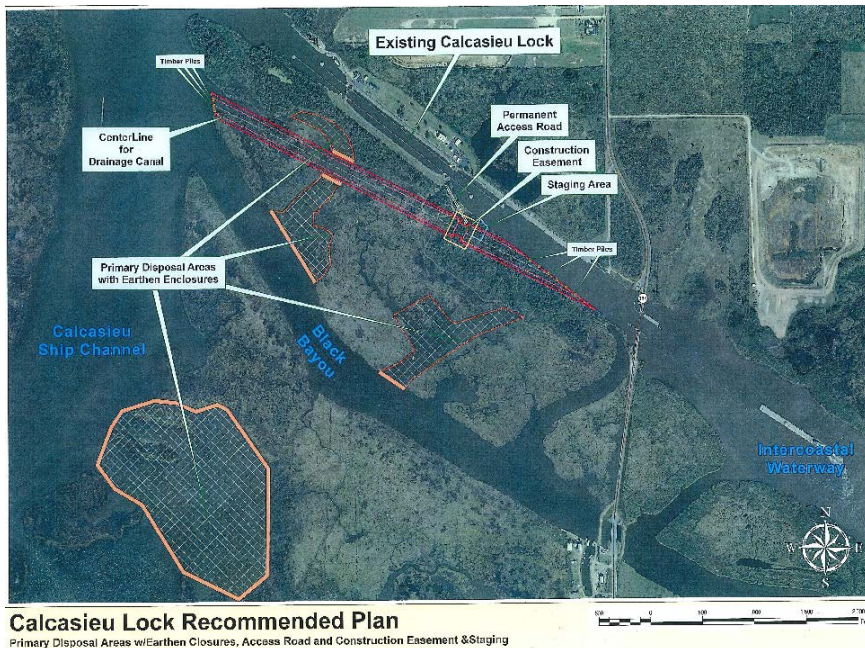


# Calcasieu Lock, Calcasieu Parish, Louisiana Navigation Improvements – Gulf Intracoastal Waterway

16 May 2014



**Abstract:** The Calcasieu Lock, Louisiana Feasibility Study addresses navigation improvements for the Gulf Intracoastal Waterway at and in the vicinity of Calcasieu Lock, Calcasieu Parish, LA.

The principal problem to be addressed is the delays to navigation induced through operation of the Calcasieu Lock for drainage of the Mermentau River Basin as part of its authorized purpose. The delays result in approximately \$1 to \$3 million in damages to the Nation on an average annual basis. The primary opportunities are to

reduce or eliminate commercial traffic delays and improve the national and regional economic conditions. The need to maintain the effectiveness of Calcasieu Lock as a salinity barrier for the Mermentau Basin is critical. While the problem and opportunities are localized physically at the lock, the range of alternatives has potential impacts at multiple scales. The overall study goal reflects the role Calcasieu Lock plays in a critical navigation system as well as an integral part to a water management system (Mermentau Basin) that requires both drainage capacity and an effective barrier to salinity intrusion.

As a result of the feasibility investigations, New Orleans District identified construction of a sluice gate structure and associated bypass channel excavation south of the existing Calcasieu Lock (Alternative 1) as the National Economic Development (NED) Plan – the plan that maximizes net economic benefits to the Nation and fully complies with Army policy. The NED plan is the Recommended Plan. The plan includes approximately 215,000 cubic yards of material dredged from the bypass channel will be placed within the project area in several areas of open water totaling about 50 acres. This dredged material will be beneficially placed to restore degraded brackish marsh and create brackish marsh from shallow open water. Unavoidable environmental impacts to approximately 11.5 acres of forested spoil bank habitat would be fully compensated by the implementation of tree stand improvements in about 15 acres of the remaining forested habitat plus the purchase of 9 acres of credit from an approved bottomland hardwood mitigation bank serving the project area. Monitoring and adaptive management of the on-site mitigation area are

included as part of the recommended plan, and will be conducted to ensure that forest benefits are realized.

Based on October 2014 price levels, the estimated project first cost of the Recommended Plan is \$16,700,000, inclusive of associated investigation, environmental, engineering and design, construction, supervision and administration, and contingency costs. In accordance with Section 102 of the WRDA of 1986 as amended, inland waterway navigation projects are 100 percent Federal cost with 50 percent from the Inland Waterways Trust Fund. The operations and maintenance of this Project will be performed by the Federal Government as part of the Calcasieu Lock at 100 percent Federal cost.

The Recommended Plan's annual average equivalent cost (including annual maintenance) is \$947,000. The average annual equivalent benefits for the Recommended Plan are \$1,148,000 which results in average annual equivalent net benefits of \$201,000 and a benefit-to-cost ratio of 1.2-to-1 at a 3.5% discount rate.

**Report Documentation:** Pertinent documentation on the project, the results of the CWRB and subsequent Washington-Level Review Actions are linked below:

- CWRB Agenda
- Project Map/Placemat
- Project Summary
- CWRB Briefing Slides
- CWRB Lessons Learned
- CWRB Meeting Record
- State & Agency Review Comment Letters
- Documentation of Review Findings
- Signed Chief of Engineers Report
- Advanced Copy to Congressional Committees
- ASA (CW) Memo to OMB
- OMB Response
- ASA (CW) Transmittal to Congress
- Authorization

**Additional Information:** [Mississippi Valley Division](#)

[New Orleans District](#)