MRGO Rock Dam Survey at Bayou la Loutre

Survey conducted May 6, 2009
Report released May 18, 2009

By
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Final
Print Legal size
Pictures of colorized graphics posted in the office of the work barge on site at the MRGO rock dam

USACE MRGO Rock Dam drawings

Plan view

Cross dam profile

Axial dam profile
Southwestern bank of MRGO rock dam  May 6, 2009

Channel center of MRGO rock dam  May 6, 2009. Strong incoming tide with numerous birds and dolphin feeding in dam area.

Northeastern bank of MRGO rock dam  May 6, 2009
Southeast Sonar Image Mosaic A of the MRGO rock dam closure at Bayou la Loutre

Sidescan Sonar imagery acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

Image mosaic of files 219, 220, 221, 22, 223. Image track in MRGO channel slightly west of center traveling southeast. Instrument Humminbird 997C.

Scale is approximate.

~100 feet

Southeast

MRGO

CBA

Rock Dam

Northwest
Sidescan Sonar Image **Mosaic A** of the MRGO rock dam closure at Bayou la Loutre

Sidescan Sonar imagery acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

Image mosaic of files 219, 220, 221, 22, 223. Image track is in MRGO channel slightly west of center traveling southeast. Instrument Humminbird 997C.

Scale is approximate. Approximately 41 to 42 feet deep.
Sidescan Sonar Image Mosaic B of the MRGO rock dam closure at Bayou la Loutre

Sidescan Sonar imagery acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

Image mosaic of files 224, 225, 226. Image track is in MRGO channel center traveling southeast. Instrument Humminbird 997C.

**Southeast**

**Northwest**

Scale is approximate. ~100 feet
Sidescan Sonar Image Mosaic B of the MRGO rock dam closure at Bayou la Loutre

Sidescan Sonar imagery acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

Image mosaic of files 224, 225, 226. Image track is in MRGO channel center traveling southeast. Instrument Humminbird 997C.

Depth: 41.4 ft

11:08:31 AM
5/06/09

N 29°49.247'
W 089°35.610'

72:10
sm
652
mph
9.0
Temp °F

77.4

5/06/09

N 29°49.297'
W 089°35.675'

72:09
sm
652
mph
9.0
Temp °F

77.1

Southeast

Bedding Layer

Drag anchor scar

Normal MRGO channel bottom with dredge scars

Bedding Layer

Base Stone

Base Stone for Armor rock

Recent deposition

Northwest

Bedding Layer

Scale is approximate.

~~100 feet
Southeast

Sidescan Sonar Image Mosaic C of the MRGO rock dam closure at Bayou la Loutre

Sidescan Sonar Imagery acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

Image mosaic of files 215, 216, 217, 218. Image track is in MRGO channel slightly east of center traveling southeast.
Instrument Humminbird 997C.

Southeast

MRGO

C B A

Rock Dam

Northwest

Scale is approximate.

~100 feet

SAVE OUR COAST
Sidescan Sonar Image **Mosaic C of the MRGO rock dam closure at Bayou la Loutre**

Sidescan Sonar imagery acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

Image mosaic of files 215, 216, 217, 218. Image track is in MRGO channel slightly east of center traveling southeast. Instrument Humminbird 997C.

Scale is approximate. ~100 feet

Normal MRGO channel bottom with dredge scars
Sonar Profile

Partially completed rock dam

Southeast

Northwest

Vertical exaggeration ~ 10X
Add 1.5 feet for depth of transducer

Approximately 1:1

Depth Sonar Profile of the MRGO rock dam closure at Bayou la Loutre

Depth Sonar profile acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

File 232. Image track is in MRGO channel center traveling south to north. Instrument Humminbird 997C.
Sonar Profile
Partially completed rock dam

Southeast

Depth 41.8 ft
11:28:57 AM
5/6/09
N 29°49.333'
W 089°35.728'
Temp 77.4°F

Northwest

Base layer
Bedding layer
Base channel
Subsidence is unknown

Subsidence is unknown

Vertical exaggeration ~ 10X
Add 1.5 feet for depth of transducer

Approximately 1:1

Depth Sonar Profile of the MRGO rock dam closure at Bayou la Loutre

Depth Sonar profile acquired May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

File 232. Image track is in MRGO channel center traveling south to north. Instrument Humminbird 997C.
Northwest Sonar Profile

Southeast

Vertical exaggeration ~ 10X
Add 1.5 feet for depth of transducer

Depth Sonar profile acquired
May 6, 2009 by the Lake Pontchartrain Basin Foundation. John Lopez, Ph.D. operator and captain. Also assisting Darren Siddons and Dave Derbes (USACE representatives)

File 236. Image track is in MRGO channel center. Instrument Humminbird 997C.
Northwest
Sonar Profile

Southeast

Sidescan Sonar Image

Depth Sonar &
Sidescan sonar image
Profile of the MRGO
rock dam closure at
Bayou la Loutre

Vertical exaggeration ~ 10X
Add 1.5 feet for depth of transducer

Depth Sonar profile acquired
May 6, 2009 by the Lake
Pontchartrain Basin
Foundation. John Lopez,
Ph.D. operator and captain.
Also assisting Darren
Siddons and Dave Derbes
(USACE representatives)

File 236. Image track is
in MRGO channel center.
Instrument Humminbird
997C.