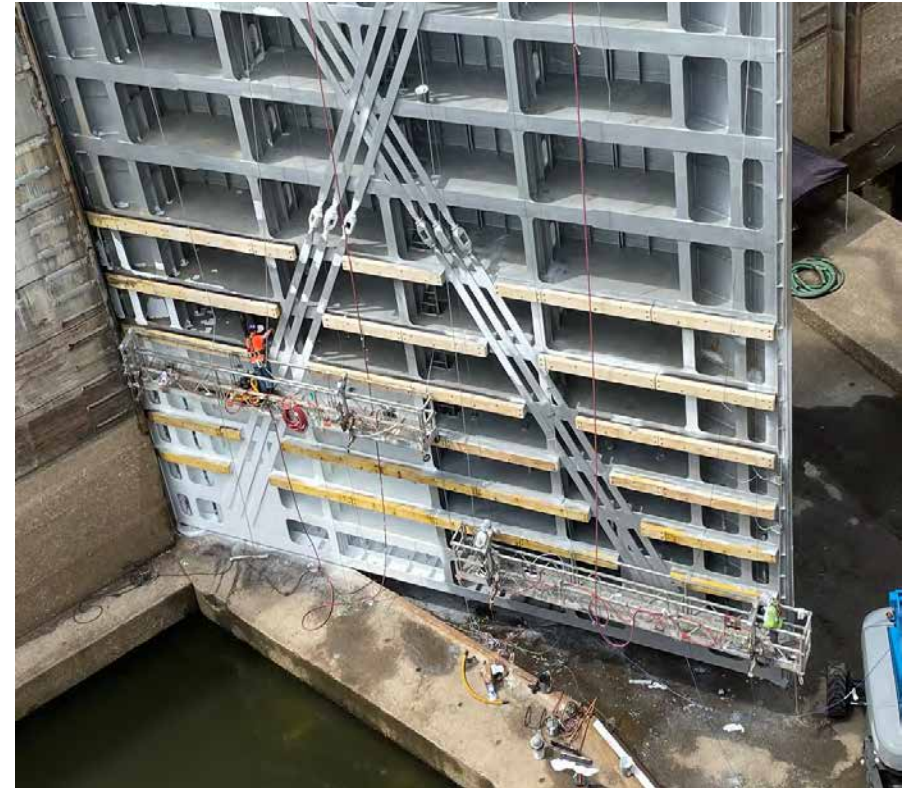
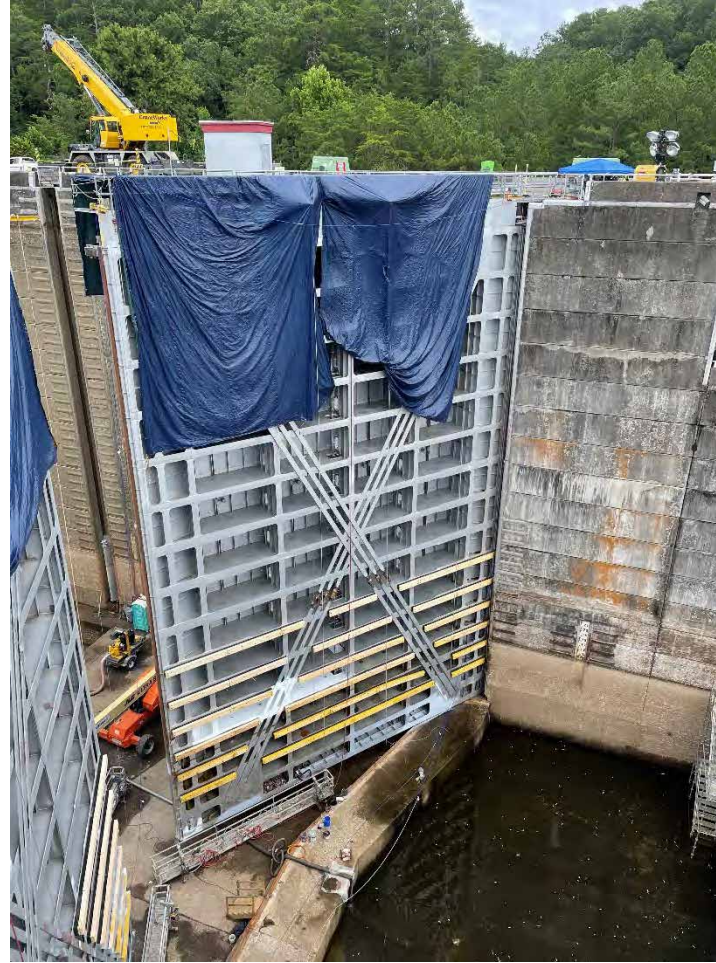


