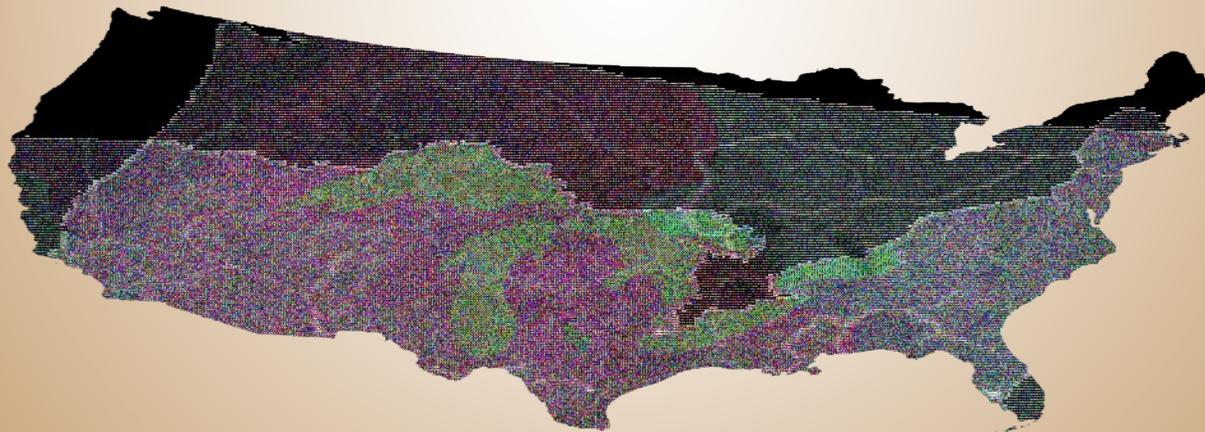


BIG RIVER COALITION



AAPA

HARBORS AND NAVIGATION COMMITTEE 41818

Sean M. Duffy, Sr.
Executive Director

sean.duffy@bigrivercoalition.org

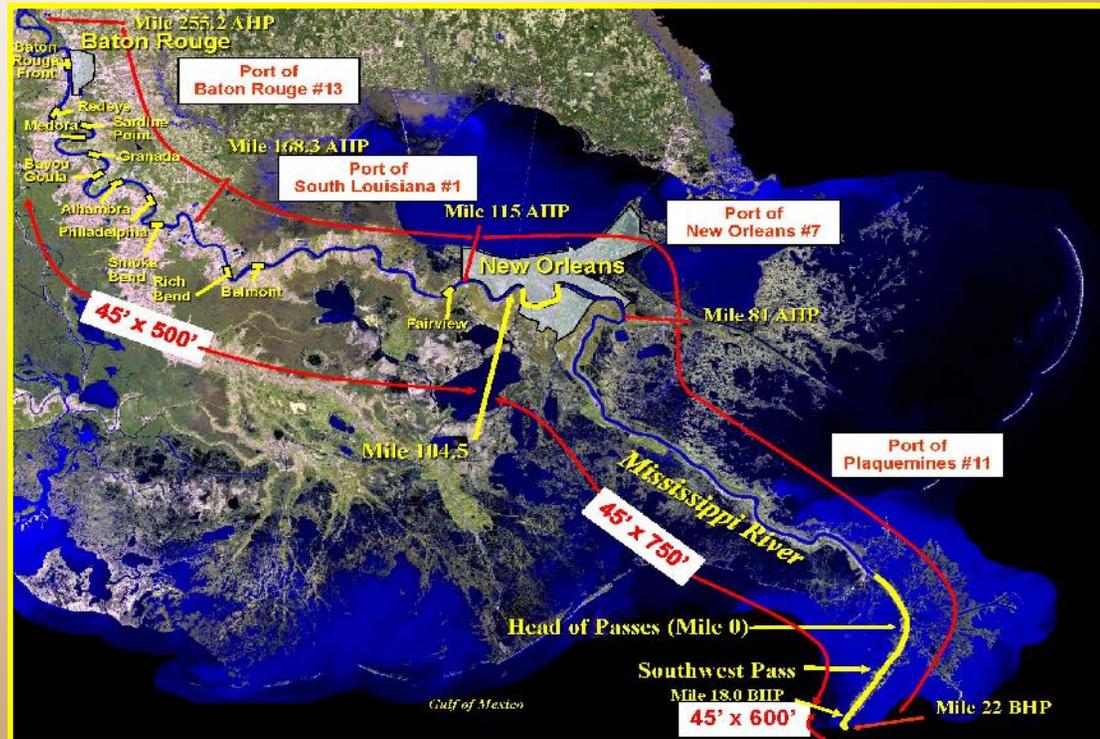
MARITIME NATION



Mississippi River Ship Channel

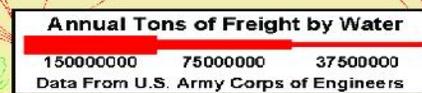


- #1 Largest Port Complex in the United States (World?)
- Largest Navigation Project in Corps
- U.S. Tonnage Rankings:
 - #1 - Port of South Louisiana
308 million short tons
 - #7 - Port of New Orleans
 - #11 - Port of Plaquemines
 - #13 - Port of Baton Rouge
- Corps annually expends \$118 M on average





Note: Figure shows dock-to-dock annual shipment volumes (tonnages) by 4-digit Performance Monitoring System Commodity Class and annual shipment volumes (tonnages, dollar-valued trades) to and from U.S. seaports and foreign countries, broken down by 4-digit Harmonized Schedule Commodity Codes.



DRAFT RESTRICTIONS SOUTHWEST PASS 2018

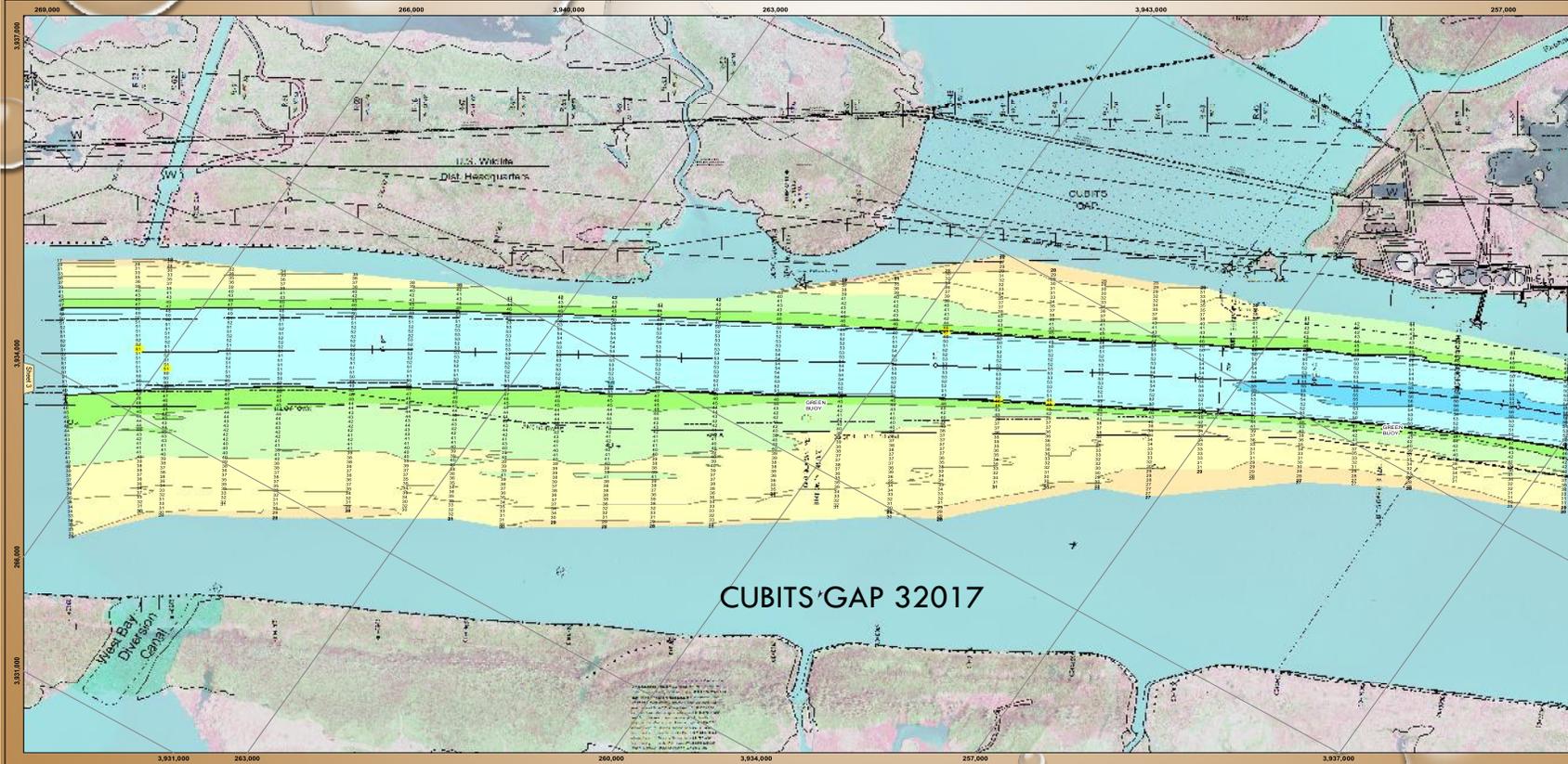
THE BAR PILOTS FURTHER REDUCED THEIR MAXIMUM DRAFT RECOMMENDATION TO 42 FEET (FRESHWATER) AT 1000 HOURS ON SATURDAY, APRIL 7, 2018. THE BAR PILOTS PREVIOUS DRAFT RECOMMENDATION OF 44 FEET (FRESHWATER) WAS ESTABLISHED AT 1030 HOURS ON MARCH 19, 2018.

THE CRESCENT RIVER PORT PILOTS REDUCED THEIR MAXIMUM RECOMMENDED DRAFT IN THE CUBIT'S GAP AREA TO 42 FEET ON SATURDAY, APRIL 14, 2018. THE FEDERAL PILOTS REDUCED THEIR MAXIMUM DRAFT RECOMMENDATION TO 42 FEET ON APRIL 7, 2018.

