

Fabius River Drainage District
8203 County Road 346
Taylor, MO 63471

November 18, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW.
Washington, D.C. 20314-1000

RE: Section 7001 of the Water Resources Reform and Development Act of 2014
Levee Improvement for the Fabius River Drainage District

Dear Ms. Kiefel:

The Fabius River Drainage District appreciates the opportunity to provide a Section 7001 Proposal in accordance with the Water Resources Reform and Development Act of 2014. The attached proposal describes our proposed levee modification project.

In short, our levee system was last improved in the 1960s in accordance with the 1954 Flood Control Act. We wish to improve our levee to the 500-year level of protection, to provide additional protection for our landowners, infrastructure, and commercial/industrial businesses. Our District has witnessed multiple high water events, overtopping in 1973 and 1993. The cost of flood fighting and levee rehabilitation has led to our need to permanently improve our levee system. The proposed improvement would potentially reduce these costs that are typically compensated by FEMA or through the PL84-99 USACE program.

An improvement to our levee system and surrounding levee systems (as recommended by the Mississippi River Commission in the Upper Mississippi Comprehensive Plan) would increase protection to human health, and strengthen the local, regional, and national economies. The recommend plan by the Mississippi River Commission after the 2008 Flood, was for the 500-year level of protection. With major highways, such as the Avenue of the Saints, US 61, and US 24, our District protects a significant portion of the infrastructure studied for detour and transportation disruptions due to flooding. This total transportation impact amounted to 1.03 billion dollars. If combined with the other Districts studied in the Comp Plan, the importance to our national economy becomes apparent.

Our District is willing to take on the expense for this project, but wish to have federal approval before proceeding. Again, we appreciate being able to submit this proposal and look forward to working with you in the future.

As always, if you have any questions please do not hesitate to contact us.

Sincerely,

FABIUS RIVER DRAINAGE DISTRICT



Roger Sutter, President

C: Senator Claire McCaskill
Senator Roy Blunt
Representative Sam Graves

Enclosure: Section 7001 Proposal for Levee Improvement, Location/Fact Map, Letters of Support

Non-Federal Interest: Fabius River Drainage District is the project sponsor and sole project contributor. However, other local, non-federal interests have contributed to this project previously.

Proposed Project: The proposed project is a modification to an existing United States Army Corps of Engineers project, the Fabius River Drainage District's levee. The levee was federally improved as a part of the 1954 Flood Control Act (House Document 281/83/2). The proposed project would improve the existing levee from an approximately 100-year design to a 500-year design. The 500-year design would be sufficient to meet all requirements and retain FEMA certification, plus additional consideration due to uncertainties in climate change. This improvement would require additional sand and earthen material to raise the levee footprint. The levee would be improved on the landside of the levee, retaining its current riverside configuration. The project will include permitting work, assessment of environmental impacts, and right-of-way. This proposed improvement would be a frequency based design, meaning that if/when the flow, frequency profiles were to change the levee could be modified to retain its 500-year level of protection, plus a critical levee freeboard of five (5) feet.

Project Purpose: The Fabius River Drainage District (District) is located in southern Lewis and northern Marion Counties, along the west bank of the Mississippi River from River Mile 323.5 to 331.4. The Fabius River Drainage District was established in 1911. The Fabius River Drainage District was established to protect approximately 14,264 acres of agricultural land and aid in the reduction of waterborne disease. The originally constructed levees were improved as part of the 1954 Flood Control Act and the subsequent improvements of the 1950s and 1960s.

The District's original levee improvement was based upon pre-1950s methodologies and datasets. Since that time, new data has become available and the new flood trends that have been experienced. The current data indicates that at the nearest gauge, since 1944, the odds of a flood event occurring that exceeds major flood stage are approximately 1 in 4 (~18 events). If this dataset is condensed to the past 10 years the odds jump to 1 in 2.5 (~4 events).

The District flood fights during significant flood events by pushing up their sand levee and sandbagging where necessary. When the flooding subsides, Federal Emergency Management Agency (FEMA) funding is applied for to cover flood fighting expenses. If the flood fighting was unsuccessful and the levee overtopped, then the District would apply for funding from USACE under Public Law 84-99 for repairs. This cycle of flood fighting or overtopping followed by the application for funding has occurred many times since the improvements of the 1950s and 1960s and at great federal and local expense. According to USACE MVR, the PL84-99 expenses for the 2008 levee repairs (non-overtopping event) alone were approximately \$1,282,019 (2008 costs). These damages do not include any FEMA or local expenses incurred for flood fighting, nor do they include damages to other infrastructure or farmland.