PREPPING AND PAINTING



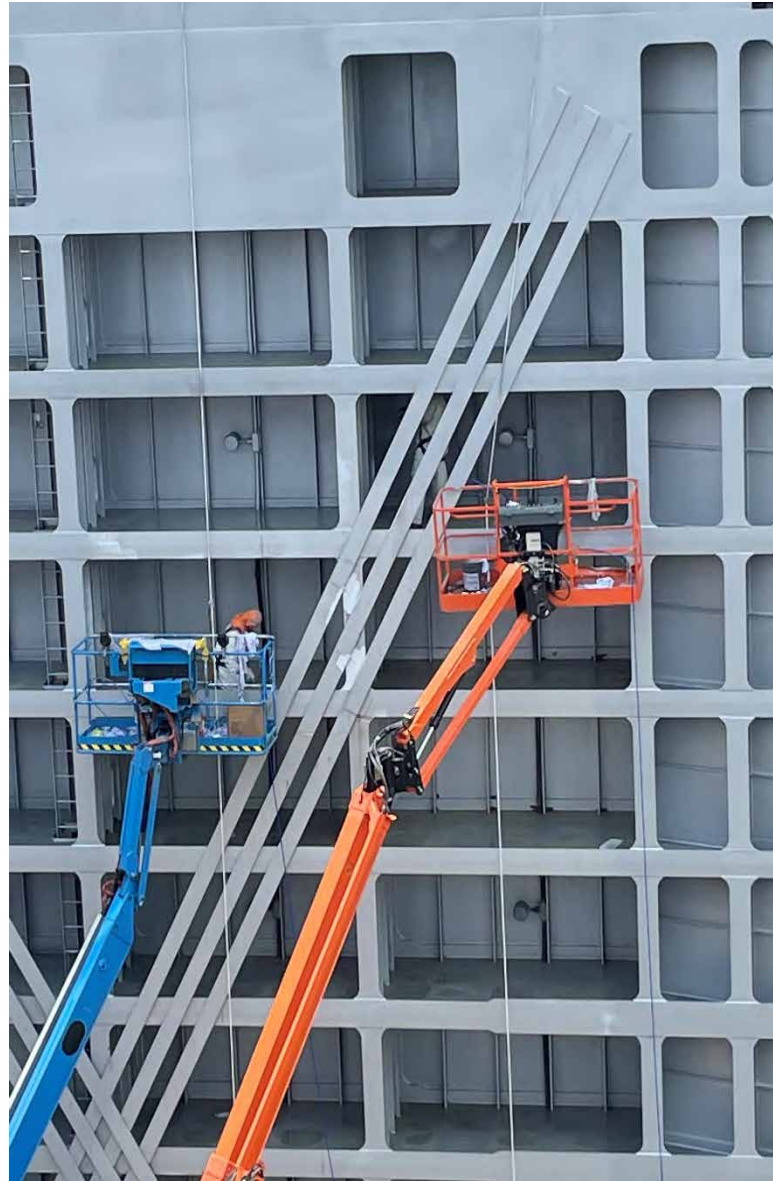
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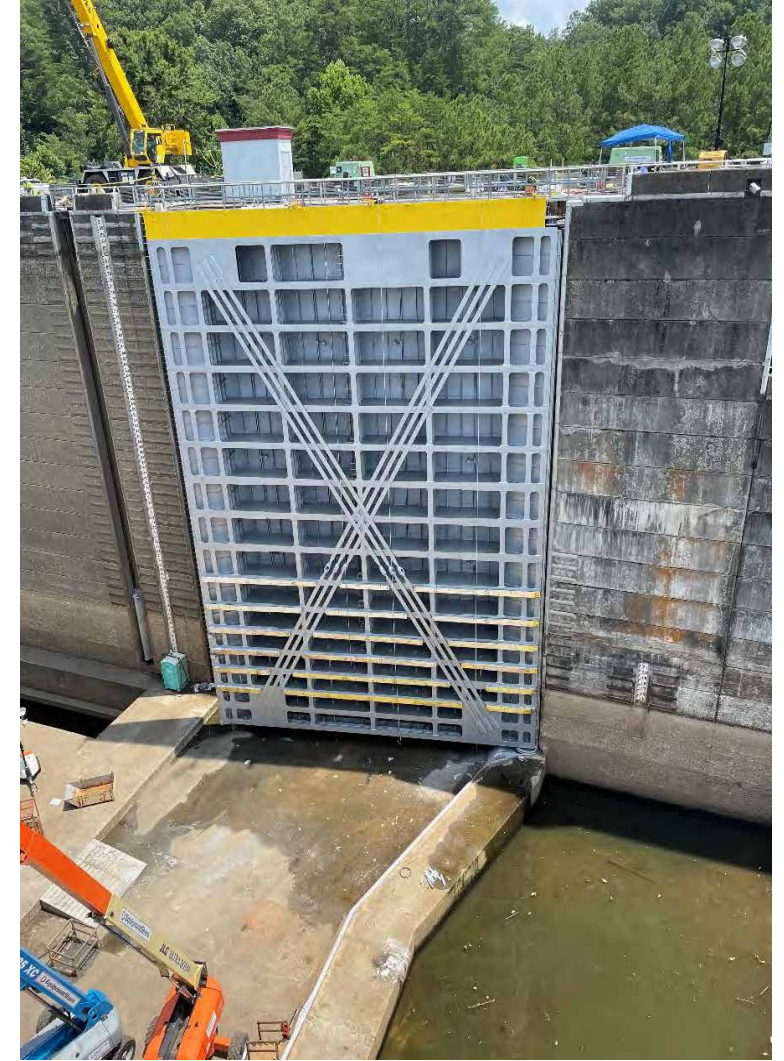
BANKHEAD LOCK CLOSURE



