

**Atchafalaya River and Bayous Chene, Boeuf, and Black, LA  
Disposal Area I Inspection**

**CEMVN-OD-T  
August 2011**

**Overview** – The CEMVN conducted an inspection of Disposal Area I on 4-August-2011 to investigate habitat development and type, and gauge overall habitat quality. Observations made during this inspection are intended to improve the District’s understanding of the maturation of beneficial use disposal areas within the Atchafalaya Basin. Findings will also help direct future disposal practices.

Inspection was conducted by Jeff Corbino (OD-T), Thomas Parker (PDR-RP), and Gary Couret (CD-LA). Findings were documented with a digital camera equipped with a GPS, and relevant pictures and field notes are included in this brief report. Satellite imagery and Infrared aerial photography are included to provide insight on the formation and expansion of Disposal Area I through natural accretion and dredged material disposal operations.



Figure 1. Project Vicinity.



**Dec 2010 BUMP**

Figure 2. December 2010 extent of Disposal Area 1. Green dots serve as match-points in thumbnails of prior aerial reconnaissance shown in Figure 3. Each match-point is also labeled for reference to photographs contained in this report.

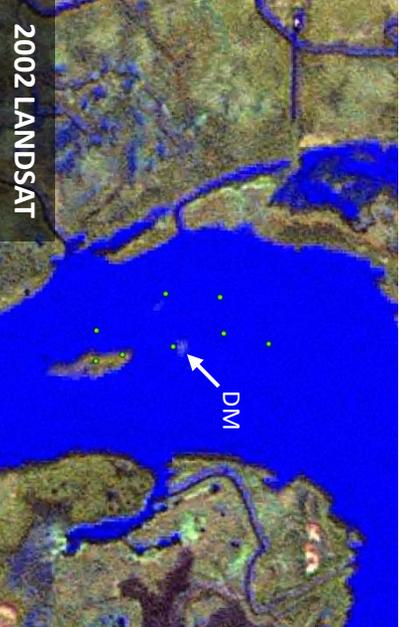
Note that dredged material mounds were placed upriver of the disposal area during Fiscal Year (FY) 2009 channel maintenance. Mounds are dispersed by currents and drift into the disposal area – as opposed to direct placement on the disposal area.



