

NATIONAL WATERWAYS CONFERENCE

13 SEPTEMBER 2018

New Orleans District Update

Col. Michael Clancy, Commander, New Orleans District

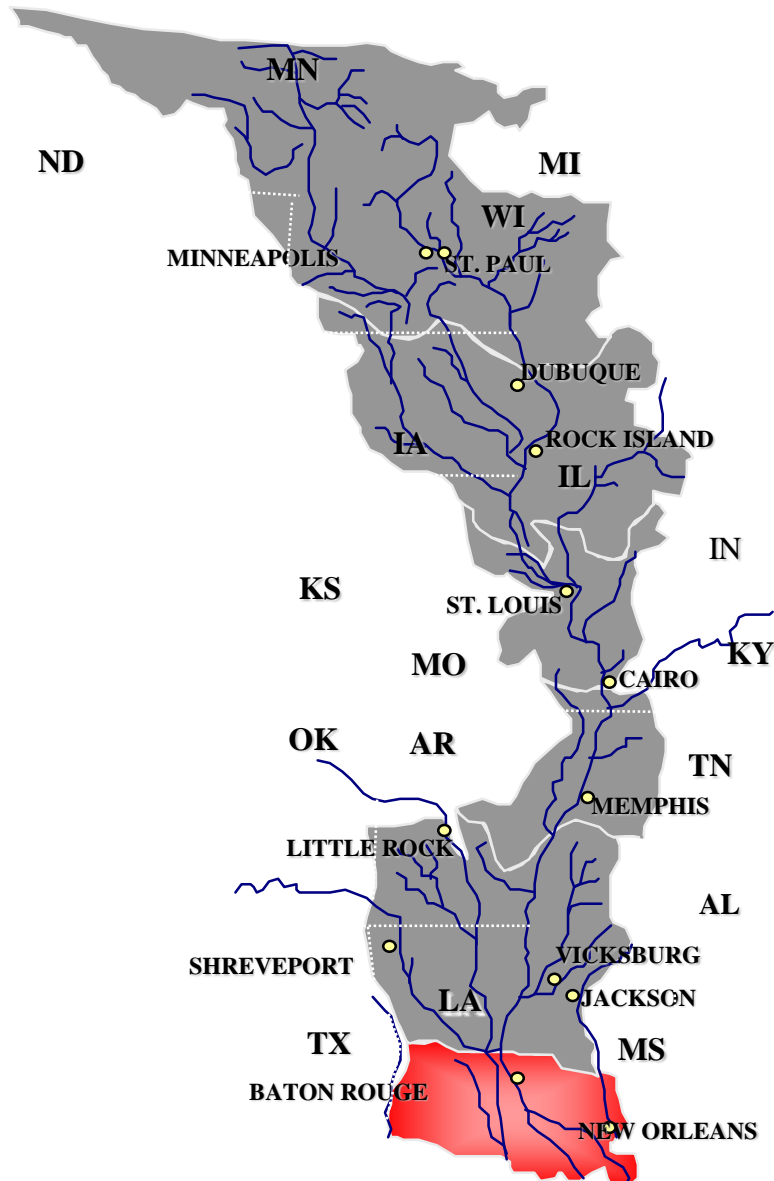
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NEW ORLEANS DISTRICT