Painting lower gates



Completed Painting & Gate Repairs



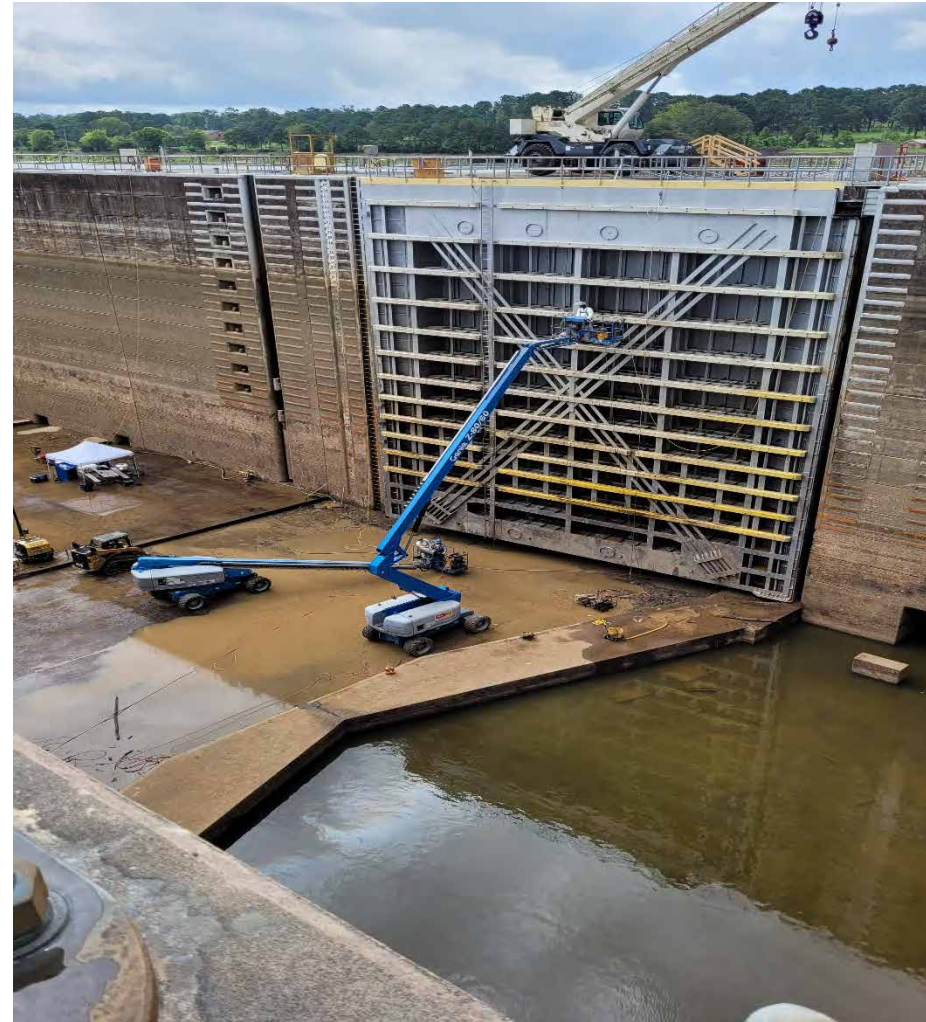
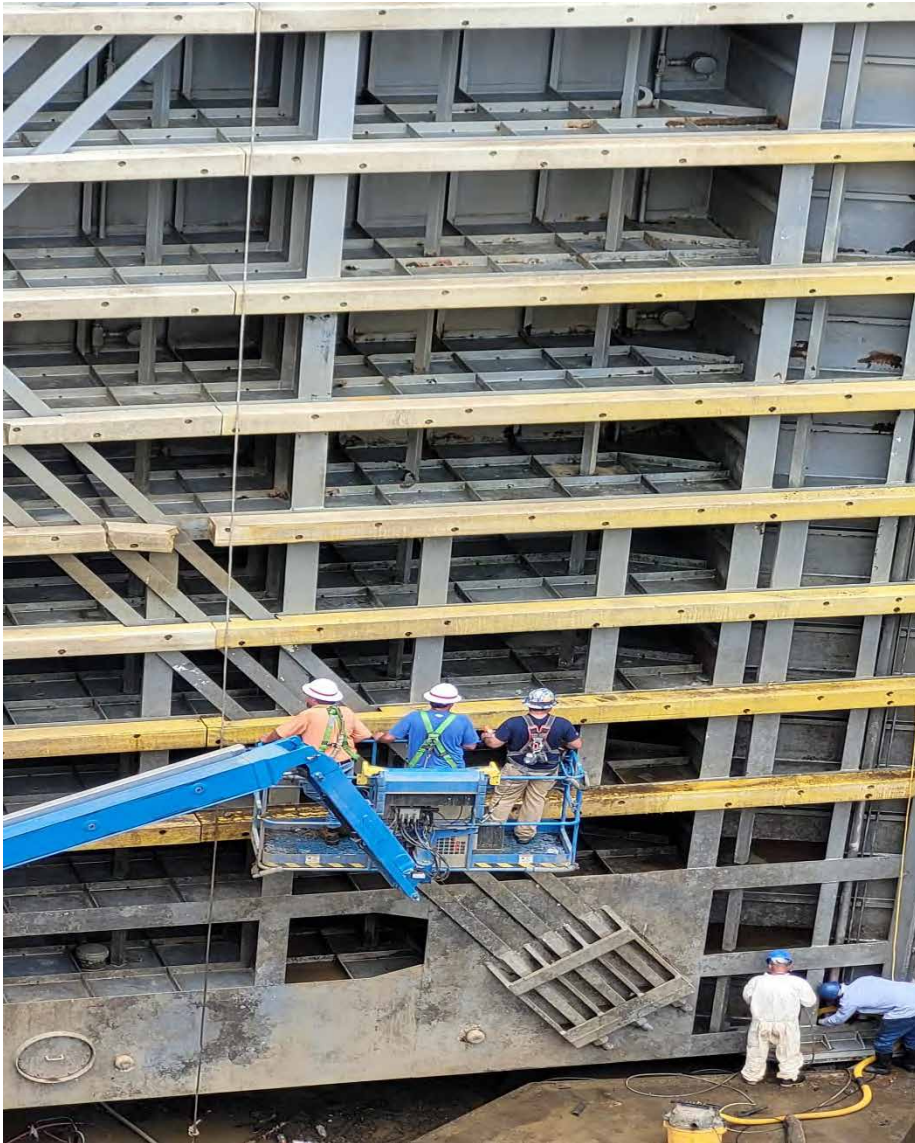
OLIVER LOCK – DEWATERED



