

MTS

Louisiana's

Marine

Transportation

System



Louisiana Department of Transportation and Development



Catalogue of Louisiana's Waterways - 2016





Louisiana Department of Transportation and Development

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(Cover artwork is Houma Navigation Canal at crossing of Gulf Intracoastal Waterway)

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Summary

Louisiana is a leader in marine transportation and is number one in tonnage in the nation. The key to **Louisiana's economy is to stay a leader and continue to attract new business to the region.** We can do this by keeping our waterways and infrastructure open and accessible to all types of businesses.

A key issue for Louisiana's Marine Transportation System is that deeper channels are needed to the Gulf. Deeper water is needed to move larger projects out to the Gulf of Mexico and keep Louisiana fabricators and the many associated businesses and water transportation companies competitive in the global market.

Due to our inland waterway system, America's agricultural export crops are competitive throughout the international marketplace despite often having higher 'to harvest' costs. If the US stopped shipping grain, it is estimated that one million acres of land elsewhere in the world would have to be converted from habitat to crop land. About 60% of US grain exports travel through Louisiana ports.

The US government has responsibility for the waterways, locks and dams within its boundaries, not the states. The US Army Corps of Engineers (USACE or Corps) is the arm of the US Army that is tasked with maintaining our **nation's waterways.**



The USACE's projects are authorized by Congress in Water Resources Reform and Development Acts (WRRDA). The 2014 WRRDA bill was signed into law by the president on June 10, 2014. Much needed language clarification was made including incidental storm surge protection removed from the AGMAC navigation project and streamlining some of the Corps processes as well as changing the Operations & Maintenance costs on Deep Draft Mississippi River (MR) so that it will be a federal responsibility up to 50 feet depth. This will make way for previously authorized deepening of the MR so that we can accommodate the larger draft ships that are being built as the Panama Canal is being remodeled and enlarged.

The new Act seeks to streamline the Corps process by limiting the time and cost of studies, and by consolidating and requiring concurrent reviews. It has also opened up the ability of non-federal sponsor to contribute funds to expedite projects.

Because of Louisiana's diverse and intricate marine transportation system, it is a national leader in waterborne transportation; however, we do have a number of issues that plague our waterway system. Maintenance and funding issues along with the tedious Corps process keep Louisiana from fulfilling its potential. Only time will tell if WRRDA 2014 does what it is suppose to do. In order to maintain this vital system and continue contributing to the nation's economy, support of Louisiana's waterway system is a MUST!

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The core of our system is the Mississippi and its tributaries

The Mississippi River winds its way 2,552 miles as it travels from the headwaters in northern Minnesota down through Louisiana and into the Gulf of Mexico **impacting our nation's economy.**

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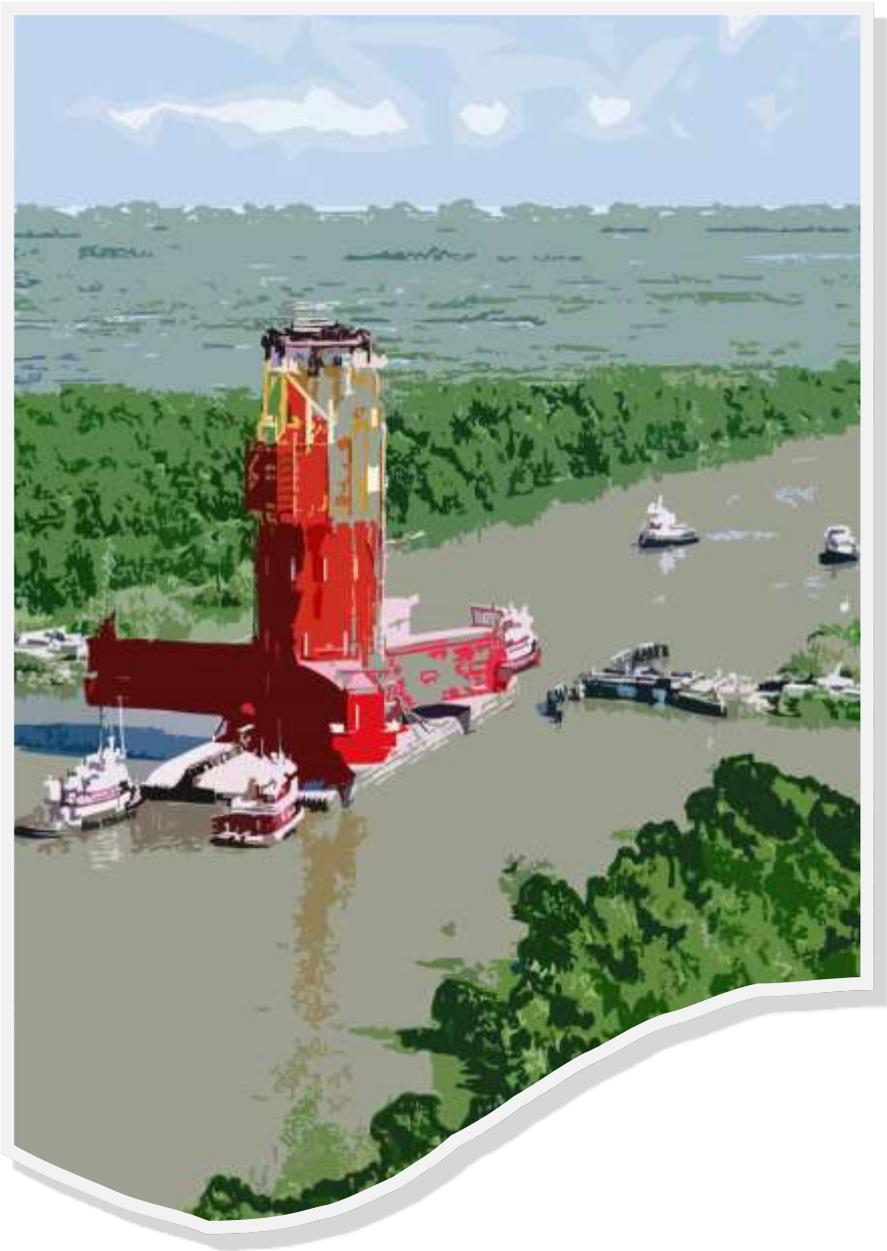