1992 LANDSAT



1998 DOQQ



2002 LANDSAT



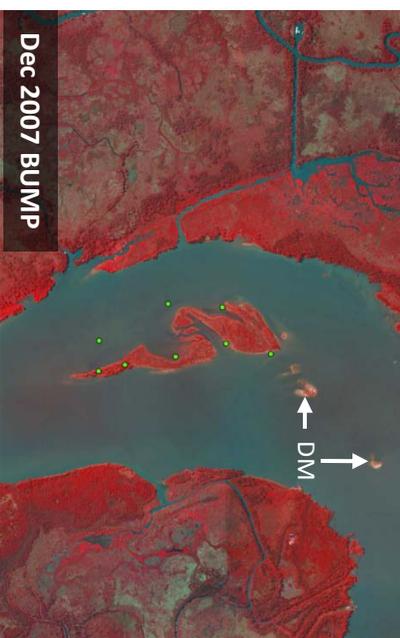
2004 DOQQ



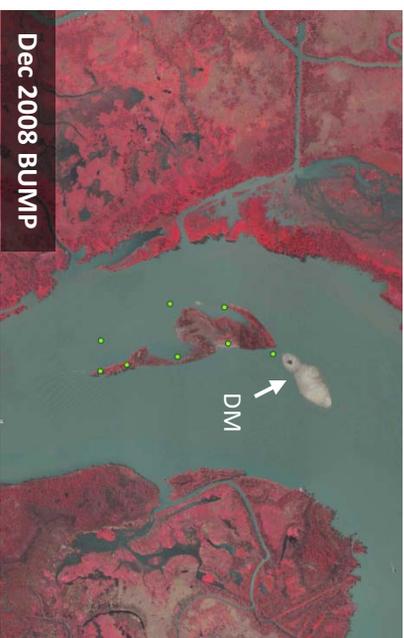
Dec 2005 BUMP



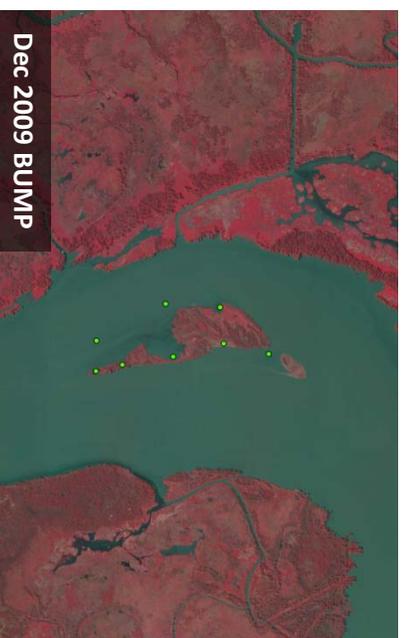
Dec 2006 BUMP



Dec 2007 BUMP



Dec 2008 BUMP



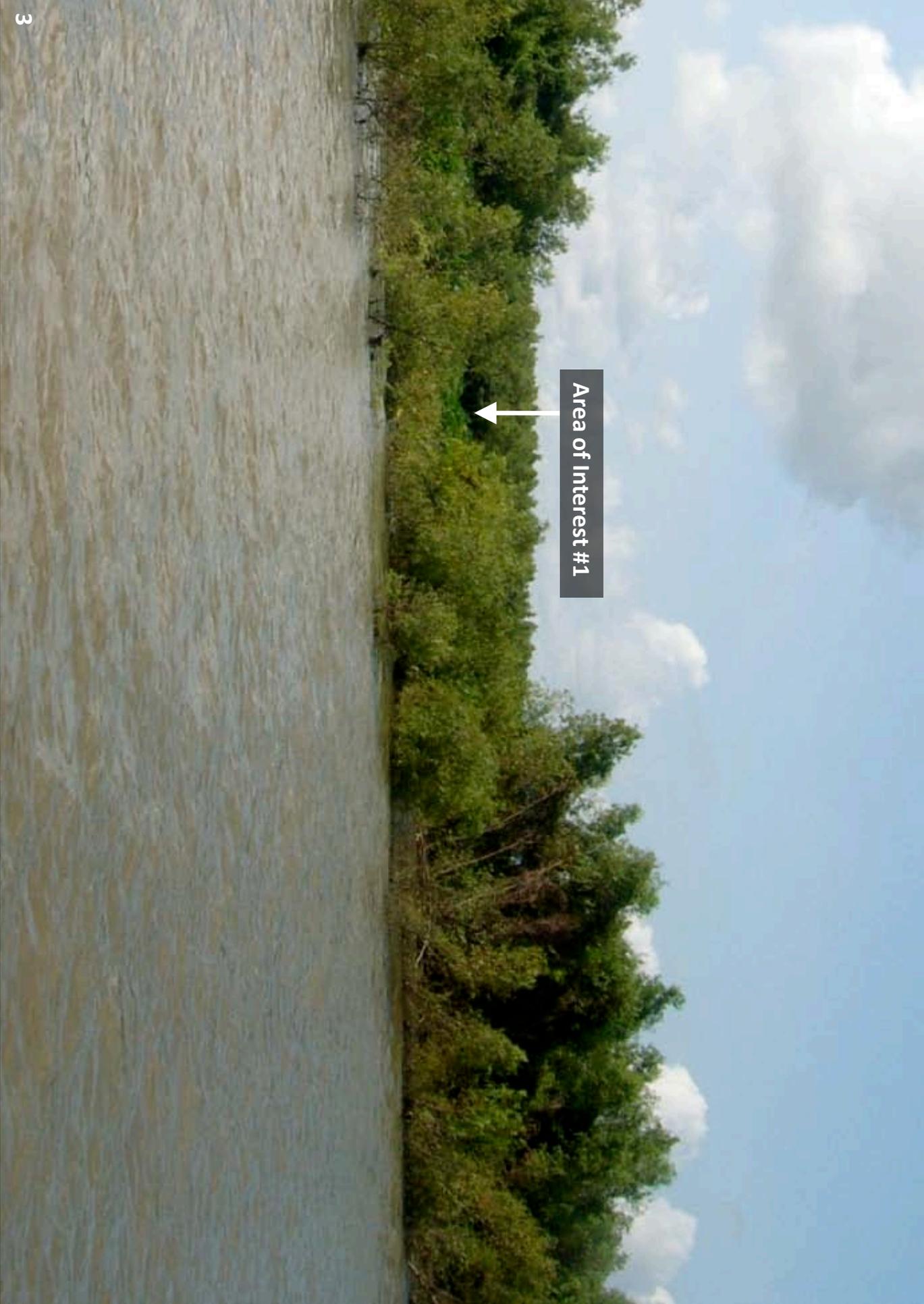
Dec 2009 BUMP

Figure 3. Natural formation of an island at Horseshoe Bend (1992-1998). Placement of dredged material mounds (labeled "DM" in above images) upriver of the island began in FY 2002. Migration of material from the mounds and natural accretion bridged the gap with the island during FY 2004. Dredged material mounds were placed upriver of the island / Disposal Area I complex during all subsequent channel maintenance events.



**Pictures 1 & 2.** Northern end of Disposal Area I (above), and black willow (*Salix nigra*) along the outer margins of Disposal Area I (below). Note that the two dredged material mounds and the v-shaped sandbar north of Disposal Area I visible in the December 2010 aerial photograph (Figure 2) were not visible above the waterline during this inspection.





**Picture 3.** Area of interest #1. Interior of Disposal Area I visible through a break in outer margin of black willow,



4

