

# BIG RIVER COALITION

“Advocating for a Mightier Mississippi River”



NATIONAL WATERWAYS CONFERENCE 91318

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# MARITIME NATION



# MISSISSIPPI RIVER ECONOMICS

THE BIG RIVER COALITION IS COMMITTED TO ENSURING THE FUTURE OF NAVIGATION ON THE MISSISSIPPI RIVER SHIP CHANNEL (MRSC) AS ONE OF THE NATION'S FUNDAMENTAL NATURAL RESOURCES AND TRUE ECONOMIC POWERHOUSE. THE MISSISSIPPI RIVER AND TRIBUTARIES PROJECT HAS AN ESTIMATED \$ 735.7 BILLION ANNUAL IMPACT ON THE NATION'S ECONOMY AND IS RESPONSIBLE FOR APPROXIMATELY 2.4 MILLION JOBS (585,000 JOBS ON THE LOWER RIVER – CAIRO, IL TO THE GULF OF MEXICO AND 1.86 MILLION PLUS JOBS ON THE UPPER RIVER-LAKE ITASCA, MN TO CAIRO, IL AND INCLUDING THE IL RIVER).

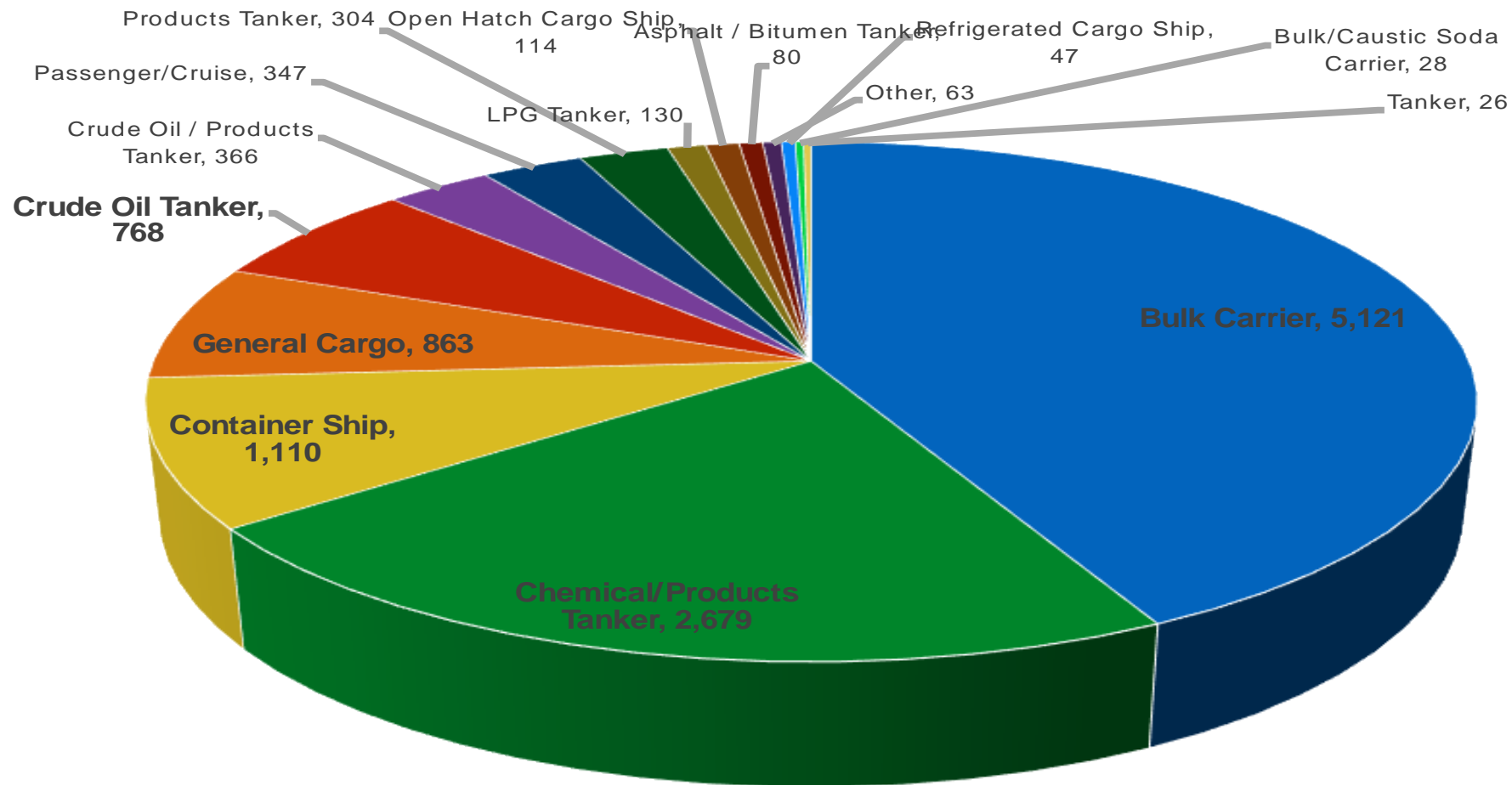


# DEEP-DRAFT VESSEL MOVEMENTS ON THE MISSISSIPPI RIVER SHIP CHANNEL

- Approximately 7,500 ships entered and then exited Southwest Pass in 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 256 miles of the Mississippi River Ship Channel.



# Ship Types





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



Patrick M. Quigley  
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A SDAV owned small business.

