A Web-enabled, GIS-integrated Coastal Restoration Information Management System

Michael Turner
Louisiana Department of Natural Resources
Office of Coastal Restoration and Management
Project Locations

- Barrier Island Restoration
- Dredged Material / Marsh Creation
- Freshwater Diversion
- Hydrologic Restoration
- Marsh Management
- Outfall Management
- Sediment and Nutrient Trapping
- Sediment Diversion
- Shoreline Protection
- Vegetation Planting
CRMS Sites

Coastwide Reference Monitoring System - Wetlands
Information and Data Overview:

- GIS data layers and imagery
- Monitoring data
- Engineering data such as benchmarks and soil borings
- Documents generated by LDNR/OCRM
GIS Data Overview:

• 17 “Coastal” layers
  – (Restoration Projects, Monitoring Stations, Oyster Leases, Coastal Permits, etc.)

• 13 “Boundaries” layers
  – (Parishes, Coastal Basins, State Coastal Zone Boundary, State Offshore Boundary, etc.)

• 6 “Reference” layers
  – (Primary Roads, Major Inland Water Bodies, etc.)

• 8 “Imagery and Maps” layers
  – (DOQQ, SPOT, Landsat, etc.)
Monitoring Data Overview:

- 9,135 Monitoring Stations, with # increasing almost weekly
- Over 40 different parameters collected
- Date range: 2/25/1987 to Present
- Total data record counts:
  - Accretion: 1,458
  - DCP & Continuous Hydrographic: 14.8 million
  - Discrete Hydrographic: 40,840
  - Herbaceous Marsh Vegetation: 66,883
  - Soil Properties: 2,700
  - Surface Elevation: 9,216
Engineering Data Overview:

- **Project Infrastructure:** locations, descriptions, construction information on 15,809 features
  - borrow sites, dredge channels, disposal/fill/marsh creation areas
  - containment dikes/spoil banks/levees
  - culverts, terraces, docks, plugs, locks, weirs, gated structures
  - siphons/pumps/diversion structures
  - shoreline protection areas
  - plantings, sediment fences

- **Primary GPS Network:** 42 monument/benchmark points
- **Secondary GPS Network:** 249 monument/benchmark points
- **Soil core boring logs** for 1139 locations
Document Overview:

- 900 Documents currently available online
- Searchable by Project, Basin or Restoration Technique
- Date range: January 1980 to Present
- Document categories include:
  - Annual Reports
  - Annual Inspection Reports
  - Ecological Reviews
  - Environmental Assessments
  - Feasibility Study Reports
  - Monitoring Reports
  - Project Completion Reports
LA Department of Natural Resources
Office of Coastal Restoration and Management’s Website-Database Integration

1. Website

2. GIS Database

3. Monitoring Database
Office of Coastal Restoration and Management
The Office of Coastal Restoration and Management is responsible for the maintenance and protection of the state’s coastal wetlands. The Coastal Restoration and Engineering Divisions are responsible for the construction of projects aimed at creating, protecting and restoring the state’s wetlands.

The main function of the Coastal Management Division is the regulation of uses in the Louisiana coastal zone, especially those which have a direct and significant impact on coastal waters.

Coastal Management Division
Jim Rives, Acting Administrator

Coastal Restoration Division
William K. "Kirk" Rhinehart, Administrator

Coastal Engineering Division
Christopher P. Knotts, P.E., Director

Coastal Management Division
- Home
- Coast Lines Newsletter
- Coasting Nonpoint Pollution Control
- Coastal Use Permits
- Online Joint Permit Application
- Federal Consistency
- Local Coastal Programs
- PermitTrak Database System

Coastal Restoration Division
- Home
- Restoration Program Background
- Monitoring Data
- Document Search
- 2006 Annual Project Reviews

Coastal Engineering Division
- Home
- Coastal Restoration Projects
- Coastal Studies and Findings
- Info for CWPPRA Partners

