Inland Waterways
Users Board

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Calcasieu Lock South Chamber Wall Replacement May 2018 - Jun 2019



Calcasieu Lock

- Multipurpose Lock Navigation, Flood & Salinity Control -Completed 1950
- 75 feet wide x 1200 feet long x -13 feet mean low gulf
- Located near the intersection of the Calcasieu River and GIWW near Mile 238 of the GIWW - 10 miles south of Lake Charles.
- 40.6 M tons in 2017; 15th nationwide
- Averages ~1100 tows per month
- No viable inland alternate route when the lock is closed



Calcasieu Lock Chamber Wall Construction Challenges

- Contract to replace existing timber south chamber guidewall with concrete and steel modular guidewall awarded 22 Feb for \$11.8 million
- Demolition of existing guidewall 21 May through 25 June with contractor working 10 hour day shifts Monday through Friday and lock operated for vessel traffic nights and weekends – queues managed within reasonable numbers < 20
- Template to align foundation piles situated in lock chamber 28 June.
 Installation of foundation piles for replacement wall commenced 10 July.
- Vessel queue and average wait time escalated upwards of 100 vessels on turn and 80 hour delays.

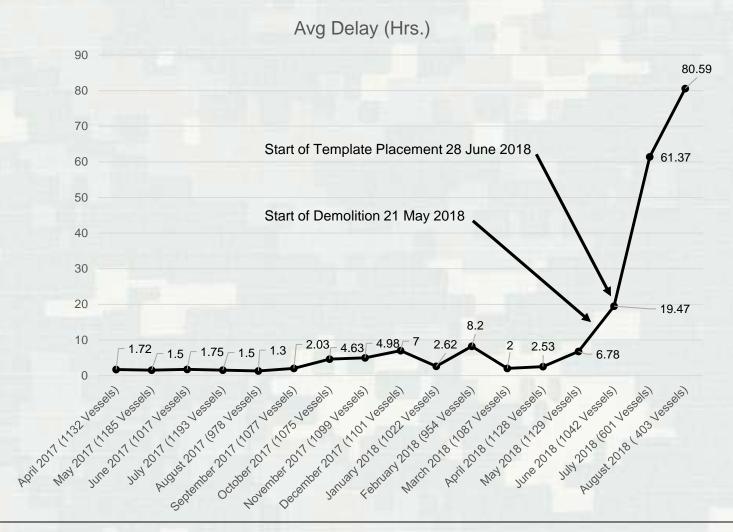


Calcasieu Lock Chamber Wall Pile Alignment Template





Calcasieu Lock Average Delay (Hrs.) April 2017-Present





Calcasieu Lock Chamber Wall Construction Traffic Management Measures

- Ongoing coordination between USACE, GICA, USCG and navigation industry
- Port Captains stationed at the lock to assist Lock Operators in traffic management
- Assist vessels staged at the lock to control and expedite vessels through the chamber
- Guide piles installed to facilitate alignment of transiting vessels and buffer the pile template



Calcasieu Lock Chamber Wall Construction Traffic Management Measures - continued

- Changed construction schedule from 10 hour days Monday through Friday to 12 hour days Monday through Thursday
- Staging areas established east and west of the lock to preposition waiting tows next in queue
- Alternating lockages 6 hours east 6 hours west on week night operations; 12 hours east – 12 hours west during weekend operations
- Instituted protocols to bypass tows next in queue that fail to advance promptly when directed. Protocols codified in Marine Safety Information Bulletin published 10 August 2018.
- Coordinated with USCG to keep Black Bayou Bridge open for vesters traffic to maximum extent practicable

General Concept Replacement Wall



