

1. Administrative Details

Proposal Name: The Upper Mississippi River Comprehensive Plan

by Agency: Upper Mississippi, Illinois & Missouri Rivers Association

Locations: IL,IA,MO

Date Submitted: 09/23/2015

Confirmation Number: 030241e7-07cc-4ecb-b6a8-e64323ed1f00

Supporting Documents

File Name	Date Uploaded
KEach and Hunt Lima support of CComp plan.pdf	09/23/2015
Fabius Support Letter of CComp Plan.pdf	09/23/2015
TriOak Support of Comp Plan.pdf	09/23/2015
092315 Two Rivers Support of Comp Plan.pdf	09/23/2015
Klingner and Associates support of Comp Plan.pdf	09/23/2015
70001 Upper Mississippi River Comp Plan Final.pdf	09/23/2015
Greater Burlington Support of Comp Plan.pdf	09/23/2015
Uminra Support Marion County.pdf	09/23/2015
KEach and Hunt Lima support of CComp plan.pdf	09/23/2015
70001 Upper Mississippi River Comp Plan Final.pdf	09/23/2015
UMIMRA Support Letter Comprehensive Plan- surface.pdf	09/23/2015
70001 Upper Mississippi River Comp Plan Final.pdf	09/23/2015

2. Provide the name of the primary sponsor and all non-Federal interests that have contributed or are expected to contribute toward the non-Federal share of the proposed feasibility study or modification.

Sponsor	Letter of Support
Upper Mississippi, Illinois, & Missouri Rivers Association(Primary)	The Members of the Upper Mississippi, Illinois, & Missouri include levee districts, land owners, municipalities and business owners. Our members support the implementation of the Upper Mississippi River Comprehensive Plan as a public- private partnership.
Keach Drainage & Levee District, IL	<p>We send this letter of support for the modification of the Upper Mississippi River Comprehensive Plan, an authorized USACE project. We support the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a) strike the word “develop” and replace with the words “implement a Public-Private Partnership Plan”</p> <p>From an economic perspective, the Upper Mississippi River Comprehensive Plan will play a large role in mid-west economic development. According to the Tennessee Valley Authority Study, improving our flood control system in the Upper Valley can return 5 dollars for every one dollar invested in Regional Economic Development. Also, employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive plan.</p> <p>From a humanitarian perspective the UMRCP is necessary to ensure that the naturally fertile soils of the Upper Mississippi Valley are protected to produce food for a growing world population. One acre of corn, yielding 150 bushel, produces enough kilocalories to feed 10 people for an entire year. The Upper Mississippi Comprehensive Plan Levees protect over 853,000 acres of prime farm land. Therefore, these levees protect the land that feeds more than 8.5 million people for an entire year.</p> <p>From a transportation perspective, cost brought on by a major flood event is dominated by the cost of diversion detours. The Comprehensive Plan found a four-bridge diversion cost of \$478.1million (\$2008), or \$510.0 million (\$2012). The Corps estimate of \$510 million increases by \$454 million when diversion costs found at the remaining bridges are added to the total cost. Rail diversion costs are also significant. According to the Center for Transportation Research at the University of Tennessee (CTR) train diversion costs incurred roughly \$3 million per day (see attached uploaded letter for complete)</p>
Fabius River Drainage District	<p>We send this letter of support for the modification of the Upper Mississippi River Comprehensive Plan, an authorized USACE project. We support the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a) strike the word “develop” and replace with the words “implement a Public-Private Partnership Plan”</p> <p>From an economic perspective, the Upper Mississippi</p>
030241e7-07cc-4ecb-b6a8-e64323ed1f00	<p>River Comprehensive Plan will play a large role in mid-west economic development. According to the Tennessee Valley Authority Study, improving our flood control system in the Upper Valley can return</p>

3. State if this proposal is for a feasibility study, a modification to an authorized USACE feasibility study or a modification to an authorized USACE project. If it is a proposal for a modification, provide the authorized water resources development feasibility study or project name.

Modification to an Authorized USACE Feasibility Study : Upper Mississippi River Comprehensive Plan

4. Clearly articulate the specific project purpose(s) of the proposed study or modification. Demonstrate that the proposal is related to USACE mission and authorities and specifically address why additional or new authorization is needed.