OCRSM Related Sites
- America’s Wetland Campaign

Additional OCRM Topics
- National Marine Fisheries Service
- Career Opportunities
<table>
<thead>
<tr>
<th>Rec</th>
<th>State ID</th>
<th>Federal ID</th>
<th>Project Name</th>
<th>PFL</th>
<th>Sponsor</th>
<th>Project Type</th>
<th>Status</th>
<th>Basin</th>
<th>Total Acres</th>
<th>Project Info</th>
<th>Request Project Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P0-21</td>
<td>PFD-04</td>
<td>EDEN ISLE EAST MARSH RESTORATION (DEAUTHORIZED)</td>
<td>4</td>
<td>NMFS</td>
<td>HR</td>
<td>Authorized</td>
<td>PO</td>
<td>3004.44</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>2</td>
<td>P0-02A</td>
<td>P0-03A</td>
<td>VIOLET FRESHWATER DISTRIBUTION (DEAUTHORIZED)</td>
<td>3</td>
<td>NRCS</td>
<td>HR</td>
<td>Authorized</td>
<td>PO</td>
<td>15010.93</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>3</td>
<td>ER-33</td>
<td>XTS-321</td>
<td>BAYOU CREOLE PUMP STATION (DEAUTHORIZED)</td>
<td>6</td>
<td>EPA</td>
<td>HR</td>
<td>Authorized</td>
<td>PO</td>
<td>152500.16</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>4</td>
<td>TV-14</td>
<td>TV-0057</td>
<td>MARSH ISLAND HYDROLOGIC RESTORATION</td>
<td>6</td>
<td>USACE</td>
<td>HR</td>
<td>Authorized</td>
<td>PO</td>
<td>8400.17</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>5</td>
<td>CS-17</td>
<td>CS-17</td>
<td>CAMERON CREOLE PLUGS</td>
<td>1</td>
<td>USFWS</td>
<td>HR</td>
<td>Constructed</td>
<td>CS</td>
<td>16447.02</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>6</td>
<td>P0-15</td>
<td>P0-02A</td>
<td>BIENVILLE NATIONAL WILDLIFE REFUGE HYDROLOGIC RESTORATION, PHASE 1</td>
<td>9</td>
<td>NMFS</td>
<td>HR</td>
<td>Constructed</td>
<td>CS</td>
<td>25922.52</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>7</td>
<td>ME-11</td>
<td>ME-16</td>
<td>NILEMOUTH CANAL HYDROLOGIC RESTORATION</td>
<td>2</td>
<td>NMFS</td>
<td>HR</td>
<td>Constructed</td>
<td>ME</td>
<td>1336.45</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>8</td>
<td>TE-22</td>
<td>TE-22</td>
<td>POINT AU FEUILLE CANAL PLUGS</td>
<td>2</td>
<td>NMFS</td>
<td>SPNR</td>
<td>Constructed</td>
<td>ME</td>
<td>5111.6</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>9</td>
<td>TE-32A</td>
<td>TE-32T</td>
<td>NORTH LAKE BOURDAIRES BOUVARD DEPRESSION INTRODUCTION AND HYDROLOGIC MANAGEMENT</td>
<td>5</td>
<td>USFWS</td>
<td>FEHER</td>
<td>Not Constructed</td>
<td>TE</td>
<td>7809.99</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>10</td>
<td>TV-21B</td>
<td>TV-21T</td>
<td>BAYOULE DURMEY BASIN FRESHWATER INTRODUCTION</td>
<td>9</td>
<td>USACE</td>
<td>HR</td>
<td>Not Constructed</td>
<td>FY</td>
<td>2244.55</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>11</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>12</td>
<td>P0-04</td>
<td>P0-04A</td>
<td>ORLEANS COUNTY 100-ACRE PROJECT</td>
<td>9</td>
<td>NMFS</td>
<td>HR</td>
<td>Constructed</td>
<td>PO</td>
<td>6953.19</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>13</td>
<td>TV-02</td>
<td>TV-02</td>
<td>COTE BLANCHE HYDROLOGIC RESTORATION</td>
<td>3</td>
<td>NRCS</td>
<td>HR</td>
<td>Constructed</td>
<td>ME</td>
<td>5000.14</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>14</td>
<td>ME-16</td>
<td>ME-16</td>
<td>ORLEANS COUNTY 100-ACRE PROJECT</td>
<td>3</td>
<td>NRCS</td>
<td>HR</td>