## 500 MILLION TONS OF CARGO







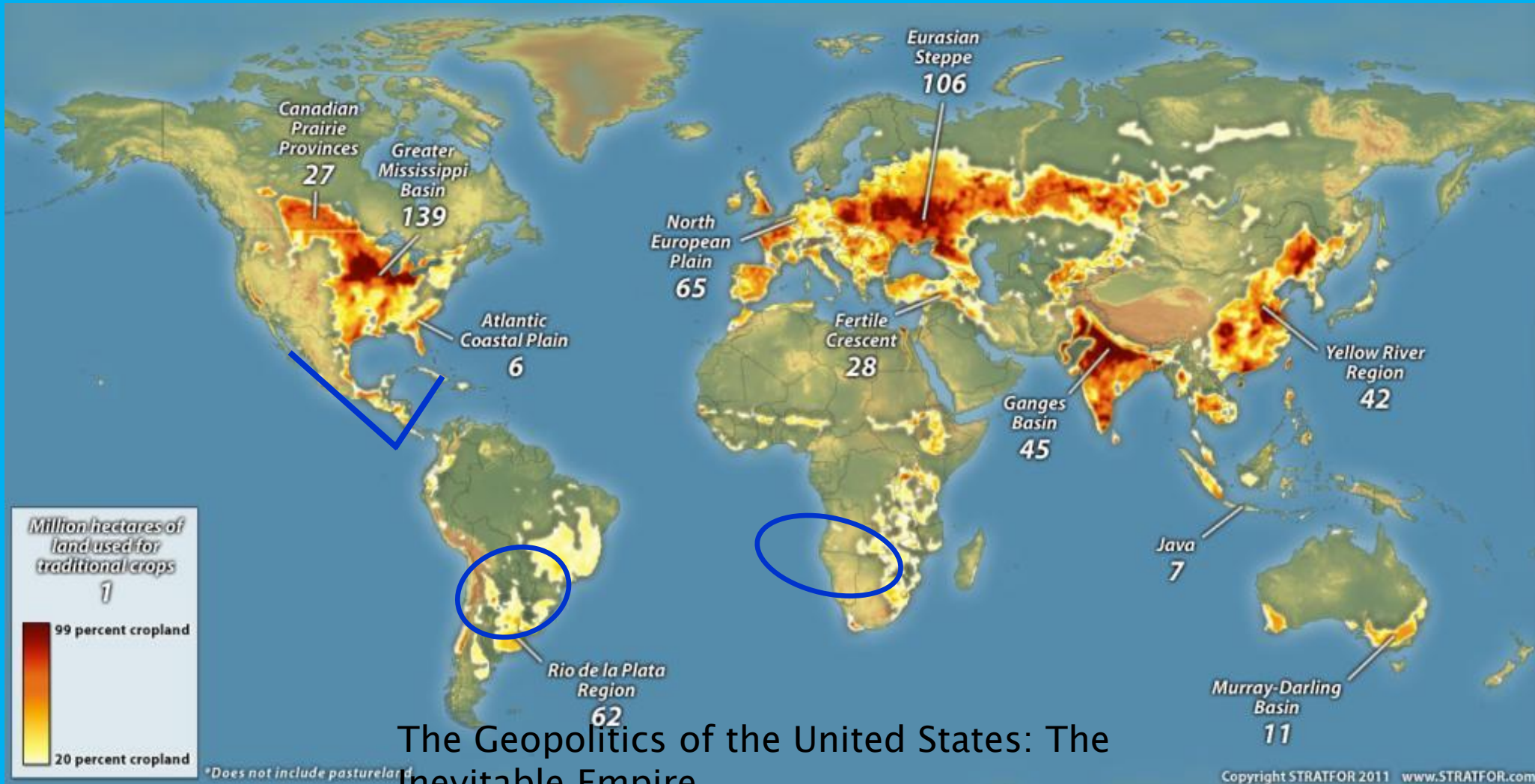


**Note:** Figure shows dock-to-dock annual shipment volumes (tonnages) by 4-digit Performance Monitoring System Commodity Class and annual shipment volumes (tonnages, dollar-valued trades) to and from U.S. seaports and foreign countries, broken down by 4-digit Harmonized Schedule Commodity Codes.

Annual Tons of Freight by Water		