To implement a systemic approach that reduces cumulative flood risk costs and annual flood damages, while simultaneously providing long term improvements to other system values and uses (ecological, economic, recreation, transportation, etc.). Currently, the Upper Mississippi and Illinois Rivers have no plan when high water occurs, each levee district must resort to flood fighting in an “every man for himself” atmosphere. This is dangerous to human life and is stifling to economic development. An Upper Mississippi River Comprehensive Plan takes the guess work out of flooding, providing a plan of action so everyone knows where the water goes. Currently, areas are flooding at more frequent intervals and not receiving compensation for their damages; whereas, with the Comprehensive Plan, we will know where the water will go and can put in place compensation agreements with the local sponsor. The proposed project will bring many levee districts in the Upper Mississippi and Illinois rivers in compliance with the new Federal Flood Risk Management Standard by providing 500 year flood protection

5. To the extent practicable, provide an estimate of the total cost, and the Federal and non-Federal share of those costs, of the proposed study and, separately, an estimate of the cost of construction or modification.

	Federal	Non-Federal	Total
Study	\$7,500,000	\$0	\$7,500,000
Construction	\$200,000,000	\$4,000,000,000	\$4,200,000,000

Explanation (if necessary)

The USACE Rock Island District estimates that the completion of the modification to Sec. 459 of WRDA 1999 will require 2.5 million each year for the next 3 years. This modification will require additions to the hydrology and hydraulic study, fine tuning of the “Working Plan” in the Pike, Lincoln and St. Charles area, additional public meetings, development of crop insurance and/or flood easements in those areas unable or electing not to improve, implementing an elevated pump station authority under PL 84-99, and enacting an upland passive storage funding plan (similar to the Iowa Watershed Project) for all five (5) Upper River States. The USACE Rock Island District estimates construction cost in range of \$4.0 billion for Plan H, to \$6.2 billion for Plan M (2008 dollars). Lower costs would be anticipated if built by the local sponsors. The Public Private Partnership would be formulated so structural improvements would be privately funded by the local sponsor and the non-structural flood easements would be funded by the federal government at an estimated annual cost of 15.4 million, equating to approximately 100/acre for up to 160,000 acres. This would more than achieve the Mississippi River Commission recommendations to minimize induced head on the Mississippi Rivers & Tributaries System (MR&T).

6. To the extent practicable, describe the anticipated monetary and nonmonetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.

Implementation of a large, systemic flood risk reduction plan would result in significant regional economic benefits. The Tennessee Valley Authority estimated that every dollar spent on comprehensive flood risk reduction (i.e., 500-year level of risk reduction for urban areas and 100-year or greater level of risk reduction for agricultural areas - Plans A, B, D, G, H or M) would generate as much as \$5 in increased gross regional product for every dollar expended. According to the “Detour and Transportation Infrastructure Costs Due to a Major Flood Event on the Upper Mississippi and Illinois Rivers”, Center of Transportation Research, University of Tennessee, July 5, 2012 report, the total costs of detour and repairs to highways and rail tracks are \$1.027 billion, and if no improvement, by year 30, the diversion costs of the 10 bridges of the Upper Mississippi becomes \$3.1 billion. Employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive flood risk reduction plan. Other Social Effects (OSE) benefits for public health and safety and displacement would occur if a systemic alternative plan were implemented. From a stakeholder view, the results of applying the Risked Informed Decision Framework (RIDF) indicated a preference for a comprehensive plan with a high level of risk reduction, for the entire Upper Mississippi River System. We know flood control works, since the Great Flood of 1993, according to the USACE Rock Island Corps of Engineers District, eleven of our member districts have prevented damages totaling nearly \$5.2 Billion. This number not only shows how successful flood control projects have been, but how imperative the maintenance and improvement of these structures are to the viability of the communities that depend on them.