UTC 2011:08:04 15:07:37  
NW mag

Pictures 4 & 5. Area of interest #1 looking northwest (above) and northeast (below). Poned area and fringe vegetation encompassed about 15 acres. Plant species included alligatorweed (*Alternanthera philoxeroides*), American lotus (*Nelumbo lutea*), smartweed (*Polygonum* sp), cattail (*Typha latifolia*) and giant cutgrass (*Zizaniopsis miliacea*).



5

UTC 2011:08:04 15:06:34  
ENE mag



Pictures 6 & 7. Bulltongue (*Sagittaria lancifolia*) and bird tracks (far left); freshwater mussel shells were scattered throughout the ponded area (left). Great blue heron (*Ardea Herodias*), great egret (*Ardea alba*), and American coot (*Fulica americana*) were sighted in the area.



8 – Cattail stand

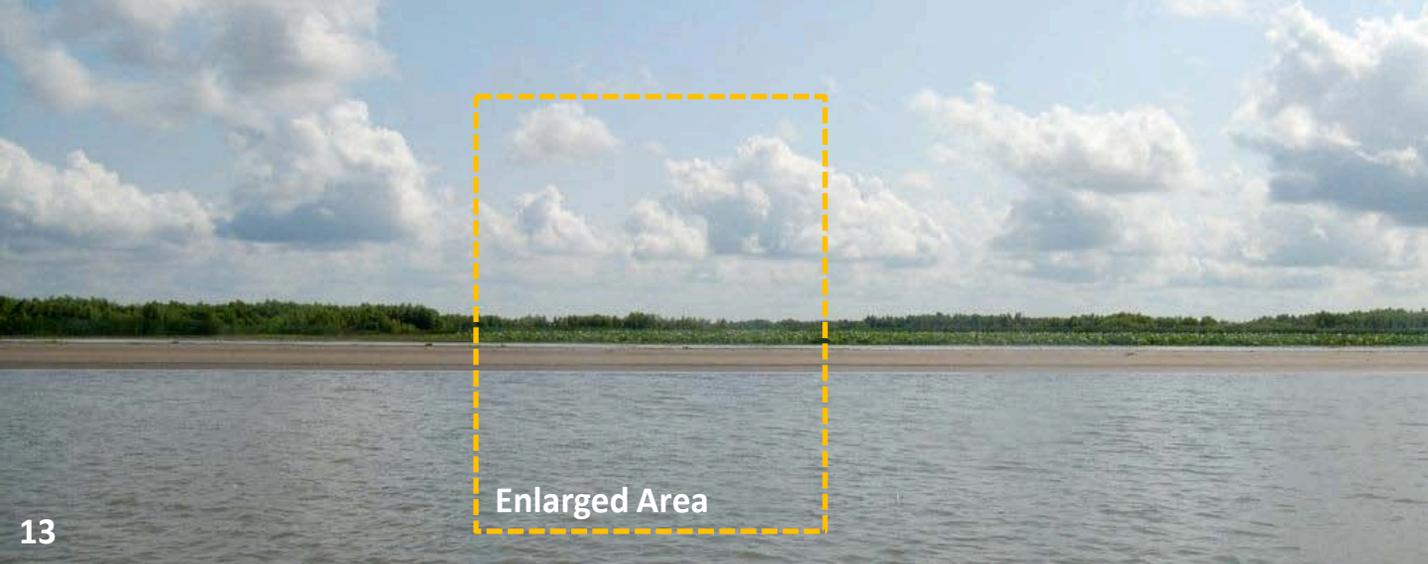
Pictures 9 & 10. Elephant's ear (*Colocasia esculenta*) and giant cutgrass (lower left and right) becoming established on recently deposited sand within area of interest #1.