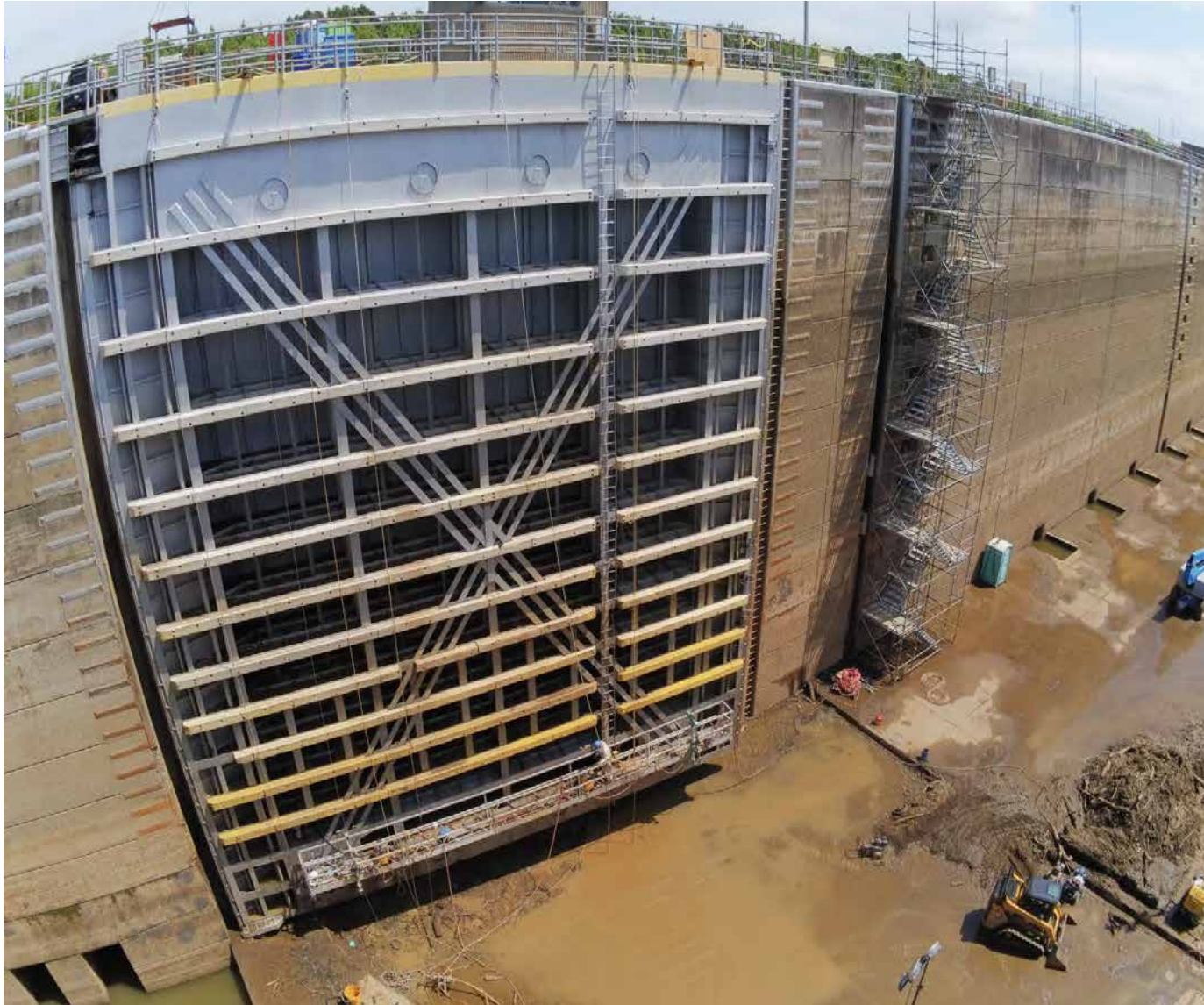
OLIVER LOCK



Oliver Lock dewatered, inspection & painting



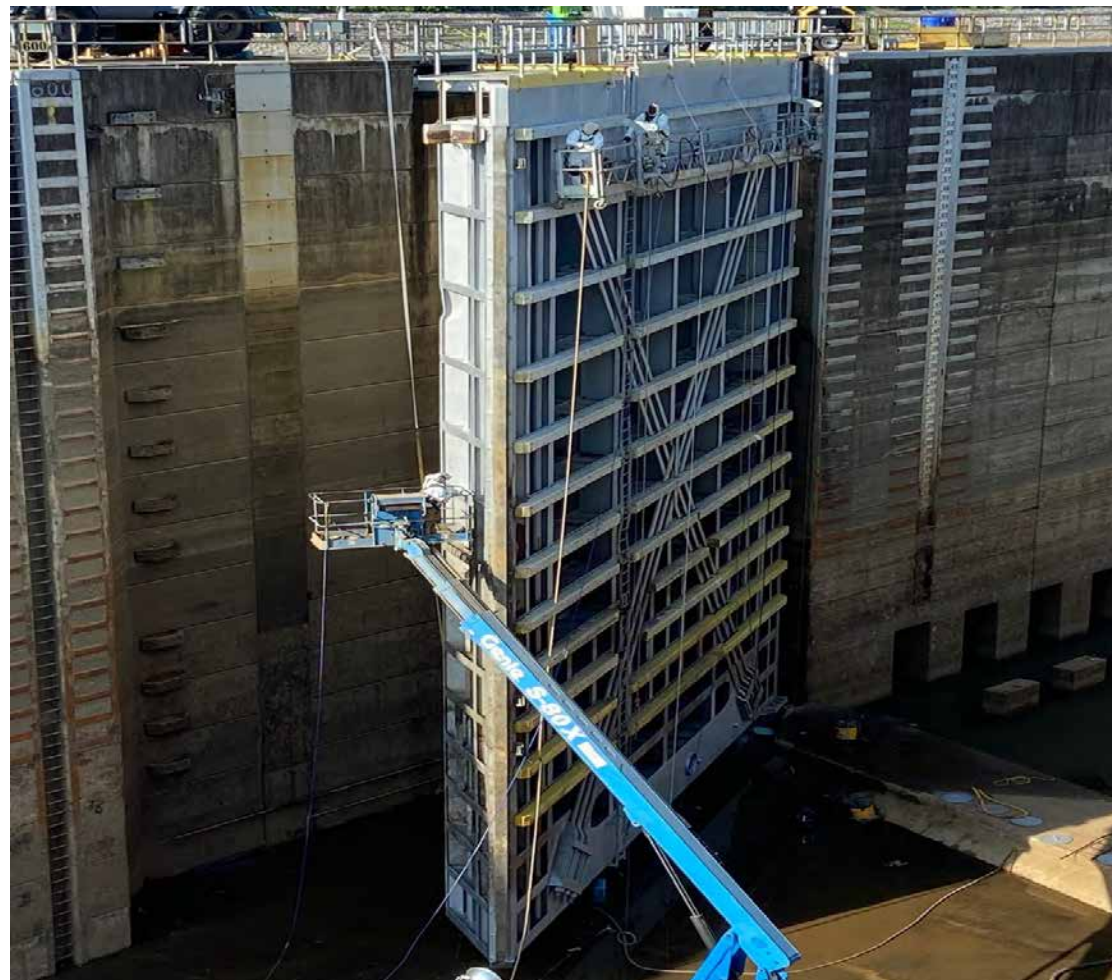
OLIVER LOCK – REPAIRS AND PAINT PREP



