US Army Corps of Engineers
Memphis District

Project Fact Sheet

Memphis Wolf River Backwater Levee System, TN

Sec. 216 of the Flood Control Act of 1970 (PL 91-611)

Feasibility Study (General Investigation)

Location: The system is located adjacent to the Mississippi River along the south bank of the Wolf River in Memphis, Shelby County, TN.

Description: The system consists of 3.4 miles of floodwall, 5.5 miles of levee embankment, 7 pump stations, and 27 closure structures. The system was constructed by the Corps of Engineers and turned over to the City of Memphis for maintenance in 1959.

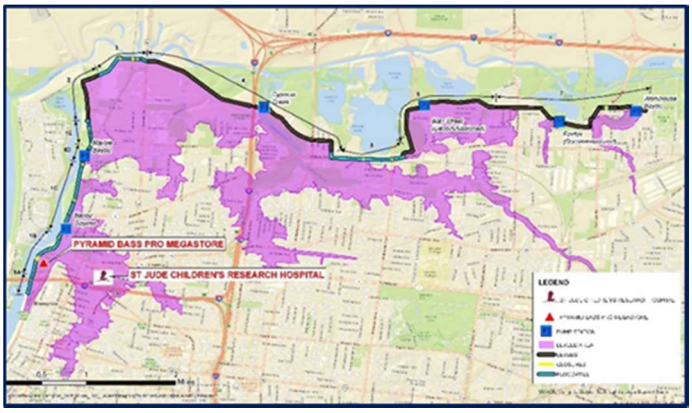
Issues: The floodwall has settled since initial construction. The Corps completed an Initial Appraisal in June 2015 that concluded a Federal Interest in conducting a feasibility study to formulate solutions to the settlement.

Importance: The system provides flood risk reduction for residential and highly developed industrial, commercial, and public areas located north of downtown Memphis. It protects an area of 2,962 acres with structures valued at a total of $1.9 billion and a population of 14,560 located on the north side of Memphis. Critical facilities in the area are the St. Jude Children's Research Hospital and major transportation corridors.

Risk: The floodwall will continue to provide flood protection during frequent floods of lesser magnitude. However, an extreme flood, such as the Mississippi River and Tributaries Project Design Flood, poses a substantial risk to the city's flood protection system. Risk increases with continued settlement.

Consequence: Overtopping would result in significant flood damages in downtown. It would disrupt business operation at City Hall, the County Government Headquarters, the Federal Courts, hotels, restaurants, financial, and retail facilities; disrupt traffic and impede emergency vehicles on surface streets and I-40; restrict normal operations at St Jude Children's Hospital and other medical facilities; damage homes and threaten resident's lives.

Activities for FY 18: The Corps is using $3 million in Flood Supplemental funding to develop the study scope and prepare the cost share agreement with the City of Memphis.



Memphis-Wolf River Backwater Levee with 100-Year Inundation levels without the system in place indicated in purplet

Activities for FY 19: Continue the study process.

Additional Amount That Could be Used in FY 19: The study is fully funded with Flood Supplemental funds in FY 18.

Flood Supplemental Activities: The Corps is currently developing the project scope, including schedule. The Corps will complete the study within three years from signing the feasibility cost sharing agreement.

Project Sponsor: City of Memphis, TN.

Congressional Interest: Senate Alexander (TN) and Corker (TN). House: Cohen (TN-9) and Kustoff (TN-8)

Phase	FY 18 Budget	FY 18 Allocation	FY 18 Flood Supplemental	FY 19 Budget	FY 19 Additional Capability	FY 2019 Flood Supplemental
Feasibility	$0	$0	$3,000,000	$0	$0	$0

The capability for each study or project is defined as the estimated amount of additional, new funding that, if provided in the applicable FY, can be used effectively and efficiently in that FY, consistent with law and contracting and execution policy, assuming that all unobligated carry in to that FY is used first. However, each capability estimate is made without reference to the availability of manpower, equipment, and other resources across the Army Civil Works program, so the sum of the capability estimates exceeds the amount that the Corps actually could use in a single FY. The Budget allocates funding among studies and projects on a performance basis in a manner that will enable the Corps to use that funding effectively. Furthermore, the overall funding level proposed in the Budget for the Army Civil Works program reflects the Administration's assessment of national priorities in view of the range of potential private and public use of funds. Consequently, while the Corps could obligate additional funds for some studies and projects, offsetting reductions within the Army Civil Works program would be required to maintain overall budgetary objectives.