<td>Constructed</td>
<td>ME</td>
<td>5000.14</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>15</td>
<td>TE-22</td>
<td>TE-22</td>
<td>POINT AU FEUILLE CANAL PLUGS</td>
<td>2</td>
<td>NMFS</td>
<td>SPNR</td>
<td>Constructed</td>
<td>ME</td>
<td>5111.6</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>16</td>
<td>TE-32A</td>
<td>TE-32T</td>
<td>NORTH LAKE BOURDAIRES BOUVARD DEPRESSION INTRODUCTION AND HYDROLOGIC MANAGEMENT</td>
<td>5</td>
<td>USFWS</td>
<td>FEHER</td>
<td>Not Constructed</td>
<td>TE</td>
<td>7809.99</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>17</td>
<td>TV-21B</td>
<td>TV-21T</td>
<td>BAYOULE DURMEY BASIN FRESHWATER INTRODUCTION</td>
<td>9</td>
<td>USACE</td>
<td>HR</td>
<td>Not Constructed</td>
<td>FY</td>
<td>2244.55</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>18</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>19</td>
<td>P0-04</td>
<td>P0-04A</td>
<td>ORLEANS COUNTY 100-ACRE PROJECT</td>
<td>9</td>
<td>NMFS</td>
<td>HR</td>
<td>Constructed</td>
<td>PO</td>
<td>6953.19</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>20</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>21</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>22</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>23</td>
<td>TE-22</td>
<td>TE-22</td>
<td>POINT AU FEUILLE CANAL PLUGS</td>
<td>2</td>
<td>NMFS</td>
<td>SPNR</td>
<td>Constructed</td>
<td>ME</td>
<td>5111.6</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>24</td>
<td>TE-32A</td>
<td>TE-32T</td>
<td>NORTH LAKE BOURDAIRES BOUVARD DEPRESSION INTRODUCTION AND HYDROLOGIC MANAGEMENT</td>
<td>5</td>
<td>USFWS</td>
<td>FEHER</td>
<td>Not Constructed</td>
<td>TE</td>
<td>7809.99</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>25</td>
<td>TV-21B</td>
<td>TV-21T</td>
<td>BAYOULE DURMEY BASIN FRESHWATER INTRODUCTION</td>
<td>9</td>
<td>USACE</td>
<td>HR</td>
<td>Not Constructed</td>
<td>FY</td>
<td>2244.55</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>26</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>27</td>
<td>TE-22</td>
<td>TE-22</td>
<td>POINT AU FEUILLE CANAL PLUGS</td>
<td>2</td>
<td>NMFS</td>
<td>SPNR</td>
<td>Constructed</td>
<td>ME</td>
<td>5111.6</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>28</td>
<td>TE-32A</td>
<td>TE-32T</td>
<td>NORTH LAKE BOURDAIRES BOUVARD DEPRESSION INTRODUCTION AND HYDROLOGIC MANAGEMENT</td>
<td>5</td>
<td>USFWS</td>
<td>FEHER</td>
<td>Not Constructed</td>
<td>TE</td>
<td>7809.99</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>29</td>
<td>TV-21B</td>
<td>TV-21T</td>
<td>BAYOULE DURMEY BASIN FRESHWATER INTRODUCTION</td>
<td>9</td>
<td>USACE</td>
<td>HR</td>
<td>Not Constructed</td>
<td>FY</td>
<td>2244.55</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>30</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>31</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>32</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>33</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>34</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
<tr>
<td>35</td>
<td>CS-20</td>
<td>CS-20</td>
<td>EAST SABINE LAKE HYDROLOGIC RESTORATION</td>
<td>10</td>
<td>NRCS</td>
<td>HR</td>
<td>Not Constructed</td>
<td>CS</td>
<td>37284.88</td>
<td>Project Info</td>
<td>Request Project Data</td>
</tr>
</tbody>
</table>