7. Does local support exist? If ‘Yes’, describe the local support for the proposal.

Yes

Local Support Description

During the planning process of the Comprehensive Plan, all three governors of the primary impacted states of Illinois, Missouri and Iowa showed support for a systemic, high level of protection plan. UMIMRA (NGO) has been the lead on local coordination. The additional public and state meetings will assist in fine tuning the Mississippi River Commission recommendations, who also support implementation. Plans B, G, H and M are all similar in providing a high level of flood risk reduction. Plan H includes a cost comparison. For Plan H, the construction cost of increasing the system height (typically raising a levee) is compared to the cost acquiring of the district, and the cost effective option (either the levee raise or acquisition) then becomes a part of Plan H for that site. Any district could choose not to be a part of the plan and the district would stay “as is” or find other resources to improve the existing level of protection. Of the existing flood damage reduction systems, 37 systems should be further evaluated using a cost comparison methodology. Most of the Levee districts, if no Federal funds are available, could proceed over time with local assessments or state support. Local assessments in the Upper Mississippi River main stem levee districts range from \$5.00 to \$40.00/acre. In accordance with the Mississippi River Commission recommendations, those districts able to improve within FEMA induced head guidelines have a total acreage of 728,000 acres. Using an improvement assessment rate as approved by local landowners and local sponsors, improvements would be made over time, as coordinated by the Mississippi River Commission and the local sponsor.

For areas not improved, assurance for crop insurance or flood easements will be necessary to fully implement the plan. These districts may be eligible for Federal funding.

8. Does the primary sponsor named in (2.) above have the financial ability to provide for the required cost share?

Yes

Primary Sponsor Letter of Support

(As uploaded)

UMIMRA Support Letter Comprehensive Plan- surface.pdf

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

November 26, 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 modification of the Upper Mississippi River Comprehensive Plan, an authorized USACE project. UMIMRA proposes the following modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a) strike the word "develop" and replace with the word "implement."

From an economic perspective, the Upper Mississippi River Comprehensive Plan will play a large role in mid-west economic development. According to the Tennessee Valley Authority Study, improving our flood control system in the Upper Valley can return 5 dollars for every one dollar invested in Regional Economic Development. Also, employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive plan.

From a humanitarian perspective the UMRCPP is necessary to ensure that the naturally fertile soils of the Upper Mississippi Valley are protected to produce food for a growing world population. One acre of corn, yielding 150 bushel, produces enough kilo-calories to feed 10 people for an entire year. The Upper Mississippi Comprehensive Plan Levees protect over 853,000 acres of prime farm land. Therefore, these levees protect the land that feeds more than 8.5 million people for an entire year.

From a transportation perspective, cost brought on by a major flood event is dominated by the cost of diversion detours. The Comprehensive Plan found a four-bridge diversion cost of \$478.1million (\$2008), or

\$510.0 million (\$2012). The Corps estimate of \$510 million increases by \$454 million when diversion costs found at the remaining bridges are added to the total cost. Rail diversion costs are also significant. According to the Center for Transportation Research at the University of Tennessee (CTR) train diversion costs incurred roughly \$3 million per day and total roughly \$60 million for a 30 day period. In combination, the diversion costs for highway and rail transportation total \$1.024 billion, assuming the flooding event occurs in the current year. Additionally, the estimated total costs of the detour and repairs to highways and rail tracks are \$1.027 billion.

From a local perspective, the UMRCP is necessary to ensure the safety of human life and alleviate the stress of knowing where the water will go in a high water event. According to the American Geophysical Union, Mississippi river discharge is projected to greatly increase during 2011-2099, attributing to hydrologic intensification, meaning that the Upper Mississippi Valley can expect more recurring issues over the coming years.

There is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the hungry.

Thank you for your consideration,

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

Other Non-Federal Sponsors Letter(s) of Support

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Greater Burlington Support of Comp Plan.pdf

September 23, 2015

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,

The Greater Burlington Partnership is the leading economic and community development organization serving Burlington/West Burlington, and the surrounding area. This letter is in support for the modification of the Upper Mississippi River Comprehensive Plan. The organization supports the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a), I would encourage you to strike the word “develop” and replace with the words “implement a Public-Private Partnership Plan”

From an economic perspective, hundreds of jobs and millions of dollars of private capital investment are protected by our local flood control system. As a river community, we see vast potential for additional large-scale economic development projects with river access. The one limiting factor: flood control. An upgraded levee protection system as outlined in the comprehensive plan could unleash numerous economic development projects. Estimates suggest employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region with the implementation of the comprehensive plan.

How do we feed a starving world? By fully utilizing our fertile soil between the bluffs and the Mighty Mississippi. Fully implementation of the Upper Mississippi Comprehensive Plan levees system would protect over 853,000 acres of prime farm land- enough to feed more than 8.5 million people for an entire year.