MARINE TRANSPORTATION

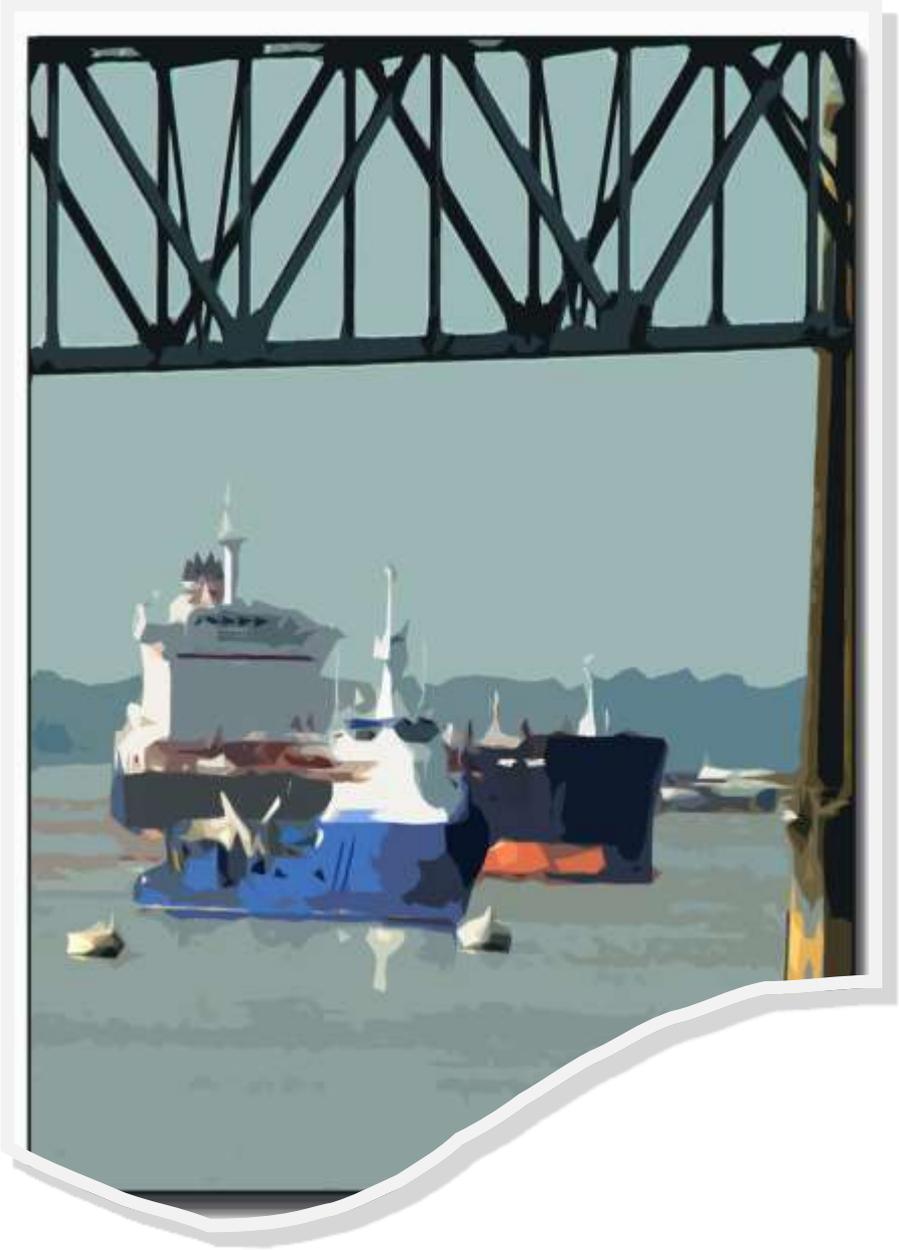
*The Mississippi River and its tributaries provide safe, reliable and efficient waterborne transportation to the heartland of the United States. Louisiana is the gateway for international trade, **both imports and exports.** Louisiana's marine transportation system is of **paramount importance to our nation's economy.***

Currently, Louisiana's marine transportation system transports 510 million tons of goods. Since freight tonnage worldwide is expected to double by 2020 and Latin American trade is **expected to triple,** Louisiana's marine transportation system will continue to be a vital business incubator for our national economy.

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Catalogue of Waterways

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OVERVIEW

A Marine Transportation System is "...a network of navigable waters, publicly and privately owned vessels, port terminals, intermodal connections, shipyards, vessel repair facilities, and a **trained labor pool maintaining and operating this infrastructure.**"

THE U.S. MARINE TRANSPORTATION SYSTEM – Maritime Administration - "The Year of the Ocean 1998"

Comprised of three components, the Louisiana MTS is:

Deep Draft Waterways

These waterways are vital to Louisiana and the nation as they are the means by which we export American agricultural and manufactured products and import consumer products and the raw materials needed by our factories and power plants.

Coastal Waterways

These waterways provide an access to the Gulf of Mexico for the southern Louisiana based commercial fishermen, offshore oil platform fabricators and supply vessels. The Gulf Intracoastal Waterway (GIWW) is the water highway alternative to the east and west following a route somewhat parallel to Interstate 10.

Inland Waterways

With their connections to the deep draft and coastal waterways, these rivers, bayous and locks are the links to international trade for Heartland farmers and manufacturers.



Deep Draft Waterways

Deep Draft Mississippi River

The Mississippi River has the largest and longest system of deepwater terminals in America and perhaps the world. It is the only waterway system in America with a multitude of intermodal connections and deep water ports/terminals that are accessible year round. It is the **crown jewel of Louisiana's Marine Transportation System** and is considered one of the major centers for maritime business by international ship owners and commodity traders.

Approximately 11% of America's petroleum refineries are located on the waterway. Nine major chemical manufacturing plants are located between the ports of South Louisiana and Baton Rouge. Exports of agricultural products, lumber, chemicals, coal, and manufactured goods from Louisiana as well as from other states and Canada move down the Mississippi.

Deep Draft Mississippi River	
Channel:	4 miles - 45' deep - 600' wide 122.5 miles - 45' deep - 750' wide 127.9 miles - 45' deep - 500' wide 1.4 miles - 40' deep - 500' wide
Public Ports:	5
Intermodal Access:	Interstates 10, 12, 55 and 59
	6 Class 1 railroads
	Mouth of Ohio River to Head of Passes into Gulf of Mexico
Foreign and Domestic Tonnage: 536.3 million (USACE - 2012)	

This waterway contains five public ports – Plaquemines, St. Bernard, New Orleans, The Port of South Louisiana and the Port of Greater Baton Rouge, and includes private and public terminals. Its most unique intermodal feature is the midstream transfer system. The majority of tonnage transported via this waterway is transferred between ocean cargo vessels and river barges to be collected and distributed throughout North America or exported to foreign buyers. By having access to inland and coastal waterways, cargo handled by the midstream transfer system, does not have to be temporarily discharged to a land based storage facility and then reloaded for the final destination.

Thus, importers and exporters are able to lower their freight costs and delivery costs which makes US exports more competitive economically and lowers the costs of imported goods to consumers.