THE CONTROLLING DRAFT IS THE SAME FOR ALL THREE PILOT ASSOCIATIONS NAVIGATING VESSELS AT SWP.

Bonnet Carré Spillway Historic Operations:

Historic Openings Years	Dates Open	Number of Bays Opened	Maximum Flow cfs
1937	January 28 to March 16	285	211,000
1945	March 23 to May 18	350	318,000
1950	February 10 to March 19	350	223,000
1973	April 8 to June 21	350	195,000
1975	April 14 to April 26	225	110,000
1979	April 17 to May 31	350	191,000
1983	May 20 to June 23	350	268,000
1997	March 17 to April 17	298	243,000
2008	April 11 to May 8	160	160,000
2011	May 9 to June 20	330	316,000
2016	January 10 to January 31	210	203,000
2018	March 8 to March 30	183	185,000



LEGEND	
--- Federal Navigation Channel	■ Cable Area
--- Federal Navigation Center Line	■ Placement Area
--- As-built Pipeline/Cable	■ Anchorage Area
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point
--- Project Depth Contour	★ Beacon, General
	★ Red Navigation Buoy
	★ Green Navigation Buoy
	■ Borrow Area
	● Shoalest Sounding**
	★ Wrecks-Submerged

Gage Reading: 0.7 MLLW @ PILOT TOWN @ 1335
 Sea Conditions: CALM SEAS
 Vessel Name: BLANCHARD
 Survey Type: CONDITION, SB
 Sounding Frequency: LOW

Vertical Datum:
 Soundings are shown in feet and indicate height below Mean Lower Low Water (MLLW, OP-11).
 Datum Relationship for page 01022 as of 2/28/2017:
 0.7 MLLW @ PILOT TOWN @ 1335

Distances on the Mississippi River, above and below the location of Passes are shown at 1 mile intervals.

The location of navigation aids are based on and provided by the U.S. Coast Guard.
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998 DOQQ in green).
 Reference is NAD 83, NAVD83, NAVIGATOR Chart No. 11361.

** Shoalest Sounding per Quarter per Reach.

** High frequency (200 kHz) survey data represents the first depth measurement at a sounding location and will not be suspended in the 'Blue' layer. If high frequency (200 kHz) survey data normally penetrates through the 'Blue' layer to depict elevations of consolidated bottom material, Low frequency soundings may vary depending on channel conditions and instrument settings.



U.S. Army Corps of Engineers
 District: CEMVW

U.S. ARMY CORPS OF ENGINEERS
 MISSISSIPPI RIVER DISTRICT
 MAY/COLUMBIA DISTRICT

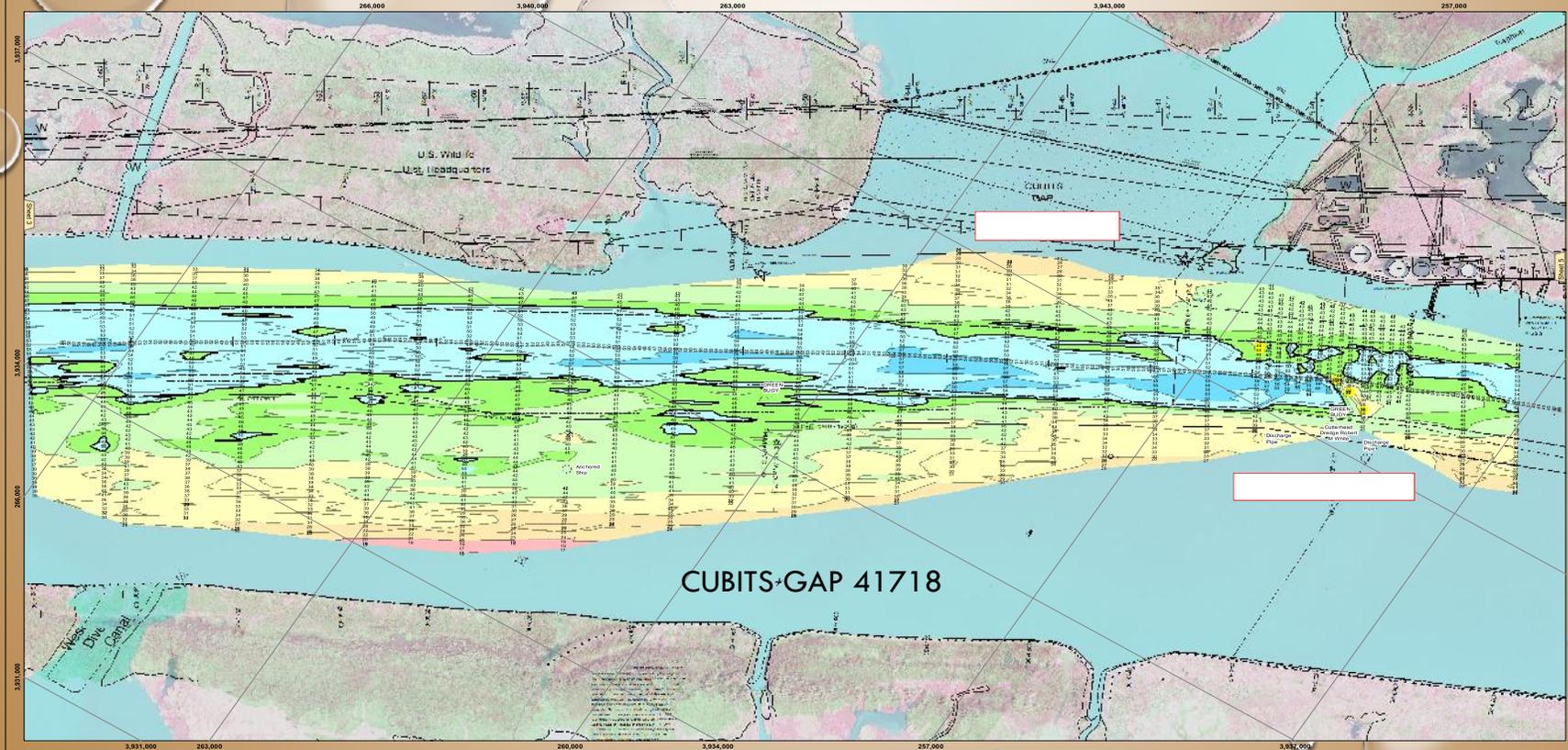
Prepared By: JTB/LEB/DG
 Title: SW 04_SWP_20170320_CS
 Date: 20 March 2017

MISSISSIPPI RIVER - B.R. TO GULF
 SOUTHWEST PASS - SHEET 4
 SW 04_SWP_20170320_CS
 20 March 2017

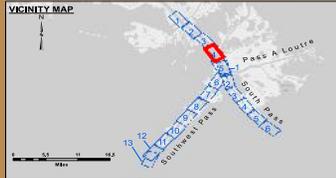
Sheet Reference Number
 4 of 13

Revision Number:
 1.1 (2/20/2017)

This chart was prepared from the following data:
 1. 2016 Aerial Photography (200 kHz) survey data
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 3. 2016 Aerial Photography (30 kHz) survey data
 4. 2016 Aerial Photography (10 kHz) survey data
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CUBITS GAP 41718



LEGEND	
--- Federal Navigation Channel	■ Borrow Area
--- Federal Navigation Center Line	■ Placement Area
--- As-built Pipeline/Cable	■ Anchorage Area
--- Unconfirmed Pipeline/Cable	⊗ Obstruction Point
--- Project Depth Contour	⚓ Wrecks-Submerged
★ Beacon, General	★ Shoalest Sounding**
◆ Red Navigation Buoy	◆ Green Navigation Buoy
■ -10' and above	■ -10' to -20'
■ -20' to -30'	■ -30' to -40'
■ -40' to -45'	■ -45' to -48.5'
■ -48.5' to -55'	■ -55' and below

Gage Reading: 1.80 MLLW @ PILOT TOWN @ 1110
 Sea Conditions: CALM, FLUFF (SAND WAVES)
 Vessel Name: JOHN BOPE
 Survey Type: CONDITION, SB
 Sounding Frequency***: LOW

Vertical Datum:
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998 DOQQ in green)
 Reference is NGS, A.A. Navigation Chart No. 11361.
 *** Shoalest Sounding per Quarter per Reach.

** High frequency (200 kHz) survey data represents the first signal return at a sounding location and will thus encounter shallower, lower in "k" (if present). Low frequency (24 kHz) survey data normally penetrates through the "k" layer to the substrations of consolidated bottom material. Low frequency accuracies may vary depending on channel conditions and instrument settings.

NOTES:
 Horizontal Coordinate System:
 North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.
 Vertical Datum:
 Soundings are shown on this chart as depths below Mean Lower Low Water (MLLW). 07-11L Datum Relationships for gage 81702 are of July 2015.
 07-11W08B = 07-11MLW - 3.2286(1)
 Distances on the Mississippi River, measured below Head of Passes are shown at 1 mile intervals.
 The location of navigation aids are based on and projected by the U.S. Coast Guard.
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998 DOQQ in green).
 Reference is NGS, A.A. Navigation Chart No. 11361.
 *** Shoalest Sounding per Quarter per Reach.