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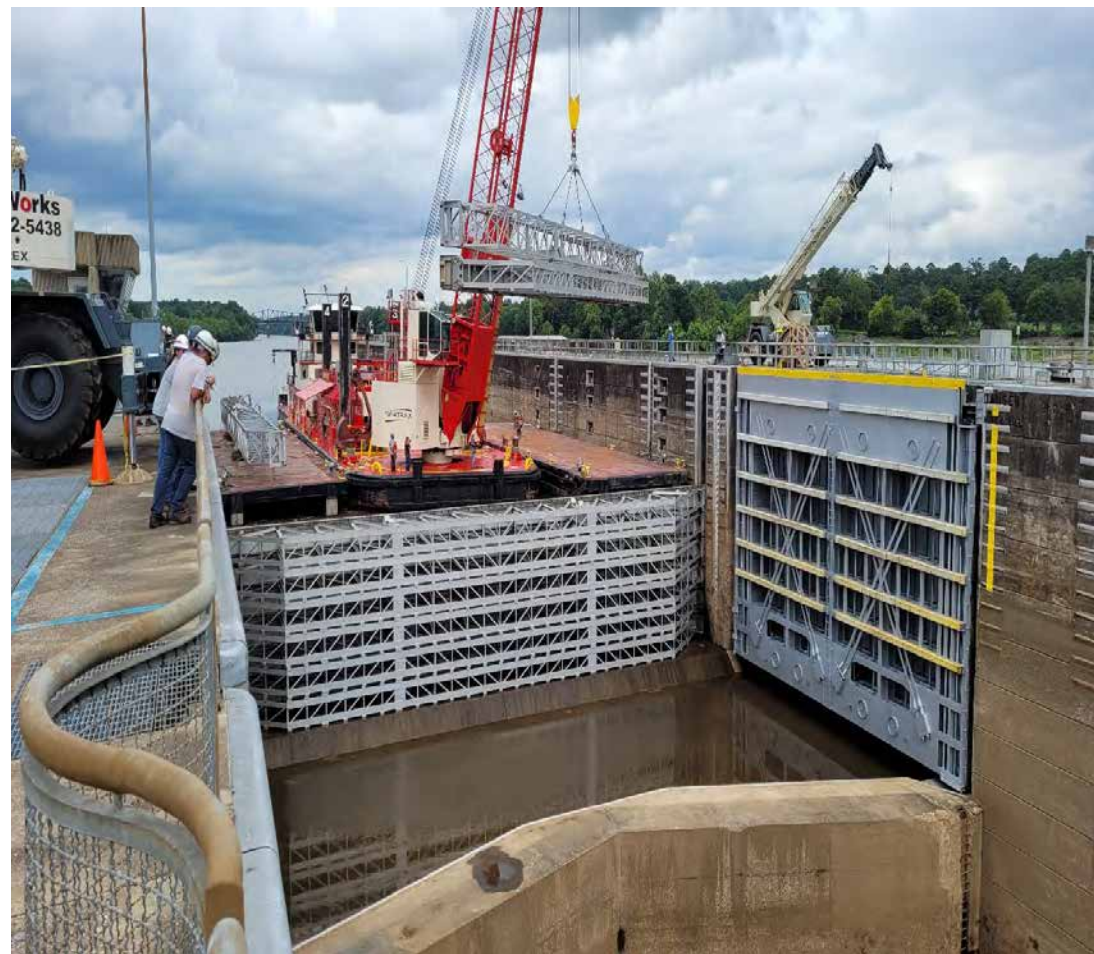
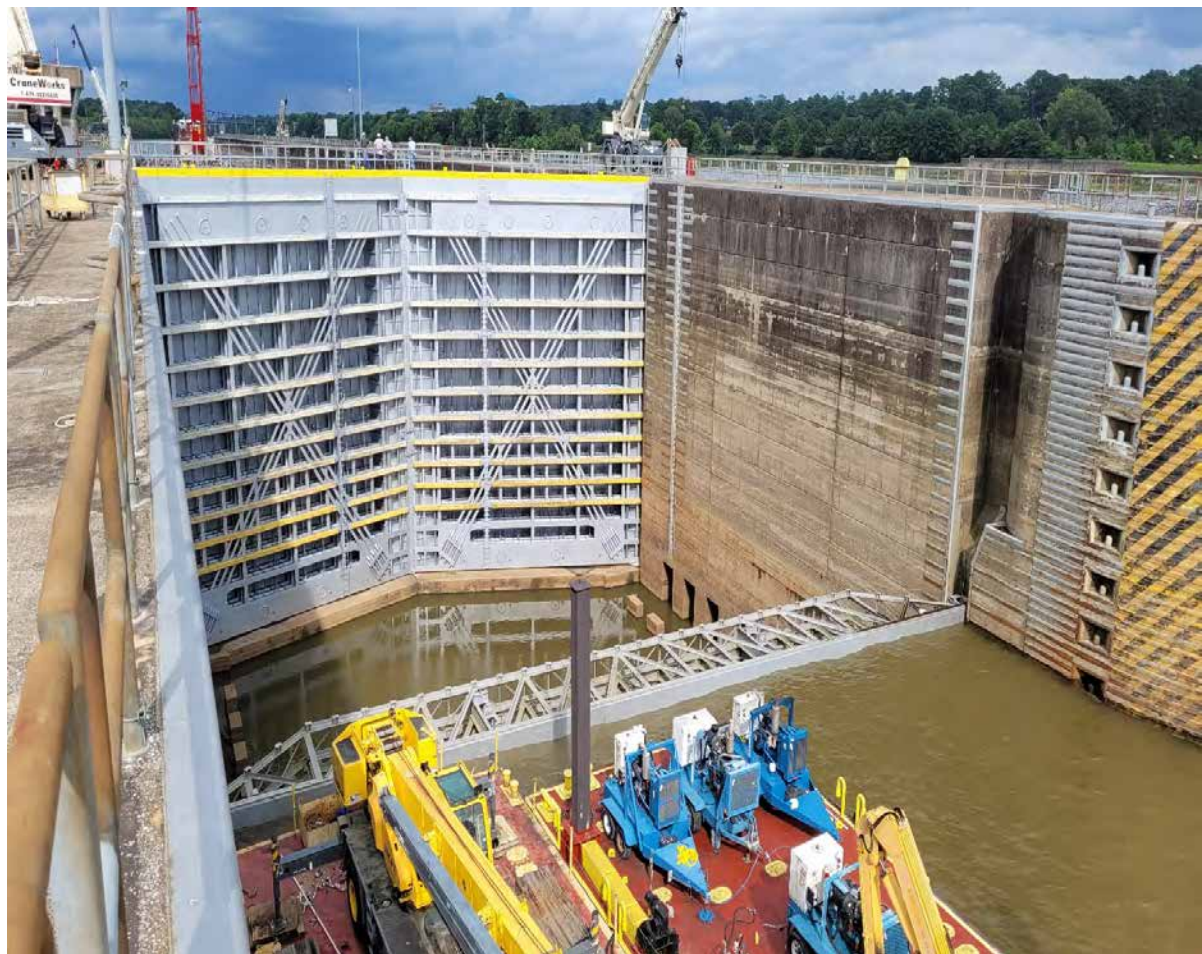
PREPPING AND PAINTING MITER GATES