150000000	75000000	37500000
Data From U.S. Army Corps of Engineers		



# GLOBAL AGRICULTURAL ZONES



The Geopolitics of the United States: The Inevitable Empire

UNITED STATES STRATEGIC IMPERATIVES: Stratfor's 5 Imperatives

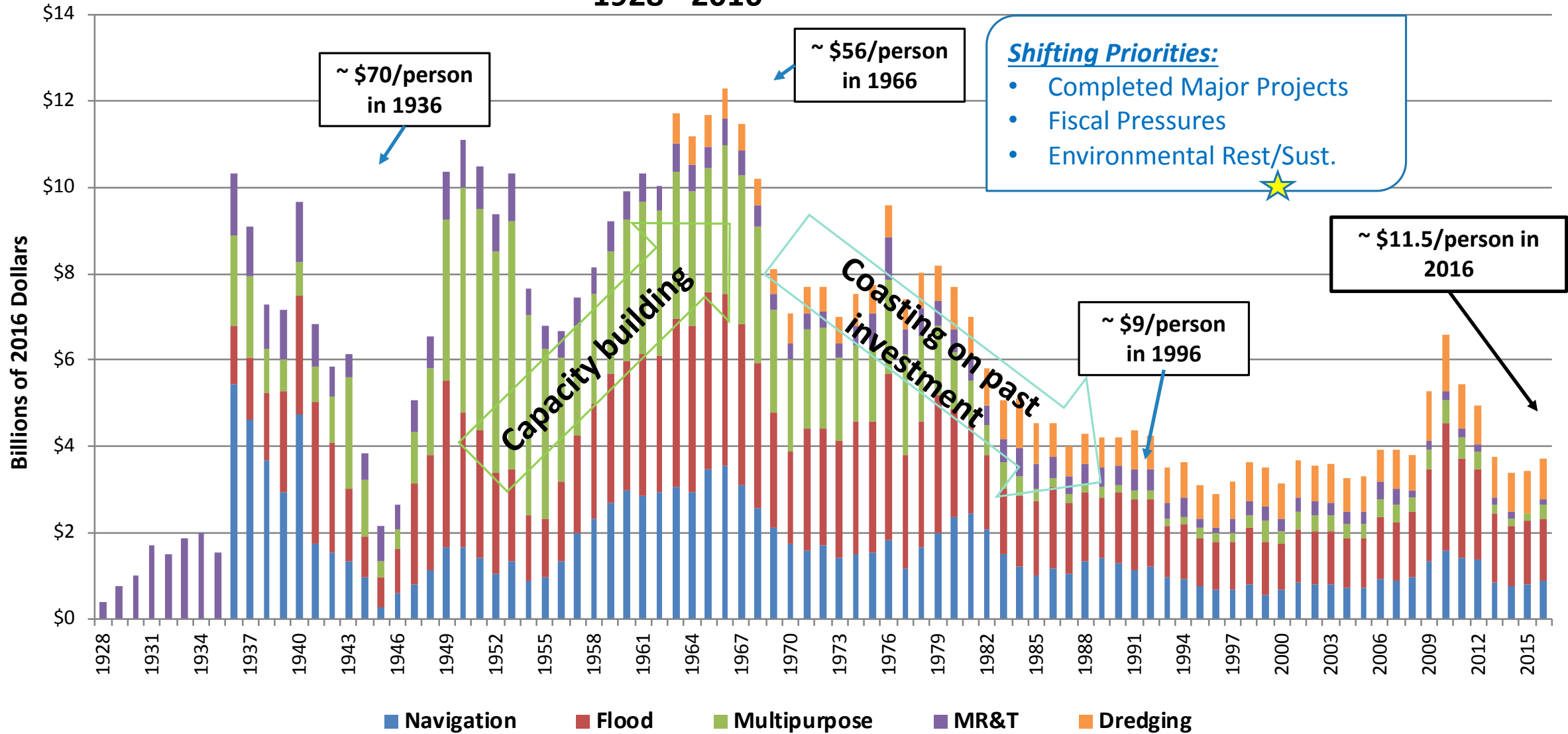
- 1) Dominate the Greater Mississippi River Basin
- 2) Eliminate All Land-Based Threats to the Greater Mississippi Basin

