

FACTSHEET
SECTION 107 INLAND HARBOR

1. a. Project. Yazoo Diversion Canal, Warren County, Mississippi.

b. Status. Detailed Project Report (feasibility)

2. a. Corps District: Vicksburg.

b. Sponsors. City of Vicksburg, Mississippi, and the Warren County Port Commission.

3. Congressional Interest. Bennie Thompson (D-2nd/MS); Trent Lott (R-MS); Thad Cochran (R-MS)

4. Location. The project is located in the Yazoo Diversion Canal adjacent to Vicksburg, Mississippi. The project area extends from the mouth of the canal at the Mississippi River to the Vicksburg Harbor, a distance of approximately 3 miles. The existing Federal navigation project was opened to navigation in 1903. The project provides navigation access to waterborne industries located along the Vicksburg waterfront and the Port of Vicksburg which is located in the 300-acre E. W. Haining Industrial Park at Vicksburg Harbor. Yazoo River inbound and outbound traffic also traverses the canal.

5. Problem.

a. The existing project includes a 150-foot bottom-width channel with an authorized bottom elevation of 9 feet below the low-water record or 30.2 feet, National Geodetic Vertical Datum (NGVD). The narrow channel and channel alignment are cited as the major problems in the project area affecting future development and the safe movement of barges. Commercial traffic moving through the canal increased from approximately 3.5 million tons in 1990 to over 6.1 million tons in 1997. The canal is particularly congested from the mouth upstream for approximately 7,000 feet. Three barge loading/unloading facilities are located on the left descending bank within this reach. Currently, tows must reduce speed while navigating in this area and must be broken down into one- and two-barge tows because of the narrow channel width when entering the canal. This requirement adds transit time and transportation costs. The city of Vicksburg waterfront, located approximately 6,700 feet upstream from the mouth of the canal, is used for the launching of recreational craft and the occasional mooring of

large paddlewheel tour boats that frequent Vicksburg. In addition, a riverboat casino is located adjacent to the canal immediately below the Vicksburg waterfront. Barge fleeting areas adjacent to the canal also developed as the inland transportation system moved from shallow draft steamboats to modern-day barges as the primary mode of moving commodities.

b. The three-barge terminals located along the left descending bank below the city waterfront include petroleum, log, and grain handling facilities. Crushed stone and rock are periodically offloaded at a site located above the Vicksburg waterfront. There are no permanent mooring facilities located along the right descending bank of the canal. Use of the right descending bank for barge mooring is limited to high water conditions that allow barges to be moored outside of the navigation channel. Barge mooring width depends principally on the Mississippi River stage and the requirement to stay out of the navigation channel. During high river stages, barges can be moored up to three wide when tied abreast to the bank. During lower stages, barge mooring may be limited to one barge in width. Stages in the canal fluctuate approximately 40 feet on an annual basis. A few "dead men" are located along the top right descending bank for securing barges when high river stages permit.

c. The current channel alignment includes a bend immediately above the Vicksburg city waterfront. Downbound tows moving through this bend temporarily align with a riverboat casino permanently moored within a cofferdam alongside the navigation channel immediately below the Vicksburg waterfront. Loss of power or steering by downbound tows moving through this bend could be catastrophic. The riverboat casino and its cofferdam in which it floats are outside the limits of the navigation channel. However, during the high-water season, stages in the canal often overtop the cofferdam. High flows in the Yazoo River, coupled with low stages on the Mississippi river, can produce strong currents in the canal contributing to safety problems. Widening/straightening of the canal would reduce the potential for accidents.