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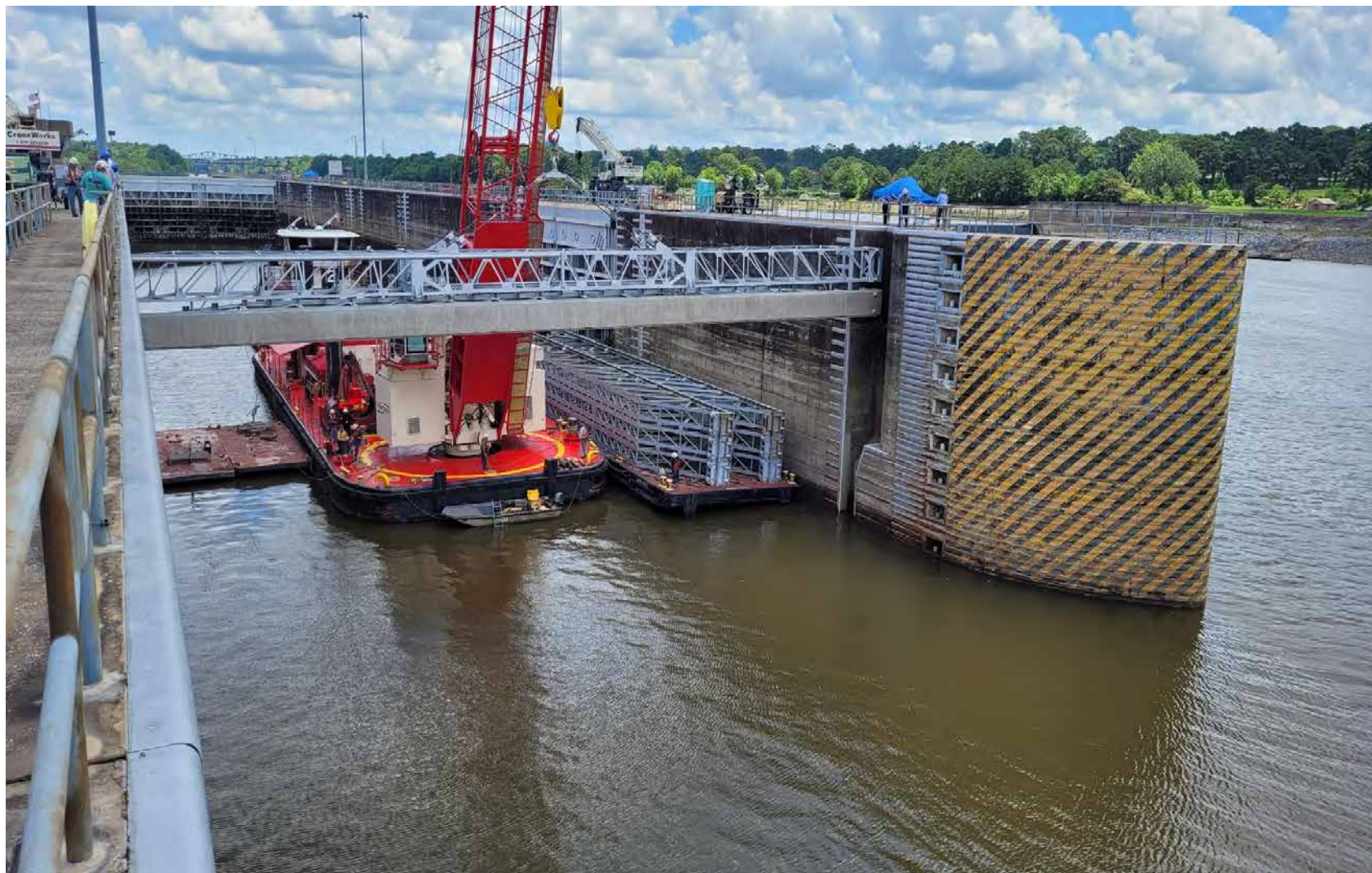
PAINTING COMPLETE, REMOVING STOPLOGS TO FLOOD CHAMBER



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REMOVING STOPLOGS – WORK COMPLETE