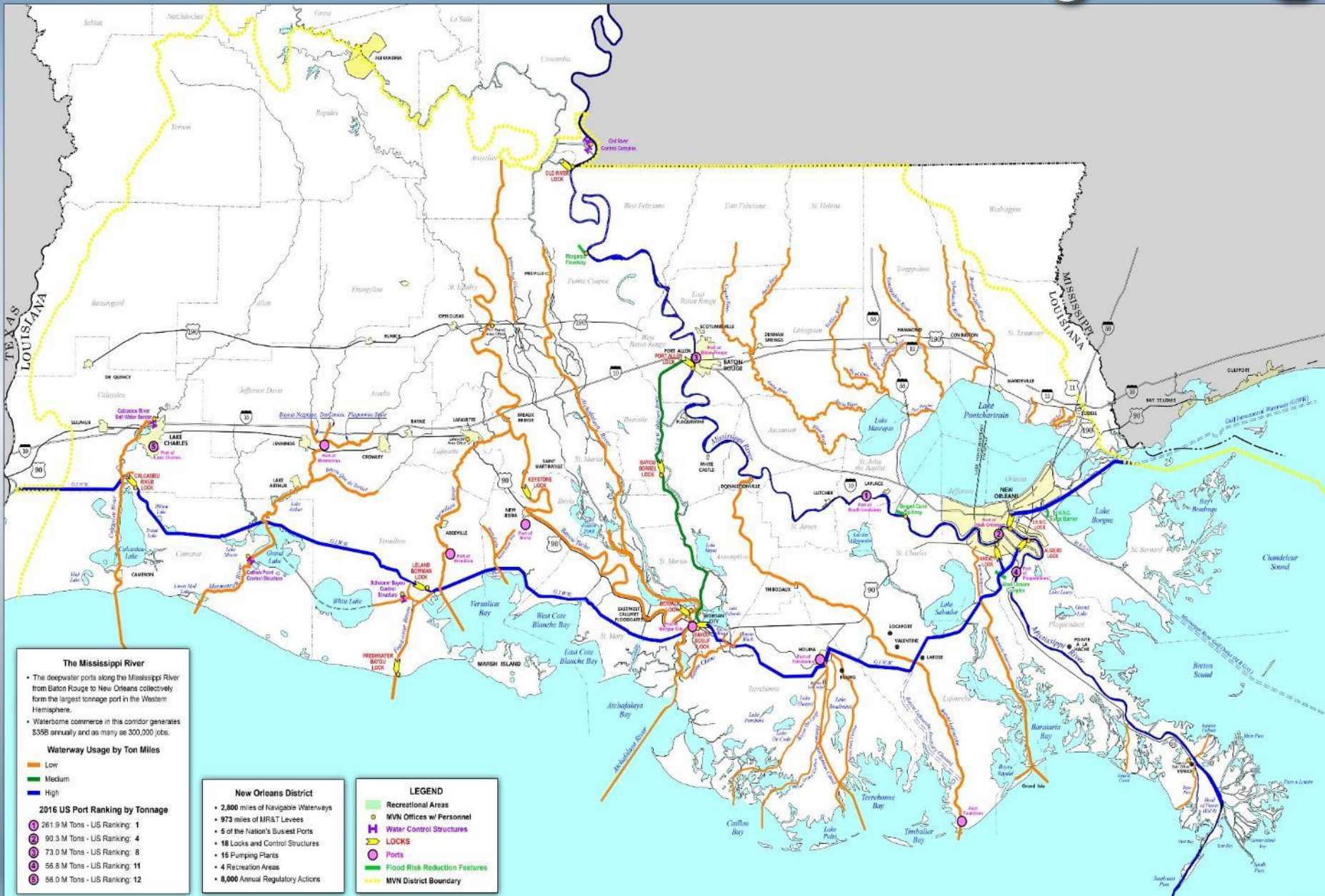


- **2,800** miles of navigable waterway
- **973** miles of MR&T levees
- **325** miles of hurricane risk reduction levees
- **5** of the nation's **15** busiest ports
- **18** locks and control structures
- **15** pumping plants
- **13** recreation areas
- **8,000** annual regulatory actions





New Orleans District Fact & Figures



The Mississippi River

- The deepwater ports along the Mississippi River from Baton Rouge to New Orleans collectively form the largest tonnage port in the Western Hemisphere.
- Waterborne commerce in this corridor generates \$39B annually and as many as 300,000 jobs.

Waterway Usage by Ton Miles

- Low (Orange line)
- Medium (Green line)
- High (Blue line)

2016 US Port Ranking by Tonnage

- 1 261.9 M Tons - US Ranking: 1
- 2 90.3 M Tons - US Ranking: 4
- 3 73.0 M Tons - US Ranking: 8
- 4 58.8 M Tons - US Ranking: 11
- 5 58.0 M Tons - US Ranking: 12

New Orleans District

- 2,800 miles of Navigable Waterways
- 973 miles of MR&T Levees
- 5 of the Nation's Busiest Ports
- 18 Locks and Control Structures
- 15 Pumping Plants
- 4 Recreation Areas
- 8,000 Annual Regulatory Actions

LEGEND

- Recreational Areas (Green circle)
- MVN Offices w/ Personnel (Yellow circle)
- Water Control Structures (H symbol)
- LOCKS (Yellow arrow)
- Ports (Purple circle)
- Flood Risk Reduction Features (Green line)
- MVN District Boundary (Yellow dashed line)

A Stronger System Than Ever Before

LAKE PONTCHARTRAIN



17th St.