Top Fifteen Tonnage Ports in US in Tons (Millions)		
1	Port of South Louisiana	252.1
2	Houston, TX	238.2
3	New York, NY and NJ	132.0
4	New Orleans, LA	79.3
5	Beaumont, TX	78.5
6	Long Beach, CA	77.4
7	Corpus Christi, TX	69.0
8	Los Angeles, CA	61.8
9	Baton Rouge, LA	60.0
10	Plaquemines, LA Port of	58.3
11	Texas City, TX	56.7
12	Mobile, AL	54.9
13	Lake Charles, LA	54.4
14	Huntington—Tristate	52.9
15	Norfolk Harbor, VA	46.2

US ACE—Transportation Facts & Info—Nov 2013



The 5 Public Ports on the lower Mississippi:

Plaquemines Port, Harbor and Terminal District

- Mile 0 to mile 80.8

The gateway to the Mississippi Valley Export Corridor, the largest port system in the world, Plaquemines Port is home to the two largest coal terminals in the US.

St. Bernard Port

- Mile 81.5 to mile 91.6

Located on the east bank of the Mississippi River, it has immediate access to the GIWW. This landlord port provides a strategic location for expanding logistics and manufacturing operations.

The Port of New Orleans

- Mile 81.2 – mile 114.9

Besides its designation as one of **the world's major sea ports being** the port of choice for the movement of cargoes such as steel, rubber, coffee, containers and manufactured goods, the Port of New Orleans is growing as a major cruise ship port. Unlike other US cruise ports which are only a point of departure, New Orleans presents a **unique "double vacation" value by offering the enjoyment of the French Quarter and nearby Acadian, Cajun and Creole cultural attractions.**



Two Carnival Cruise Line vessels at New Orleans'

The Port of South Louisiana

- Mile 114.9 – Mile 168.5

The Port of South Louisiana, which stretches 54 miles along the Mississippi River, is the largest tonnage port district (comprised of facilities in St. Charles, St. John the Baptist, and St. James Parishes) in the Western Hemisphere and ranks fourth in the world. It handled over 252.1 million tons of cargo in 2013, brought to its terminals by vessel, barge, rail, and truck. The port has eight world class Port-owned facilities, ranging from grain elevators to general cargo and bulk docks.

Over 50,000 barges and 4,000 ocean-going vessels call at the port each year. With exports of 52 million tons of cargo a year, more than any other port in North America, the Port accounts for 15 percent of total US exports.

Port of Greater Baton Rouge

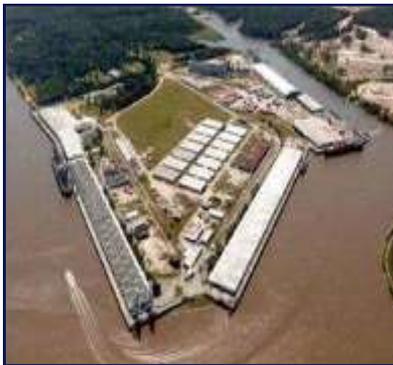
- Mile 168.5 – mile 253

The Port of Greater Baton Rouge is strategically located on the Mississippi River and is an integral part of the Louisiana maritime industry and overall economy. Handling a diverse range of cargo and accommodating special requests is a trademark of the Port of Greater Baton Rouge and it ranks among the top 15 ports in the nation in total tonnage.

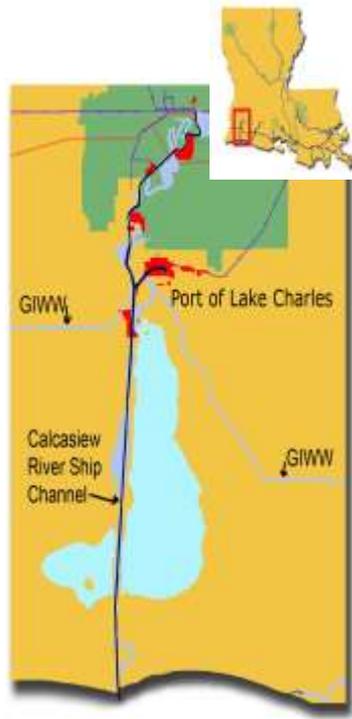
Calcasieu River Ship Channel

The Calcasieu River Ship Channel is a navigable deep draft waterway serving Southwestern Louisiana. The channel was constructed in 1941 just before the US entered WWII. It became, and still is, an important artery for the shipping industry. The Calcasieu River Ship Channel is **Louisiana's shortest deep draft portal (35 miles) to the Gulf of Mexico** and has access to the GIWW.

The Port of Lake Charles is in the midst of switching from an importer of LNG to an exporter of LNG. Over \$70 Billion in announced export LNG projects are slated for the Calcasieu River. **85% of the Port's tonnage is energy cargo.** Federal revenue is expected to increase from \$750 million to \$1.2 Billion per year.



Port of Lake Charles at the City Docks



	Calcasieu River Ship Channel
Channel:	35 miles long - 40' deep - 400' wide
Public Ports:	1
Intermodal Access:	Interstate 10 Highway
Rail	3 Class 1 railroads
Waterway	GIWW and the Gulf of Mexico
Foreign and Domestic Tonnage: 54.4 million (USACE 2012)	

Louisiana Offshore Oil Port (LOOP)

The 'LOOP'

- 18 Miles offshore from Grand Isle

Louisiana Offshore Oil Port, Inc. (LOOP) is America's first and only deep-water port operating under US and Louisiana licenses. While not on a waterway, it is 18 miles off Louisiana shores in the Gulf of Mexico and provides tanker offloading and temporary storage services for crude oil transported on some of the largest tankers in the world. LOOP handles 13 percent of the nation's foreign oil, about 1.2 million barrels a day, and connects by pipeline to 35 percent of the US refining capability. Crude imports have ebbed since 2009 as booming domestic output from shale oilfields has cut them by 27 percent.



Coastal Waterways

Gulf Intracoastal Waterway

The Gulf Intracoastal Waterway (GIWW) may be the most remarkable artery of waterborne transportation in America. This vital inland waterway was constructed from the 1920s to 1943. Stretching 1300 miles from Brownsville, TX to Apalachicola, FL, it links together deep water ports, bayous, lakes, rivers and canals.

The Louisiana segment, from the Louisiana-Texas border to the Louisiana-Mississippi border, is 306 miles. Its most important intersection is with the Mississippi River. The GIWW, experiences its **heaviest traffic along Louisiana's coast. About 113 million tons of cargo pass through the GIWW's locks annually. It's also a supply route for oil and gas industry as well as the offshore platform fabricators/shipyards.**

Today, the GIWW provides safe and economic transportation for a variety of commodities. Texas and Louisiana account for over 80% of the total U.S. production of chemicals and petrochemicals. The GIWW's

Gulf Intracoastal Waterway	
Channel:	306' miles long – 12' deep - 125' wide
Public Ports:	7
Locks/Dams	5 - Calcasieu Lock, Leland Bowman Lock & Dam, IHNC Lock, Harvey Lock, & Algiers Lock
Intermodal Access:	Atchafalaya, Calcasieu, Mermentau, Mississippi and Vermillion Rivers, Bayous Teche and Lafourche, the GIWW Morgan City/Port Allen Route and Commercial Canal
Domestic Tonnage	113.8 million (USACE — 2012)





Heavy Traffic on the GIWW at Morgan City

role as the “waterway I-10” and its Mississippi River connection to the Nation’s Heartland allows for affordable transportation for our nation’s industries. Much is made of the competition between Houston and our Mississippi River deep draft ports/terminals, but it is the GIWW that puts Houston on the Mississippi and its interior waterway connections.