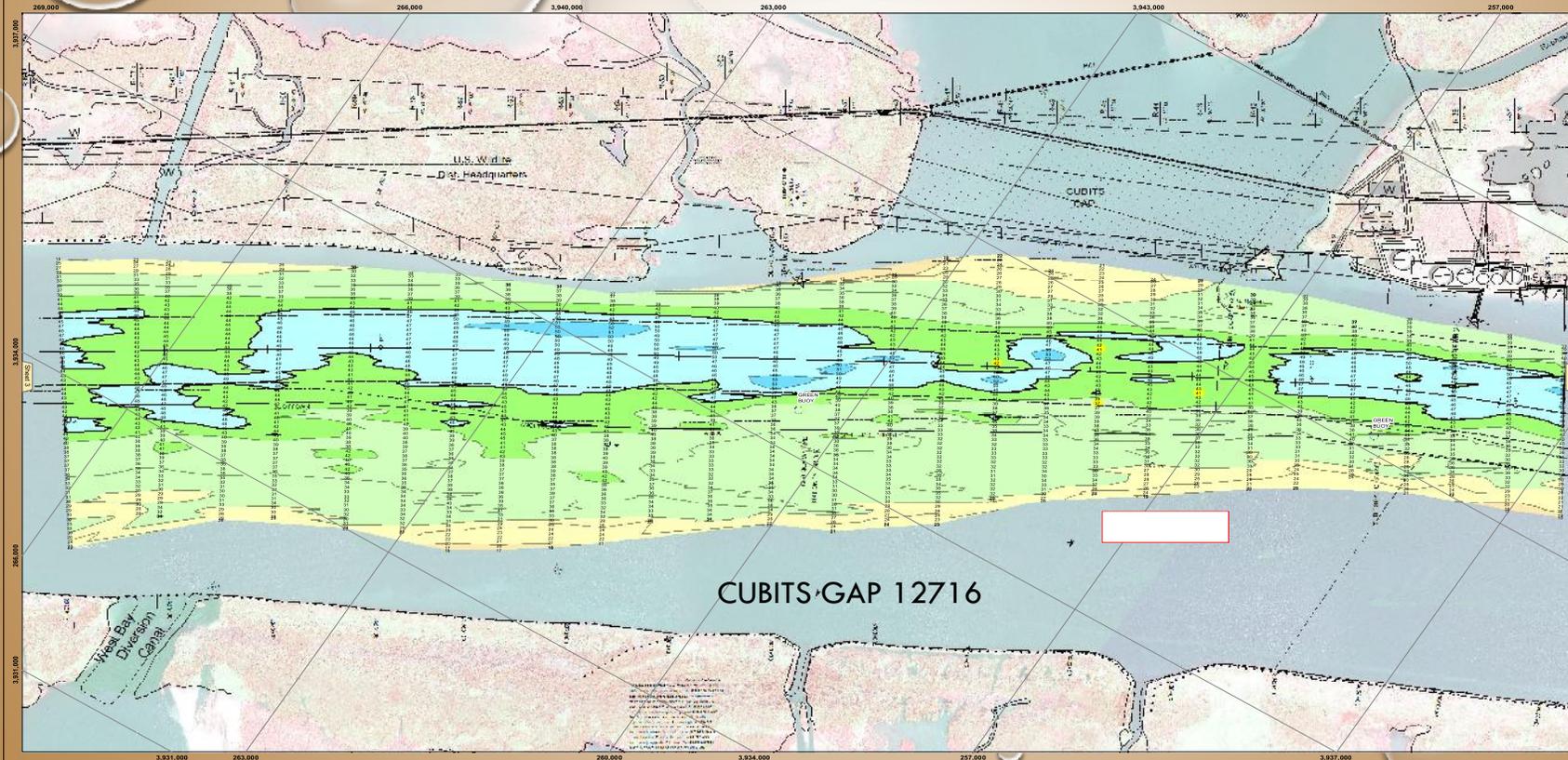
U.S. Army Corps of Engineers
 District: CEMV

PROJECT:
 MISSISSIPPI RIVER - B.R. TO GULF
 SOUTH WEST PASS - SHEET 4
 SW_04_SWP_20180417_CS
 17 April 2018

U.S. ARMY CORPS OF ENGINEERS
 NEW ORLEANS DISTRICT
 PROJECT NO. 1110
 SHEET NO. 4
 DATE: 17 APR 2018

MISSISSIPPI RIVER - B.R. TO GULF
 SOUTH WEST PASS - SHEET 4
 SW_04_SWP_20180417_CS
 17 April 2018

Sheet Reference Number
 4 of 13



CUBITS GAP 12716



LEGEND	
--- Federal Navigation Channel	█ Cable Area
--- Federal Navigation Center Line	█ Placement Area
--- As-built Pipeline/Cable	█ Anchorage Area
--- Unconfirmed Pipeline/Cable	█ Obstruction Point
--- Project Depth Contour	█ Wrecks-Submerged
█ Borrow Area	★ Beacon, General
█ Shoalest Sounding**	★ Red Navigation Buoy
★ Green Navigation Buoy	

Cage Reading: 5.6 MLG @ PILOT TOWN @ 1010
 Sea Condition: CHOPPY
 Vessel Name: BLANCHARD
 Survey Type: CONDITION, SB
 Sounding Frequency: LOW

5.6 MLG @ PILOT TOWN @ 1010
 CHOPPY
 BLANCHARD
 CONDITION, SB
 LOW

Feet
 0 500 1,000 1,500 2,000 2,500

NOTES

Horizontal Coordinate System: North American Datum of 1983 (NAD 83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.

Vertical Datum: Soundings are shown in feet and indicate to the value Mean Low Gulf Datum (MLG). Datum: Mean Low Water (MLW) as of 2010.00. GULF NAVIGATOR - 0.3' MLW = 3.27' MLLG.

Distances on the Mississippi River, above and below HULL, are given in feet at 100-foot intervals.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

2013 Aerial Photography data source: GEOLIP, Atlantic Group, LLC. (1998 DOQG in green)

Reference is N.O.A.A. Navigation Chart No. 11361.

** Shoalest Sounding per Quarter per Reach.

High Frequency (200 kHz) survey data represents the 99th percentile return of a sounding buoy and will include suspended sediments. Low Frequency (20 kHz) survey data normally penetrates through the left bank to depict elevations or coordinates below midline. Low frequency soundings may vary depending on channel conditions and bathymetry setting.

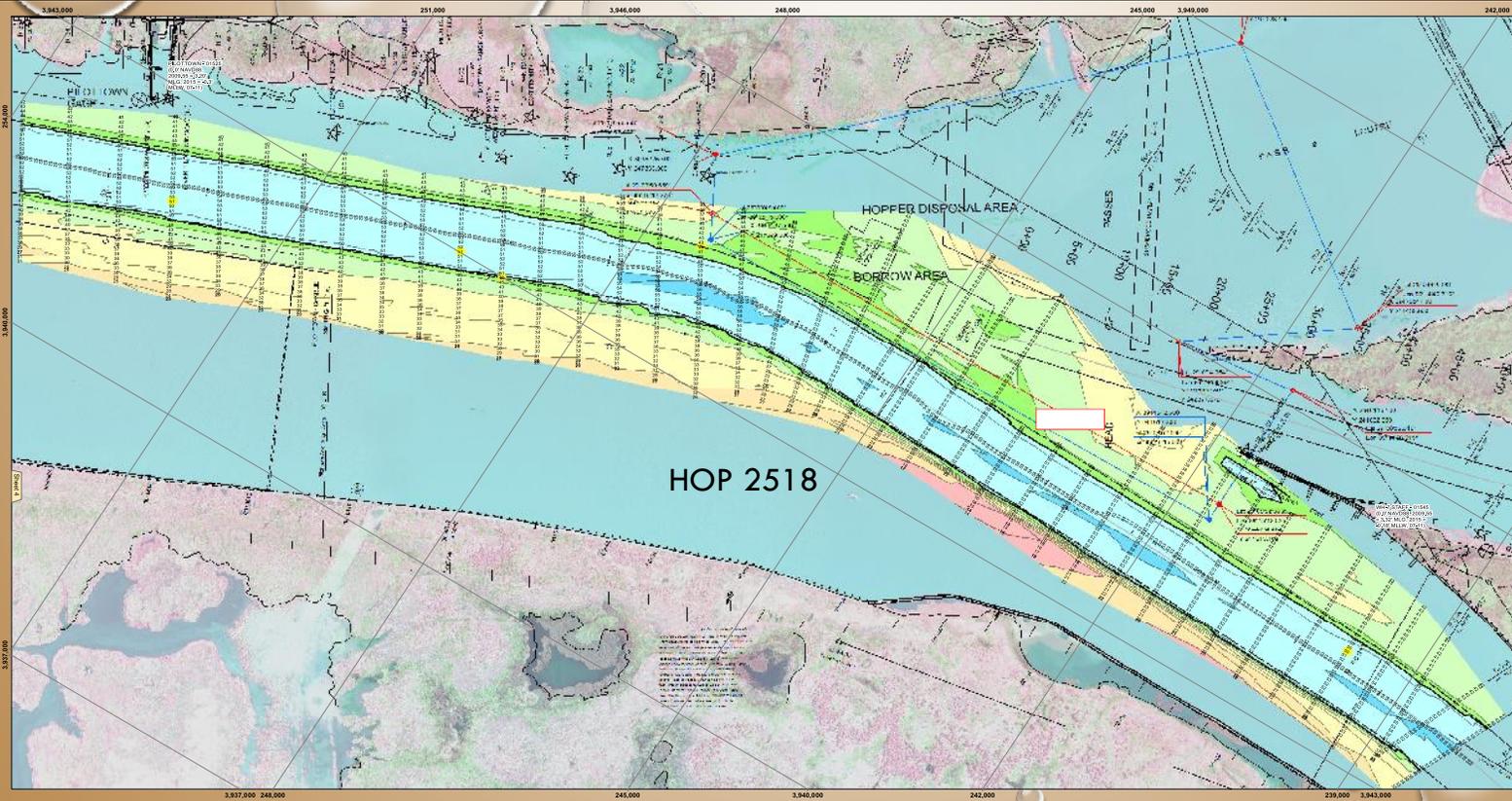


Approved for Release by the Chief of Engineers, District of Central and Eastern Mississippi, Vicksburg, Mississippi, on 08/27/2013. This document contains information that is unclassified but may be exempt from public release under 5 U.S.C. 552, paragraph 2(b). The information is not to be disseminated outside the District of Central and Eastern Mississippi without the approval of the Chief of Engineers, District of Central and Eastern Mississippi.