Orleans



London



Seabrook

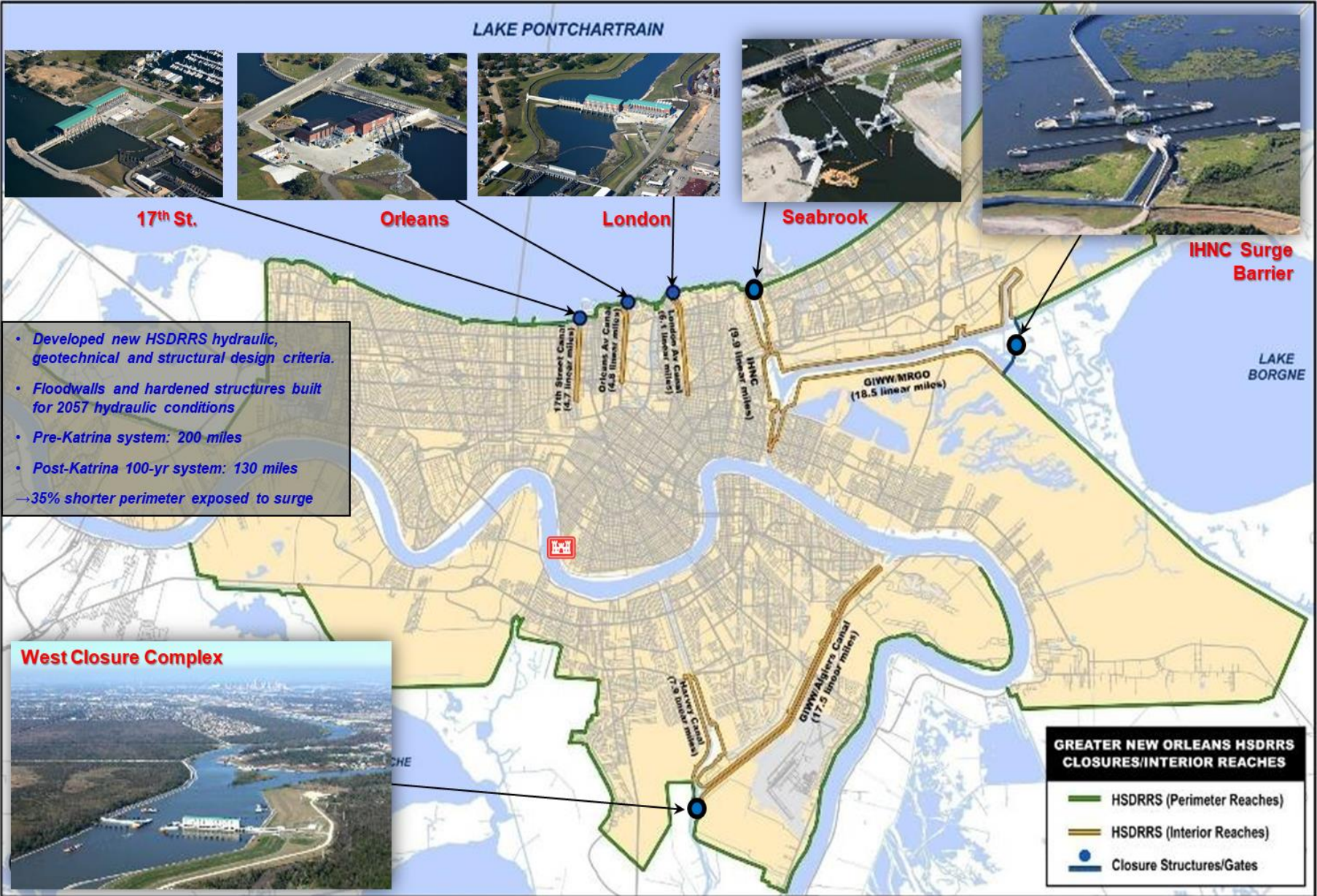


IHNC Surge Barrier

- Developed new HSDRRS hydraulic, geotechnical and structural design criteria.
- Floodwalls and hardened structures built for 2057 hydraulic conditions
- Pre-Katrina system: 200 miles
- Post-Katrina 100-yr system: 130 miles
- 35% shorter perimeter exposed to surge



West Closure Complex



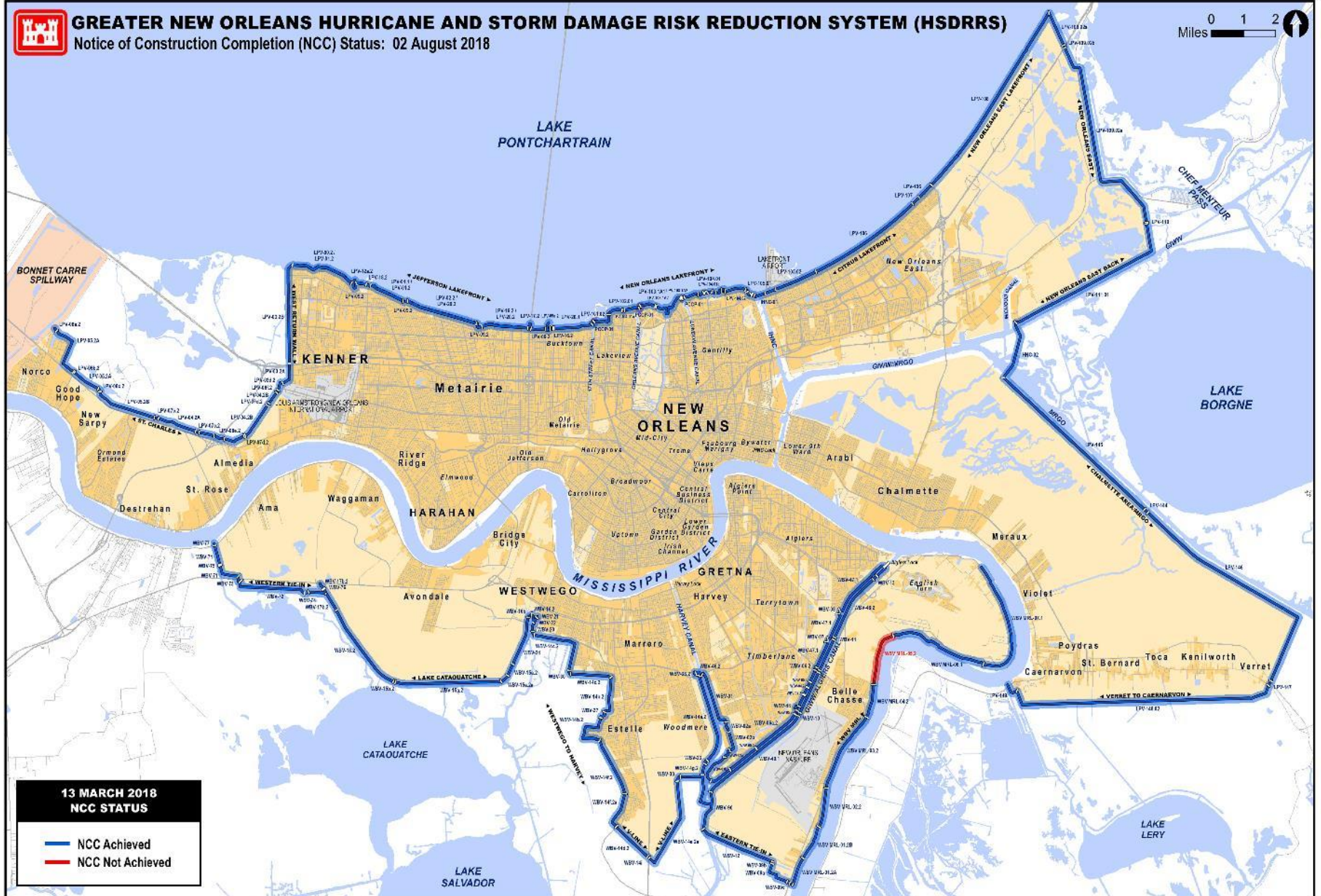
GREATER NEW ORLEANS HSDRRS CLOSURES/INTERIOR REACHES

- HSDRRS (Perimeter Reaches)
- HSDRRS (Interior Reaches)
- Closure Structures/Gates