More Records:  Zoom to these records
Freshwater Bayou Wetland Protection

State Project Number: ME-04
Federal Sponsor: Natural Resources Conservation Service (NRCS)
Project Types: Hydrologic Restoration, Shoreline Protection
Construction Completion Date: 1998

Description:
This project was constructed in two phases. Phase I was completed in 1995 and consisted of a 10,000 linear-foot rock dike to protect the west bank of Freshwater Bayou Canal from shoreline erosion. Phase II of the project was completed in 1998 and included the construction of several water control structures to improve the capability of the interior wetlands to mediate the effects of increased salinity and higher water level fluctuations, on vegetation cover.

Reports Available:
- Search for Project Documents

Project Information:
- Request Project Data
- Geospatial Data
State of Louisiana
Department of Natural Resources
Coastal Restoration Division

Monitoring Plan

for

Freshwater Bayou Wetland Protection

State Project Number ME-04
Priority Project List 2

August 2003
Vermilion Parish
Freshwater Bayou Wetland Protection

State Project Number: ME-04
Federal Sponsor: Natural Resources Conservation Service (NRCS)
Project Types: Hydrologic Restoration, Shoreline Protection
Construction Completion Date: 1998

Description:
This project was constructed in two phases. Phase I was completed in 1995 and consisted of a 10,000 linear-foot rock dike to protect the west bank of Freshwater Bayou Canal from shoreline erosion. Phase II of the project was completed in 1998 and included the construction of several water control structures to improve the capability of the interior wetlands to mediate the effects of increased salinity and higher water level fluctuations, on vegetation cover.

Reports Available:
- Search for Project Documents

Project Information:
- Request Project Data
- Geospatial Data
The data request you submitted has been fulfilled.


http://ftp.dnr.state.la.us/pub/extract_request/bmep24534731079.csv.gz

The file is in zip format, containing 1134605 bytes. This file will be retained on this site for 2 business days.

Zip software is required to read this file and can be downloaded from the following web address:
http://www.winzip.com