From a transportation perspective, diversion detours carry a significant cost to our economy. The Comprehensive Plan found a four-bridge diversion cost of \$478.1million (\$2008), or \$510.0 million (\$2012). The Corps estimate of \$510 million increases by \$454 million when diversion costs found at the remaining bridges are added to the total cost. Rail diversion costs are also significant. According to the Center for Transportation Research at the University of Tennessee, (CTR) train diversion costs incurred roughly \$3 million per day and total roughly \$60 million for a 30 day period. In

combination, the diversion costs for highway and rail transportation total \$1.024 billion. Additionally, the estimated total costs of the detour and repairs to highways and rail tracks are \$1.027 billion.

In addition, we also can not ignore the value of human life including the danger and displacement that occur with a major flood event. We are likely to see increased hydrological intensification in the future, and we must do something to protect human life and investment from the raging river.

As you can see, there is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the world. The time to act is now. Thank you for your consideration.

Best regards,

A handwritten signature in black ink, appearing to read "Jason Hutcheson", with a stylized flourish at the end.

Jason Hutcheson, CEcD, MBA
President & CEO

Other Non-Federal Sponsors Letter(s) of Support

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KEach and Hunt Lima support of COmp plan.pdf

HUNT-LIMA DRAINAGE & LEVEE DISTRICT
705 LAFAYETTE
WARSAW, ILLINOIS 62379

September 23, 2015

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

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There is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the hungry.

Thank you for your consideration,

A handwritten signature in black ink that reads "L. Dianne Barnett". The signature is written in a cursive, flowing style.

L. Dianne Barnett, Commissioner

KEACH DRAINAGE & LEVEE DISTRICT
102 NORTH WESTGATE AVENUE
JACKSONVILLE, ILLINOIS 62650

September 23, 2015

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

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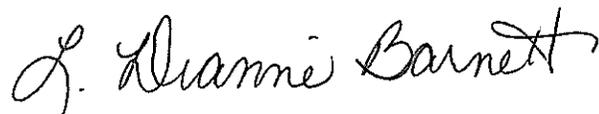
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L. Dianne Barnett, Commissioner

Other Non-Federal Sponsors Letter(s) of Support

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Klingner and Associates support of Comp Plan.pdf

September 23, 2015

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,

As engineers working with over thirty (30) Levee & Drainage Districts in the Upper Mississippi Valley, we send this letter of support for the modification of the Upper Mississippi River Comprehensive Plan, an authorized USACE project. We support the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a) strike the word “develop” and replace with the words “implement a Public-Private Partnership Plan”

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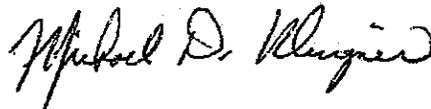
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Michael D. Klingner, P.E., President

Other Non-Federal Sponsors Letter(s) of Support

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Uimimra Support Marion County.pdf

MARION COUNTY DRAINAGE DISTRICT

7265 County Road 336, Palmyra, MO 63461

September 23, 2015

U.S. Army Corps of Engineers
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441 G Street NW
Washington, DC 20314-1000

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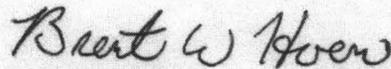
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Thank you for your consideration,

A handwritten signature in cursive script that reads "Brent W. Hoerr".

Brent W. Hoerr
President

Other Non-Federal Sponsors Letter(s) of Support

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TriOak Support of Comp Plan.pdf



P.O. Box 68
Oakville, Iowa 52646
(319) 766 - 2230

September 23, 2015

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Keifel)
441 G Street NW
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There is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the hungry.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "Al Muhlbach". The signature is written in a cursive, flowing style with a prominent initial "A" and a long, sweeping underline.

Other Non-Federal Sponsors Letter(s) of Support

(This is as uploaded, a blank page will show if nothing was submitted)

092315 Two Rivers Support of Comp Plan.pdf



*Affiliated Districts:
Levee District 16
Drainage Districts 4, 7, & 8*

September 23, 2015

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,

We send this letter of support for the modification of the Upper Mississippi River Comprehensive Plan, an authorized USACE project. We support the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a) strike the word “develop” and replace with the words “implement a Public-Private Partnership Plan”

From an economic perspective, the Upper Mississippi River Comprehensive Plan will play a large role in mid-west economic development. According to the Tennessee Valley Authority Study, improving our flood control system in the Upper Valley can return 5 dollars for every one dollar invested in Regional Economic Development. Also, employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive plan.