HSDRRS STATUS MAP

 **GREATER NEW ORLEANS HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM (HSDRRS)**
Notice of Construction Completion (NCC) Status: 02 August 2018

0 1 2
Miles 



13 MARCH 2018
NCC STATUS

-  NCC Achieved
-  NCC Not Achieved

HSDRRS REMAINING WORK



\$1.38 B
\$105 M

SELA Interior Drainage



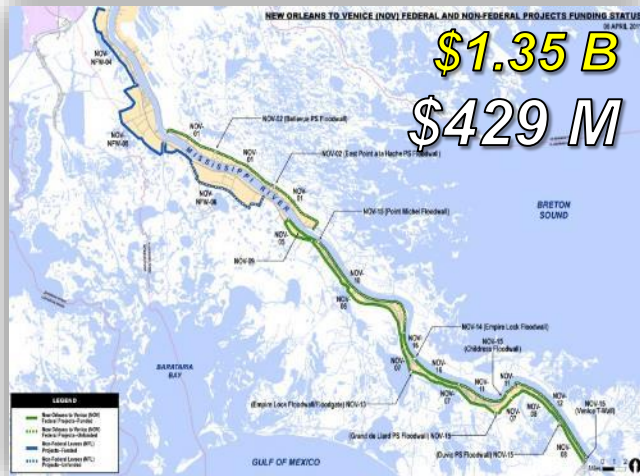
\$414 M
\$189 M

Armoring



\$286 M
\$133 M

Environmental Mitigation



\$1.35 B
\$429 M

***New Orleans to Venice /
Non-Federal Levees***

Program Appropriations
Unobligated Funds



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2018 Mississippi River High Water



- Peak discharge of **2.07M** cfs (**8th** largest since 1912)
- **12th** operation of Bonnet Carré Spillway
 - **183** of **350** bays opened
 - **2nd** shortest opening (**22** days)
- Flood fight initiated on **FEB 26**
 - Team effort with local levee districts
 - **237** hotspots closely monitored (down from **286** in **2016**)
- **Six** dredges working in Southwest Pass
 - **42** ft draft restriction



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Short-Term Repairs: \$306.4M

- \$25.2M in FY17 Supplemental Funds
 - MR&T-C and MR&T-O&M
- \$281.2M in FY18 Supplemental Funds
 - O&M, MR&T-C and MR&T-O&M

Long-Term Projects: 1.388 Billion

- **Comite River Diversion (\$343M)**
- **East Baton Rouge Flood Control (\$255M)**
- **West Shore Lake Pontchartrain (\$760M)**
- **Grand Isle (\$15M)**
- **Five Studies (\$3M each)**
 - Upper Barataria Basin FRM
 - South Central Coastal
 - Amite River & Tribs Comp Study - East of Miss. River
 - West Bank & Vicinity Levee Lifts GRR
 - Lake Pontchartrain & Vicinity Levee Lifts GRR