Ports of Iberia, Terrebonne, Morgan City, and West St. Mary specialize in platform fabrication and supply to the offshore oil and gas industry.

Bayou Teche – Mermentau River – Vermilion River

Bayou Teche is a 125-mile long waterway starting in Port Barre and flows southward to meet the Lower Atchafalaya River at Patterson. The Teche has great cultural significance and at one time provided **the primary means of transportation for the Acadians’ migration**. Levees built along the Atchafalaya in the 1930s diminished the fresh water supply for the Teche. A pumping station was built in Krotz Springs between 1976 and 1982 to pump water from the Atchafalaya River and Bayou Courtableau to the Teche and the Vermilion. This greatly improved fresh water supply for farmers and fishermen in the region. The Teche continues to provide transportation, food, irrigation, recreation, and livelihood for those living along its banks.



Looking down Bayou Teche

Formed on the common boundary of Lafayette and St. Martin Parishes by a confluence of small bayous flowing down from St. Landry Parish, the Vermilion River flows southward. It flows past the cities of Lafayette and Abbeville and it is crossed by the GIWW before flowing into Vermilion Bay and on into the Gulf of Mexico.

Like the Mermentau, the Vermilion serves its communities as a source of transportation, a source of irrigation (mostly for rice farmers), flood control, commercial fishing and maritime recreation.

The importance of the Vermilion as a means of transportation and commerce declined with the introduction of the railroad and the paving of all highways leading into Lafayette in 1936.



The Mermentau River flows south toward the Gulf and is fed by four small bayous. The river supplies freshwater for the Mermentau Basin and is located in between Lake Calcasieu and Vermilion River. The Catfish Point control structure is a salt water intrusion barrier located on the river to aid in the prevention of salt water from the Gulf reaching the many fresh water rivers and bayous in the region. Several large freshwater lakes (Grand Lake, White Lake) and confined wetlands dominate the region.

The principal agricultural and aquaculture products of the Mermentau are rice and crawfish. The annual economic values of the rice and crawfish crops average \$160 million and \$35 million, respectively. Alligators are a common sight, sunning along the bank lines or

lurking in the brown waters. So numerous are alligators that each year a wild alligator harvest is authorized. The value of the annual alligator harvest is about \$1.3 million.

The river also supports a viable commercial fishing industry. The diverse wetland ecosystems provide habitat for a variety of fresh and saltwater fish and shellfish. The most popular saltwater species

are shrimp, spotted sea trout, red drum and red snapper. Freshwater sport fish include largemouth bass, crappie, bluegill, catfish and crawfish.



	Mermentau River	Vermilion River	Bayou Teche
Channel:	72 miles long - 4-11' deep - 40' wide	About 52 miles long - 5-11' deep	107 miles long (navigable)
Locks/ Dams	none	none	none
Intermodal Access:	GIWW & Gulf of Mexico	GIWW & Gulf of Mexico	GIWW & Gulf of Mexico
Foreign & Domestic Tonnage	311,000 (WCUS-2012)	Emerging Port	0.5 million (USACE—2012)

Houma Navigation Canal & Bayou Lafourche

The Houma Navigation Canal (HNC) is a man made navigation channel that provides direct access to the Gulf of Mexico from the Gulf Intracoastal Waterway at Houma, Louisiana. The seat of Terrebonne Parish, Houma, has about 250 oil



Gulf Island Fabricators' facilities in Houma

and gas related businesses along with many shipbuilding yards and commercial fishing boats.

The *Port of Terrebonne* is located on the Houma Navigation Canal within one-half mile of its intersection with the Gulf Intracoastal Waterway. This location puts the port in a strategic position to take advantage of significant cargo flows and marine traffic on both waterways.

DOTD has undertaken a deepening feasibility study for the Houma Navigation Canal under Corps Section 203 guidelines. It was previously a part of the Morganza to the Gulf Hurricane Protection project study.



Oil rig built in Houma being moved down the Houma Navigation Canal to the Gulf of Mexico

Bayou LaFourche, is a waterway that is navigable from the GIWW at Larose, Louisiana, south to the Gulf of Mexico where it passes Port Fourchon.

Port Fourchon is the largest supply base in the country for the offshore oil and gas industry. The overwhelming majority (over 95%) of tonnage handled at the Port is oil and gas related. Every widget and gadget needed to support the oil and gas industry is handled as cargo. It moves through container, bulk, break bulk and just about every method imaginable. Approximately 30% of total tonnage travels to and from the Port by inland barge before being transferred to or from an offshore supply vessel, and 70% travels to and from the Port by vehicle before being transferred to or from an offshore supply vessel or helicopter. The commodities commonly barged are the liquid bulk commodities such as oil-field fluids, heavy waters (CaCl₂), cement, and fuel.

	Houma Navigation Canal	Bayou LaFourche
Channel:	36 Miles Long 15' to 18' Deep 150' Wide	55 Miles Long 3' - 26' Deep
Public Ports:	1	1
Locks/Dams	None: one is currently under design	None (there is a floodgate at Larose)
Intermodal Access:	GIWW & Gulf of Mexico	GIWW & Gulf of Mexico
Foreign & Domestic Tonnage	2.5 million (USACE fact sheet 2013)	24.09 million (PAL fact sheet 2012)



Offshore supply vessels at Port Fourchon

Inland Waterways

Atchafalaya River & the Morgan City/Port Allen GIWW Route

Both the Atchafalaya River and the Morgan City/Port Allen GIWW Route are short cuts for inland traffic from the Mississippi River to the GIWW.

A distributary (off-shoot) of the Mississippi and Red rivers, the Atchafalaya River is approximately 170 miles long, in south central Louisiana. It is a significant industrial shipping channel and is in the cultural heart of Cajun country. Formed near Simmesport at the confluence of the Red River and the Mississippi at Old River, the Atchafalaya receives water from both the Red and Mississippi and winds its way south past Morgan City and empties into the Gulf of Mexico through the Atchafalaya Bay. The river is forming a new delta in the bay, the only place on the Louisiana coastline that is actually gaining ground.