Surveyed By: J.E. BDO	Checked By: [Signature]
Plotted By: [Signature]	Charted By: [Signature]
Approved: [Signature]	Approved: [Signature]

MISSISSIPPI RIVER - BR. TO GULF
 SOUTHWEST PASS - SHEET 4
 SW_04_SWP_20160127
 27 January 2016

Sheet Reference Number
 4 of 13

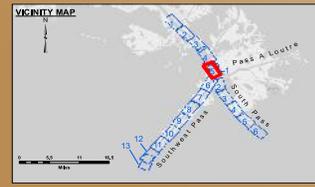


NOTES:
 This chart was prepared from the following data:
 1. Hydrographic Survey of the Mississippi River, 1915-1916, U.S. Army Corps of Engineers, District of New Orleans.
 2. Hydrographic Survey of the Mississippi River, 1917-1918, U.S. Army Corps of Engineers, District of New Orleans.
 3. Hydrographic Survey of the Mississippi River, 1919-1920, U.S. Army Corps of Engineers, District of New Orleans.
 4. Hydrographic Survey of the Mississippi River, 1921-1922, U.S. Army Corps of Engineers, District of New Orleans.
 5. Hydrographic Survey of the Mississippi River, 1923-1924, U.S. Army Corps of Engineers, District of New Orleans.
 6. Hydrographic Survey of the Mississippi River, 1925-1926, U.S. Army Corps of Engineers, District of New Orleans.
 7. Hydrographic Survey of the Mississippi River, 1927-1928, U.S. Army Corps of Engineers, District of New Orleans.
 8. Hydrographic Survey of the Mississippi River, 1929-1930, U.S. Army Corps of Engineers, District of New Orleans.
 9. Hydrographic Survey of the Mississippi River, 1931-1932, U.S. Army Corps of Engineers, District of New Orleans.
 10. Hydrographic Survey of the Mississippi River, 1933-1934, U.S. Army Corps of Engineers, District of New Orleans.
 11. Hydrographic Survey of the Mississippi River, 1935-1936, U.S. Army Corps of Engineers, District of New Orleans.
 12. Hydrographic Survey of the Mississippi River, 1937-1938, U.S. Army Corps of Engineers, District of New Orleans.
 13. Hydrographic Survey of the Mississippi River, 1939-1940, U.S. Army Corps of Engineers, District of New Orleans.
 14. Hydrographic Survey of the Mississippi River, 1941-1942, U.S. Army Corps of Engineers, District of New Orleans.
 15. Hydrographic Survey of the Mississippi River, 1943-1944, U.S. Army Corps of Engineers, District of New Orleans.
 16. Hydrographic Survey of the Mississippi River, 1945-1946, U.S. Army Corps of Engineers, District of New Orleans.
 17. Hydrographic Survey of the Mississippi River, 1947-1948, U.S. Army Corps of Engineers, District of New Orleans.
 18. Hydrographic Survey of the Mississippi River, 1949-1950, U.S. Army Corps of Engineers, District of New Orleans.
 19. Hydrographic Survey of the Mississippi River, 1951-1952, U.S. Army Corps of Engineers, District of New Orleans.
 20. Hydrographic Survey of the Mississippi River, 1953-1954, U.S. Army Corps of Engineers, District of New Orleans.
 21. Hydrographic Survey of the Mississippi River, 1955-1956, U.S. Army Corps of Engineers, District of New Orleans.
 22. Hydrographic Survey of the Mississippi River, 1957-1958, U.S. Army Corps of Engineers, District of New Orleans.
 23. Hydrographic Survey of the Mississippi River, 1959-1960, U.S. Army Corps of Engineers, District of New Orleans.
 24. Hydrographic Survey of the Mississippi River, 1961-1962, U.S. Army Corps of Engineers, District of New Orleans.
 25. Hydrographic Survey of the Mississippi River, 1963-1964, U.S. Army Corps of Engineers, District of New Orleans.
 26. Hydrographic Survey of the Mississippi River, 1965-1966, U.S. Army Corps of Engineers, District of New Orleans.
 27. Hydrographic Survey of the Mississippi River, 1967-1968, U.S. Army Corps of Engineers, District of New Orleans.
 28. Hydrographic Survey of the Mississippi River, 1969-1970, U.S. Army Corps of Engineers, District of New Orleans.
 29. Hydrographic Survey of the Mississippi River, 1971-1972, U.S. Army Corps of Engineers, District of New Orleans.
 30. Hydrographic Survey of the Mississippi River, 1973-1974, U.S. Army Corps of Engineers, District of New Orleans.
 31. Hydrographic Survey of the Mississippi River, 1975-1976, U.S. Army Corps of Engineers, District of New Orleans.
 32. Hydrographic Survey of the Mississippi River, 1977-1978, U.S. Army Corps of Engineers, District of New Orleans.
 33. Hydrographic Survey of the Mississippi River, 1979-1980, U.S. Army Corps of Engineers, District of New Orleans.
 34. Hydrographic Survey of the Mississippi River, 1981-1982, U.S. Army Corps of Engineers, District of New Orleans.
 35. Hydrographic Survey of the Mississippi River, 1983-1984, U.S. Army Corps of Engineers, District of New Orleans.
 36. Hydrographic Survey of the Mississippi River, 1985-1986, U.S. Army Corps of Engineers, District of New Orleans.
 37. Hydrographic Survey of the Mississippi River, 1987-1988, U.S. Army Corps of Engineers, District of New Orleans.
 38. Hydrographic Survey of the Mississippi River, 1989-1990, U.S. Army Corps of Engineers, District of New Orleans.
 39. Hydrographic Survey of the Mississippi River, 1991-1992, U.S. Army Corps of Engineers, District of New Orleans.
 40. Hydrographic Survey of the Mississippi River, 1993-1994, U.S. Army Corps of Engineers, District of New Orleans.
 41. Hydrographic Survey of the Mississippi River, 1995-1996, U.S. Army Corps of Engineers, District of New Orleans.
 42. Hydrographic Survey of the Mississippi River, 1997-1998, U.S. Army Corps of Engineers, District of New Orleans.
 43. Hydrographic Survey of the Mississippi River, 1999-2000, U.S. Army Corps of Engineers, District of New Orleans.
 44. Hydrographic Survey of the Mississippi River, 2001-2002, U.S. Army Corps of Engineers, District of New Orleans.
 45. Hydrographic Survey of the Mississippi River, 2003-2004, U.S. Army Corps of Engineers, District of New Orleans.
 46. Hydrographic Survey of the Mississippi River, 2005-2006, U.S. Army Corps of Engineers, District of New Orleans.
 47. Hydrographic Survey of the Mississippi River, 2007-2008, U.S. Army Corps of Engineers, District of New Orleans.
 48. Hydrographic Survey of the Mississippi River, 2009-2010, U.S. Army Corps of Engineers, District of New Orleans.
 49. Hydrographic Survey of the Mississippi River, 2011-2012, U.S. Army Corps of Engineers, District of New Orleans.
 50. Hydrographic Survey of the Mississippi River, 2013-2014, U.S. Army Corps of Engineers, District of New Orleans.
 51. Hydrographic Survey of the Mississippi River, 2015-2016, U.S. Army Corps of Engineers, District of New Orleans.
 52. Hydrographic Survey of the Mississippi River, 2017-2018, U.S. Army Corps of Engineers, District of New Orleans.
 53. Hydrographic Survey of the Mississippi River, 2019-2020, U.S. Army Corps of Engineers, District of New Orleans.
 54. Hydrographic Survey of the Mississippi River, 2021-2022, U.S. Army Corps of Engineers, District of New Orleans.
 55. Hydrographic Survey of the Mississippi River, 2023-2024, U.S. Army Corps of Engineers, District of New Orleans.

DATE	BY	REVISION

MISSISSIPPI RIVER - B.R. TO GULF
 SOUTHWEST PASS - SHEET 5
 SW_05_SMP_20180205_CS
 05 February 2018

Sheet Reference Number
 5 of 13



LEGEND

- Federal Navigation Channel
- Federal Navigation Center Line
- As-built Pipeline/Cable
- Unconfirmed Pipeline/Cable
- Project Depth Contour
- Cable Area
- Placement Area
- Anchorage Area
- Obstruction Point
- Wrecks-Submerged
- Borrow Area
- Shoalest Sounding**
- Beacon, General
- Red Navigation Buoy
- Green Navigation Buoy
- -10' and above
- -10' to -20'
- -20' to -30'
- -30' to -40'
- -40' to -45'
- -45' to -48.5'
- -48.5' to -55'
- -55' and below