The information that fulfills this data request has been carefully prepared from the best available sources or data. It is intended for general informational purposes only and should not be considered authoritative for navigational, engineering, other site-specific uses, or any other uses. The Louisiana Department of Natural Resources (DNR) does not warrant or guarantee its accuracy, nor does DNR assume any responsibility or liability for any reliance thereon.
<table>
<thead>
<tr>
<th>Station</th>
<th>Date (MM/DD/Y)</th>
<th>Time (HH:MM:SS)</th>
<th>Raw Water (QC)</th>
<th>Adjusted V (QC)</th>
<th>Raw Specific Conductance (μS/cm)</th>
<th>Adjusted Specific Conductance (μS/cm)</th>
<th>Raw Salinity (ppt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>0:00:08</td>
<td>5.39</td>
<td>5.39</td>
<td>4565.6</td>
<td>4565.6</td>
<td>2.43</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>1:00:08</td>
<td>5.08</td>
<td>5.08</td>
<td>4570.5</td>
<td>4570.5</td>
<td>2.43</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>2:00:08</td>
<td>5.3</td>
<td>5.3</td>
<td>4561.9</td>
<td>4561.9</td>
<td>2.43</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>3:00:08</td>
<td>4.89</td>
<td>4.89</td>
<td>4587.9</td>
<td>4587.9</td>
<td>2.44</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>4:00:08</td>
<td>4.69</td>
<td>4.69</td>
<td>4624.1</td>
<td>4624.1</td>
<td>2.46</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>5:00:08</td>
<td>4.51</td>
<td>4.51</td>
<td>4649.5</td>
<td>4649.5</td>
<td>2.47</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>6:00:08</td>
<td>4.35</td>
<td>4.35</td>
<td>4645.1</td>
<td>4645.1</td>
<td>2.47</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>7:00:00</td>
<td>4.24</td>
<td>4.24</td>
<td>4693.9</td>
<td>4693.9</td>
<td>2.49</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>11:00:08</td>
<td>4.71</td>
<td>4.71</td>
<td>4691.2</td>
<td>4691.2</td>
<td>1.79</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>12:00:08</td>
<td>6.1</td>
<td>6.1</td>
<td>4668.3</td>
<td>4668.3</td>
<td>1.79</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>13:00:08</td>
<td>6.25</td>
<td>6.25</td>
<td>4674.9</td>
<td>4674.9</td>
<td>1.79</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>14:00:08</td>
<td>7.25</td>
<td>7.25</td>
<td>4664.8</td>
<td>4664.8</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>15:00:08</td>
<td>8.02</td>
<td>8.02</td>
<td>4651.6</td>
<td>4651.6</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>16:00:08</td>
<td>8.43</td>
<td>8.43</td>
<td>4659.7</td>
<td>4659.7</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>17:00:08</td>
<td>8.46</td>
<td>8.46</td>
<td>4684.9</td>
<td>4684.9</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>18:00:08</td>
<td>8.16</td>
<td>8.16</td>
<td>4713.1</td>
<td>4713.1</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>19:00:08</td>
<td>7.68</td>
<td>7.68</td>
<td>4698.9</td>
<td>4698.9</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>20:00:08</td>
<td>7.1</td>
<td>7.1</td>
<td>4679.9</td>
<td>4679.9</td>
<td>1.79</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>21:00:08</td>
<td>6.62</td>
<td>6.62</td>
<td>4710.7</td>
<td>4710.7</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>22:00:08</td>
<td>6.14</td>
<td>6.14</td>
<td>4729.9</td>
<td>4729.9</td>
<td>1.78</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>23:00:08</td>
<td>5.64</td>
<td>5.64</td>
<td>4747</td>
<td>4747</td>
<td>1.77</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>00:00:00</td>
<td>5.08</td>
<td>5.08</td>
<td>4781.5</td>
<td>4781.5</td>
<td>1.76</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>01:00:00</td>
<td>4.66</td>
<td>4.66</td>
<td>4822.1</td>
<td>4822.1</td>
<td>1.76</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>02:00:00</td>
<td>4.24</td>
<td>4.24</td>
<td>4851.4</td>
<td>4851.4</td>
<td>1.76</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>03:00:00</td>
<td>3.8</td>
<td>3.8</td>
<td>4870.4</td>
<td>4870.4</td>
<td>1.77</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>04:00:00</td>
<td>3.44</td>
<td>3.44</td>
<td>4879.1</td>
<td>4879.1</td>
<td>1.76</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>05:00:00</td>
<td>3.06</td>
<td>3.06</td>
<td>4895.7</td>
<td>4895.7</td>
<td>1.76</td>
</tr>
<tr>
<td>ME04-19</td>
<td>1/1/2001</td>
<td>06:00:00</td>
<td>2.71</td>
<td>2.71</td>
<td>4905</td>
<td>4905</td>
<td>1.76</td>
</tr>
</tbody>
</table>
PROVISIONAL DATA SUBJECT TO REVISION

Station: CRMS0135-H01

Parameters:
☐ Salinity
☑ Water Temp
☐ Water Level

Days:
☒ 30 days
☐ 60 days
☐ 90 days

Start Date: 09/29/2006

Create Graph
Other functions available on the SONRIS interactive GIS Map...
Other features available at the main website...
Monitoring Data

Hydrographic, accretion, herbaceous marsh vegetation, soil properties, and surface elevation data collected by the LDNR / CRD 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/wind 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 either by project, CRMS (Coastwide Reference Monitoring System) site, or station number. 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. Note: for CRMS stations, these monthly data comprise Soil Porewater data.

Hourly Data

Link: Retrieve Hourly Data (via SONRIS Lite)

Hourly hydrographic data may also be downloaded either by project, CRMS (Coastwide Reference Monitoring System) site, or 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.

Data are not necessarily available for download from all stations. However, if you would like to request data that are not currently available from the database, an alternate request option is available (see Other Data, below).
Monitoring Data

Hydrographic, accretion, herbaceous marsh vegetation, soil properties, and surface elevation data collected by the LDNR / CRD 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.

Accretion Data

Link: Retrieve Accretion Data (via SONRIS Lite)

Accretion data can be downloaded either by project or by station number. These data are collected from specific locations within herbaceous marsh areas and swamp/bottomland hardwood forest areas, and are collected at 6 months and 12 months after monitoring station establishment. Accretion measurements show rates of soil accretion or soil erosion at a location.