	Atchafalaya River	GI WW Morgan City – Port Allen Route
Channel: length:	121 miles - 12’ deep	64.1 miles – 12’ deep – width: 125’
Public Ports:	2	1
Locks/Dams:	none	2
Intermodal Access:	GIWW, Mississippi River, Red River, GIWW-PA/MC Route, and Gulf of Mexico	GIWW, Mississippi River, Red River, Atchafalaya, and Gulf of Mexico
	the future Interstate 49	Interstates 10, 12 and the future 49
	2 Class 1 railroads	2 Class 1 railroads
Foreign and Domestic Tonnages:	5.6 million (USACE 2013)	74 million (WCUS pt 2 2012)

The Morgan City-Port Allen GI WW Route connects the Mississippi River at Port Allen to the GIWW. Across from Baton Rouge at mile 228.1 on the Mississippi it makes an almost direct southern route to just above Morgan City and the GIWW where it meets with the Atchafalaya River and Bayou Teche. As a shortcut it is popular for barge traffic from Baton Rouge westbound towards Lake Charles and on into Texas. It is 64.1 miles long and by using this waterway, heavy river ship and barge traffic between Baton Rouge and New

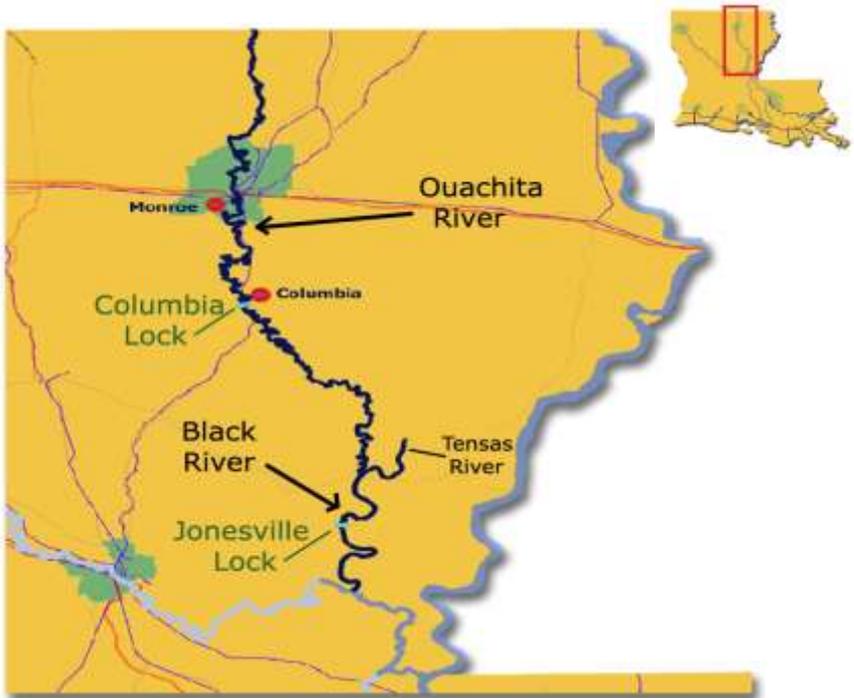
Orleans is avoided, which is about 120 miles long in comparison. It runs almost parallel between the longer Mississippi and the swifter Atchafalaya. Situated on the Morgan City-Port Allen GIWW Route just off the Mississippi River, the *Inland Rivers Marine Terminal (IRMT)* is a 60-acre intermodal facility of the Port of Greater Baton Rouge. The IRMT is strategically located at the hub of an extraordinary waterway network connecting the US Heartland with international markets. Nearly 50 percent of all American markets are accessible by barge through the Mississippi River inland waterway system.



Looking north on the Delta of the Atchafalaya River from the Gulf of Mexico

Ouachita-Black Rivers

The Ouachita River begins in the Ouachita Mountains near Mean, Arkansas, and is dammed to create several reservoirs before it reaches Louisiana. When in Louisiana it flows in a southerly direction and collects tributary waters from Bayou Bartholomew, **Bayou de Loutre, Bayou D'Arbonne, the Boeuf River, the Little River, and the Tensas River.** After the Ouachita merges with the Tensas River, it is called the Black River for several miles until it joins the Red River which in turn flows into both the Atchafalaya River and the Mississippi River via the Old River. The Ouachita-Black River system is a pipeline for raw materials and energy supplies to agriculture, paper production and construction **industries. The river's main transportation commodities are** aggregate, agricultural products, fertilizers and petroleum products. The Ouachita-Black economy is moving from a dependency on the agriculture and wood/timber industries to one of strength and diversity. Several new primary industries including paper and pulp, plastics, telecommunications and medical services, now provide a broad base for the local economy and surrounding region.





Looking North up the Ouachita River in Monroe

Located on the Ouachita River in West Monroe, LA, *The Greater Ouachita Port* has recently added a large storage yard with two side loaders and a large crane with spreaders to handle containers, a road connecting the rail side storage to dock side storage, and are in the process of adding on to the rail siding to make a complete loop and double the rail space.

	The Ouachita River
Channel:	332 miles—from Arkansas border— 9’ deep
Public Ports:	2
Locks/Dams	2
Intermodal Access:	Interstate 20
	2 Class 1 railroads
	Atchafalaya, Mississippi & Red Rivers
Foreign and Domestic Tonnage:	0.9 million (includes Arkansas) (USACE 2012)



Red River J. Bennett Johnston Waterway

The Red River, Known as the J. Bennett Johnston Waterway, flows out of southwest Arkansas and into Louisiana where it flows southeastward across the state and into the Atchafalaya River at Old River. **It is a raw material route for NW Louisiana's growing** manufacturing industries which include auto manufacturing, ship module fabrication, steel coil processing, specialty paper products, and consumer goods.

Public Ports:

The *Alexandria Regional Port* is located at Mile 90 of the Red River which is nearby the Union Pacific and KCS Railroads, Interstate 49, US Highways 71, 165 and 167 and LA highways 1 and 28.

Because of the Port’s proximity to Fort Polk’s Joint readiness Training Center in Leesville, it has attracted heavy use by the military because of its easy access for transporting heavy equipment and supplies in and out of the region.

Natchitoches Port is four miles northeast of Natchitoches on LA 6 (East). The port has a slack water harbor with a 62,000 square foot warehouse. In addition to interstate 49, it has direct access to Kansas City Southern Railroad and owns two switching engines.

Shreveport-Bossier Port has both extensive inland waterway connections for domestic traffic and access to international trading partners through the Mississippi River. A comprehensive rail network provides service to and within the Port, linking it to the Union Pacific and Kansas City Southern railroads. Truckers have access to I-20, I-49 and the proposed I-69 corridor.

The newest port on the river is the *Red River Parish Port* at Hanna which provides access for the delivery of commodities such as agricultural limestone used by local industry. The port is adjacent to LA 1 and the Union Pacific Railroad, and near I-49.