**Pictures 11 & 12.** Area of interest #1 looking east (above) and south (below). Note beginning of outer sandbar to the east (red arrow). Willet (*Tringa semipalmata*) and white ibis (*Eudocimus albus*) were present within the transition between the ponded area and outer sandbar.





13

Enlarged Area

**Picture 13.** Sandbar separating Horseshoe Bend from the eastern edge of Disposal Area I (Above). Sandbar extended about 1,800 feet along the western edge of Disposal Area I and was backed by an additional 3 acre American lotus stand (visible in the enlarged photo at right). Both areas were separated from each other and the disposal area by shallow open-water.

Roseate spoonbills (*Platalea ajaja*), Laughing gulls (*Leucophaeus atricilla*), plovers (*Charadrius spp.*), and caspian terns (*Hydroprogne caspia*) were sighted loafing on the sandbar and foraging in the shallow open-water.



13 - Enlarged Area



14

UTC 2011:08:04 15:32:23  
 W mag  
 W:091°16'21.75"  
 N:029°31'20.39"



15

**Pictures 14 & 15.** Area of Interest #2 within the natural island footprint. Sandbar and American lotus stand visible from the southern end of Disposal Area I (above). Elephant's ear and black willow were well established on the southern end of the disposal area (right). Note channel marker for Horeshoe Bend is visible in both photos (red arrow).

**Picture 16.** Rattlebox (*Sesbania drummondii* – at center) and eastern baccharis (*Baccharis halimifolia* – at right) within area of interest #2.



UTC 2011:08:04 15:34:49  
W mag  
W: 091° 16' 21.72"  
N: 029° 31' 21.07"



17



18

**Pictures 17 - 19.** Eastern baccharis (above) and false indigo (*Amorpha fruticosa* - at right).

Locust and fiddler crabs were abundant along the shoreline of area of interest #2 (below).



19



20

Area of Interest #3



**Pictures 20 & 21.** Area of interest #3, also within the natural island footprint, as viewed from Crewboat Cut through a shoreline break in black willow (above). Unknown grasses and elephant's ear below hidden below the tree canopy (below).



21

UTC: 2011-08-04 10:42:00  
SM Nag  
V: 091°16' 22.94"  
N: 029° 31' 27.35"