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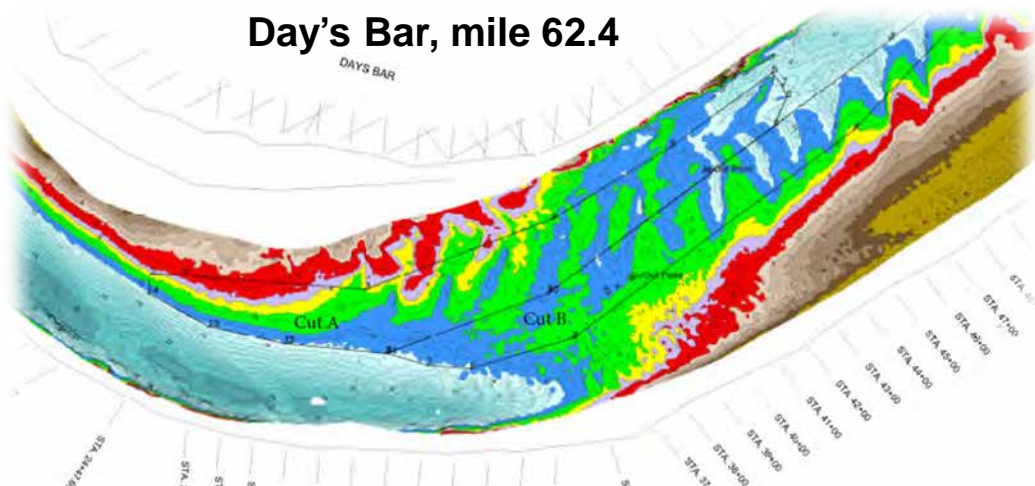


2021 BWT MAINTENANCE DREDGING

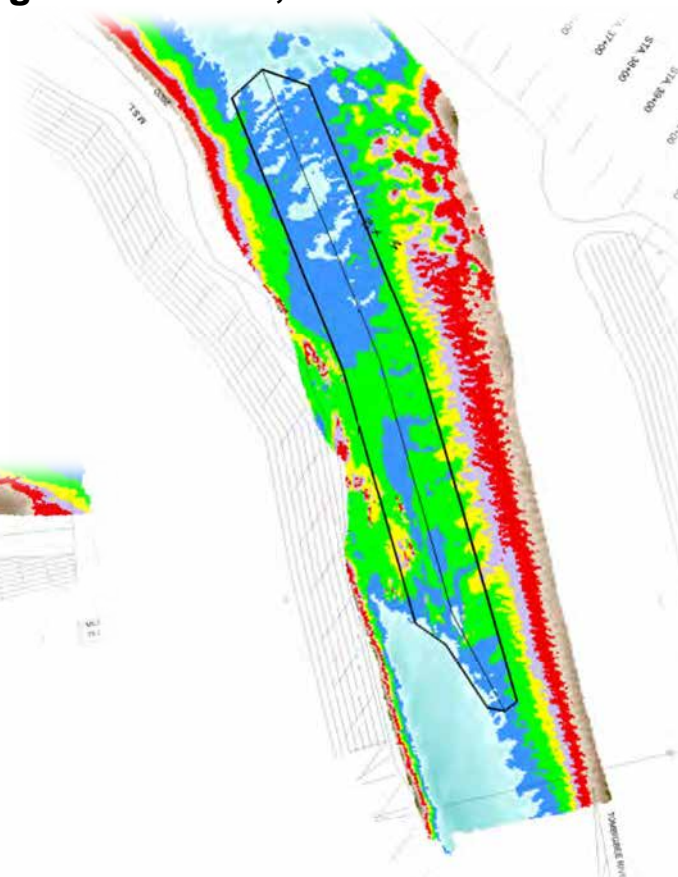
- **Dredging contract awarded to Inland Dredging Co. (24" Cutterhead pipeline dredge Kelly L.) ~ \$4.3M**
- **Dredging delayed to Early August due to shuffling dredges with Vicksburg District**
- **Current significant areas of concern on lower BWT:**
 - **Days Bar, mile 62.4**
 - **Sunflower Bar, mile 78.0**
 - **George Gaines, mile 81.3**

2021 BWT MAINTENANCE DREDGING

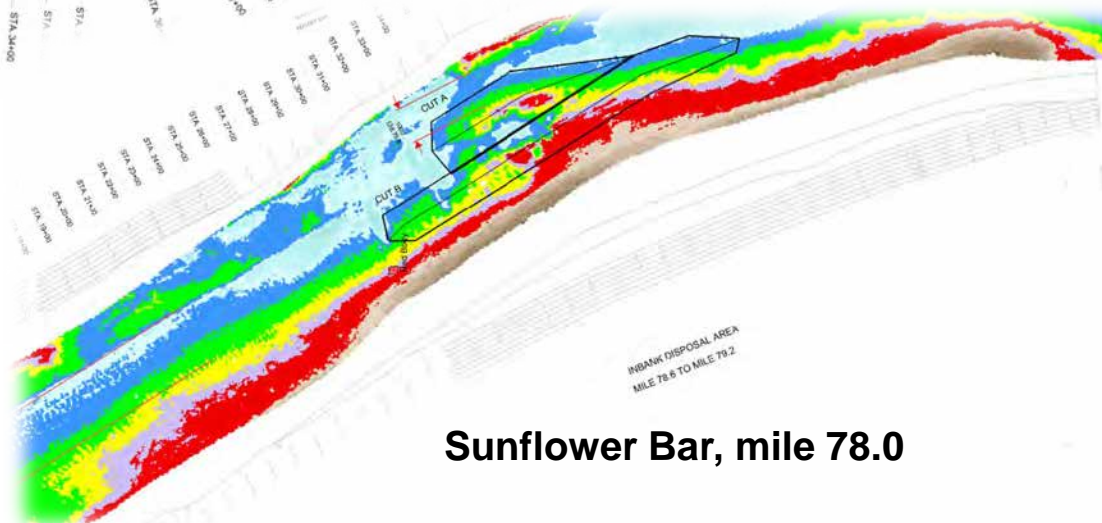
Day's Bar, mile 62.4



George Gaines Bar, mile 81.3



Sunflower Bar, mile 78.0



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AIDS TO NAVIGATION

- USCG Cutter WEDGE
- Virtual ATONs ???