The Fabius River Drainage District provides a significant economic benefit to its surrounding region. It has been estimated by USACE MVR that the District has prevented approximately \$56,447,400 in damages since 1973. The levee protects critical aspects of the local economy, and if lumped together with the other Districts that need improvements in this region, can sum to significant regional or even national economic impact.

The proposed project is within the recommendations of the Mississippi River Commission's (MRC) for the Upper Mississippi River Comprehensive Plan (UMRCP), dated August 14, 2008.

Project Estimate: Approximately \$22,875,000, which includes necessary permitting, engineering, and construction activities.

Project Benefits: The population located behind this levee is approximately 35. The proposed project would not only protect this population, but also protect approximately 16.5 miles of U.S. and State Highways, 7.3 miles of railroads, significant industrial/commercial development, and residences. The proposed project would provide additional protection for human health and these roadways, railways, and businesses beyond the existing estimated annual damages prevented of approximately \$1.4 million (value estimated from USACE MVR calculations).

This District is a portion of the Upper Mississippi River Basin Levee System, which was found to provide direct or indirect protection to major roadway and railway bridges that cross the Mississippi or Illinois Rivers. A study entitled *Detour and Transportation Infrastructure Costs Due to a Major Flood Event on the Upper Mississippi and Illinois Rivers* by the Center for Transportation Research at the University of Tennessee found that the total costs of detour, road damage, and highway damage due to a major flood event was \$1.027 billion. This District provides a significant portion of this transportation benefit.

Project Support: The District's Board supports this project and other levee and drainage districts in the surrounding area are supportive and seeking their own improvements, in accordance with the UMRCP.

Project Cost Share: No federal cost share required. Project planned at 100% local sponsor cost. However, if funding is made available under the National Levee Safety Act (Title IX of WRDA 2007), the Comprehensive Plan (Section 459 of WRDA 1999), or other USACE funding, it would be of great assistance to improve public health and safety for the Upper Mississippi River.

Project Letter of Support: See attached letter from the District Commissioners and other letters of support.

Legend

- (X-XX) Marine Highway
- District Boundary
- Missouri Highways
- Multi-Lane Highways
- + Railroads
- + River Mile



LEVEE FACTS

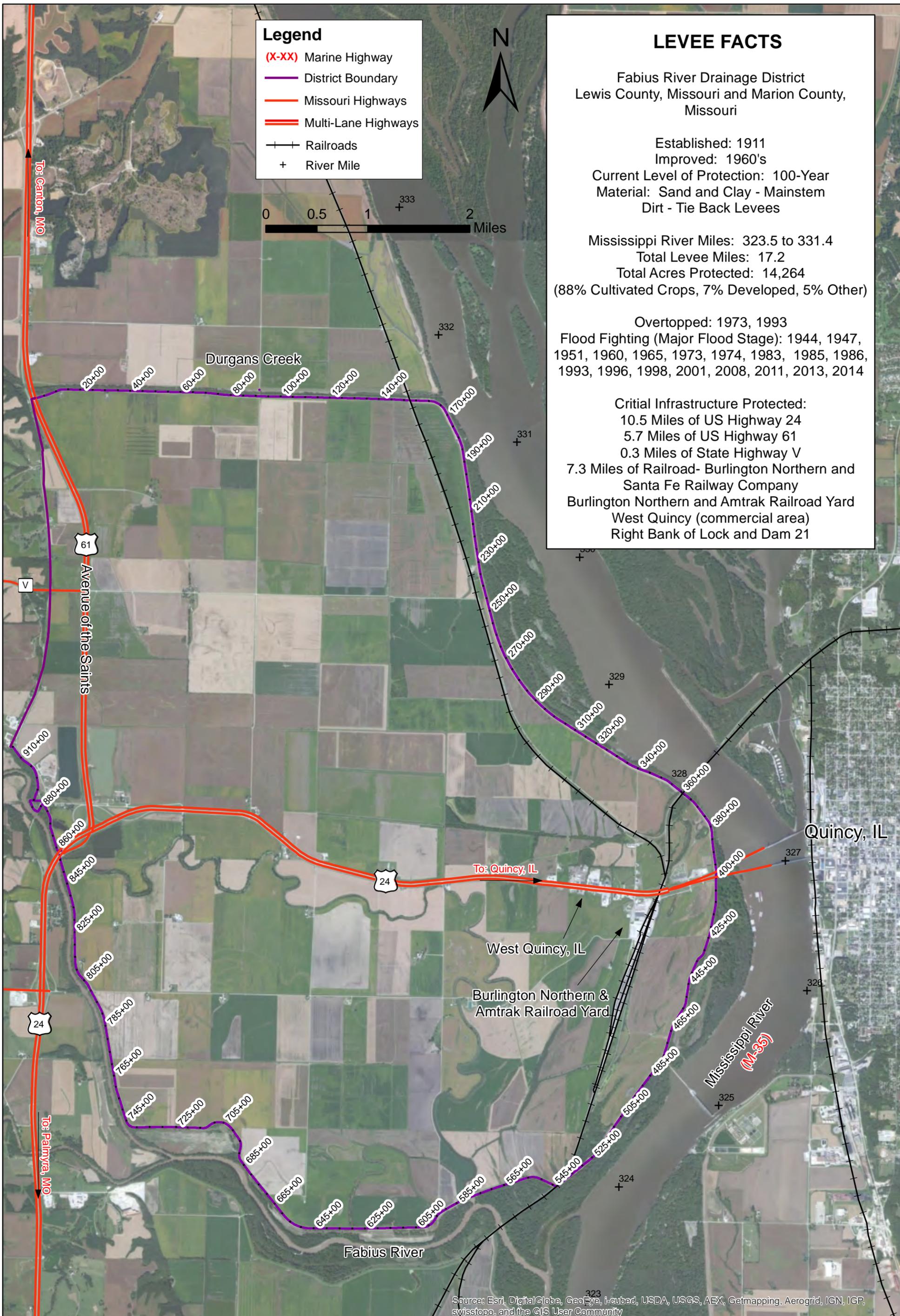
Fabius River Drainage District
Lewis County, Missouri and Marion County,
Missouri