	The Red River / J. Bennett Johnston Waterway
Channel:	236 miles long—9’ deep—200’ wide
Public Ports:	4
Locks/Dams	5 — they are 6-Barge tow design — 685’ long x 84’ wide
Intermodal Access:	Atchafalaya, Mississippi and Ouachita-Black rivers
Foreign & Domestic Tonnage:	6.3 Million (USACE 2013)

Shallow Draft Mississippi River (above Baton Rouge)

This section of the Mississippi River is the barge link between our deep water ports and terminals to the US Heartland. It provides US farmers with a vital link to world trade and is a conduit for the transport of industrial materials. Both industries and cities rely on this waterway to receive and distribute petroleum products and coal for electric power plants as well as raw materials such as base plastic, chemical, and steel products.

Via the Old River Lock, it is connected to the Red, Ouachita-Black and Atchafalaya Rivers. It provides Louisiana farmers with energy and fertilizer supplies, and its grain elevators, cotton gins and seed facilities allow for both local and international distribution and sales.

The Port of Lake Providence is located on the Mississippi River at mile 484 Above Head of Passes (AHP) in the inland northeast corner of Louisiana in East Carroll Parish. Primary commodities include aggregates, coal, dry and liquid fertilizer, forest products, lime, and tire chips- inbound; cottonseed and grain- outbound.

The Madison Parish Port is located in Madison Parish 6 miles north of Interstate 20. Primary commodities at the port are fertilizers, cotton seed and grains, but it also handles fabricated sections of barges and offshore vessels. In 2013 they handled over 550,000 tons of bulk and break bulk cargo.



Lake Providence Port



	Shallow Draft Mississippi River Above Baton Rouge
Channel	275 miles—12' deep
Public Ports	2
Locks & Dams	None
Intermodal Access	Interstate 20
	Access to 2 Class 1 railroads via short line railroad
	Baton Rouge to Ohio River
Foreign & Domestic Tonnage	14.5 Million (Estimate from 2012 USACE data)

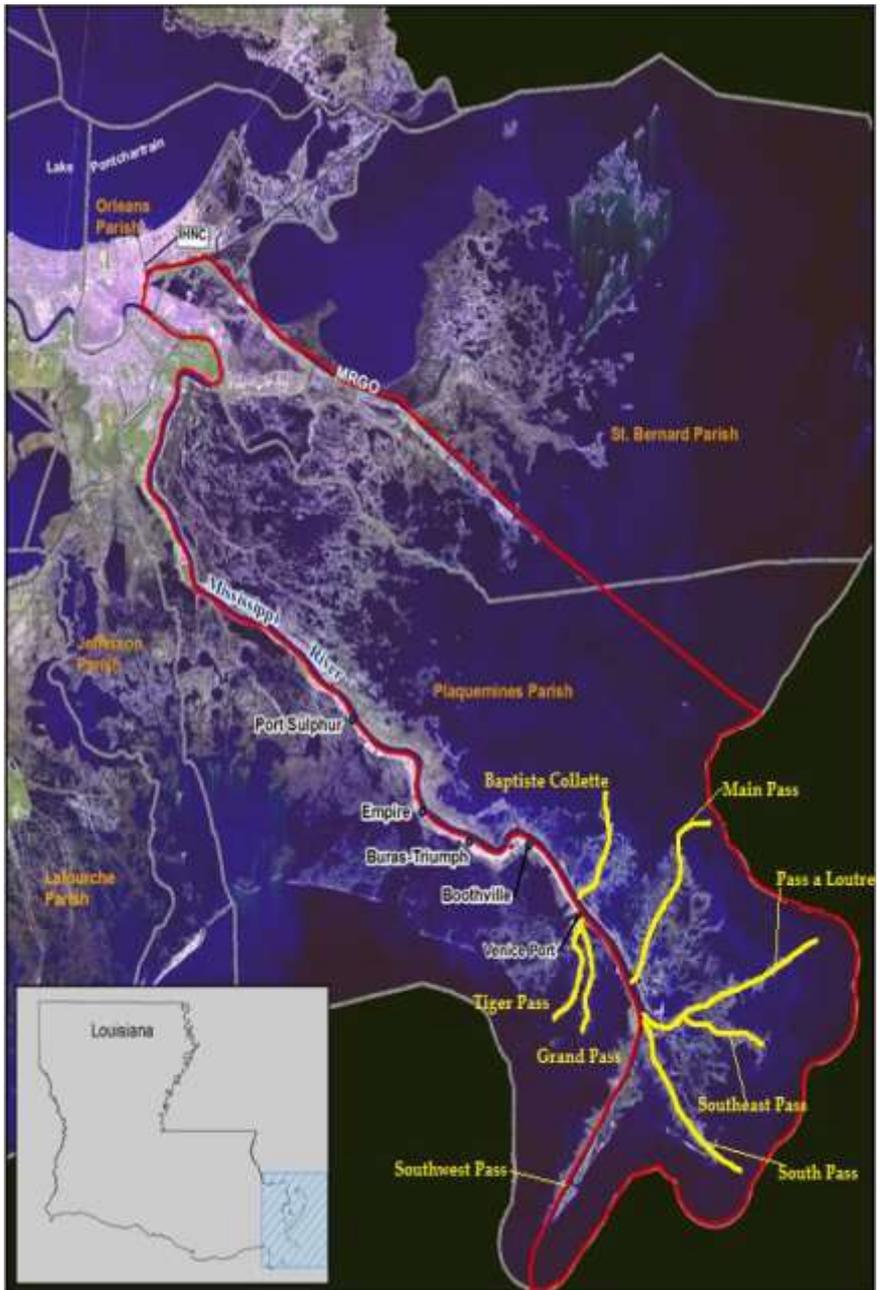
Current Navigation Deepening Studies

The Louisiana Department of Transportation and Development is the non-federal sponsor of several current deepening studies: the Mississippi River Ship Channel, the Acadiana Gulf of Mexico Access Channel, and the Houma Navigation Canal are all vital waterways **that support the state and the nation's economy**. DOTD also funds the Baptiste Collette Bayou deepening study through Plaquemines Parish. These waterways are authorized by Congress to be maintained at a specified channel depth. In order to deepen a channel below the federally authorized channel depth, a feasibility study is required and must be submitted to the Assistant Secretary of the Army for Civil Works for approval before any work can proceed.



Baptiste Collette Bayou Navigation Channel Deepening Study

Baptiste Collette Bayou is a distributary of the Mississippi River, approximately 75 miles south of New Orleans, near Venice in Plaquemines Parish. Offshore supply vessels servicing the eastern Gulf of Mexico from Venice currently need to travel the heavily used Southwest Pass before going east. Deepening the Baptiste Collette Bayou would provide a shorter, more economical, and safer route from Venice. Lack of adequate access to/from the destinations east of the Mississippi River could lead to the loss of business and revenue for Plaquemines Parish and the state.

