

River Engineering Operation and Maintenance & Regulating Works FY22/23 Update

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O&M Programs

Dike and Revetment

- Traditional maintenance to existing river training structures and revetments. Typically funded annually. Covers Mississippi River Miles 300 to 0.0

Biological Opinion

- In April 1998, Region 3 of the U.S. Fish and Wildlife Service (FWS) and Mississippi Valley Division (MVD) of the U.S. Army Corps of Engineers entered into formal Section 7 consultation under the Endangered Species Act (ESA). The consultation covered the continuation of operation and maintenance activities on the Upper Mississippi River Nine Foot Navigation Channel. Direct effects addressed within the consultation were navigation channel dredging, dike and revetment maintenance, water level management, and management of Corps lands.

Avoid and Minimize

- In October 1992, the St. Louis District issued “Design Memorandum No. 24, Avoid and Minimize Measures, Melvin Price Locks and Dam, Upper Mississippi River - Missouri and Illinois”. The document was developed as a result of a commitment made in the 1988 Record of Decision associated with the Environmental Impact Statement for the Second Lock at Melvin Price Locks and Dam. The intent of the program is to reduce environmental impacts of increased navigation traffic associated with construction of the second lock. Full-scale implementation of the program began in 1996



River Engineering Concepts



O&M Execution

- Upper Dike & Revetment (300-195)
 - Traditional O&M
 - Upper Biological Opinion and Avoid & Minimize(300-195)
 - Improve/maintain side channel connectivity
 - Improve main channel boarder habitat
 - Collect data and perform scientific analysis (mussels)
 - Creation of Island Habitat
- Lower Dike & Revetment (195-0)
 - Traditional O&M
 - Structure Assessment Performed
 - IIJA Funds (Infrastructure Investment and Jobs Act)
 - Lower Biological Opinion and Avoid & Minimize (195-0)
 - Improve/maintain side channel connectivity
 - Improve main channel boarder habitat
 - Collect data and perform scientific analysis (Pallid Sturgeon)
 - Creation of Island Habitat



Regulating Works Program

Authority

- Since 1881, the Regulating Works Project has been authorized by various River and Harbor Acts, mainly the River and Harbor Acts of June 25, 1910; January 21, 1927; and July 3, 1930.

Description

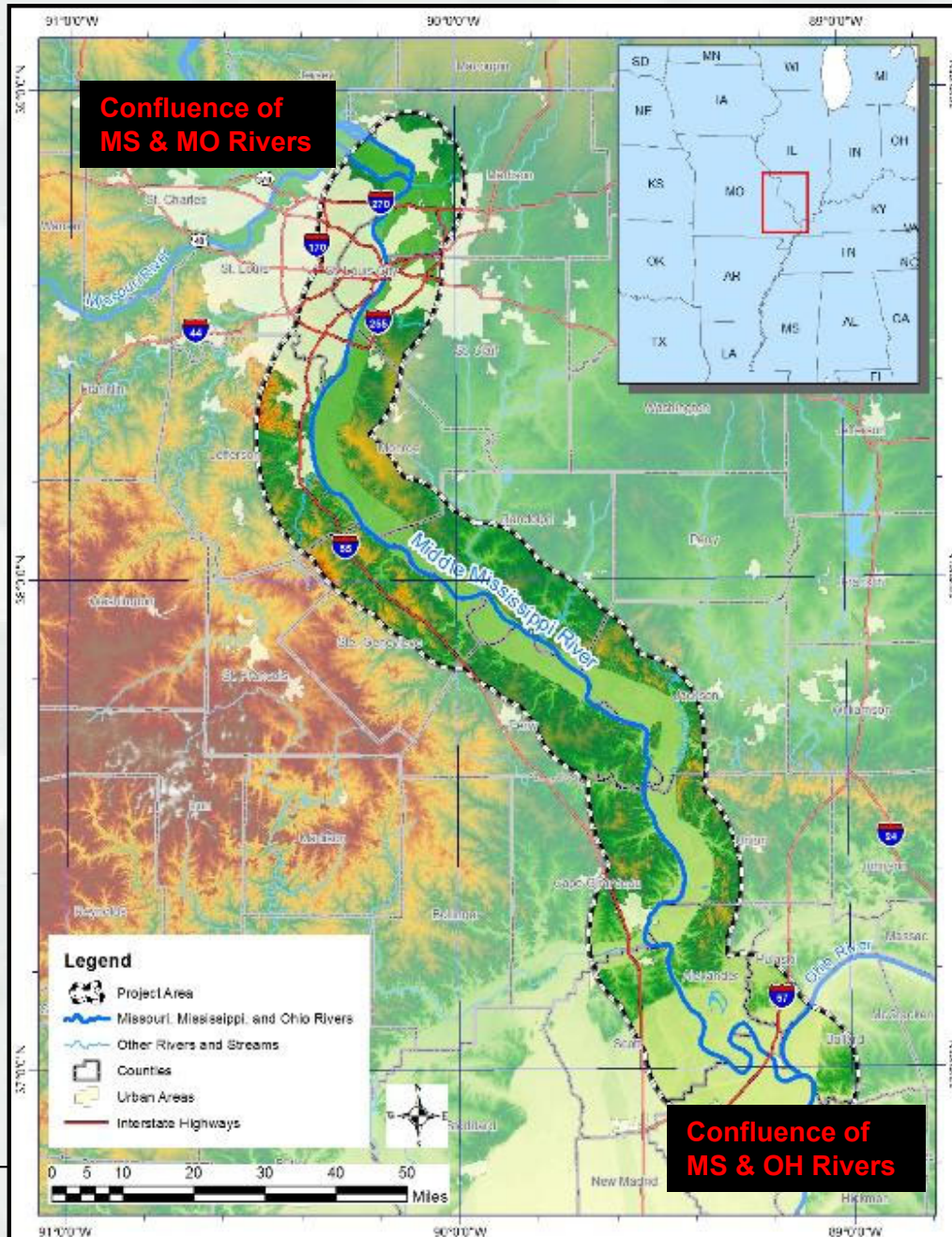
- The St. Louis District of the U.S. Army Corps of Engineers (Corps) is charged with obtaining and maintaining a navigation channel on the Middle Mississippi River (MMR) that is a minimum of nine feet deep and 300 feet wide with additional width in bends as necessary (commonly called the Regulating Works Project). As authorized by Congress, the Project is obtained by construction of revetment, rock removal, and river training structures to maintain bank stability and ensure adequate, reliable navigation depth and width. The long-term goal of the Project, as authorized by Congress, is to obtain and maintain a navigation channel and reduce federal expenditures by alleviating the amount of annual maintenance dredging through the construction of river training structures and revetments.