Herbaceous Marsh Vegetation Data

Link: Retrieve Herbaceous Marsh Vegetation Data (via SONRIS Lite)

Herbaceous marsh vegetation data can be downloaded either by project or by station number. These data are collected from specific areas that represent vegetative communities, and are collected at various time intervals ranging from seasonally to every 2-3 years. Parameters sampled include: vegetation species present, relative abundance and dominance of species within an area, and vegetative community type.

Soil Properties Data

Link: Retrieve Soil Properties Data (via SONRIS Lite)

Soil Properties data can be downloaded either by project or by station number. For CRMS (Coastal Reference Monitoring System) stations, these data are collected once time, when the station is established. Parameters sampled include: wet & dry soil pH, soil specific conductance, soil salinity, soil moisture content, bulk density, percent organic matter, and wet & dry volume.
Monitoring Data

Hydrographic, accretion, herbaceous marsh vegetation, soil properties, and surface elevation data collected by the LDNR / CRD 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.

Surface Elevation Data

Link: Retrieve Surface Elevation Data (via SONRIS Lite)

Surface Elevation data can be downloaded either by project or by station number. These data are collected at specific locations within herbaceous marsh areas and swamp/bottomland hardwood forest areas, and are collected at various time intervals ranging from every 6 months to every two 2-3 years. The sampling parameters consist of several sediment elevation measurements taken relative to a fixed subsurface datum at each location.

Other Data

Link: Request Other Data

Some monitoring stations collect data that are for parameters not listed above, or have data that has not yet been made available for download. This option is available for requesting these data.

Graph Data

Link: Graph Data

Monitoring Data can be graphed at the following intervals: 30 days, 60 days, and 90 days.

All Monitoring Data

Link: Retrieve All Monitoring Data
LDNR Coastal Restoration
Document Search

Enter document search criteria.

- **Document Type**: ALL Types
- **Project**: ALL Projects
- **Hydrographic Basin**: ALL Basins
- **Restoration Technique**: ALL Restoration Techniques
- **From Date (mm/dd/yyyy)**: 
- **To Date (mm/dd/yyyy)**: 
- **Document Name (optional)**: 
- **Document Author (optional)**: 
- **Document Keywords (optional)**: 

Submit
## Restoration Projects

The following table lists approved CWPPRA, implemented State, and non-CWPPRA Federal restoration projects alphabetically **by State Project Number**. To change the sort order, click on a column heading. For clarification of abbreviations used in the table, see the [abbreviation keys](#) at the bottom of this page.