6. Alternative Plans Considered.

a. The primary issues identified during the problem identification process was the width of the current channel and the channel alignment above the city waterfront. Three alternatives were developed and evaluated. Plan A included

widening the navigation channel to a 200-foot bottom width from the mouth of the canal to Glass Bayou, a distance of approximately 9,000 feet. The existing 150-foot bottom-width channel would be maintained from Glass Bayou to the Vicksburg Harbor project. Plan A would allow two-barge tows (two barges end to end) to traverse the canal during all river stages. Plan B included widening of the navigation channel to a 250-foot bottom width from its mouth to Glass Bayou. The navigation channel would be widened to a 200-foot bottom width from Glass Bayou to the Vicksburg Harbor project, a distance of approximately 5,020 feet. Plan B would allow four-barge tows (four barges, two square) to traverse the canal to Vicksburg Harbor. Plan C included widening of the navigation channel to a 300-foot bottom width from its mouth to Glass Bayou. This plan includes a 250-foot bottom-width channel from Glass Bayou to Vicksburg Harbor. Plan C would allow for six-barge tows (three wide and two long) to traverse the canal from the mouth of the canal to Vicksburg Harbor.

b. Each alternative plan would be constructed to a bottom elevation of 33 feet, NGVD, in order to provide a 9-foot channel depth during low water periods. Updated criteria for establishing the required bottom elevation resulted in the higher elevation for the widening plan compared to the authorized depth for the existing project. Depth of annual maintenance dredging in the canal will be determined by the projected stages for the upcoming low-water season.

c. The additional channel width included in each of the alternatives from the mouth of the canal to Glass Bayou is needed to safely accommodate increased commercial traffic and improve operational efficiency. Plan selection was based on a comparison of transportation savings benefits. Each of the alternative plans evaluated met policy criteria. None of the alternatives would create flood-free lands which could be sold. Approximately 300 acres of land (excluding mitigation requirements) are required for the project. Only 28 acres of bottom-land hardwood wetlands lying along the right descending top bank will be required to be purchased. The remaining balance of approximately 272 acres lies within lands either owned by the Federal government (5 acres), is subject to navigation servitude (212 acres), or is owned by the non-Federal sponsor provided to fulfill local cost-sharing requirements for a previous project (55 acres). Lands provided by the non-Federal sponsor for the previous project are not creditable as LERR's for cost-sharing purposes. Purchase of the 28 acres not

subject to navigation servitude will not permit local entities to control access to the project. All channel excavation will take place along the right descending bank of the canal where there is no development. Use of the right descending bank will return to its present condition subsequent to project construction.

7. Description of Recommended Plan. Plan B discussed above is recommended for implementation. The recommended plan includes the enhancement of 68 acres of qualifying Warren-county owned land to compensate for the loss of approximately 28 acres of wooded wetlands. Disposal of excavated material is planned for open water into the Mississippi River. Material to be excavated has been tested and is clean, nonpolluted material suitable for open water disposal. Improvements to the canal will contribute to the economic growth of Vicksburg, Warren County, and surrounding counties by providing low cost barge transportation and by stimulating economic growth. Total transportation savings benefits for the recommended plan are estimated at \$965,000 annually. The recommended plan has a benefit-cost ratio of 3.62.

8. Is Project the NED Plan? Yes.

9. Scheduled Initial Construction Award (FY): 2005

10. Authorization, Appropriations Act, or Report Language:
Section 107 of the River and Harbor of 1960, as amended.

11. Financial Information:

a. Initial GNF Costs - \$3,489,000

b. Federal Costs

Feasibility Study - \$100,000

Plans and Specifications - \$320,000

Construction - \$2,820,100 (initial)

Total Initial Federal Costs - \$3,240,100

* Total Ultimate Federal Costs - \$3,124,200

* Reflects the additional 10% of GNF costs less credit for LERR that the sponsor must reimburse the Federal Government after construction is completed.

Estimated Average Annual Federal
OMRR&R (from DPR) - \$53,000

c. Total Project Limit

Total Federal Costs x 2.25 - \$7,029,450

Total Project Limit - \$7,029,450

d. Federal Limit for Future OMRR&R

Total Project Limit - \$7,029,450

Total Federal Costs - \$3,124,200

Federal Limit for Future OMRR&R - \$3,905,250

e. Non-Federal Costs

Local Service Facilities - \$0

LERR's - \$233,000

Feasibility Study - \$0

Plans and Specifications - \$0

Construction - \$348,900

Est. Reimbursement to the Federal Government- \$115,900

Total Non-Federal Costs - \$697,800

12. Supplemental Information. The project has a high profile locally and is strongly supported by the city of Vicksburg, Warren County, and the Warren County Port Commission.