Relevance to the region/nation:

- The Mississippi River is an artery of commerce critical to the movement of hundreds of millions of tons of essential goods and commodities such as corn, grain, coal, petroleum, and many other products important to the national economy.



Project Description



Construction Execution - Bankline Restoration at Dogtooth Bend (Len Small)



Project Collaboration - Annual RATT Meeting on Middle Mississippi River



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Regulating Works Execution

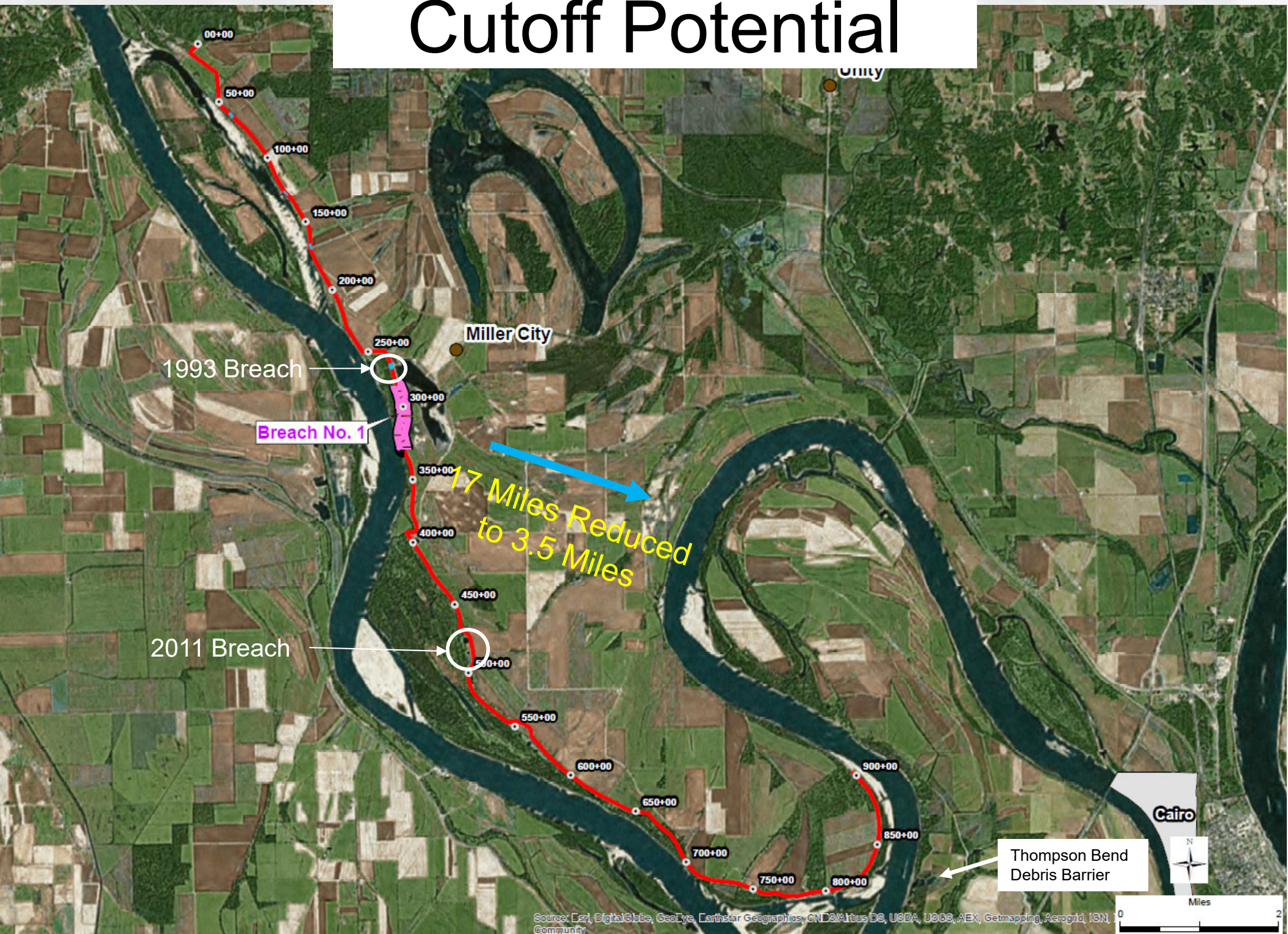
Ongoing River Training Construction Project to “Minimize Dredging” on the Middle Mississippi River (Confluence of Missouri River to Confluence of Ohio River)