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Thank you for your consideration,

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Two Rivers Levee & Drainage District
Vicki Stoller, Administrator

Other Non-Federal Sponsors Letter(s) of Support

(This is as uploaded, a blank page will show if nothing was submitted)

Fabius Support Letter of COmp Plan.pdf

Fabuis River Drainage District
8203 County Road 346
Taylor, Missouri 63471

September 23, 2015

U.S. Army Corps of Engineers
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Washington, DC 20314-1000

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Thank you for your consideration,

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Roger Sutter, President
Fabius River Drainage District

Additional Proposal Information

(This is as uploaded, a blank page will show if nothing was submitted)

70001 Upper Mississippi River Comp Plan Final.pdf



WRRDA 2014- Section 7001 Submittal:

The Upper Mississippi River Comprehensive Plan

Submitted to:

www.usace.army.mil/Missions/CivilWorks/ProjectPlanning/WRRDA7001Proposals.aspx

September 23, 2015

SUBMITTED BY THE UPPER MISSISSIPPI, ILLINOIS,
& MISSOURI RIVERS ASSOCIATION (UMIMRA)

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1.0 Non-Federal Interest

The sponsor for regional coordination is the Upper Mississippi, Illinois, and Missouri Rivers Association (UMIMRA). Federal implementation planning for responsible Federal and non-Federal entities will be by the USACE under existing authorization. Construction responsibilities will be by the responsible Federal and non-Federal entities (local district, municipality, or political subdivision of its respective state, and/or state funded).

2.0 Study or Modification Type

This proposal is a modification to an authorized USACE project. UMIMRA proposes the following modification to Sec.459 of the 1999 Water Resources Development Act. In subsection (a) strike the word "develop" and replace with the word "implement a Public-Private Partnership Plan." So that it reads as follows:

SEC. 459. UPPER MISSISSIPPI RIVER COMPREHENSIVE PLAN.

(a) DEVELOPMENT.—The Secretary shall ~~develop~~ **implement a Public-Private Partnership Plan** to address water resource and related land resource problems and opportunities in the upper Mississippi and Illinois River basins, from Cairo, Illinois, to the headwaters of the Mississippi River, in the interest of systemic flood damage reduction by means of—

- (1) structural and nonstructural flood control and floodplain management strategies;
- (2) continued maintenance of the navigation project;
- (3) management of bank caving and erosion;
- (4) watershed nutrient and sediment management;
- (5) habitat management;
- (6) recreation needs; and

(7) other related purposes.

(b) CONTENTS.—The plan under subsection (a) shall—

(1) contain recommendations on management plans and actions to be carried out by the responsible Federal and non-

Federal entities;

(2) specifically address recommendations to authorize construction of a systemic flood control project for the upper Mississippi River; and

(3) include recommendations for Federal action where appropriate and recommendations for follow-on studies for problem areas for which data or current technology does not allow immediate solutions.

(c) CONSULTATION AND USE OF EXISTING DATA.—In carrying out this section, the Secretary shall—

(1) consult with appropriate Federal and State agencies; and

(2) make maximum use of data in existence on the date of enactment of this Act and ongoing programs and efforts of Federal agencies and States in developing the plan under subsection (a).

(d) COST SHARING.—

(1) DEVELOPMENT.—Development of the plan under sub-section (a) shall be at Federal expense.

(2) FEASIBILITY STUDIES.—Feasibility studies resulting from development of the plan shall be subject to cost sharing under section 105 of the Water Resources Development Act of 1986 (33 U.S.C. 2215).

(e) REPORT.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate a report that includes the plan under subsection (a).

3.0 Proposed Project Purpose

To implement a systemic approach that reduces cumulative flood risk costs and annual flood damages, while simultaneously providing long term improvements to other system values and uses (ecological, economic, recreation, transportation, etc.).

Currently, the Upper Mississippi and Illinois Rivers have no plan when high water occurs, each levee district must resort to flood fighting in an "every man for himself" atmosphere. This is dangerous to human life and is stifling to economic development. An Upper Mississippi River Comprehensive Plan takes the guess work out of flooding, providing a plan of action so everyone knows where the water goes. Currently, areas are flooding at more frequent intervals and not receiving compensation for their damages; whereas, with the Comprehensive Plan, we will know where the water will go and can put in place compensation agreements with the local sponsor. The proposed project will bring many levee districts in the Upper Mississippi and Illinois rivers in compliance with the new Federal Flood Risk Management Standard.