<table>
<thead>
<tr>
<th>State Project Number</th>
<th>PPL</th>
<th>Federal Sponsor</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT-02</td>
<td>02</td>
<td>NMFS</td>
<td>Atchafalaya Sediment Delivery</td>
</tr>
<tr>
<td>AT-03</td>
<td>02</td>
<td>NMFS</td>
<td>Big Island Mining</td>
</tr>
<tr>
<td>AT-04</td>
<td>09</td>
<td>NMFS</td>
<td>Castille Pass Channel Sediment Delivery</td>
</tr>
<tr>
<td>BA-01</td>
<td>N/A</td>
<td>USACE</td>
<td>Davis Pond Freshwater Diversion</td>
</tr>
<tr>
<td>BA-02</td>
<td>01</td>
<td>NRCS</td>
<td>GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration</td>
</tr>
<tr>
<td>BA-03</td>
<td>N/A</td>
<td>NA</td>
<td>Naomi Siphon Diversion</td>
</tr>
<tr>
<td>BA-03c</td>
<td>05</td>
<td>NRCS</td>
<td>Naomi Outfall Management</td>
</tr>
<tr>
<td>BA-04</td>
<td>N/A</td>
<td>NA</td>
<td>West Pointe a la Hache Siphon Diversion</td>
</tr>
<tr>
<td>BA-04c</td>
<td>03</td>
<td>NRCS</td>
<td>West Pointe a la Hache Outfall Management</td>
</tr>
<tr>
<td>BA-05b</td>
<td>N/A</td>
<td>NA</td>
<td>Queen Bess</td>
</tr>
<tr>
<td>BA-05c</td>
<td>N/A</td>
<td>NA</td>
<td>Baie de Chactas</td>
</tr>
<tr>
<td>BA-15</td>
<td>03</td>
<td>NMFS</td>
<td>Lake Salvador Shore Protection Demonstration</td>
</tr>
<tr>
<td>BA-15x1</td>
<td>N/A</td>
<td>NA</td>
<td>Lake Salvador Shoreline Protection Extension</td>
</tr>
<tr>
<td>BA-16</td>
<td>N/A</td>
<td>NA</td>
<td>Bayou Segnette</td>
</tr>
<tr>
<td>BA-18</td>
<td>01</td>
<td>NMFS</td>
<td>Fourchon Hydrologic Restoration (Deauthorized)</td>
</tr>
<tr>
<td>BA-19</td>
<td>01</td>
<td>USACE</td>
<td>Barataria Bay Waterway Wetland Restoration</td>
</tr>
<tr>
<td>BA-20</td>
<td>02</td>
<td>NRCS</td>
<td>Jonathan Davis Wetland Protection</td>
</tr>
<tr>
<td>BA-21</td>
<td>03</td>
<td>NMFS</td>
<td>Bayou Perot/Bayou Rigolettes Marsh Restoration (Deauthorized)</td>
</tr>
<tr>
<td>BA-22</td>
<td>04</td>
<td>NRCS</td>
<td>Bayou L’Ours Ridge Hydrologic Restoration (Deauthorized)</td>
</tr>
<tr>
<td>BA-23</td>
<td>04</td>
<td>NRCS</td>
<td>Barataria Bay Waterway West Side Shoreline Protection</td>
</tr>
<tr>
<td>BA-24</td>
<td>05</td>
<td>NMFS</td>
<td>Myrtle Grove Siphon</td>
</tr>
<tr>
<td>BA-25</td>
<td>05</td>
<td>EPA</td>
<td>Bayou Lafourche Siphon (Phase 1)</td>
</tr>
</tbody>
</table>
Davis Pond Freshwater Diversion

State Project Number: BA-01
Project Priority List (PPL): N/A
Federal Sponsor: United States Army Corps of Engineers (USACE)
Project Type: Freshwater Diversion
Construction Completion Date: 2001

Description:
The purpose of this project is to maintain and enhance the existing ecological framework of the Barataria Basin by providing freshwater, nutrients, and sediment. This will counter saltwater intrusion and help offset marsh subsidence.

Reports Available:
- Search for Project Documents

Project Information:
- Request Hydrographic Project Data
- Request Biological Data
- Real-Time Flow Data
  - Davis Pond Freshwater Diversion: Operational Plan for 2007 (16 KB)

Davis Pond Advisory Committee Meeting Minutes:
- November 1999
- May 2001
- March 2002
- November 2002
- February 2003
- June 2004

Contact information for this project:
Tom Bernard, Structure Coordinator
Louisiana Department of Natural Resources
CERM, Room 309
2045 Lakeshore Drive
New Orleans, LA 70122
504-280-4071
Thomas.Bernard@la.gov
**Restoration Project Types**

**Freshwater Diversion.** This controlled diversion uses gates or siphons to regulate the volume of water flow. Freshwater is channeled from a nearby river or waterbody into surrounding wetlands. This infusion of water, sediment, and nutrients helps slow saltwater intrusion and promotes the growth of a new marsh. An example of a freshwater diversion is the [Davis Pond Freshwater Diversion (BA-01)](#).

![Davis Pond Freshwater Diversion (BA-01)](image)

**Outfall Management.** A variety of techniques are used to regulate the flow of freshwater diversions to ensure that water and sediment reach needed areas. These techniques maximize the benefits of freshwater diversions and can involve regulating water levels and direction of water flow to increase the dispersion and retention time of fresh water, nutrients, and sediment in the marsh. The water flow may be regulated by a combination of gates, locks, weirs, canal plugs, and gaps cut in artificial levee banks. One example is the [Caernarvon Diversion Outfall Management (BS-03a)](#).
For More Information, Please Contact:

Michael Turner
Louisiana Department of Natural Resources
(225) 342-4861
Michael.Turner@LA.gov