BLACK WARRIOR/TOMBIGBEE RIVER: DEMOPOLIS LOCK – UPPER MITER SILL FAILURE – 22 JAN 2024

22 January 2024 condition update: A site visit was performed by District Command, EN inspection team, Warrior-Tombigbee management, Demopolis Mayor Collins, Coast Guard, Cooper Marine, and Kingfisher Bay Marina.

The EN Data Collection Unit (DCU) performed sonographic surveys of the chamber floor and sill area at 0900. The BWT office had a survey boat perform a multibeam survey of the area at 1200.

The inspection team was able to walk the upper sill area and see the damage up close. The pintles of both upper gates were visually inspected, and no significant damage was found.

At approximately 1600, the Lock Supervisor and R&D Maintenance successfully exercised the upper gates to test the integrity of the pintles.



U.S. ARMY

US Army Corps of Engineers



EN Inspection Team Assessing Damage





Successful Test of Opening Upper Gate



WHEELER LOCK & DAM WILKINS LOCK AND DA ORY LOCK AND DAM ABERDEEN LOCK & DAM ALA. COLUMBUS TOM BEVILL LOCK & DAN WILLIAM BACON OLIVER TUSCALOOSA ARMISTEAD I. SELDEN LOCK & DAM HOWELL HEFLIN LOCK & DAM MERIDIAN DEMOPOLIS LOCK & DAM CLAIBORNE LOCK & DAN EVILL MISS PASCAGOULA GOAL 2

PICKWICK LOCK & DAM

Deliver Integrated Water Resource Solutions

BLACK WARRIOR/TOMBIGBEE RIVER: DEMOPOLIS LOCK – UPPER MITER SILL FAILURE – 21 JAN 2024

ward dealers and second and second

21 January 2024 condition update: R&D Maintenance began constructing scaffolding to access the upper sill area. Sandbags were used to dam off water intruding from stoplog leaks. Tie-offs to the miter gate and handrails will be placed for the inspection team arriving tomorrow.

Parker Towing retrieved their barges from the chamber at approximately 1000.

A large piece of the failed concrete can be seen in the lock chamber approximately 120ft from the sill.

The hydraulic system got air in it during the lower miter gate closing process. R&D worked to bleed the air out of the system so the lower gates could be properly operated and not drift.



U.S. ARMY

US Army Corps of Engineers®



Scaffolding Construction







PICKWICK LOCK & DAM TENN. FLORENCE WHEELER LOCK & DAM MIE WHITTEN LOCK & DAA TUPE WILKINS LOCK AND DA NORY LOCK AND DAM ABERDEEN LOCK & DAM ALA. JOHN C. COLUMBUS OLT LOCK & DAN TOM BEVILL LOCK & DAM WILLIAM BACON OLIVER TUSCALOOSA ARMISTEAD I. SELDEN LOCK & DAM HOWELL HEFLIN MERIDIAN DEMOPOLIS LOCK & DAM MILLER FERRY LOCK & DAM CLAIBORNE LOCK & DAI EVILLE MISS MOBI PASCAGOULA

GOAL 2 *Deliver Integrated Water Resource Solutions*

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.



US Army Corps of Engineers®



Diver Inspecting Stoplog Slot





PICKWICK LOCK & DAM



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.



U.S. ARMY

US Army Corps of Engineers®



PICKWICK LOCK & DAM