4.0 Cost Estimate

The USACE Rock Island District estimates that the completion of the modification to Sec. 459 of WRDA 1999 will require 2.5 million each year for the next 3 years. This modification will require additions to the hydrology and hydraulic study, fine tuning of the "Working Plan" in the Pike, Lincoln and St. Charles area, additional public meetings, development of crop insurance and/or flood easements in those areas unable or electing not to improve, implementing an elevated pump station authority under PL 84-99, and enacting an upland passive storage funding plan (similar to the Iowa Watershed Project) for all five (5) Upper River States.

The USACE Rock Island District estimates construction cost in range of \$4.0 billion for Plan H, to \$6.2 billion for Plan M (2008 dollars). Lower costs would be anticipated if built by the local sponsors. The Public Private Partnership would be formulated so structural improvements would be privately funded by the local

sponsor and the non-structural flood easements would be funded by the federal government at an estimated annual cost of 15.4 million, equating to approximately 100/acre for up to 160,000 acres. This would more than achieve the Mississippi River Commission recommendations to minimize induced head on the Mississippi Rivers & Tributaries System (MR&T).

5.0 Benefits of the Proposed Project

Implementation of a large, systemic flood risk reduction plan would result in significant regional economic benefits. The Tennessee Valley Authority estimated that every dollar spent on comprehensive flood risk reduction (i.e., 500-year level of risk reduction for urban areas and 100-year or greater level of risk reduction for agricultural areas - Plans A, B, D, G, H or M) would generate as much as \$5 in increased gross regional product for every dollar expended. According to the "Detour and Transportation Infrastructure Costs Due to a Major Flood Event on the Upper Mississippi and Illinois Rivers", Center of Transportation Research, University of Tennessee, July 5, 2012 report, the total costs of detour and repairs to highways and rail tracks are \$1.027 billion, and if no improvement, by year 30, the diversion costs of the 10 bridges of the Upper Mississippi becomes \$3.1 billion.

Employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive flood risk reduction plan. Other Social Effects (OSE) benefits for public health and safety and displacement would occur if a systemic alternative plan were implemented.

From a stakeholder view, the results of applying the Risked Informed Decision Framework (RIDF) indicated a preference for a comprehensive plan with a high level of risk reduction, for the entire Upper Mississippi River System. We know flood control works, since the Great Flood of 1993, according to the USACE Rock Island Corps of Engineers District, eleven of our member districts have prevented damages totaling nearly \$5.2 Billion. This number not only shows how successful flood control projects have been, but how imperative the maintenance and improvement of these structures are to the viability of the communities that depend on them.

6.0 Local Support

During the planning process of the Comprehensive Plan, all three governors of the primary impacted states of Illinois, Missouri and Iowa showed support for a systemic, high level of protection plan. UMIMRA (NGO) has been the lead on local coordination. The additional public and state meetings will assist in fine tuning the Mississippi River Commission recommendations, who also support implementation.

7.0 Financial Ability

Plans B, G, H and M are all similar in providing a high level of flood risk reduction. Plan H includes a cost comparison. For Plan H, the construction cost of increasing the system height (typically raising a levee) is compared to the cost acquiring of the district, and the cost effective option (either the levee raise or acquisition) then becomes a part of Plan H for that site. Any district could choose not to be a part of the plan and the district would stay "as is" or find other resources to improve the existing level of protection. Of the existing flood damage reduction systems, 37 systems should be further evaluated using a cost comparison methodology.

Most of the Levee districts, if no Federal funds are available, could proceed over time with local assessments or state support. Local assessments in the Upper Mississippi River main stem levee districts range from \$5.00 to \$40.00/acre. In accordance with the Mississippi River Commission recommendations, those districts able to improve within FEMA induced head guidelines have a total acreage of 728,000 acres. Using an improvement assessment rate as approved by local landowners and local sponsors, improvements would be made over time, as coordinated by the Mississippi River Commission and the local sponsor.

For areas not improved, assurance for crop insurance or flood easements will be necessary to fully implement the plan. These districts may be eligible for Federal funding.

8.0 Letters of Support

Please see the attached letters in Appendix A.