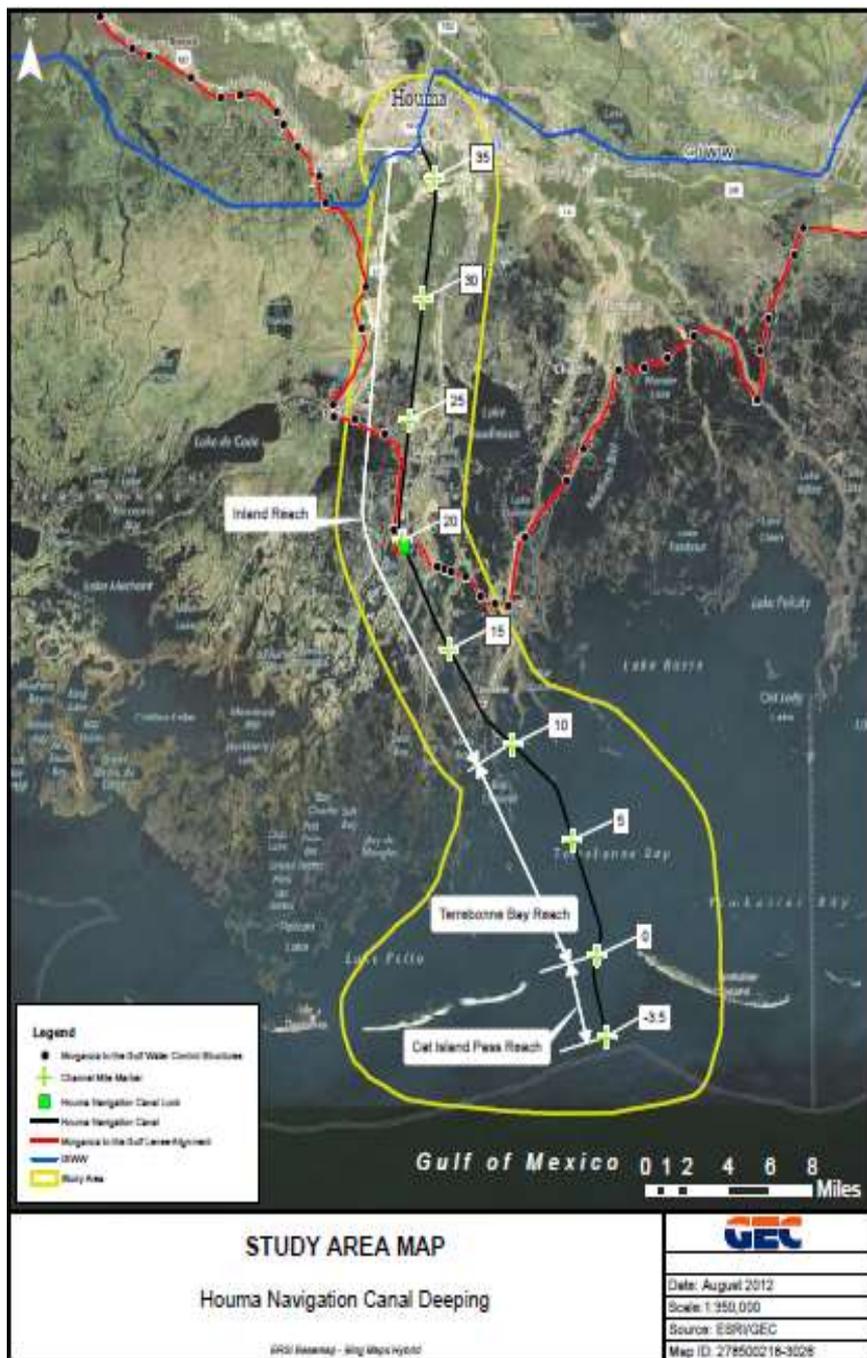


A feasibility study, with a goal of contributing to the economy of South Louisiana and the nation while also providing an environmental benefit with the use of dredged material, has been conducted by Plaquemines Parish Government under the authority of Section 203 of the Water Resources Development Act (WRDA) of 1986. Section 203 of WRDA 1986 allows non-federal interest, such as Plaquemines Parish, to undertake feasibility studies of proposed navigation projects and submit them to the Assistant Secretary of the Army for Civil Works for consideration to be recommended for construction as a Corps of Engineers Civil Works project. The feasibility study was completed and submitted to the Assistant Secretary of the Army for Civil Works in August of 2015. The estimated cost of construction is \$45 million with a cost-benefit ratio of 1.41, with 75% Federal and 25% Non-Federal cost-share for the recommended 22 foot dredging depth.

Houma Navigation Canal Deepening Study

The Houma Navigation Canal (HNC) is currently maintained at a **15-foot channel depth**. **The HNC is one of Louisiana's transportation gateways to the Gulf of Mexico.** Houma is the home of industries that build and repair supply vessels, topsides, and platforms for the oil and gas industry in the Gulf of Mexico. The deep water oil and gas industry requires larger and deeper draft vessels to service the offshore platforms. The need for a deeper canal for the resulting deeper draft vessels is important to keep the U.S. industries based in Houma competitive with the world market.

The Purpose of the HNC deepening study is to identify the most economically feasible depth for the canal. A feasibility study, with a goal of retaining business industries in Terrebonne Parish while also providing an environmental benefit with the use of dredged material, is underway through the authority of Section 203 of the Water Resources Development Act (WRDA) of 1986. Section 203 of WRDA 1986 allows a non-federal interest, such as Louisiana DOTD, to undertake feasibility studies and submit them to the Assistant Secretary of the Army for Civil Works for consideration to be recommended for construction as a Corps of Engineers Civil Works project. The feasibility study is scheduled to be submitted to the Assistant Secretary of the Army for Civil Works in January of 2017. The estimated cost range for construction is \$189 million for an 18 foot dredged depth to \$215 million for a 20 foot dredged depth with a cost-benefit ratio of 5.30 and 1.19 respectively. There is a 80% Federal and 20% Non-Federal cost-share.



Mississippi River Ship Channel

International shipping is using larger vessels with deeper drafts. With the deepening of the Panama Canal, Louisiana needs a deeper Mississippi River to be able to accommodate the larger vessels and stay competitive in international trade. Through the years, the Mississippi River has been deepened to a depth of 45 feet in two phases. Phase I deepened the ship channel to 45 feet from the Gulf of Mexico to mile 181.0 AHP (Donaldsonville). Phase II deepened the channel to 45 feet from mile 181.0 AHP to Baton Rouge. DOTD signed a cost sharing agreement with the US Corps of Engineers for a re-evaluation report for the feasibility of deepening the river to 50 feet on April 2, 2015. The report is scheduled for completion in March of 2018. The estimated cost of construction is \$300 million with a 50% cost-share for DOTD at \$150 million.





