

# BLACK WARRIOR/TOMBIGBEE RIVER: HOLT LOCK – RIVER WALL MONOLITH CRACKS – 28 AUGUST 2024

28 August 2024:

The ROV inspection team is processing and evaluating the data and footage from last week's inspection. The lock chamber elevation was lowered approximately 5ft during inspections to gather some baseline instrumentation data that will be used in Engineering's structural stability calculations.

The bulkhead guide rails were delivered to the site on 21 August. These components were inspected and accepted by the Engineering team.

Senator Tuberville's staff visited the site and hosted a stakeholders' meeting on 22 August.

Section 1 of 3 of the bulkhead has been fit up at the Contractor facility and USACE performed an inspection 27 August. A final fit up inspection will occur 30 August for all 3 sections of the bulkhead. Welding will begin after the inspection. Installation of the bulkhead is still scheduled for 30 September.

An Industry Day will be held at Holt Lock on Wednesday, 4 September. Information can be found at:

<https://sam.gov/opp/74260c4a4be548ec8ee8ac4652ec40cf/view>

Contact Scott Ellzey (matthew.s.ellzey@usace.army.mil by 14:00 CST on August 30, 2024, if you plan to attend this event)



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Remote Operated Vehicle w/ dye bottle



Culvert Intake



Bulkhead Section 1 Fit Up



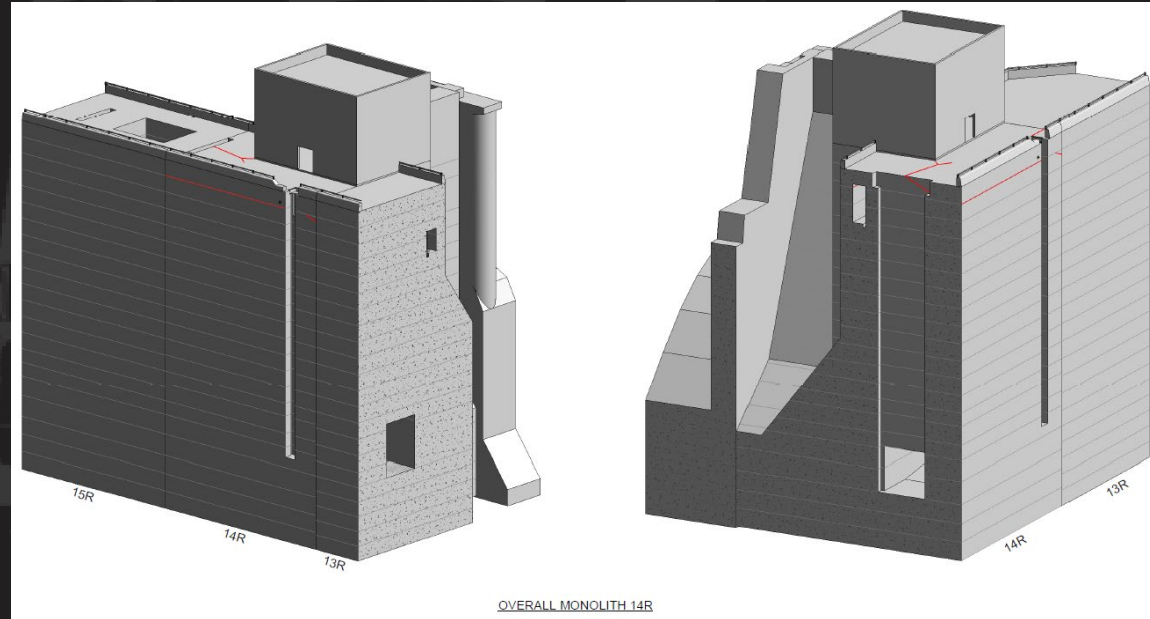
# BLACK WARRIOR/TOMBIGBEE RIVER: HOLT LOCK – RIVER WALL MONOLITH CRACKS – 21 JUNE 2024

21 June 2024:

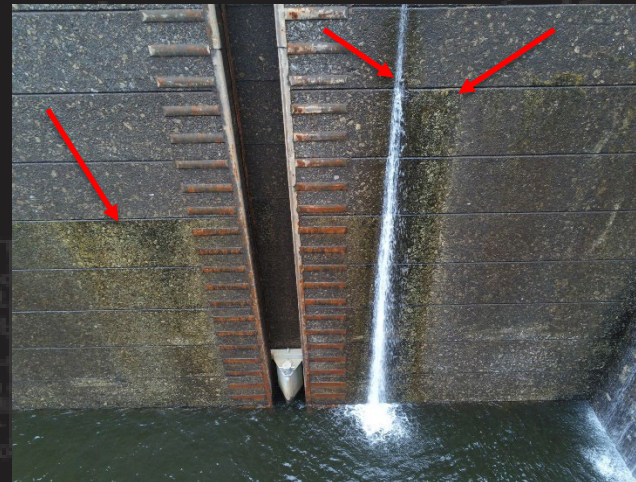
Operations and Engineering staff have observed cracking in Monolith 14R of the lock chamber river wall.