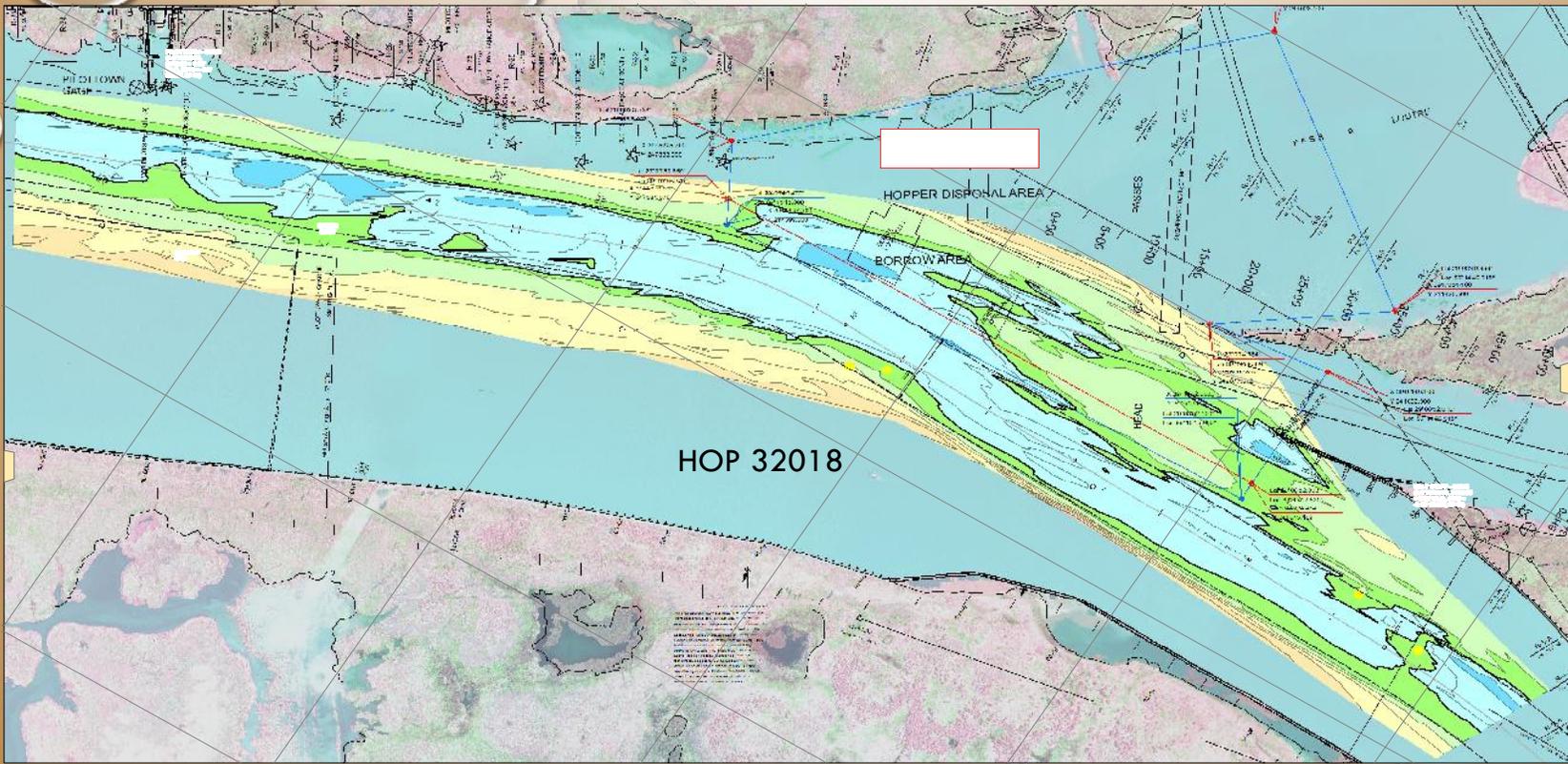
NOTES:
 Horizontal Coordinate System:
 North American Datum of 1983 (NAD83), projected by the State Plane Coordinate System (SPCS), Louisiana South Zone, Zone-wide High U.S. Survey Feet.
 Vertical Datum:
 Soundings are shown in feet and indicate depths below Mean Low Water (MLW, 0'-11').
 Datum Reduction for page 011025 as of July 2015.
 UTM MGRS = 12U MLW = 3,307,000
 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.
 The location of navigation aids are based on and controlled by the U.S. Coast Guard.
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998, 0000 in green).
 Reference is N.O.A., Navigation Chart No. 11361.
 ** Shoalest Sounding per Quarter per Reach.
 *** High frequency (200 kHz) survey data represents the first signal return of a sounding. In shallow and soft bottom areas, the 'first' signal may be 'flashed' forward. Low frequency (10 kHz) survey data normally penetrates through the 'flashed' layer to report a bottom of consolidated bottom material. Low frequency soundings may vary depending on channel conditions and bottomwater settings.

Gage Reading:
 Site Conditions:
 Vessel Name:
 Survey Type:
 Sounding Frequency***: LOW

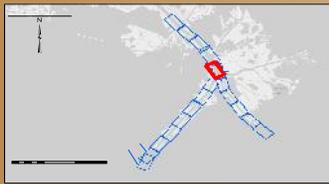
0.4 MLW @ PILOT TOWN @ 1115
 CHOPPY SEAS
 JOHN BOPP
 CONDITION, SB

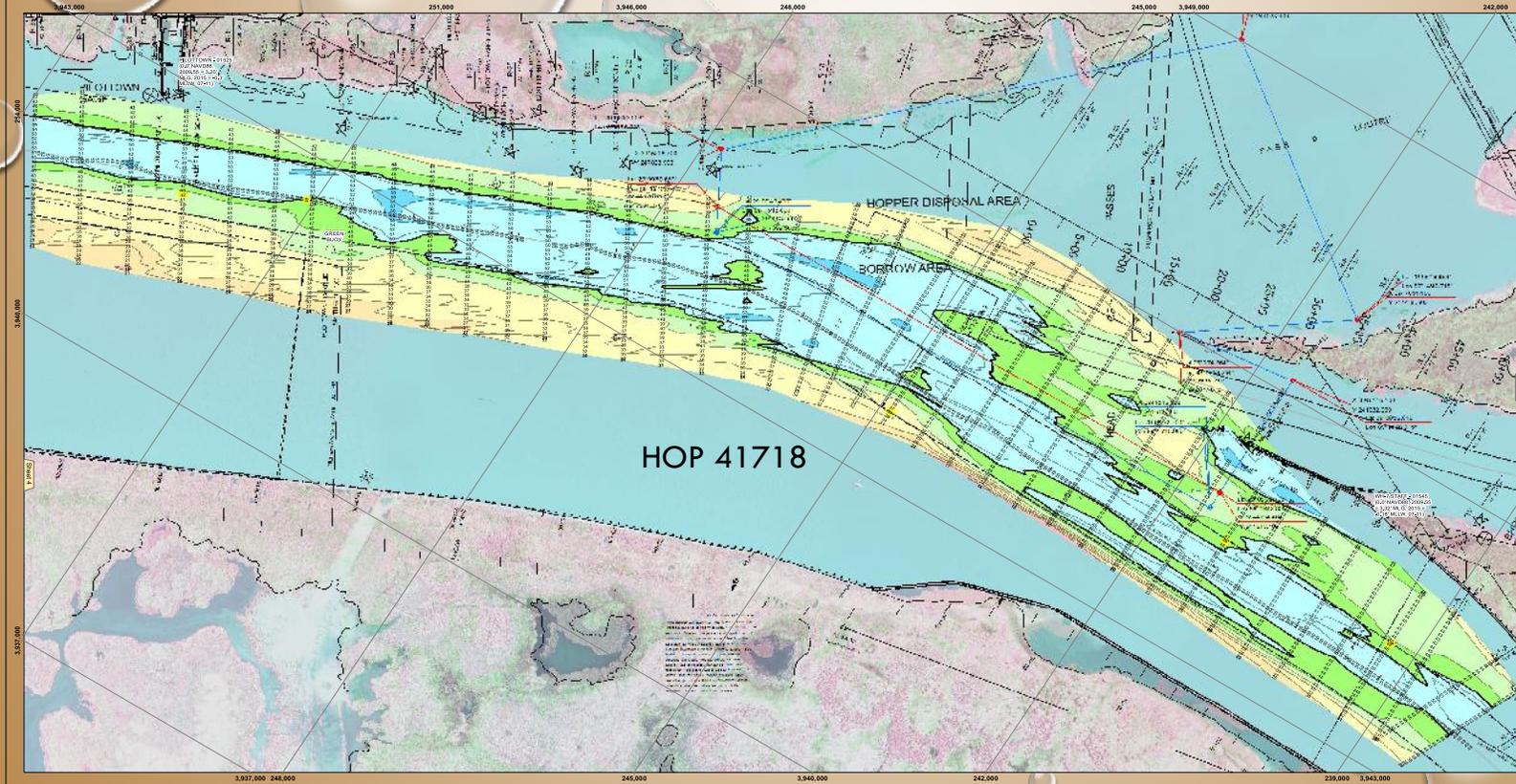
Scale: 0 500 1,000 1,500 2,000 2,500 Feet

NOTES:
 Horizontal Coordinate System:
 North American Datum of 1983 (NAD83), projected by the State Plane Coordinate System (SPCS), Louisiana South Zone, Zone-wide High U.S. Survey Feet.
 Vertical Datum:
 Soundings are shown in feet and indicate depths below Mean Low Water (MLW, 0'-11').
 Datum Reduction for page 011025 as of July 2015.
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 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.
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HOP 32018





HOP 41718

US Army Corps of Engineers
District: CEMVN

NOTES:
1. This chart is based on the 2016 Aerial Photographs of the area shown. The 2016 Aerial Photographs were obtained from the National Aeronautics and Space Administration (NASA) and are available at the following URL: <http://www.nasa.gov>. The 2016 Aerial Photographs were processed by the National Geospatial-Intelligence Agency (NGA) and are available at the following URL: <http://www.nga.gov>. The 2016 Aerial Photographs were processed by the National Geospatial-Intelligence Agency (NGA) and are available at the following URL: <http://www.nga.gov>. The 2016 Aerial Photographs were processed by the National Geospatial-Intelligence Agency (NGA) and are available at the following URL: <http://www.nga.gov>. The 2016 Aerial Photographs were processed by the National Geospatial-Intelligence Agency (NGA) and are available at the following URL: <http://www.nga.gov>. 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U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT	APPROVED BY: J. E. SPOFFORD	DATE: 17 APR 2018
DRAWN BY: J. E. SPOFFORD	CHECKED BY: J. E. SPOFFORD	DATE: 17 APR 2018
DATE: 17 APR 2018	DATE: 17 APR 2018	DATE: 17 APR 2018



LEGEND	
--- Federal Navigation Channel	■ Cable Area
--- Federal Navigation Center Line	■ Placement Area
--- As-built Pipeline/Cable	■ Anchorage Area
--- Unconfirmed Pipeline/Cable	■ Obstruction Point
--- Project Depth Contour	★ Beacon, General
	★ Red Navigation Buoy
	★ Green Navigation Buoy
	★ Wrecks-Submerged
	■ Borrow Area
	● Shoalest Sounding**
	■ -10' and above
	■ -10' to -20'
	■ -20' to -30'
	■ -30' to -40'
	■ -40' to -45'
	■ -45' to -48.5'
	■ -48.5' to -55'
	■ -55' and below

Gage Reading: 1.8 MLLW @ PILOT TOWN @ 1130
 Sea Conditions: CALM, FLUFF
 Vessel Name: JOHN BOOP
 Survey Type: CONDITION, SB
 Sounding Frequency: LOW

Vertical Datum:
 Soundings are shown in feet and indicate depths below Mean Lower Low Water (MLLW, 07-11).
 Datum Relationships by page 07023 as of July 2015:
 07 MLLW = +0.0 MLLW = 0.00 MLLW

Distances on the Mississippi River, above and below Heat of Passes are shown at 1 mile intervals.