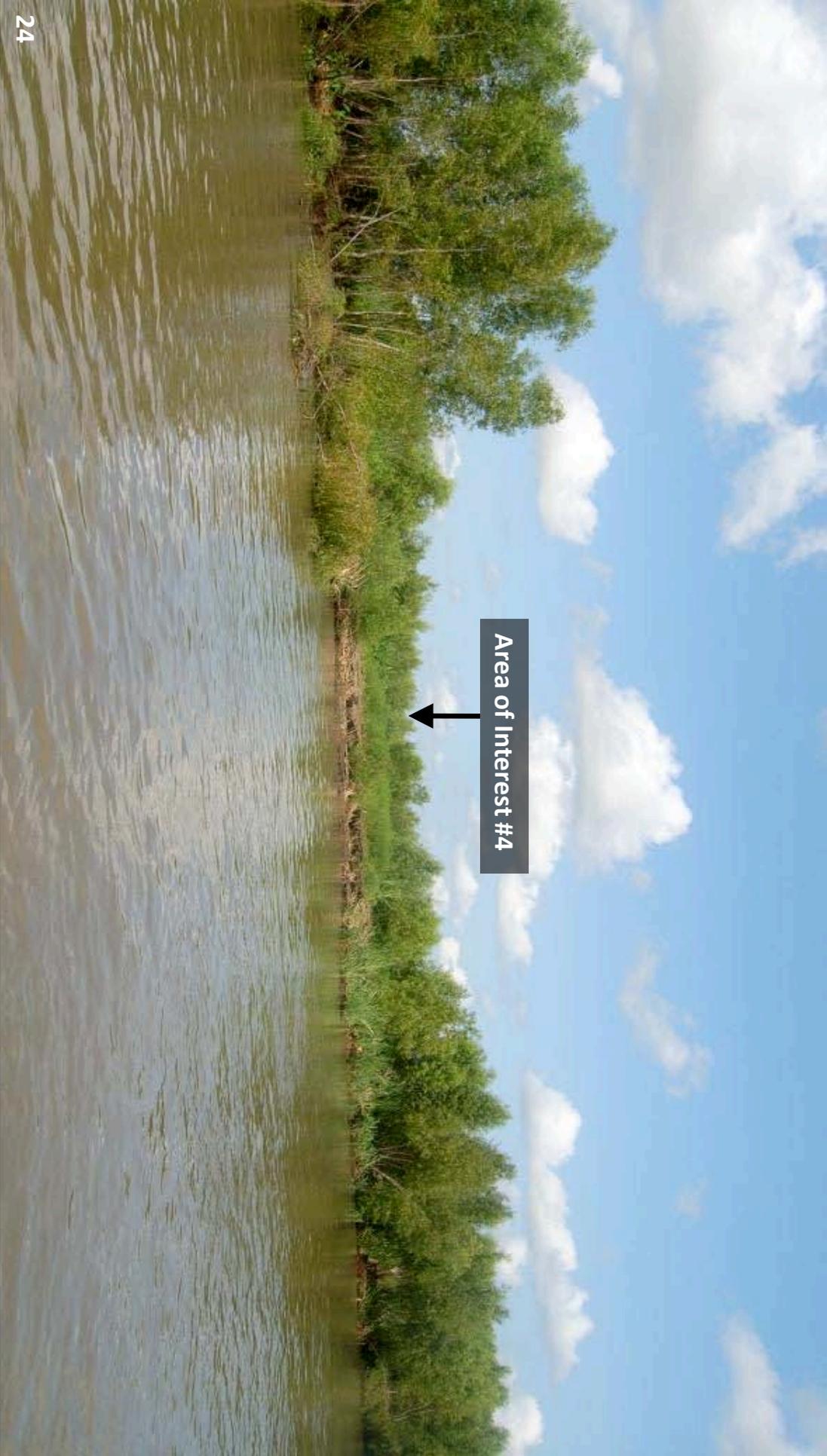
22



23

**Pictures 22 & 23.** Elephant's ear and *Hibiscus laevis* (above and left) below the willow canopy in area of interest #3.

Areas #2 and #3 combined encompassed about 4 acres within the boundaries of the natural sandbar island that began forming prior to dredged material disposal operations.



24

**Picture 24.** Area of interest #4, as viewed from Crewboat Cut through a shoreline break.



Picture 25. Dense field of American lotus in area of interest #4, looking towards the northwest. Green heron (*Butorides virescens*) were observed hunting amongst the lotus.

