

# BLACK WARRIOR/TOMBIGBEE RIVER: DEMOPOLIS LOCK – UPPER MITER SILL FAILURE – 27 FEB 2024

27 February 2024 condition update:

District Leadership visited Demopolis Lock on Friday, February 23<sup>rd</sup> to assess site conditions, discuss timelines and solutions with contractors, and visit the local concrete batch plant to examine testing.

Debris removal in the lock chamber continues. A contract mod was awarded for the acquisition of a high-capacity crane to lift large pieces of debris that are expected to be in the way of formwork bracing. This crane is expected to arrive Thursday, February 29<sup>th</sup>.

Dive teams have been utilized to help assess the weight and shape of the debris, as well as develop plans to lift and remove it from the chamber.

Contractors began drilling into existing sill for dowel placement on the new pours.

Engineering has been working with contractors on analyzing test results and admixture optimization to provide the best solution for the concrete pours.



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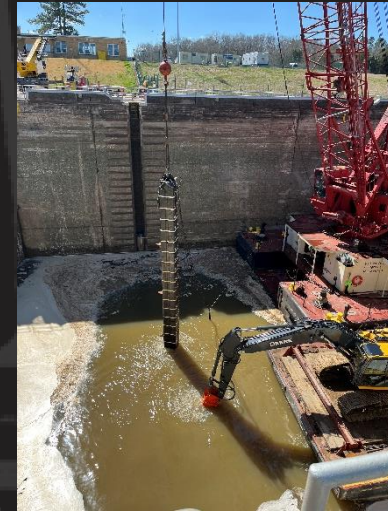
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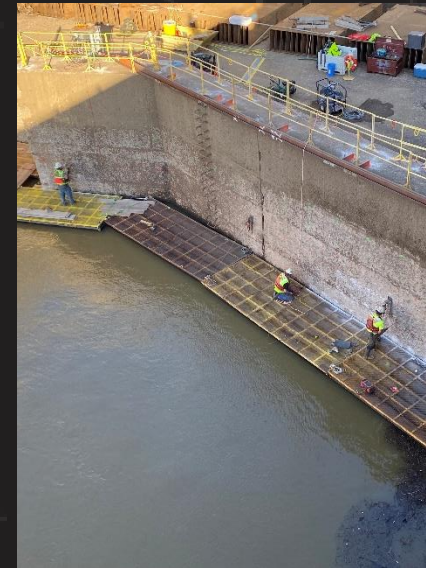
Damaged Sill



Concrete Testing at Batch Plant



Continued Debris Removal



Dowel Location Drilling



# BLACK WARRIOR/TOMBIGBEE RIVER: DEMOPOLIS LOCK – UPPER MITER SILL FAILURE – 20 JAN 2024

20 January 2024 condition update:  
At 0700, District Crisis Team held a safety and coordination meeting with TVA, R&D Maintenance, and Specialty Diving, Inc. to go over safety hazards, the dive plan, and the plan and procedures for lifting and placing the stoplogs. By 0800, all details and safety plans were finalized, and the team began operations.

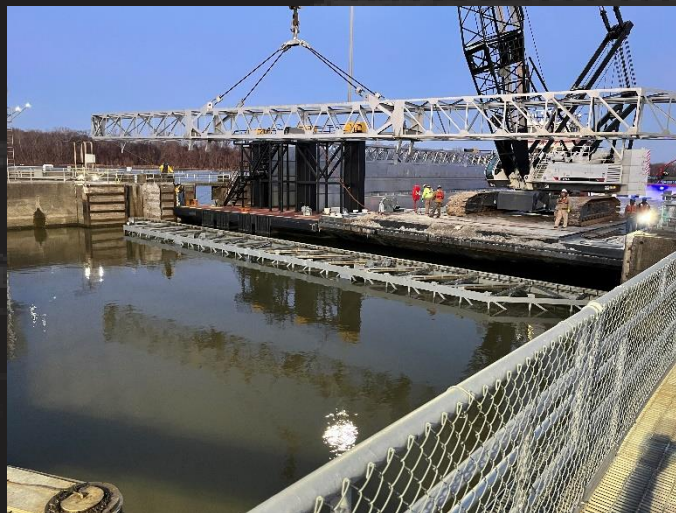
The team experienced delays due to frozen air lines in the latching device on the picking beam. At 1100, TVA vessel Freedom began moving three stoplogs (RG3, RG4, and SP2) from the esplanade onto the TTWW stoplog barge. Complete at 1230.

At 1300, the dive team inspected the stoplog slot. No issues were found.

At 1330, TVA began setting 5 stoplogs (1 heavy, 2 regular BWT, 2 regular TTWW). Last stoplog was set at 1700.



Diver Inspecting  
Stoplog Slot



Setting Stoplogs

Last Stoplog  
Set



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# BLACK WARRIOR/TOMBIGBEE RIVER: DEMOPOLIS LOCK – UPPER MITER SILL FAILURE - 19 JAN 2024

19 January 2024 condition update:  
At 0700 District Crisis Team held a coordination meeting with Parker Towing to go over the lower miter gate closing plan. By 1030 all details and safety plans were finalized, and the team began operations.

Parker Towing placed barges in the chamber and arrange their 3 towboats and additional barges downstream of the miter gates by 1115.

The lower miter gates were moved out of recess at 1130 and, following the gate closing procedure, were successfully placed into mitered position by 1145.

The lock chamber was filled and the head on the upper gates were equalized stopping the uncontrolled flow by 1220.

TVA vessel FREEDOM will arrive at 2100, 19 JAN, with crane barge and addition stoplogs from the Tenn-Tom Waterway. Upper stoplog setting operations will begin at 0700, 20 JAN.



Lower Miter Gates  
Closed



Lower Miter Gates  
Closing



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# BLACK WARRIOR/TOMBIGBEE RIVER: DEMOPOLIS LOCK – UPPER MITER SILL FAILURE - 16 JAN 2024

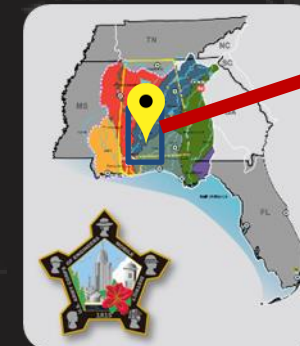
## 16 January 2024 Incident:

At 0600 the on-duty lock operator heard a loud noise and while investigating noticed water flowing under the upper miter gate. The concrete that comprises the upper miter sill fractured, allowing water to pass under the gate. The lower lock gates were open at time of the incident.

Project contacted District personnel to start planning courses of action. Notice to Mariners are being issued to update users.

Current operations are to close the lower miter gates to allow the pool to equalize and set the upper stoplogs to get the lock chamber under control. Operation will take place 19-21 January. Engineering and Operations are continuing to analyze the extent of damages and are working other courses of action to stop the flow and get the lock under control.

At this time, the extent of damages have not been determined. Once the lock is dewatered damage assessment and repair plans can be developed. No accurate estimate for closure duration is available at this time. This schedule will be refined once a full assessment of the damages can be performed.



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