The location of navigation aids are based on and provided by the U.S. Coast Guard.

2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (H98 DOOD in green).
 Reference is N.C.A.A. Navigator Chart No. 11361.

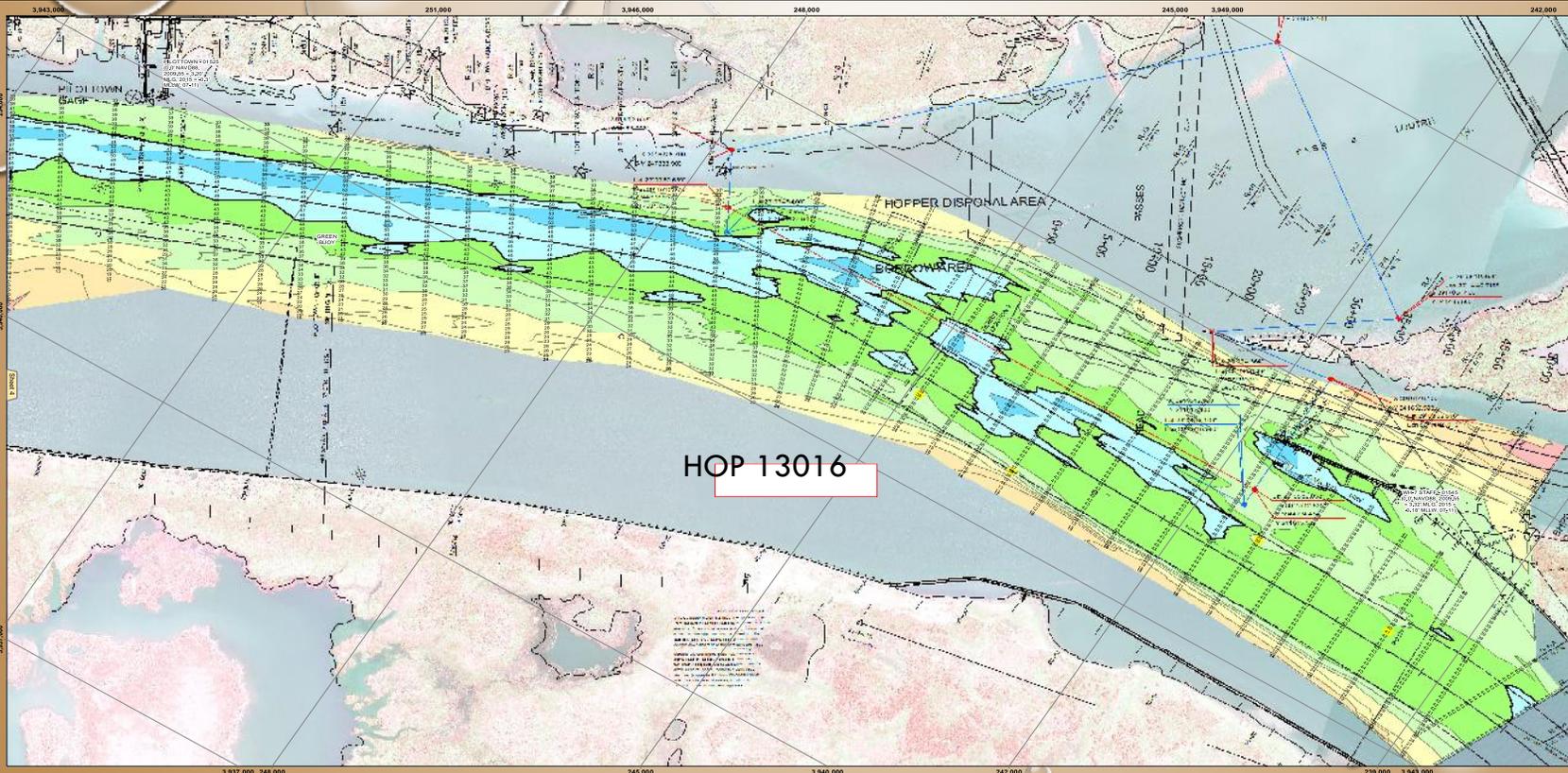
** Shoalest Sounding per Quarter per Reach.

** High frequency (200 kHz) survey data represents the first signal return at a sounding. Return and will include suspended matter, except on "RFL". However, low frequency (12 kHz) survey data normally penetrates through the "RFL" layer to detect alterations of consolidated bottom material. Low frequency accuracy may vary depending on channel conditions and instrument settings.

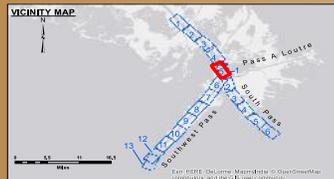


MISSISSIPPI RIVER - B.R. TO GULF
 SOUTHWEST PASS - SHEET 5
 SW_06_SWP_20180417_CS
 17 April 2018

Sheet Reference Number
 5 of 13
 Revision Number
 1 (2018011)



HOP 13016



LEGEND

--- Federal Navigation Channel	■ Cable Area	□ Borrow Area	■ -10' and above
--- Federal Navigation Center Line	■ Placement Area	● Shoalest Sounding**	■ -10' to -20'
--- As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -20' to -30'
--- Unconfirmed Pipeline/Cable	⊗ Obstruction Point	★ Red Navigation Buoy	■ -30' to -40'
--- Project Depth Contour	⚓ Wrecks-Submerged	● Green Navigation Buoy	■ -40' to -45'
			■ -45' to -50'
			■ -50' and below

Gage Reading: 5.4 MLG @ PILOT TOWN @ 0935
 Sea Conditions: CHOPPY
 Vessel Name: BLANCHARD
 Survey Type: CONDITION, SB
 Sounding Frequency: LOW

Vertical Datum: Mean Low Gulf Datum (MLGD)
 Datum Relationship for gage 01025 as of July 2016: 0.07 NAVD83 = 0.02 MLGD + 0.00 MLGD

Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.

The location of navigation aids are based on and provided by the U.S. Coast Guard.
 2013 Aerial Photography data source: GEODLP, A&E, Group, LLC, (1988 DODG in green)
 Reference is NOAA, Navigation Chart No. 11361.

** Shoalest Sounding per Quarter per Reach.

*** High frequency (200 kHz) survey data represents the first application of sounding buoys and will include suspended solids, known as "TSS", if present. High frequency survey data normally penetrates through the "bluff layer" to detect elevations of consolidated bottom material. Low frequency accuracy may vary depending on channel conditions and transmitter settings.

NOTES:
 Horizontal Coordinate System:
 North American Datum of 1983 (NAD83) converted to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distances in U.S. Survey Feet.
 Vertical Datum:
 Soundings are shown in feet and indicate depths below the Mean Low Gulf Datum (MLGD).
 Datum Relationship for gage 01025 as of July 2016:
 0.07 NAVD83 = 0.02 MLGD + 0.00 MLGD
 Distances on the Mississippi River, above and below Head of Passes are shown at 1 mile intervals.
 The location of navigation aids are based on and provided by the U.S. Coast Guard.
 2013 Aerial Photography data source: GEODLP, A&E, Group, LLC, (1988 DODG in green)
 Reference is NOAA, Navigation Chart No. 11361.
 ** Shoalest Sounding per Quarter per Reach.
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U.S. ARMY
 US Army Corps of Engineers
 District: CEMVH

U.S. ARMY CORPS OF ENGINEERS
 MISSISSIPPI DISTRICT
 NEW ORLEANS DISTRICT

Project No.	SW 05 SWP 20160130
Project Name	MISSISSIPPI RIVER - B.R. TO GULF
Sheet No.	5 of 13
Date	30 January 2016

Sheet Reference Number
 5 of 13

HOPPER DREDGES	HOPPER CAPACITY CUBIC YARDS	PRESENT LOCATION
*ELLIS ISLAND (2017)	15,500	SHIP ISLAND, MS
<i>GLENN EDWARDS</i>	<i>13,500</i>	<i>ENROUTE TO SOUTHWEST PASSS</i>
<i>STUYVESANT</i>	<i>9,400</i>	<i>SOUTHWEST PASS</i>
*MAGDALEN (2017)	8,550	LONG BEACH ISLAND, NY
*WHEELER	8,256	SOUTHWEST PASS
LIBERTY ISLAND	6,540	MARTIN COUNTY, FL
*ESSAYONS	6,423	COLUMBIA RIVER, OR
TERRAPIN ISLAND	6,400	CAPE HENRY, VA
BAYPORT	4,855	SOUTHWEST PASS, LA
B.E. LINDHOLM	4,000	MANASQUAN, NJ
NEWPORT	4,000	SOUTHWEST PASS, LA
R.N. WEEKS	4,000	MANASQUAN, NJ
DODGE ISLAND	3,600	SHIPYARD
PADRE ISLAND	3,600	FORT PIERCE, FL
*McFARLAND	3,000	BRAZOS RED FLAG (SECOND)
* GOVERNMENT DREDGE		

DREDGES WORKING IN SOUTHWEST PASS 2018

HOPPER DREDGES	HOPPER CAPACITY CUBIC YARDS	PRESENT LOCATION
BAYPORT	4,855	SWP: STARTED DREDGING 3/12/18
NEWPORT	4,000	SWP: STARTED DREDGING 3/11/18
STUYVESANT/GE	9,400	SWP: STARTED DREDGING 4/4/18
WHEELER	8,256	SWP: STARTED DREDGING 3/31/18

CUTTERHEAD DREDGES	PRESENT LOCATION
ROBERT M. WHITE	SWP: STARTED DREDGING 3/16/18
G.D. MORGAM	SWP: STARTED DREDGING 4/17/18

DEEP-DRAFT VESSEL MOVEMENTS ON THE MISSISSIPPI RIVER SHIP CHANNEL

- Approximately 7,500 ships entered and then exited Southwest Pass in 2016 and 2017, each requiring either a State or Federal Pilot.
- Lower Mississippi River Deep-Draft Ports Complex: Baton Rouge, South Louisiana, New Orleans, St. Bernard and Plaquemines.
- Combined these five port move approximately 500 million tons of cargo every year. The LMR Deep-Draft Ports Complex is connected by nearly 256 miles of the Mississippi River Ship Channel.