District Engineering performed an initial stability analysis with known data and assumptions. The analysis revealed stability issues with the monolith that could pose a safety risk to lock personnel and waterway users. As a result, it was determined that Holt Lock will be closed to navigation starting at Noon on Saturday, 22 June 2024.

Navigation notice was sent out at 1545 on Friday, 21 June. A waterway users call has been set up for Monday, 23 June at 1000 to discuss the situation.



3D Model of Monolith and Assumed Crack Path



Leaks at Monolith 13R/14R Joint and Lift Lines



Dye Observed from Leaks in Lift Lines Along 14R



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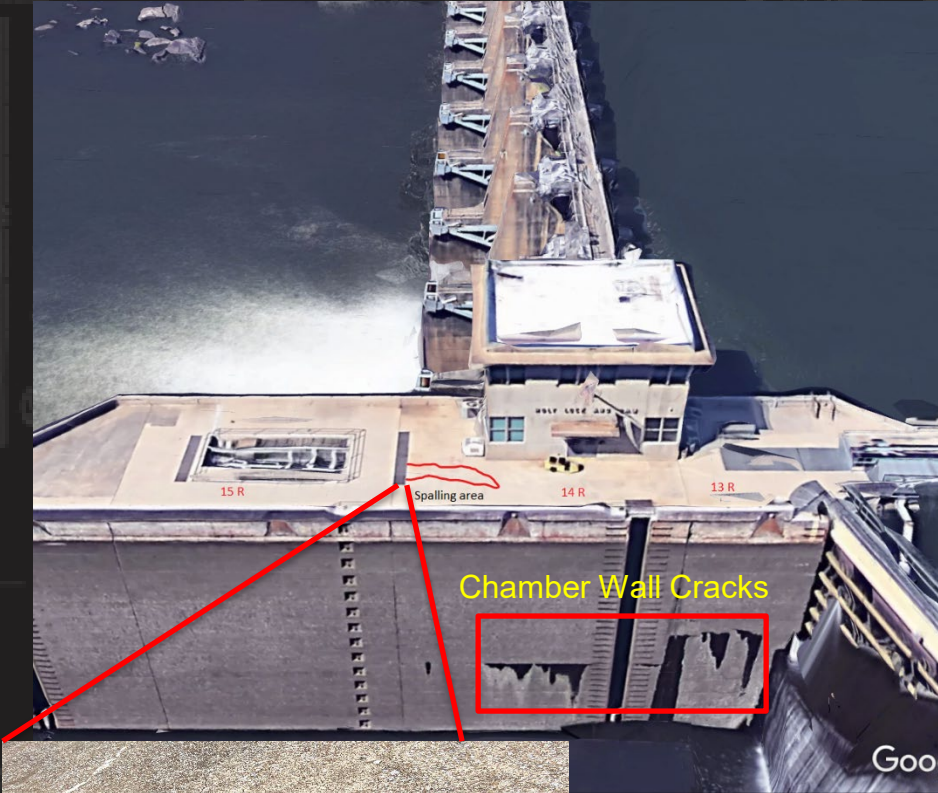


# BLACK WARRIOR/TOMBIGBEE RIVER: HOLT LOCK – RIVER WALL MONOLITH CRACKS – 29 MAY 2024

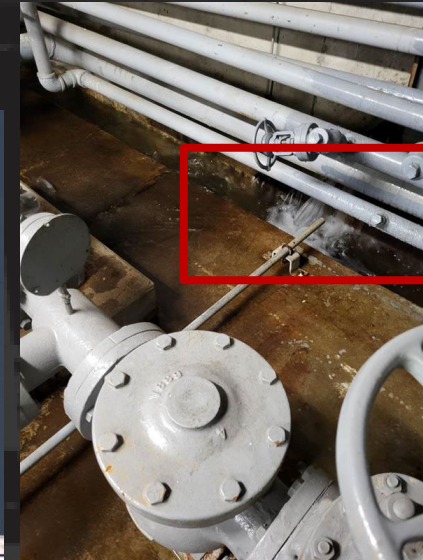
29 May 2024:  
Staff at the BWT Project Management Office notified Mobile District Operations of recent changes in the observed cracks in river wall monolith 14R of the Holt Lock chamber. Concerns raised were increased water flows through existing cracks in the machinery spaces and galleries of the lock wall, new cracks and spalling discovered in the river side filling valve upstream bulkhead slot, and the failure of the gallery sump pumps.

Lock personnel and contractor maintenance staff have concerns about the structural safety of the area, the increased crack movements observed during lockages, and the increased water flows through the machinery spaces.

District OP has altered District EN and Dam Safety to review new data sent by the project and historical data in PICES reports. A meeting was already scheduled onsite at Holt the week of 25 June to discuss the cracking, but EN/OP have decided to investigate onsite the week of 3 June. This is based on the recent failure of the Demopolis Lock upper sill.



New Crack in  
Upstream  
Bulkhead Slot



Water Coming In  
Machinery Room



Crack in Machinery Room Floor



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