Southwest Louisiana Regional Update

Patrick J. Landry, P.E.
CPRA Operations Division
August 31, 2016
Cost: $45.8 million (funded 100% with 07-08 State Surplus funds): Construction: $40+ million

Project Features:
- Constructed 5+ miles of beach
- Pumped 2 million cubic yards of sand from source 20+ miles in GOM
- Sand fencing
- Volunteer vegetative plantings

Project Status:
- Sand pumping complete: Feb 2014
- Sand fence re-built: October 2015
- Dunes forming adjacent to sand fencing
Cameron Parish Shoreline Project
Shoreline Prior to Nourishment
Sand, discharge pipe and sand fencing moving westward towards Holly Beach
Sand dunes forming
May 2016
GULF OF MEXICO

BLACK BAYOU CULVERTS PROJECT (CS-29)
Black Bayou Culverts (CS-29)

- Concrete box culvert with 10 – 10’ X 10’ bays with flap gates in Black Bayou along Hwy 384
Black Bayou Culverts (CS-29)

• **Project Goals:** Control water levels & salinity in Mermentau Basin

• **Project Features:** Sheet pile cutoff walls, push piers, rock armor, guardrail improvements

• **Construction Cost:** $ 7.9 million

• **Project Status:**
  - Original project completed: January 2010
  - Engineering NTP: Lonnie Harper & Assoc. – Jan 2013
  - Construction NTP: May 2015
  - Final Inspection: June 2016
  - Operations contract in place
Black Bayou Culverts (CS-29)
Upstream of the box culvert after de-watering
Notice voids underneath the box culvert
Black Bayou Culverts (CS-29)
Downstream of the box culvert after de-watering
Notice voids under the box culvert
Concrete Tie-In Slab
## Grand Lake Shoreline Protection

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Project Budget (CIAP)</td>
<td>$10.6 million</td>
</tr>
<tr>
<td>Linear Feet</td>
<td>37,800</td>
</tr>
<tr>
<td>Construction Completion Date</td>
<td>February 2010</td>
</tr>
<tr>
<td>Funding Program</td>
<td>CIAP</td>
</tr>
</tbody>
</table>
Grand Lake Shoreline Protection (Tebo Point) (ME-21)

- **Project Goals:** Protect SW shoreline of Grand Lake from wake erosion
- **Project Features:** 1.1 miles of foreshore rock
- **Construction Cost:** $ 4 million (low bid)
- **Project Status:**
  - Bid date: June 2016
  - Award contract: September 2016
  - Construction start: October 2016 (5 months)
OYSTER BAYOU
MARSH CREATION
PROJECT (CS-59)
Notes:
2. 2007 background imagery is from Microsoft.

Legend:
- Oyster Bayou Restoration Project
- Oyster Bayou Borrow Area

Project Overview
Oyster Bayou Marsh Restoration Project CS-59
Cameron Parish, Louisiana
Oyster Bayou Marsh Creation (CS-59)

- **Project Features:** 510 acres of marsh creation & 14,000 feet of terrace construction
- **Construction Cost:** $19.1 M (low bid) (Weeks Marine)
- **Project Status:**
  - Bid opening: August 9, 2016
  - Award Bid: October 2016
  - Construction start: November 2016 (12 months)
GRAND BAYOU MARSH CREATION PROJECT (CS-54)
CS-54 Grand Bayou Marsh Creation Project Features

- Two marsh creation areas north of Grand Bayou

Total: 609 ac. created

- 213 acres on Miami Corp property
- 396 acres on Cameron Prairie NWR
Grand Bayou Marsh Creation (CS-54)

- **Project Features:** Benefit 609 acres (2 cells)
- **Construction Cost:** $24.6 (estimated)
- **Project Status:**
  - Plans and specs are in final review
  - Project Bid: October 2016
  - Construction start: Feb 2017
South Grand Chenier HR Project (ME-20)

- **Project Features:** Benefit 430 acres of marsh by building two 200+ acres cells with sediment from the Gulf of Mexico

- **Construction Cost:** $18 million (estimated)

- **Project Status:**
  - Final engineering review ongoing
  - Bid Advertisement: November 2016
  - Anticipate construction start: February 2017 (5 months)
Rockefeller Refuge Shoreline
Reef Breakwater with LWA Core (Sept 2009)
Rockefeller Refuge Shoreline (ME-18)

- **Project Features:** Construct lightweight aggregate core breakwaters along shoreline for 3 miles, approximately 150’ offshore on -3.5’ contour.