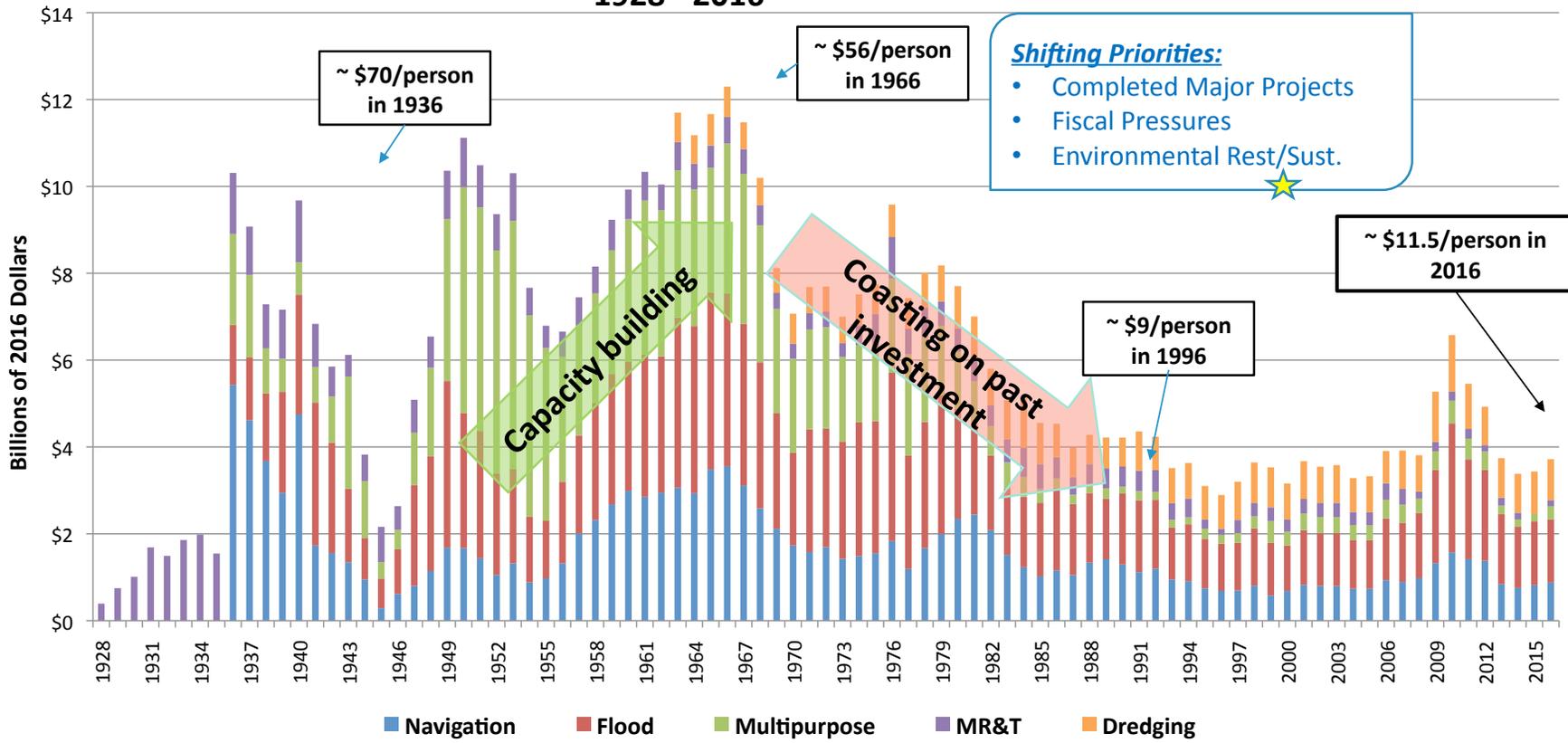




Year	Pres Budget	Conf. Amt/Work Plan	Supplemental	Reprogram	ARRA	Total Funded
2000	\$64,430,000	\$64,430,000	\$-	\$-	\$-	\$64,430,000
2001	\$63,359,000	\$63,359,000	\$-	\$-	\$-	\$63,359,000
2002	\$57,482,000	\$55,831,000	\$-	\$-	\$-	\$55,831,000
2003	\$55,831,000	\$57,482,000	\$-	\$-	\$-	\$57,482,000
2004	\$56,206,000	\$56,206,000	\$-	\$-	\$-	\$56,206,000
2005	\$59,125,000	\$59,125,000	\$60,000,000	\$1,775,000	\$-	\$120,900,000
2006	\$54,053,000	\$48,648,000	\$6,300,000	\$-	\$-	\$54,948,000
2007	\$54,074,000	\$51,830,000	\$-	\$-	\$-	\$51,830,000
2008	\$59,424,000	\$54,973,000	\$32,047,000	\$28,795,000	\$-	\$115,815,000
2009	\$55,325,000	\$51,354,000	\$66,600,500	\$3,322,000	\$57,804,000	\$179,080,500
2010	\$54,994,000	\$52,263,000	\$5,210,000	\$61,094,882	\$-	\$118,567,882
2011	\$62,969,000	\$73,569,000	\$10,000,000	\$-	\$-	\$83,569,000
2012	\$68,000,000	\$66,664,000	\$84,000,000	\$6,000,000	\$-	\$156,664,000
2013	\$81,670,000	\$73,339,660	\$-	\$-	\$-	\$73,339,660
2014	\$84,074,000	\$95,074,000	\$-	\$-	\$-	\$95,074,000
2015	\$85,341,000	\$95,341,000	\$5,020,080	\$-	\$-	\$100,361,080
2016	\$85,866,000	\$125,866,000	\$-	\$33,364,507	\$-	\$159,230,507
2017	\$82,884,900	\$103,134,900	\$10,000,000	\$-	\$-	\$113,134,900
5 Year Average	\$83,967,180	\$98,551,112	\$3,004,016	\$8,341,127	\$-	\$108,228,029
10 Year Average	\$72,054,790	\$79,157,856	\$21,287,758	\$14,730,710	\$-	\$119,483,653
2018	\$83,846,000					



Historical Investments by USACE Functional Category 1928 - 2016



Shifting Priorities:

- Completed Major Projects
- Fiscal Pressures
- Environmental Rest/Sust.

~ \$11.5/person in 2016

~ \$9/person in 1996

Capacity building

Coasting on past investment

~ \$70/person in 1936

~ \$56/person in 1966

2006-2010 Spending includes post Katrina & ARRA Supplemental

MISSISSIPPI RIVER SHIP CHANNEL DEEPENING TO 50 FEET

UNESCO: How to Feed the World in 2050

- 1) The United Nations Educational, Scientific and Cultural Organization (UNESCO) predicts that food production needs to rise by 70% world wide by 2050.
- 2) Action is needed now to ensure that the required 70 percent increase in food production is achieved, and that every human being has access to adequate food. First, investment in developing country agriculture has to increase by at least 60 percent over current levels through a combination of higher public investment and better incentives for farmers and the private sector to invest their own resources. Second, greater priority has to be given to agricultural research, development and extension services in order to achieve the yield and productivity gains that are needed to feed the world in 2050.
- 3) A Capesize grain vessel with a draft of 45 feet can carry an additional 13,475 metric tons of cargo over the previous maximum draft of the Panama Canal (39 Feet 6 inches). The same vessel at a draft of 50 feet can carry an additional 25,725 metric tons, an approximate 91% increase.

Summary of Increased Tonnage Created by LMR Deepening to 50 Feet

Table S1

Summary of Increase Tonnage and Values Created
by Deepening the LMR to 50 Feet

Year	Tonnage	Percent of 2011	Value
2017	7,294,705	2.9%	\$4,833,866,349
2018	10,142,278	4.1%	\$6,756,754,446
2019	13,275,808	5.3%	\$8,849,468,041
2020	17,053,228	6.8%	\$11,374,734,656
2021	19,142,248	7.7%	\$12,769,877,053
2022	20,186,758	8.1%	\$13,467,448,252
2023	22,275,778	8.9%	\$14,862,590,648
2024	24,364,798	9.8%	\$16,257,733,045

Table S1 From Dr. Tim Ryan's:
"The Economic Impact of Deepening the Mississippi River to 50 Feet"

MISSISSIPPI RIVER SHIP CHANNEL DEEPENING TO 50 FEET

BIG RIVER COALITION IDENTIFIES STEPS NEEDED TO DEEPEN MISSISSIPPI RIVER SHIP CHANNEL

- 1) The channel threshold for full federal funding must be increased from 45 feet to 50 feet. COMPLETED Water Resources Reform and Development Act of 2014 (WRRDA 2014).
- 2) General Reevaluation Report to update the economic impact of deepening the Mississippi River Ship Channel to 50 feet must be funded and completed by USACE and LDOTD. FUNDING DONE, REPORT RECOMMENDED PLAN COMPLETED, **final step signed Director's Report MAY 2018.**
- 3) Fund and deepen the Mississippi River Ship Channel, the WRDA 2016 changed the cost-share from 50-50% between the federal government and the non-federal sponsor was changed to 75-25% (federal and non-federal) and the Water Infrastructure Improvements for the Nation Act (WIIN).

MISSISSIPPI RIVER SHIP CHANNEL DEEPENING TO 50 FEET

The Tentatively Recommended Plan to the Recommended Plan:

“Tentatively Selected Plan (TSP): “The Tentatively Selected Plan (TSP) for the next phase of construction, is alternative 3d. This alternative is to deepen the MRSC to a depth of 50 ft LWRP for the 3 crossings located within the footprint of the Port of South Louisiana and a depth of 50 ft MLLW in the Lower Mississippi River from RM 13.4 AHP to RM 22 BHP. The 9 crossings located within the footprint of the Port of Baton Rouge would remain at 45 ft LWRP.”