FY 2018 WORK PLAN FUNDING

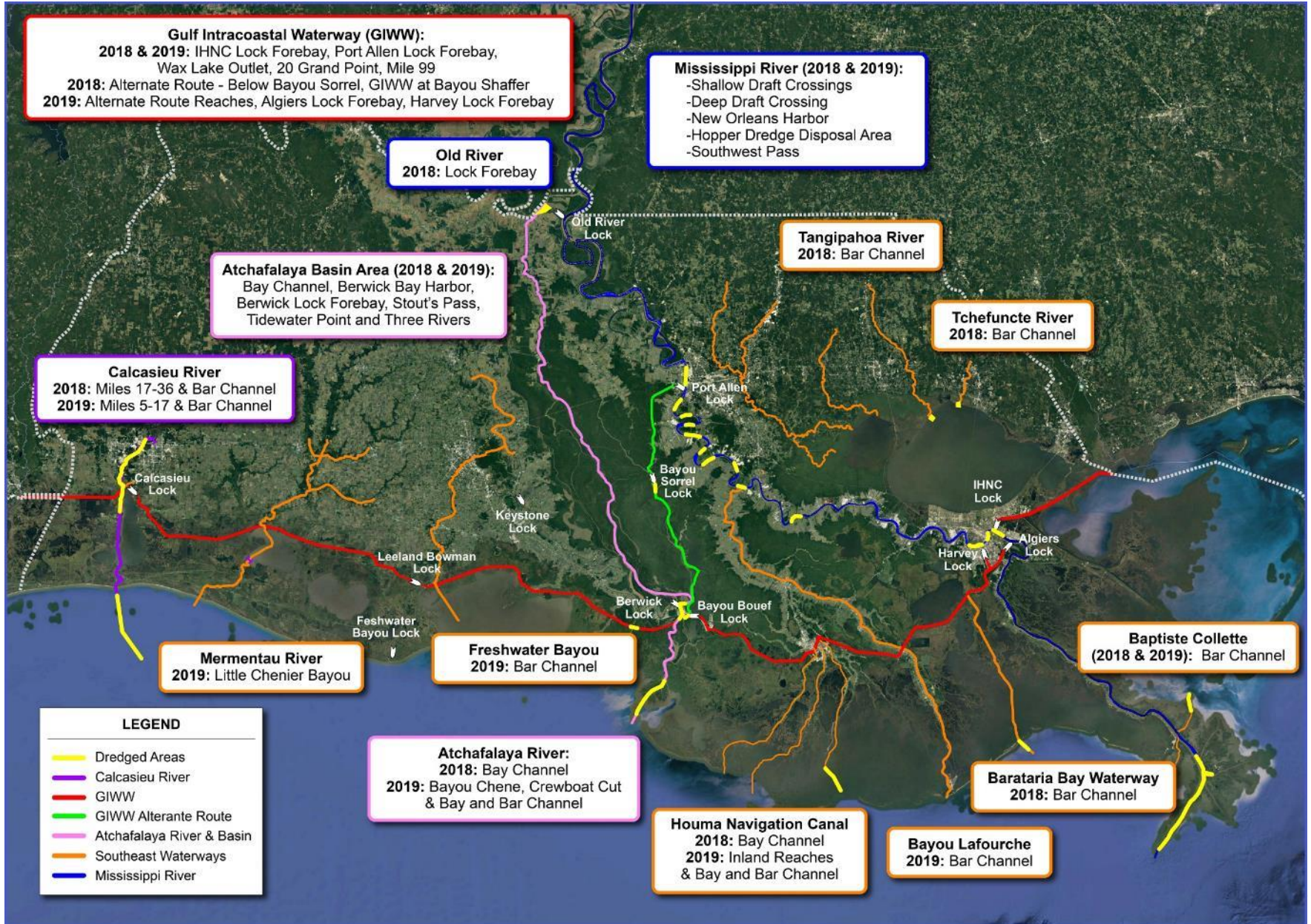
RELEASED JUNE 11, 2018

New Orleans received ~\$154M of \$1.7B total




- **Studies**
 - Calcasieu Lock
 - IHNC
 - Southwest Coastal
- **Projects**
 - Comite
 - Atchafalaya Basin
 - MR&T
 - Old River Control
 - Houma Navigation Canal


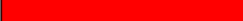





















FY2018 / 2019 DREDGING



**NEW ORLEANS DISTRICT
FY 2018 REMAINING CONTRACT DREDGING SCHEDULE &
FY 2019 CONTRACT DREDGING SCHEDULE**

LEGEND	
Hopper Dredge	
Cutterhead Dredge	
Bucket Dredge	

Project	Bid Open Date	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Point of Contact
New Orleans Harbor Cutterhead Dredge Rental #1-18 (includes dredging in GIWW Lock Forebays)	5/29/2018																Michelle Kornick 504-862-1842
Atchafalaya Basin, GIWW, & Miscellaneous Projects IDIQ (includes dredging in Old River)	7/6/2017																Tim Connell 504-862-2630
Houma Navigation Canal Bay & Bar	9/5/2018																Ray Newman 504-862-2050
Freshwater Bayou Bar Channel	8/28/2018																Tracy Falk 504-862-2971
Mermentau Little Chenier Bayou	9/6/2018																Tracy Falk 504-862-2971
Calcasieu River Miles 5-17 & Devil's Elbow	9/6/2018																Tracy Falk 504-862-2971
Mississippi River Hopper Dredge Disposal Area	9/6/2018																Michelle Kornick 504-862-1842
Atchafalaya River Bayou Chene, Bay Channel, & Bar Channel	9/5/2018																Tim Connell 504-862-2630
Bayou Lafourche Bar Channel	10/23/2018																Ray Newman 504-862-2050
Baptiste Collette Bar Channel	11/15/2018																Ray Newman 504-862-2050
Calcasieu River Bar Channel #1-18	10/31/2018																Tracy Falk 504-862-2971
Houma Navigation Canal Inland Reaches	12/20/2018																Ray Newman 504-862-2050
Southwest Pass Hopper Dredge Rental #1-19	2/20/2019																Michelle Kornick 504-862-1842
Southwest Pass Cutterhead Dredge Rental #1-19	2/21/2019																Michelle Kornick 504-862-1842
Southwest Pass Hopper Dredge Rental #2-19	3/7/2019																Michelle Kornick 504-862-1842
Southwest Pass Hopper Dredge Rental #3-19	3/26/2019																Michelle Kornick 504-862-1842
Southwest Pass Hopper Dredge Rental #4-19	4/9/2019																Michelle Kornick 504-862-1842
New Orleans Harbor Cutterhead Dredge Rental #1-19 (includes dredging in GIWW Lock Forebays)	5/18/2019																Michelle Kornick 504-862-1842
Atchafalaya Basin, GIWW, & Miscellaneous Projects IDIQ (includes dredging in Old River)	7/19/2019																Tim Connell 504-862-2630
Calcasieu River Miles 15-36 & Devil's Elbow	7/10/2019																Tracy Falk 504-862-2971
GIWW Alternate Route	8/21/2019																Vic Landry 504-862-2407

Note: Estimated dredging dates are 25 Jul 2019 to 25 Oct 2019.

Note: Estimated dredging dates are 9 Sep 2019 to 7 Jul 2020.

Note: Estimated dredging dates are 21 Sep 2019 to 21 Jan 2020.

Note: The highlighted projects are partially or fully funded with Bipartisan Budget Act of 2018 funds.