Established: 1911
Improved: 1960's
Current Level of Protection: 100-Year
Material: Sand and Clay - Mainstem
Dirt - Tie Back Levees

Mississippi River Miles: 323.5 to 331.4
Total Levee Miles: 17.2
Total Acres Protected: 14,264
(88% Cultivated Crops, 7% Developed, 5% Other)

Overtopped: 1973, 1993
Flood Fighting (Major Flood Stage): 1944, 1947,
1951, 1960, 1965, 1973, 1974, 1983, 1985, 1986,
1993, 1996, 1998, 2001, 2008, 2011, 2013, 2014

Critical Infrastructure Protected:
10.5 Miles of US Highway 24
5.7 Miles of US Highway 61
0.3 Miles of State Highway V
7.3 Miles of Railroad- Burlington Northern and
Santa Fe Railway Company
Burlington Northern and Amtrak Railroad Yard
West Quincy (commercial area)
Right Bank of Lock and Dam 21



Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

GENERAL LOCATION	FABIVS RIVER DRAINAGE DISTRICT
SHEET	1
DRAWING DATE	11/17/2014
PROJECT NO.	14-0913
DRAWING TITLE	6978 CR 308 TAYLOR, MO 63471

DESIGNED	WEK	NO.	APPR.	REVISION DESCRIPTION	DATE
DRAWN	WEK				
FIELD	FIELD BOOK				
CHECKED	CHECK DATE				
FILE NAME	XXX	FULL SCALE DRAWING SIZE: 22" x 34"			

SCALE: 1 INCH = 1 MILE	
DESIGNED	WEK
DRAWN	WEK
FIELD	FIELD BOOK
CHECKED	CHECK DATE
FILE NAME	XXX

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors

616 North 24th Street, Quincy, IL
4510 Paris Gravel Road, Hannibal, MO
610 N. 4th Street, Suite 100, Burlington, IA
49 North Prairie Street, Galesburg, IL

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Ph 319.752.3603 • Fax 319.752.3605
Ph 309.342.4042 • Fax 309.341.3781

Internet Address: www.klingner.com

LARRY WELCH
Eastern District Commissioner
Hannibal, MO

LYNDON BODE
Presiding Commissioner
Hannibal, MO

RANDY SPRATT
Western District Commissioner
Palmyra, MO

MARION COUNTY COMMISSION

Phone: 573-769-2549

VALERIE DORNBERGER, COUNTY CLERK
Marion County Courthouse - 100 South Main Street, Suite 107
Palmyra, Missouri 63461-1661

Fax: 573-769-4312

December 1, 2014

U.S. Army Corp of Engineers
ATTN: CECW@-CE Lisa Keifel
441 G Street NW
Washington, DC 20314-1000

RE: Section 7001 of the Water Resources Reform and Development Act of 2014

Dear Ms. Kiefel,

On behalf of Marion County, Missouri, the Marion County Commission is sending this letter of support of the Fabius River Drainage District's proposal in accordance with the Water Resources Reform and Development Act of 2014.