The TSP recommended deepening only to Mile 168.5 Above Head of Passes but that was updated in the development phase of the Recommended Plan and extended to Mile 23.4 AHP based on requests made by the BRC and supported by LDOTD to reconsider the costs of dredging based on the survey information provided by the MVN in the TSP.

The Water Infrastructure Improvements for the Nation Act (WIIN) changed the deepening construction costs from 50%-50% split to the 75% Federal cost and 25% non-Federal portion.

SELECTED PLAN

50 FEET CHANNEL DEPTH

The Selected Plan was adjusted based on the disparity between the 1-dimensional sediment modeling and the 2-dimensional sediment modeling. The 1-dimensional modeling over estimated the amount of sediment that would have to be removed, acknowledging this, led the Corps to suggesting the following deepening plan:

Recommended deepening the Mississippi River Ship Channel below Venice (Mile 13.4 AHP to Mile 22 BHP) to 50 feet Mean Lower Low Water (MLLW) and deepening the Ship Channel up to Baton Rouge (Mile 232.4 AHP) to 50 feet Low Water Reference Plane (LWRP).

Investment Cost	
Total Cost	\$ 237,670,000
Federal Cost	\$ 118,130,000
Non-Federal Cost	\$ 119,540,000 (\$39,380,000)
Benefit Cost Ratio	7.2

GENERAL REEVALUATION REPORT SCHEDULE

Federal Cost Share Agreement Signed	April 02, 2015
Public Scoping Meetings	May 26, to May 28, 2015
Tentatively Selected Plan Milestone Draft Report & Supplemental EIS (SEIS)	August 2016
Comments on Draft Report & SEIS Received & Addressed Agency Decision Milestone	May 2017
Final Recommended Report to MVD	December 14, 2017
Director's Report Corps HQ	May 30, 2018

CPRA LETTER TO THE BIG RIVER COALITION

March 4, 2018

"Louisiana supports projects that achieve our restoration goals and are complimentary to or consistent with the State's Master Plan. Therefore, Louisiana supports the Big River Coalition's effort to continue to work with the United States Army Corps of Engineers to utilize cutterhead dredges in the area of Southwest Pass accompanied with the beneficial use of that material to restore the coast. We appreciate your efforts in soliciting our support and thank you for consulting with us on your objectives along the way."

FISCAL YEAR	SWP CUTTERHEAD CY (MCY)	SWP BU ACRES CREATED	HDDA CY (MCY)	HDDA BU ACRES	TOTAL SWP CUTTERHEAD + HDDA CY (MCY)
2009	2.9	100	0	0	2.9
2010	3.2	67	6.5	466	9.7
2011	3.6	199	1.8	70	5.4
2012	5.6	615	.8	0	6.4
2013	5.7	612	7.2	851	12.9
2014	8.0	572	0	0	8.0
2015	11.2	364	9.6	671	20.7
2016	8.5	768	0	0	8.5
2017	12.4	*450	8.4	*600	20.8
TOTAL:	61.1	*3,747	34.3	*2,658	95.4

SEDIMENT RECYCLING: THE BENEFICIAL USE OF DREDGED MATERIAL FOR COASTAL RESTORATION

The top four records for sediment recycling in the U.S. all occur along the Mississippi River:

- #1 20.8 million cubic yards in FY 2017 performed during regular channel maintenance and HDDA dredging
- #2 20.7 million cubic yards in FY 2015 (2 cutterheads first time)
- #3 19.8 million cubic yards in FY 1961 attributed to the channel deepening from 35 to 40 feet.
- #4 18.5 million cubic yards in FY 1987 attributed to the channel deepening from 40 to 45 feet.

The breakdown of the 20.8 million cubic yards (mcy) for FY 2017 shows:

12,380,563 mcy being removed from the navigation channel in the area of Southwest Pass,
and

8,432,365 mcy from the HDDA.

WRRDA 2014

Incremental Increases HMTF Allocations

WRRDA (H.R 3080):

- In Fiscal Year 2015 the allocations shall be 67% of the total HMT from FY 14.
- In Fiscal Year 2016 the allocations shall be 69% of the total HMT from FY 15.
- In Fiscal Year 2017 the allocations shall be 71% of the total HMT from FY 16.
- In Fiscal Year 2018 the allocations shall be 74% of the total HMT from FY 17.
- In Fiscal Year 2019 the allocations shall be 77% of the total HMT from FY 18.
- In Fiscal Year 2020 the allocations shall be 80% of the total HMT from FY 19.
- In Fiscal Year 2021 the allocations shall be 83% of the total HMT from FY 20.
- In Fiscal Year 2022 the allocations shall be 87% of the total HMT from FY 21.
- In Fiscal Year 2023 the allocations shall be 91% of the total HMT from FY 22.
- In Fiscal Year 2024 the allocations shall be 95% of the total HMT from FY 23.

In Fiscal Year 2025 and each subsequent FY the allocations shall be 100% of the total received from the HMT the previous FY.

Mandatory HMT Spending

AAPA Unified Port Industry Position

Full annual HMT revenue, (taxes + HMT surplus interest) provided directly to the Corps of Engineers*

*less cost of St. Lawrence Seaway oper/maint and HMT collection by Customs

Upon enactment

Full HMT Revenue up to \$1.58B; Projects not 'fully maintained'

90% to Channel Maintenance
10% D&ET ports
8% Donor
2% Energy Transfer

Intermediate

Full HMT Revenue exceeds \$1.58B; Projects not 'fully maintained'

85% to Channel Maintenance
15% D&ET ports
10% Donor
5% Energy Transfer

Fully Maintained

Ports determine projects are 'fully maintained'

80% to Channel Maintenance
20% D&ET ports
10% Donor
10% Energy Transfer

Conditions

Each (6) U.S. port region receive a minimum of 10% of HMT revenue

Emerging harbors receive a minimum of 10% of HMT revenue

Expanded HMT-eligible uses at D&ET ports

\$1.58B is AAPA's estimate of amount needed to eventually achieve full maintenance of all commercially active navigation projects

Transition between stages to be accomplished with no reduction to channel maintenance from prior year funding level.

Jan 24, 2018





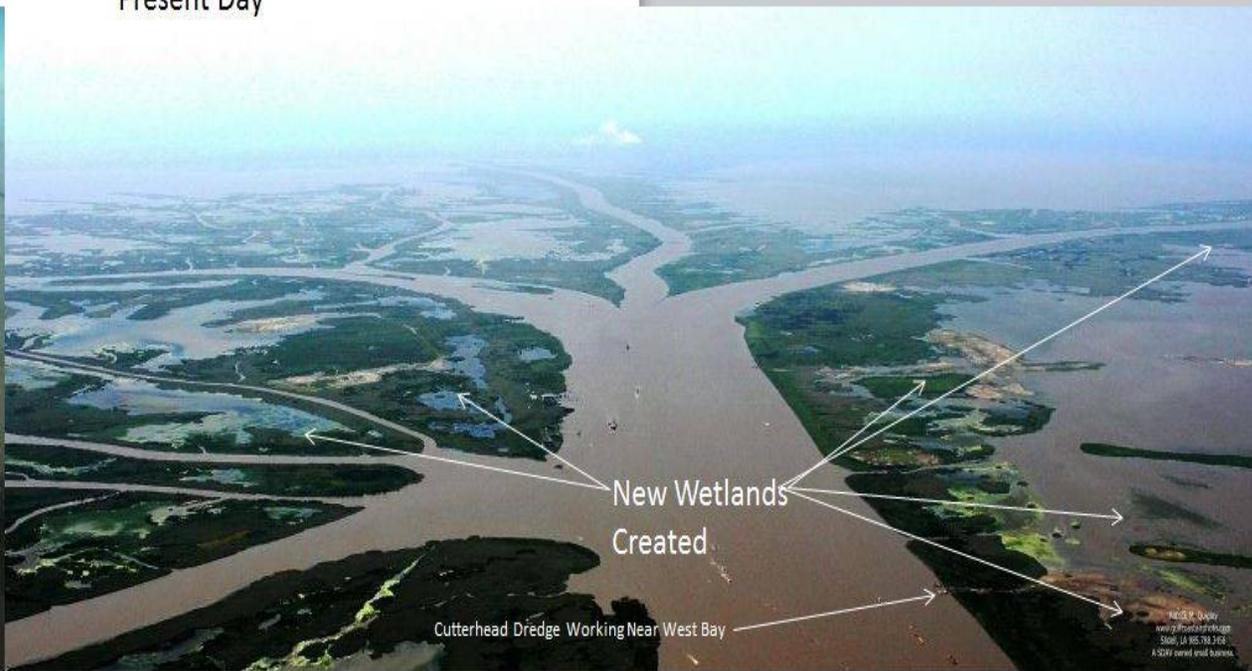


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A SDRW owned small business.

Lower Birdfoot Delta of Mississippi River with Efforts on Beneficial Use of Dredge Material from Navigation Dredging to Create and Restore Wetlands in the Mississippi River Birdfoot Delta

1985

Present Day



New Wetlands Created

Cutterhead Dredge Working Near West Bay

HAZEL P. QUINCY
www.hazelpquinncy.com
504.944.7833
A 504(c)(3) non-profit foundation

7,500 DEEP-DRAFT VESSEL ARRIVALS ON THE MISSISSIPPI RIVER SHIP CHANNEL



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500 MILLION TONS OF CARGO



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DUFFY SAID

“The BRC has often discussed the importance of the Mississippi River to the American farmers, as the ship channel connects over 350 million acres of agricultural lands to international markets,” Duffy said. “American farmers export up to 70 percent of U.S. agricultural exports to world markets via waterborne commerce on the Mississippi River, and the ship channel deepening project offers significant reductions in shipping costs. The math is easy.”

“The Mississippi River Ship Channel deepening project serves to generate commerce, stimulate coastal restoration and enhance the water carrying capacity of the gateway to the center of America: The Lower Mississippi River. The multiple benefits include substantive transportation cost savings to the American Farmers, job creation throughout the nation’s interior, and increased flood protection of businesses, farms and homes.”



QUESTIONS?