BENEFICIAL USE OF DREDGED MATERIAL

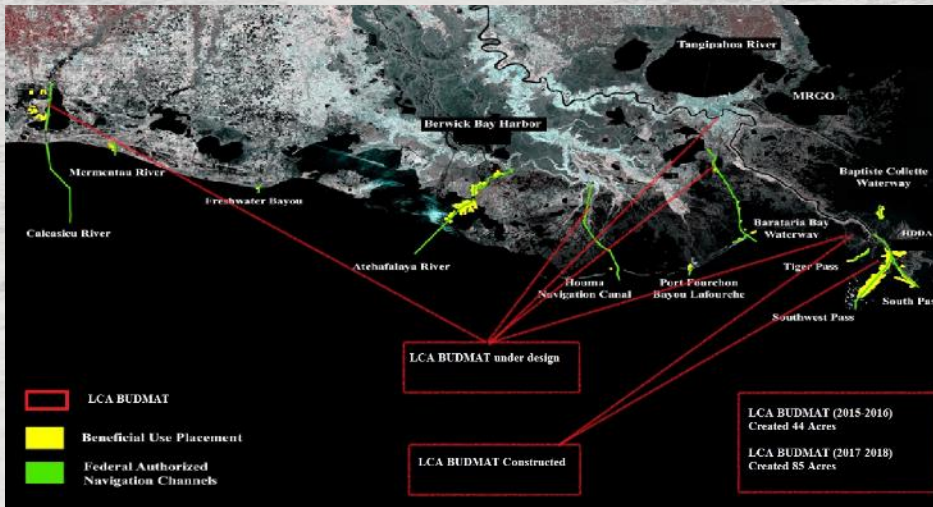
- **31,401** acres created since 1976
- Upcoming LCA BUDMAT Calcasieu/Sabine project expected to create **400** acres

Design Agreements for additional projects with:

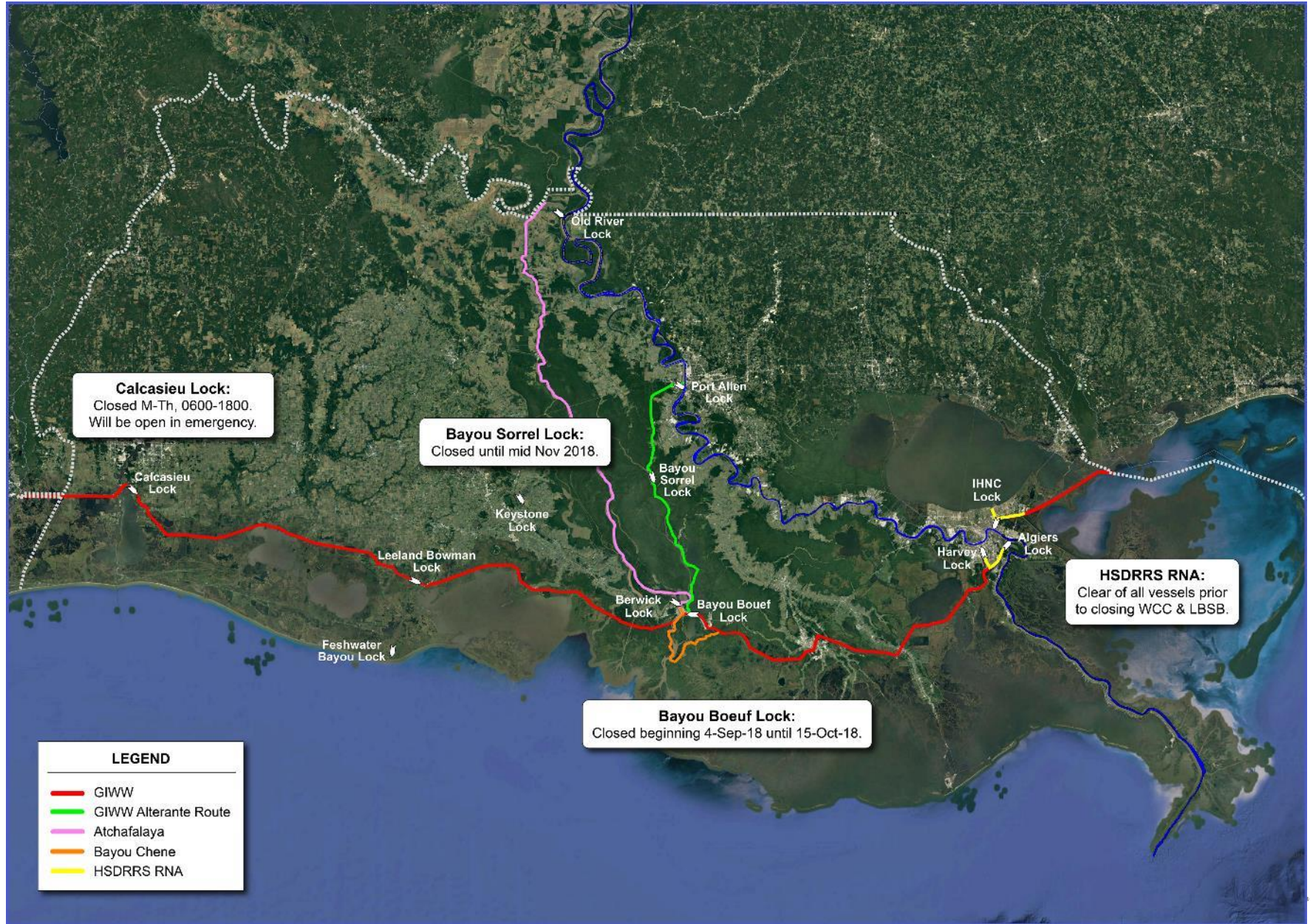
- Plaquemines Parish – Tiger Pass 2
- Jefferson Parish – Barataria Waterway
- Port of Lake Charles – Calcasieu River/Sabine Refuge (Sept 2018)

Letter of commitment:

- St Bernard Parish -- Mississippi River near New Orleans Harbor



MVN INLAND NAVIGATION STATUS



Current and Future Planned Work On GIWW Within New Orleans District 2018-2019

- **Calcasieu Lock Chamber Guidewall Replacement – Completion October 2019**
- **Bayou Boeuf Lock Dewatering and Major Repairs – Completion October 2018**
- Bayou Boeuf Lock South Chamber Guidewall Replacement
- Bayou Boeuf Lock Guidewalls Timber Replacement with Composite Plastic
- Bayou Sorrel Lock South End Dewatering and Major Repairs
- Bayou Sorrel Lock Guidewalls Timber Replacement with Composite Plastic
- Bayou Sorrel Lock Southwest Approach Dolphin and Guidewall Replacement
- IHNC Lock River End Floating Guidewall Replacement (Southwest G/W)
- Dredging at Various Locations – Morgan City Area and Lock Forebays and Alternate Route Below Bayou Sorrel Lock



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Calcasieu Lock Chamber Wall Replacement



Scope

- The south chamber guidewall of Calcasieu Lock is being replaced under a contract with duration of ~400 days.
- Multipurpose Lock – Navigation, Flood & Salinity Control
- Limited hours available for open pass (east gage >2')
- High tonnage lock – 40.6 M tons in 2017; 15th nationwide
- Lock typically passes average of 1100 vessels per month

Challenges

- Vessel queue has varied from 60-100+ since pile driving started
- Nights/Weekend construction stand downs have not matched traffic

Path Forward

- Partnering with GICA, USCG, Navigation Industry
- Navigation industry stationed pilot at lock approximately 3 weeks
- Construction contractor began 4-day work week 30 Aug
- Additional Construction Stand Downs If Needed
- Guide pile installation
- Installation of temporary mooring pile/bits



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IHNC SOUTHWEST FLOATING GUIDEWALL & DOLPHIN FEBRUARY – DECEMBER 2019



Present Southwest Guide Wall



Present Southeast Guide Wall



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BAYOU BOEUF LOCK DEWATERING AND MAJOR REPAIRS: FEBRUARY – OCTOBER 2018



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BAYOU BOEUF LOCK EAST END DEWATERING AND MAJOR REPAIRS: FEBRUARY – JULY 16, 2018



East Gates fully repaired and reinstalled

- Major marine accident in late December caused severe gate damage
- Gates pulled in wet and placed on land for damage repair
- Performed complete gate rehab: Machinery, seals, and concrete repairs
- Due to high river levels, bypass around lock through Bayou Chene required for several months



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BAYOU BOEUF LOCK WEST END DEWATERING AND MAJOR REPAIRS: JULY 16 – OCTOBER 15, 2018



Removal of Southwest Gate on 19 Jul 2018



West Gates removed from Lock prepped for steel repair, sandblasting and painting

- Remove gates, refurbish gates on land
- Lock to operate in “Open Pass” mode as long as water elevations allow
- Intermittent closures of several days to facilitate pintle work, bypass around lock through Bayou Chene available
- Dewater the west end sector gate bay in October
- Machinery, seals, and concrete repairs
- Guidewall repairs



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BAYOU SORREL LOCK SOUTH END DEWATERING AND MAJOR REPAIRS: AUGUST 15 – NOVEMBER 15, 2018



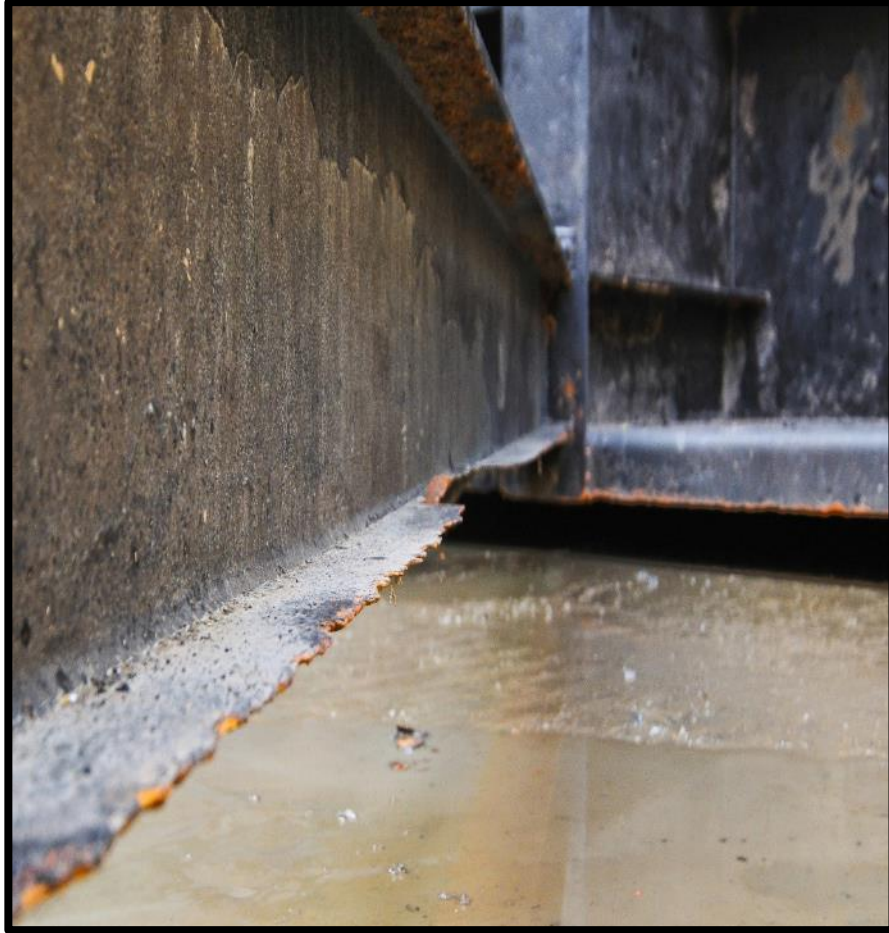
- Complete closure of the lock required
- Must be completed during low water season
- Complete gate, seals, machinery and limited concrete refurbishment
- Major steel work required on gates
- Guidewall repairs
- Detour around lock required via Algiers or Old River Lock