- **Construction Cost:** $27.5 million (estimated)

- **Project Status:**
  - Construction funding approved at Jan 2016 Task Force meeting
  - Coordinating $1 million transfer from LDWF
  - Anticipated bidding in early 2017
  - Construction to start: April/May 2017
Marsh Creation Area No. 1 (28 ac)

Marsh Creation Area No. 2 (108 ac)

Marsh Creation Area No. 3 (282 ac)
Cole’s Bayou Marsh Restoration (TV-63)

- **Project Features:**
  - Benefit 418 acres of marsh with borrow from Vermilion Bay
  - Increase freshwater and sediment inflow into interior wetlands by installing a series of culverts (22 – 42” culverts @ 9 locations)

- **Construction Cost:** $20m (estimated)

- **Project Status:**
  - Plans and specs are being finalized
  - Anticipate Project Bid: February 2017
  - Construction starting: April/May 2017
Cameron Meadows Marsh Creation (CS-66)

- **Project Features:**
  - 400 acres of marsh creation
  - 12,150 linear feet of terraces (27 terraces)
  - Borrow area – 5 miles south of the project area

- **Construction Cost:** $27.4 million (estimated)

- **Project Status:**
  - 95% Design meeting – late Sept/early Oct 2016
  - Planning to request construction funds at December 2016 Tech Committee meeting
Project Features:

- Placement of sheet pile structure in Monsanto canal (8 - 5’ square openings)
- 8,000 feet of GIWW rock shoreline protection
- 120,000 linear feet of terracing

Construction Cost: $20 million (estimated)

Project Status:

- Project is at 95% design level
- NRCS is reviewing the design features
- Unsure if project will be ready to request construction funding at CWPPRA December 2016 Tech Committee
GULF OF MEXICO
WHITE LAKE
GRAND LAKE
CALCASIEU LAKE
NO NAME BAYOU MARSH CREATION PROJECT (CS-78)
Calcasieu Ship Channel Borrow Area
Marsh Creation Area

USACE CDF “M”

CS - 78 No Name Bayou Marsh Creation
Cameron Parish, Louisiana
No Name Bayou Marsh Creation (CS-78)

- **Project Features:**
  - Benefit 533 acres of marsh
  - 3.5 million cubic yards of material from upland disposal site across from East Fork

- **Construction Cost:** $24 million (estimated)

- **Project Status:**
  - Surveys ongoing
  - Borings will begin soon & design to follow
  - 30% Design meeting: February 2017
  - 95% Design meeting: July 2017
  - Request construction funds: December 2017
Bayou Tigre Flood Control Projects (TV-67 & 75)

- **Project Goals:** Protect eastern Vermilion Parish from storm surge events
- **Project Features:** Barge Gate & Pump Station
- **Construction Cost:** $12.6 million (est.) (State surplus)
- **Project Status:**
  - Preliminary engineering report complete
  - Project design on hold pending discussions with FEMA regarding level of detail for H&H study with regards to a No Rise Certification.
Franklin Canal Barge Gate
Constructed 2014
(Bayou Tigre Gate will be similar type structure)
<table>
<thead>
<tr>
<th>Project</th>
<th>Project Name</th>
<th>Status</th>
<th>Const. Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS-33</td>
<td>Cameron Parish Shoreline</td>
<td>Recently Completed (Feb 2014)</td>
<td>$40 M</td>
</tr>
<tr>
<td>CS-29</td>
<td>Black Bayou Culverts</td>
<td>Recently Completed (June 2016)</td>
<td>$7.9 M</td>
</tr>
<tr>
<td>ME-21</td>
<td>Grand Lake Shoreline (Tebo Point)</td>
<td>Recently Bid (June 17, 2016)</td>
<td>$4 M</td>
</tr>
<tr>
<td>CS-59</td>
<td>Oyster Bayou Marsh Creation &amp; Terracing</td>
<td>Recently Bid (August 9, 2016)</td>
<td>$19 M</td>
</tr>
<tr>
<td>CS-54</td>
<td>Grand Bayou Marsh Creation</td>
<td>Projected Bid – Fall 2016</td>
<td>$24.6 M</td>
</tr>
<tr>
<td>ME-20</td>
<td>South Grand Chenier Marsh Creation</td>
<td>Projected Bid – Fall 2016</td>
<td>$18 M</td>
</tr>
<tr>
<td>ME-18</td>
<td>Rockefeller Refuge Shoreline Stabilization</td>
<td>Projected Bid – Spring 2017</td>
<td>$27.5 M</td>
</tr>
<tr>
<td>TV-63</td>
<td>Cole’s Bayou Marsh Creation</td>
<td>Projected Bid – Spring 2017</td>
<td>$20 M</td>
</tr>
<tr>
<td>CS-66</td>
<td>Cameron Meadows Marsh Creation &amp; Terracing</td>
<td>Proj. Fund. Request – Dec 2016</td>
<td>$27.4 M</td>
</tr>
<tr>
<td>CS-78</td>
<td>No Name Bayou Marsh Creation</td>
<td>Proj. Fund. Request – Dec 2017</td>
<td>$24 M</td>
</tr>
<tr>
<td>CS-49</td>
<td>Cameron Creole Freshwater Introduction</td>
<td>Proj. Fund. Request – Dec 16/17</td>
<td>$20 M</td>
</tr>
<tr>
<td>TV-67/75</td>
<td>Bayou Tigre Flood Control Project &amp; Pump Station</td>
<td>Engineering &amp; Design</td>
<td>$12.6 M</td>
</tr>
</tbody>
</table>

TOTAL ESTIMATED CONSTRUCTION COST: $245 M
Questions?

Contact Information:

Patrick J. Landry, P.E.
CPRA Regional Operations Manager for SW La.
Operations Division
(337) 482-0680 (work)
(337) 501-8037 (cell)
patrick.landry@la.gov