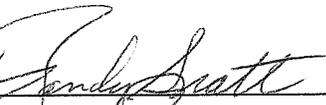
Their levee system was overtopped in 1973 and 1993 and encroached upon in many other years. This proposal to improve their levee system to the 500 year level of protection will provide additional protection for area landowners, infrastructure and commercial/industrial businesses located in the area.

This improvement to area levee systems would provide protection to human health and safety. It would also strengthen our local and regional economy as well as the national economy by preventing crop destruction and detours and damage to the Avenue of the Saints, US 61 and US 24. The transportation impact alone amounted to 1.03 billion dollars over 20 years ago.

The Fabius River Drainage District is willing to take on the expense for this project, but need to have federal approval so they can proceed. The Marion County Commissioner's hope is that you will consider this proposal that is so important to Marion County and the surrounding region.

Sincerely,


Lyndon Bode
Presiding Commissioner


Randy Spratt
Western Commissioner


Larry Welch
Eastern Commissioner

CITY OF QUINCY

KYLE A. MOORE
MAYOR



CITY HALL - - 730 MAINE
QUINCY, IL 62301-4056
(217) 228-4545

November 24, 2014

U.S. Army Corp of Engineers
Attn: CECW-CE (Lisa Keifel)
441 G Street NW
Washington, DC 20314-1000

RE: Section 7001 of the Water Resources Reform and Development Act of 2014

Dear Ms. Kiefel:

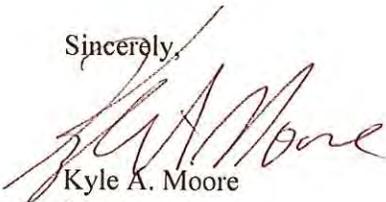
On behalf of the City of Quincy, Illinois I send this letter of support of the Fabius River Drainage District's proposal in accordance with the Water Resources Reform and Development Act of 2014.

Their levee system was overtopped in 1973 and 1993 and encroached upon in many other years. This proposal to improve their levee system to the 500-year level of protection will provide additional protection for area landowners, infrastructure and commercial/industrial businesses located there with headquarters in the City of Quincy.

This improvement to area levee systems would provide protection to human health and safety. It would also strengthen our local and regional economy as well as the national economy by preventing crop destruction and detours and damage to the Avenue of the Saints, US 61 and US 24. The transportation impact alone amounted to 1.03 billion dollars over 20 years ago.

The Fabius River Drainage District is willing to take on the expense for this project, but need to have federal approval they can proceed. We hope that you will consider this proposal that is so important to the City of Quincy and this region.

Sincerely,



Kyle A. Moore
Mayor

KAM:vle

Meagan Kaiser
Executive Director
Michael Klingner
Chairman, Illinois
Vicki Stoller
Vice Chairman, Iowa
Dianne Barnett
Treasurer, Illinois
David McMurray
Executive Committee, Iowa
John Winkelman
Executive Committee, Missouri
Jason Hutcheson
Director, Iowa



*P.O. Box 418, Bowling Green, MO 63334
573.489.9173*

Joseph B. Gibbs, PE
Director, Missouri
Philip Held
Director, Missouri
Al Muhlenbruck
Director, Iowa
Brent Hoerr
Director, Missouri
Jim Koeller
Director, Illinois
Roger Sutter
Director, Missouri
Kevin Rund
Director, Illinois

December 1, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Keifel)
441 G Street NW
Washington, DC 20314-1000

RE: Section 7001 of the Water Resources Reform and Development Act of 2014

Dear Ms. Keifel,

Established in 1954, UMIMRA is a grassroots stakeholder organization advocating for a stronger Upper Mississippi Valley through flood control. Reliable flood control leads to a more reliable navigation channel, economic development, and a better way of life for the communities along the river. UMIMRA works closely with local, state, and federal legislators, the U.S. Army Corps of Engineers, and other agencies to ensure our members concerns are heard.

UMIMRA sends this letter of support for the Fabius River Drainage District application. The Fabius River Drainage District was established to protect approximately 14,264 acres and aid in the reduction of waterborne disease.

The population located behind this levee is approximately 35. The proposed project would not only protect this population, but also protect approximately 16.5 miles of U.S. Highway, 7.3 miles of railroads. The proposed project would provide additional protection for human health and these roadways, railways, and businesses beyond the existing estimated annual damages prevented of approximately \$1.4 million.

Thank you for your consideration,

A handwritten signature in black ink that reads 'Meagan Kaiser'. The signature is written in a cursive, flowing style.

Meagan Kaiser, Executive Director
Upper Mississippi, Illinois, & Missouri
Rivers Association