## The Geopolitics of the United States: The Inevitable Empire

**“The American geography is an impressive one. The Greater Mississippi Basin together with the Intracoastal Waterway has more kilometers of navigable internal waterways than the rest of the world combined. The American Midwest is both overlaid by this waterway and is the world's largest contiguous piece of farmland. The U.S. Atlantic Coast possesses more major ports than the rest of the Western Hemisphere combined. Two vast oceans insulated the United States from Asian and European powers, deserts separate the United States from Mexico to the south, while lakes and forests separate the population centers in Canada from those in the United States. The United States has capital, food surpluses and physical insulation in excess of every other country in the world by an exceedingly large margin. So like the Turks, the Americans are not important because of who they are, but because of where they live.”**



# Historical Investments by USACE Functional Category 1928 - 2016



2006-2010 Spending includes post Katrina & ARRA Supplemental

# INSTITUTE FOR WATER RESOURCES

## **U.S. Port and Inland Waterways Modernization Preparing for Post-Panamax Vessels June 20, 2012 followed by Memo on August 24, 2012**

**CONCLUSION:** IWR agrees that Port & Inland Waterways Modernization report could have considered deepening Federal channels on the Gulf coast to primarily serve post-Panamax bulk vessels. Such waterway modernization efforts are well within the range of opportunities presented by the increasing deployment of post-Panamax sized vessels of all types.

While IWR makes no judgment as to the economic and environmental merits of deepening the LMR to 50 feet, the Port of South Louisiana's classification as a "national" bulk port using the study's "Index of Regional Trade," coupled with the expected deployment of larger bulk vessels in the world fleet suggest it is reasonable to consider the merits of such action in more detail.



# 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.  
**COMPLETED: Director's Report signed August 3, 2018.**
- 1) 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).





# 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





UTC 2015:06:03 17:44:07  
NW mag  
W:089°16'34.74"  
N:029°09'03.26"





UTC 2015:06:03 17:10:09  
ENE mag  
W:089°17'44.17"  
N:029°09'18.30"

# **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 20.9 million cubic yards in FY 2015 performed during regular channel maintenance and HDDA dredging. (2 cutterheads used on channel maintenance – first time since the late 1980’s).**
- #2 20.7 million cubic yards in FY 2017 (2 cutterheads).**
- #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 20.9 million cubic yards (mcy) for FY 2017 shows:

11.2 mcy being removed from the navigation channel in the area of Southwest Pass and 9.7 mcy from the HDDA.

