementation

• Training:
  – Hydrographic Equipment: March 8
CRMS-Wetlands: Implementation

- Training:
  - Hydrographic Equipment: March 8
  - CRMS Site Visits and Construction: April 4-6
CRMS-Wetlands: Implementation

- Training dates:
  - Hydrographic Equipment: March 8
  - CRMS Site Visits and Construction: April 4-6
CRMS-Wetlands: Implementation

- Site Characterization Report: 141 completed to date
CRMS-Wetlands: Implementation

- Site Characterization Report
CRMS-Wetlands: Implementation

• Construction of sites began in July 2005
  – Approximately 40 sites constructed
CRMS-Wetlands: Projections
Landrights Secured

N=413
CRMS-Wetlands: Projections
Landrights Secured and Projected

N=413
N=66
CRMS-Wetlands: Projections
Landrights Secured, Projected, and Constructed

N=413
N=66
N=40*
*anticipated to be 339 by December 2005
CRMS-Wetlands: Projections

- **Fall 2005:**
  - Collection of coastwide aerial photography and satellite imagery

- **December 2005:**
  - Landrights for Year 1 secured

- **March 2006:**
  - Construction of all year 1 sites completed

- **April 2006:**
  - Data collection for first year anticipated to begin (data will begin sooner if site construction is completed)
Biological Monitoring Data

Hydrographic, surface elevation, and vegetation data collected by the LDNR / CRD Biological Monitoring Section are now available on-line. All downloaded files will be in zipped, comma-delimited format with headers that describe the data. For a detailed explanation of all data types, please review the Data Descriptions document.

Hydrographic Data

Hydrographic data are now available in two general formats: data collected monthly and data collected hourly. Parameters sampled generally include: water level, water temperature, specific conductance, and salinity. In some rare instances water velocity and wind speed/direction are sampled at stations where hourly data are collected.

Monthly Data

Link: Retrieve Monthly Data (via SONRIS Lite)

Monthly hydrographic data can be downloaded by either project or station number for any range of dates that data are available. These files are relatively small as there are only approximately 12 records per station per year. In general, there is a much larger spatial distribution of stations where monthly data are collected than where hourly data are collected. The LDNR currently monitors over 400 stations throughout the coastal zone for monthly hydrographic data.

Hourly Data

Link: Retrieve Hourly Data (via SONRIS Lite)

Hourly hydrographic data may also be downloaded by project or by station number; however these files are much larger than the monthly files. For example, since one year of hourly sampling will yield approximately 8,760 records, a file for a project collecting data at 3 stations for a period of 5 years will contain approximately 131,400 records. Many typical spreadsheet programs will not be able to completely open a file of this size. For this reason, we recommend that hourly data be downloaded by station and not by project. The LDNR currently monitors over 100 stations throughout the coastal zone for hourly.
Coastwide Reference Monitoring System (CRMS) Overview

Priority Project List: N/A

Sponsors: LDNR, USGS

Parishes: Acadia, Ascension, Assumption, Calcasieu, Cameron, East Baton Rouge, Iberia, Iberville, Jefferson, Jefferson Davis, Lafayette, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Vermilion, West Baton Rouge

Reports:
- Office of Coastal Restoration and Management Quality Management Plan 2003 (PDF 582 KB)
- Biological Monitoring Section Standard Operating Procedures (PDF 2.83 MB)
- A contractor’s guide to minimum standards required by the Louisiana Department of Natural Resources, Coastal Restoration Division (PDF 2.45 MB)
- Quality management plan for Coastal Wetlands Planning, Protection, and Restoration Act monitoring program (PDF 1,004 KB)
- A proposed coast-wide reference monitoring system for evaluating wetland restoration trajectories in Louisiana (PDF 4.33 MB)
- Task 3 from Request For Proposal - Project Specific Station Location Maps (PDF 4.02 MB)
- SONRIS Database User Manual (PDF 174 KB)
- CRMS Project Managers’ Technical Fact Sheet (HTML)

Maps:
No maps available
PROVISIONAL DATA SUBJECT TO REVISION

Station Type: Continuous Hourly
Station: B401-01 30 days
Parameter: Water Temp 60 days
          Water Level 90 days
Start Date: 01/01/2004

Graph showing water level and mesh elevation from January 1, 2004 to January 31, 2004.
## CRMS-Wetlands: Authorizations and Current Request

### Authorizations

- **August 14, 2003**: (2003-2006) $12,397,506
  - (PPL 1-8 and new funding)
- **October 13, 2004**: (2008) $532,000
- **Total Auth. To Date**: $16,030,863
- **November 2, 2005**: (2009) $1,036,109
- **Total Anticipated Authorization**: $17,066,972

### Expenses

- Expenses through FY05: $532,000
- **Expenses in FY06**: $1,036,109
- **Total Expenses To Date**: $1,568,109

### Project Balance

- **Project Balance (available funds)**: $14,462,754
- **FY09 Request (based on FY06 Expenses)**: $1,036,109
- **Anticipated Balance (pending approval)**: $15,498,863
FY09 FUNDING REQUEST

CRMS $1,036,109
TV-18 Four Mile Cut/Little Vermilion Bay $28,903
Total $1,065,012
Figure 1: CRMS0434 staff gauge and continuous recorder stations. Notice the vegetation on the electrical box.

Figure 2: CRMS0434 boardwalk with missing board and warning sign post.

Figure 3: CRMS0434 RSET station.

Figure 4: CRMS0375 continuous recorder and staff gauge post. Notice vegetation around the electrical box.

Figure 7: CRMS0374 boardwalk.