Acadiana to Gulf of Mexico Access Channel

Fabricating facilities at the Port of Iberia require deeper channels to **get today's larger offshore oil platform components to the Gulf of Mexico**. The Acadiana to Gulf of Mexico Access Channel (AGMAC) project will provide a deeper and wider access channel from the Port of Iberia via the enlargement of existing channels. The project was authorized in 2007 and is in the pre-construction and design phase. Due to a change in authorizing language, cost of the project escalated and the project became economically unviable. The Water Resources Reform and Development Act of 2014 removed that language and the project is moving forward awaiting Corps funding. DOTD is the non-federal sponsor for AGMAC. Estimated cost of construction is \$140 million with a 90% Federal and 10% Non-Federal cost-share.

Glossary

Terms and Acronyms

AASHTO – American Association of State Highway and Transportation Officials

AGMAC – Acadiana Gulf of Mexico Access Channel

Bayou - A body of water, such as a creek or small river, that is a tributary of a larger body of water, usually slow moving or sluggish

Corps – US Army Corps of Engineers

Demurrage - detention charges for taking too long to load vessels, trucks and rail cars

Distributaries - A branch, diversion, or off-shoot of a river that flows away from the main stream

DOTD or LADOTD – Department of Transportation and Development; Louisiana DOTD

Draft - the depth to which a vessel is immersed when bearing a given load

EIS – Environmental Impact Statement/Study

Estuarine – of related to or found in an estuary

Estuary - **The part of the wide lower course of a river where its current is met by the sea's tides**

GIWW – Gulf Intracoastal Waterway – the man made waterway constructed during the earlier part of the last century running 306 miles along the lower portion of Louisiana (the busiest section of the GIWW) connecting Texas at Brownsville all the way through the southern states to Apalachicola, Florida

HNC – Houma Navigation Canal; man-made canal that runs from Houma and the GIWW to the Gulf of Mexico

IHNC – **Inner Harbor Navigation Canal, known to local New Orleans residents as 'The Industrial Canal'; it connects Lake Pontchartrain with the Mississippi River and the GIWW**

Intermodal - pertaining to transportation involving more than one form of carrier, as truck, ship, and rail

LNG – Liquefied natural gas

Maritime - connected with the sea in relation to navigation, shipping, etc.

MTS – Marine Transportation System

Navigable - capable of accommodating ships, boats, and barges (of adequate depth and width)

PED – Preconstruction, Engineering & Design; the design stage of a project before construction

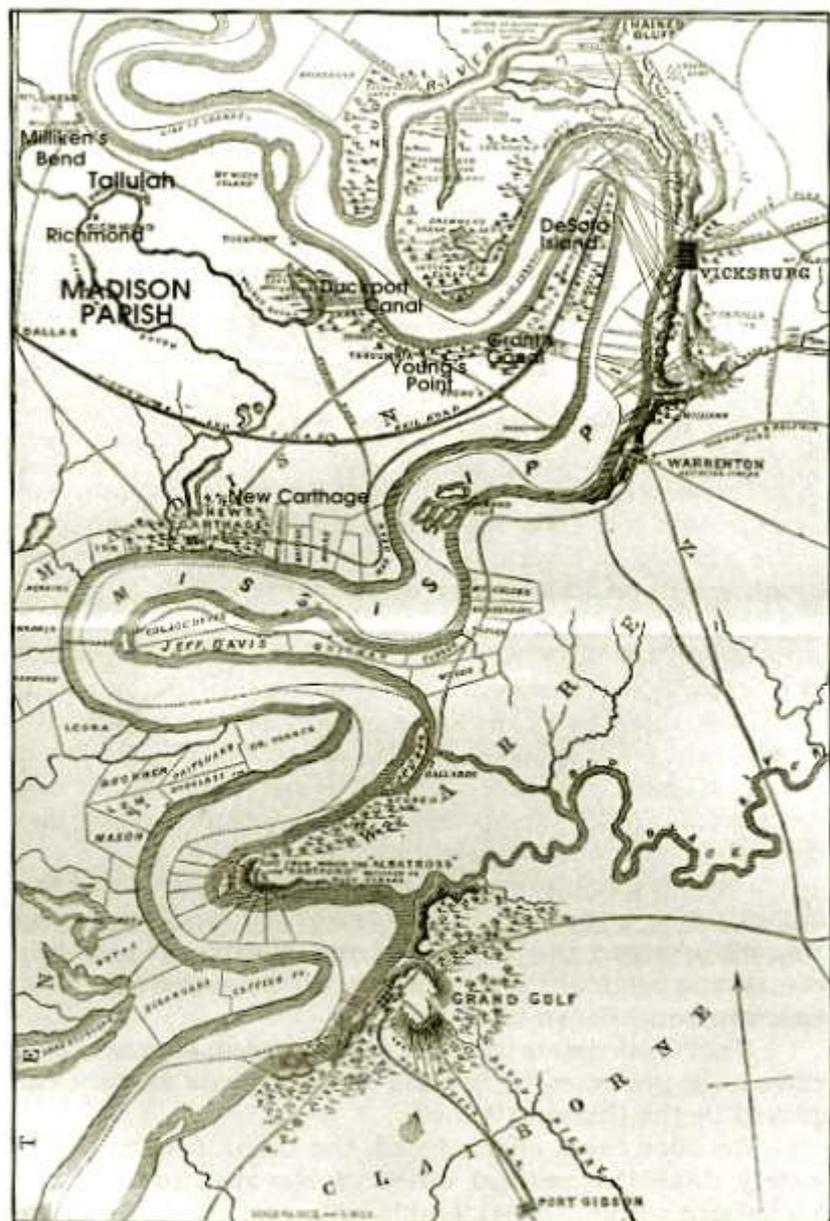
Tonnage - the capacity of a merchant vessel, expressed either in units of weight, as deadweight tons, or of volume, as gross tons; The total shipping of a country or port, figured in tons, with reference to carrying capacity; weight measured in tons

Tributaries - a stream that flows to a larger stream or other body of water

USACE – US Army Corps of Engineers

WCUS - Waterborne Commerce of United States

WRDA – Water Resources Development Act, The Water Resources Development Act is a biennial piece of federal legislation that is the main vehicle for authorizing water projects to be studied, planned and developed by the U.S. Army Corps of Engineers. It is also the **legislative vehicle for implementing policy changes with respect to the Corps' water resource projects and programs.**



MAP OF THE MISSISSIPPI RIVER FROM HAINES' BLUFF TO BELOW GRAND GULF.

HARPER'S WEEKLY, MAY 23, 1863

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