- Dogtooth Bend – Overflow structure completed January 2021
- Dogtooth Bend Phase 7 – Revetments Repairs
- Dogtooth Bend Risk & Alternatives Analysis – Risk analysis has started, and Alternative analysis will be completed in FY23
- Thompson Bend Debris Barrier – Design to continue in FY23.

This project has not received funds since 2014 and has been operating on carryover funds. It is in the FY23 Presidential Budget



Cutoff Potential



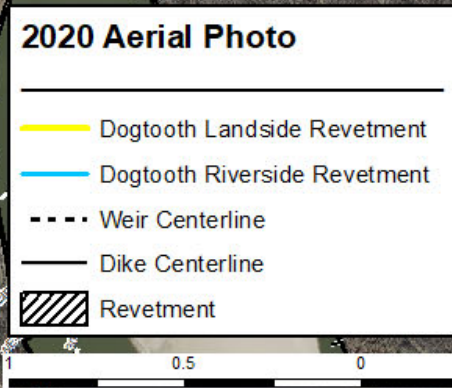
2020 Aerial Photo

- Dogtooth Landside Revetment
- Dogtooth Riverside Revetment
- Weir Centerline
- Dike Centerline
- ▨ Revetment

1 0.5 0 1 Miles

Overflow Structure

033.30R, 032.60R, 032.40R, 032.20R, 032.00L, 031.90L, 031.60L, 031.40L, 031.20L, 016.70R, 016.50R, 016.30R, 016.10R, 015.90R, 015.70R, 015.50R, 015.30R, 015.10R, 014.90R, 014.70R, 014.50R, 014.30R, 014.10R, 013.90R, 013.70R, 013.50R, 013.30R, 013.10R, 012.90R, 012.70R, 012.50R, 012.30R, 012.10R, 011.90R, 011.70R, 011.50R, 011.30R, 011.10R, 010.90R, 010.70R, 010.50R, 010.30R, 010.10R, 009.90R, 009.70R, 009.50R, 009.30R, 009.10R, 008.90R, 008.70R, 008.50R, 008.30R, 008.10R, 007.90R, 007.70R, 007.50R, 007.30R, 007.10R, 006.90R, 006.70R, 006.50R, 006.30R, 006.10R, 005.90R, 005.70R, 005.50R, 005.30R, 005.10R, 004.90R, 004.70R, 004.50R, 004.30R, 004.10R, 003.90R, 003.70R, 003.50R, 003.30R, 003.10R, 002.90R, 002.70R, 002.50R, 002.30R, 002.10R, 001.90R, 001.70R, 001.50R, 001.30R, 001.10R, 000.90R, 000.70R, 000.50R, 000.30R, 000.10R, 000.00R



Thompson Bend Debris Barrier