UTC 2011:08:04 15:54:08  
PHW 409  
W: 091° 16' 25.41"  
N: 029° 31' 38.42"

26 – Water Sprangles (*Salvinia minima*)



27 – Water Hyacinth (*Eichhornia crassipes*)



28 – Floating Primrose-Willow (*Ludwigia peploides*)

Pictures 26 - 29. Lotus field looking southwest towards Horeshoe Bend (below). Floating plants trapped among the lotus field by receding water in area of interest #4. The lotus field and fringe vegetation extended out about 15 acres.



UTC 2011-08-04 15:56:06  
SW mag  
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N: 029° 31' 37.61"

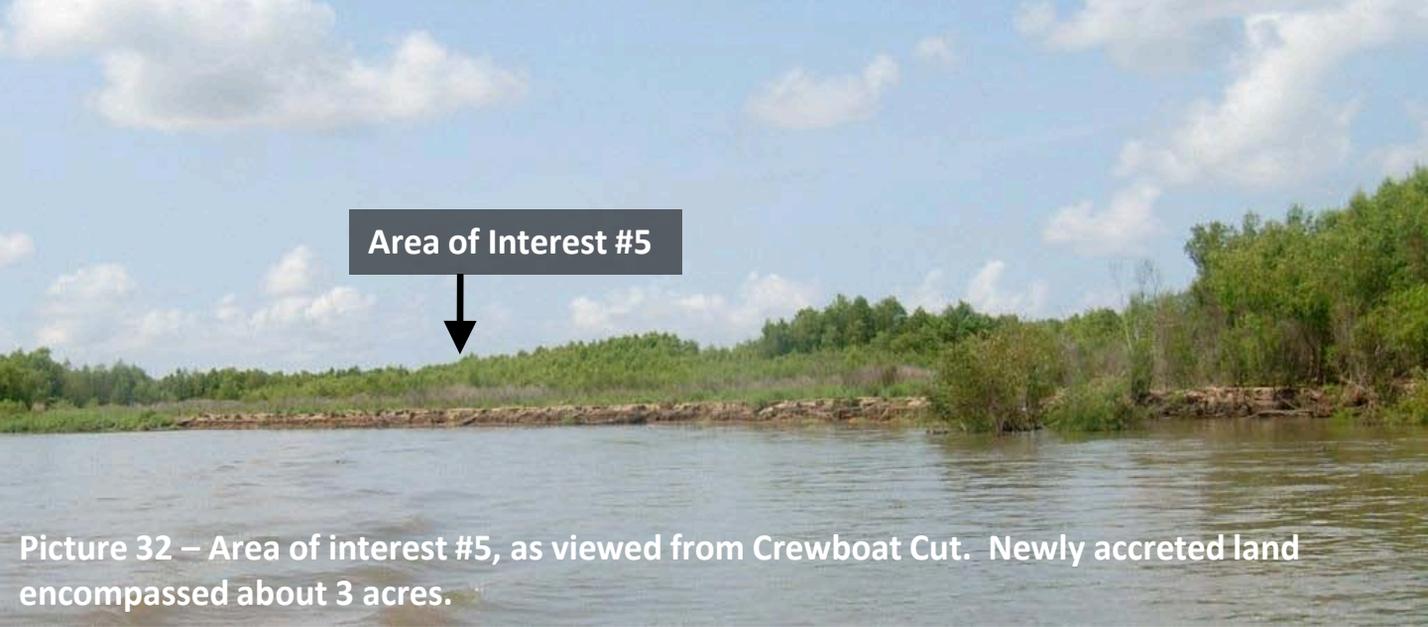


30

**Pictures 30 & 31.** Area of interest #5. Cut bank bordering Crewboat Cut. An abrupt face formed from the deposition of sand on top of the existing embankment, presumably from the 2011 spring flood.



31



Area of Interest #5

Picture 32 – Area of interest #5, as viewed from Crewboat Cut. Newly accreted land encompassed about 3 acres.



33 – Torpedograss (*Panicum repens*) and other unidentified grasses.

Pictures 34 - 36. Diverse assemblage of plants was found in area of interest #5 (in picture numerical order, parrot's feather, *Cyperus odoratus*, and *Lythrum lineare*).



34



35



36



37 – Rabbit Scat