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FUTURE MAINTENANCE WORK - PENDING FUNDING AVAILABILITY

- **Sunflower Advance Dredging to Reduce Annual Maintenance Costs**
- **Demopolis Lock Lower Gallery Pipe Replacement, Deteriorated Hydraulic Lines (no closure required) – planning for FY22**
- **Demopolis Lock Wiring Replacement (power & control); MCC replaced in 2018 – planning for FY22 – planning for FY22**
- **Holt Lock, Continue to Replace Emptying/Filling Valves (no closure required) – in process on 1 of 4 valves**
- **New Lower Miter Gates at Coffeeville and Demopolis Locks (2 ½ year Fabrication Duration and 30-day closure each to install)**
- **Acquisition of Spare Parts for Lock and Spillway Operating Systems**
- **Replace Electrical Motor Control Centers (MCC) at Selden Lock and Spillway (no closure necessary)**



NEW HOLT LOCK VALVES (4 TOTAL), WILL BE INSTALLED ONE AT A TIME **WITHOUT CLOSING THE LOCK.**

- UPDATE:
 - R&D Maintenance Services, O&M Contractor, in process of 1st of 4 replacements.
 - Anchor bolt and plates re-built and new girder beam installed.
 - Next, the new valve will be installed.



UPDATE : FLOATING PLANT/CRANE REMOVING OLD LOCK VALVE



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HOLT LOCK VALVE – REMOVE AND REPLACE



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BLACK WARRIOR/TOMBIGBEE RIVER: COFFEEVILLE EMERGENCY LOCK CLOSURE – 14 APRIL 2021



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At approximately 1100 14 April 2021 the lock operators at Coffeeville Lock, Tombigbee River mile 116.6, noticed the lower river miter gate reaction roller base was cracked almost completely through. The reaction roller keeps the rack inline with the gate hydraulic cylinder and transfers the linear motion to the sector gear, which opens and closes the miter gate. Without the reaction roller the rack can fall out of alignment with the cylinder and sector gear, breaking the machinery linkage for the miter gate rendering it inoperable.

BWT Project contacted TTWW Project to secure a spare reaction roller assembly. It took some time, concrete removal, to remove the broken assembly and install the spare assembly to put the lock back in service.



Crack running through the reaction roller assembly base



Miter Gate

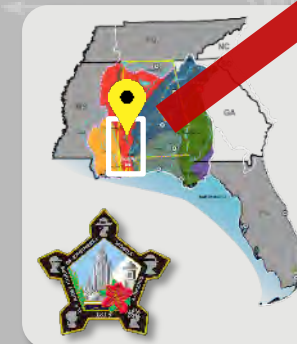
Strut Arm

Sector Gear

Rack

Hydraulic Cylinder

Reaction Roller Assembly



GOAL 2

*Deliver Integrated
Water Resource
Solutions*

BLACK WARRIOR/TOMBIGBEE RIVER: COFFEEVILLE EMERGENCY LOCK CLOSURE – 16 APRIL 2021



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O&M contractor maintenance removed concrete around the embedded roller assembly base and the sector gear base.

Mechanical hammer chipper being used by O&M contractor maintenance crews to remove the second pour of concrete that encases the machinery foundations.

The roller assembly is bolted to the sector gear base with 12 turned bolts. Once the bolted connection was exposed the old base was removed and the new reaction roller assembly bolted to the sector gear base. Then the rack and rollers were re-installed and connected to the hydraulic cylinder. Once the machinery was reconnected and tested the lock was returned to service. Repouring of the concrete occurred once traffic was cleared.



Sector Gear



Old Reaction
Roller Base

Embedded
Sector Gear
Base



Embedded
piece of
Reaction
Roller Base

BLACK WARRIOR/TOMBIGBEE RIVER: COFFEEVILLE EMERGENCY LOCK CLOSURE – 19-21 APRIL 2021



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New rack and reaction roller assembly installed. O&M Maintenance crews ensuring proper alignment of components.

Once components aligned O&M contractor made final adjustments and testing of miter gate machinery.

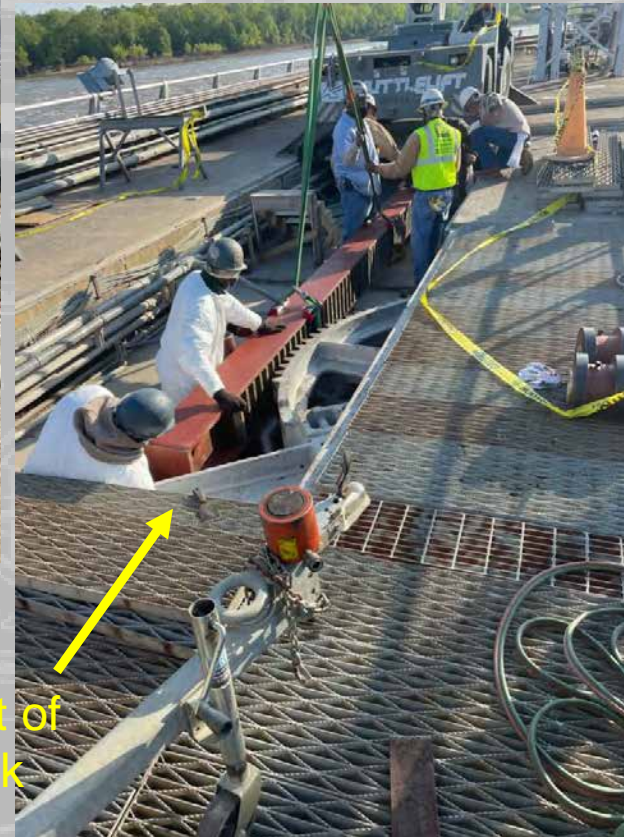
Lock re-opened to traffic afternoon of 21 April 2021.

Approx. 35 commercial vessels were waiting to lock.

The final item of re-pouring the concrete around the machinery bases took place on 26 & 27 April; allowing 24 hours of cure time.



New rack and roller assembly



Alignment of new rack



Lock Open

MOBILE DISTRICT:



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QUESTIONS?



THANK YOU FOR YOUR INTEREST!