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BAYOU SORREL LOCK SOUTH END DEWATERING AND MAJOR REPAIRS: AUGUST 15 – NOVEMBER 15, 2018



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Calcasieu Saltwater Barrier Tainter Gate Failure



Scope

- One of the tainter gates on the floodway failed on 1 Jan 18. The remaining 4 gates are in imminent danger of failure.
- The Saltwater Barrier consists of a navigation structure with one set of gates (56' wide by 13' deep) and 5 tainter gates (40' wide by 20' deep).
- Purpose of the structure is to minimize salinity north of the structure as a result of the Calcasieu River and Pass being straightened, widened and deepened to current authorized dimensions of -40' x 400'.

Schedule

- Failed Tainter Gate was removed on 29 Jan 18
 - Repair has been completed
- Remaining 4 tainter gates will be repaired starting 1 Oct 18
 - The summer months are high salinity months. The winter months are the best time to pull and repair the gates.

Path Forward

- The failed gate was repaired using emergency 1% funding from HQUSACE.
- The remaining 4 gates will be repaired using FY18 Work Plan funds.



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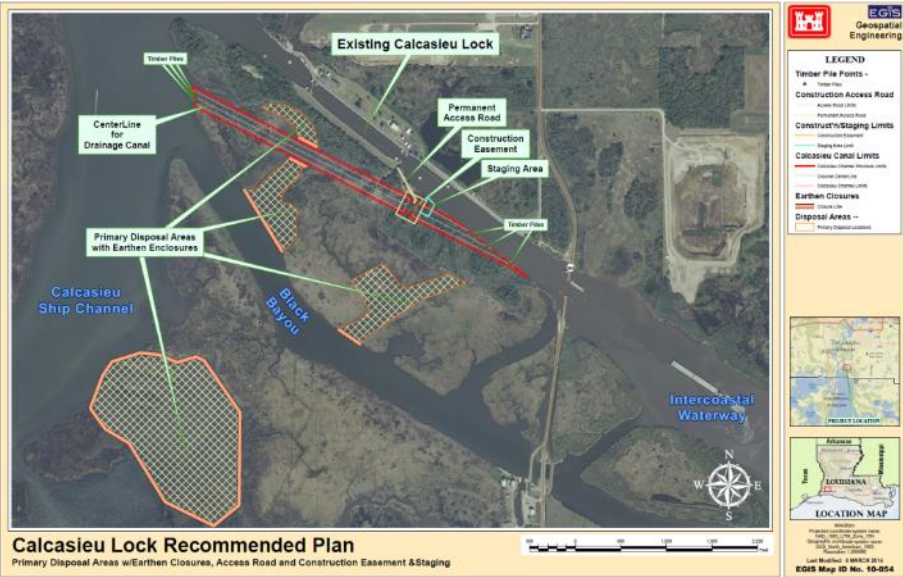


MISSISSIPPI RIVER SHIP CHANNEL

- Partnering effort with La. Department of Transportation
- Evaluate benefits and costs associated with deepening the Mississippi River Ship Channel from 45' to 50' between Baton Rouge and the Gulf of Mexico
- Director's Report for the General Reevaluation Report signed
- Benefit Cost Ratio is **7:2**
- Anticipated cost to deepen to 50' is **\$245 M**



Calcasieu Lock, LA



STATUS

- The Report of the Chief of Engineers was signed on 2 Dec 2014
- The ASA(CW) transmitted the final report to Congress on 20 August 2015
- Authorized for construction in Section 1401 WRDA 2016 at a total cost of \$17.4M
- Increased structure size necessary due to updated hydraulic modeling conditions
- ERDC performing 2d modeling which will be followed by ship simulation modeling.

CHALLENGES

- Efforts to complete PED phase include:
 - 95% P&S
 - Ship Sim Modeling required
 - Updated environmental compliance
- Verification that the project remains under the Section 902 Limit due to increased size of the structure from what was recommended in the Chief's Report

PATH FORWARD

- Project received recompletion funds in the amount of \$1.035M to complete PED phase.
- Confirm that project remains under the Section 902 Limit and complete PED to position project to advance to construction



IHNC LOCK REPLACEMENT GENERAL REEVALUATION REPORT



CHALLENGES

- Construction of the project is strongly opposed by local residents
- High risk for future litigation due to public perception of project impacts
- 3x3x3 exemption approved 3 Oct 17 for additional \$1.435 mil and completion of a Chief's Report NLT 12 Dec '19

STATUS

- Based on the economic modeling results the TSP is 110 ft x 900 ft x 22 ft with a BCR of 4.78.
- Draft report was released to the public 6 Jan '17
- Public Review ended on 7 April 17
- No funds budgeted in FY18 or for FY19
- FY18 Workplan allowance now funding study resumption to completion

PATH FORWARD

- Ensure communication is maintained with local residents and stakeholders
- GRR will update the traffic impact analysis and Community Impact Mitigation Plan (CIMP)
- Scheduled Final SEIS S&A/Public Review Start – 12 Sep '19
- Chief's Report – 12 Dec '19



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THANK YOU



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