**The channel deepening to 50 feet will create approximately 1,500 acres below Venice, in the environmentally sensitive bird’s-foot delta.**



# HIGHLIGHTED ACREAGE CREATED SINCE 2009

## MILLION CUBIC YARDS (MCY)

FISCAL YEAR	SWP CUTTERHEAD MCY	SWP BU ACRES	HDDA MCY	HDDA BU ACRES	TOTAL SWP CUTTERHEAD + HDDA MCY	TOTAL ACREAGE SWP AND HDDA
2009	2.9	100	0	0	2.9	100
2010	3.2	67	6.8	466	10	533
2011	3.6	199	1.5	70	5.1	269
2012	5.6	615	0.8	0	6.4	615
2013	5.7	612	7.2	851	12.9	1,463
2014	8.0	572	0	0	8.0	572
2015	11.2	364	9.7	667	20.9	1,031
2016	8.5	768	0	4	8.5	772
2017	12.2	1072	8.4	404	20.7	1,476
2018	6.8	575 *	4.9	366	11.7	941*
TOTAL:	67.7	4,944*	39.3	2,828	107.1	7,772*

# MISSISSIPPI RIVER SHIP CHANNEL (MRSC) DEEPENING TO 50 FEET

**The Director's Report was signed by Mr. James Dalton, USACE Director of Civil Works, on August 3, 2018 identified the following:**

**“I request that you concur with my finding that the recommended deepening of the MRSC is economically justified and environmentally sustainable, and approve budgeting for this project based on the Final GRR and SEIS.”**

The project will provide a draft of 50-feet from the Gulf of Mexico upriver 256 miles to the Port of Greater Baton Rouge. In addition, the material dredged from thirty miles of the project near the Mouth of the Mississippi River will be used to create approximately 1,500 acres of new marsh habitat. In accordance with cost sharing provisions of Section 101 of the Water Resources Development Act the federal share of the project would be \$118.1 million, while the estimated non-federal share would be \$39.4 million. The current ship channel is maintained to 45 feet. The Corps' report identified the benefit-to-cost ratio at 7.2 to 1, the average annual benefits are \$127,500,000.



# MISSISSIPPI RIVER SHIP CHANNEL (MRSC) DEEPENING TO 50 FEET

The Soy Transportation Coalition and Informa Economics, Inc. estimate the larger, more efficient Capesize vessels (120,000 metric tons) ships, could reduce the cost of the movement of grains by upwards of \$20 per metric ton due to being able to transport more soy cargo per vessel. **The per bushel costs savings ranged from 13 to 20 cents depending on the proximity to a navigable waterway (barge fleetings). The same study identified a draw area, a metric related to the distance from the Mississippi River and Tributaries to the point of waterborne or barge commerce being cheaper than truck or rail shipments, the existing draw area is 150 miles. The draw area is projected to increase to 247 miles and could capture up to 82 percent of U.S. soybean exports.**

The economic update also repeated an idea that was first referenced by the Big River Coalition:

“Improving the depth of the Mississippi River would improve reliability of navigation on the river and reduce the impact of the occasional low water events.”

# MISSISSIPPI RIVER SHIP CHANNEL DEEPENING COSTS

1) The estimated total for dredging from Venice to the Gulf of Mexico (Southwest Pass +) is approximately \$100 million. From approximately Mile 10 Above Head of Passes (AHP) to Mile 22 Below Head of Passes. **The Federal cost-share at 75% is \$75 million and the non-federal cost-share at 25% is \$25 million.** This phase must be completed first and would open up 176 miles of the Ship Channel to a controlling depth of 50 feet.

**TOTAL: \$100 million**

2) The next phase of dredging will be on the Crossings Above New Orleans, from approximately Mile 154 AHP to Mile 233.9 AHP is estimated to cost \$57.5 million. **The Federal cost-share at 75% is \$48.75 million and the non-federal cost-share at 25% is \$16.25 million.**

**TOTAL: \$57.5 million**

3) there are up to six utility pipelines that might need to be relocated or deepened sufficiently below the mudline after channel deepening. The price tag for all pipelines to be deepened is estimated to be \$80.2 million.

**TOTAL: \$80.2 million**

4) Dredging Costs:	Southwest Pass: \$100 million	Crossings: \$57.5 million	<b>TOTAL: \$ 157.5 million</b>
Pipeline Relocation:	Non-federal: \$40.1 million	Pipeline owners: \$40.1 million	<b>TOTAL: \$ 80.2 million</b>
			<b>TOTAL PROJECT COSTS: \$237,700,000</b>



# M/T ADVANTAGE START

156,639 DWT, 899' X 157' 45" Depth



720,000 PLUS BARRELS OF OIL



# M/V OLYMPIC HARMONY

182,644 DWT 1,093' X 148'







# QUESTIONS?