Appendix A

Letters of Support



Affiliated Districts:
Levee District 16
Drainage Districts 4, 7, & 8

September 23, 2015

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

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There is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the hungry.

Thank you for your consideration,

A handwritten signature in cursive script, appearing to read "Vicki Stoller".

Two Rivers Levee & Drainage District
Vicki Stoller, Administrator



P.O. Box 68
Oakville, Iowa 52646
(319) 766 - 2230

September 23, 2015

U.S. Army Corps of Engineers
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441 G Street NW
Washington, DC 20314-1000

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Making Connections, Building Community

Chamber of Commerce
Economic Development
Convention & Visitors Bureau
Downtown Partners, Inc.

September 23, 2015

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,

The Greater Burlington Partnership is the leading economic and community development organization serving Burlington/West Burlington, and the surrounding area. This letter is in support for the modification of the Upper Mississippi River Comprehensive Plan. The organization supports the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a), I would encourage you to strike the word "develop" and replace with the words "implement a Public-Private Partnership Plan"

From an economic perspective, hundreds of jobs and millions of dollars of private capital investment are protected by our local flood control system. As a river community, we see vast potential for additional large-scale economic development projects with river access. The one limiting factor: flood control. An upgraded levee protection system as outlined in the comprehensive plan could unleash numerous economic development projects. Estimates suggest employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region with the implementation of the comprehensive plan.

How do we feed a starving world? By fully utilizing our fertile soil between the bluffs and the Mighty Mississippi. Fully implementation of the Upper Mississippi Comprehensive Plan levees system would protect over 853,000 acres of prime farm land- enough to feed more than 8.5 million people for an entire year.

From a transportation perspective, diversion detours carry a significant cost to our economy. The Comprehensive Plan found a four-bridge diversion cost of \$478.1million (\$2008), or \$510.0 million (\$2012). The Corps estimate of \$510 million increases by \$454 million when diversion costs found at the remaining bridges are added to the total cost. Rail diversion costs are also significant. According to the Center for Transportation Research at the University of Tennessee, (CTR) train diversion costs incurred roughly \$3 million per day and total roughly \$60 million for a 30 day period. In

combination, the diversion costs for highway and rail transportation total \$1.024 billion. Additionally, the estimated total costs of the detour and repairs to highways and rail tracks are \$1.027 billion.

In addition, we also can not ignore the value of human life including the danger and displacement that occur with a major flood event. We are likely to see increased hydrological intensification in the future, and we must do something to protect human life and investment from the raging river.

As you can see, there is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the world. The time to act is now. Thank you for your consideration.

Best regards,

A handwritten signature in black ink, appearing to read "Jason Hutcheson", with a stylized flourish at the end.

Jason Hutcheson, CEcD, MBA
President & CEO

Fabuis River Drainage District
8203 County Road 346
Taylor, Missouri 63471

September 23, 2015

U.S. Army Corps of Engineers
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441 G Street NW
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Thank you for your consideration,

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Roger Sutter, President
Fabius River Drainage District

KEACH DRAINAGE & LEVEE DISTRICT
102 NORTH WESTGATE AVENUE
JACKSONVILLE, ILLINOIS 62650

September 23, 2015

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A handwritten signature in black ink that reads "L. Dianne Barnett". The signature is written in a cursive, flowing style.

L. Dianne Barnett, Commissioner

HUNT-LIMA DRAINAGE & LEVEE DISTRICT
705 LAFAYETTE
WARSAW, ILLINOIS 62379

September 23, 2015

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There is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the hungry.

Thank you for your consideration,

A handwritten signature in black ink that reads "L. Dianne Barnett". The signature is written in a cursive, flowing style.

L. Dianne Barnett, Commissioner

MARION COUNTY DRAINAGE DISTRICT

7265 County Road 336, Palmyra, MO 63461

September 23, 2015

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,

We send this letter of support for the modification of the Upper Mississippi River Comprehensive Plan, an authorized USACE project. We support the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a) strike the word "develop" and replace with the words "implement a Public-Private Partnership Plan"

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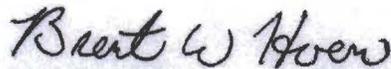
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Brent W. Hoerr
President

September 23, 2015

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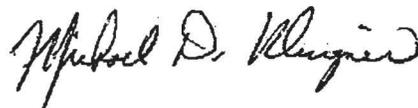
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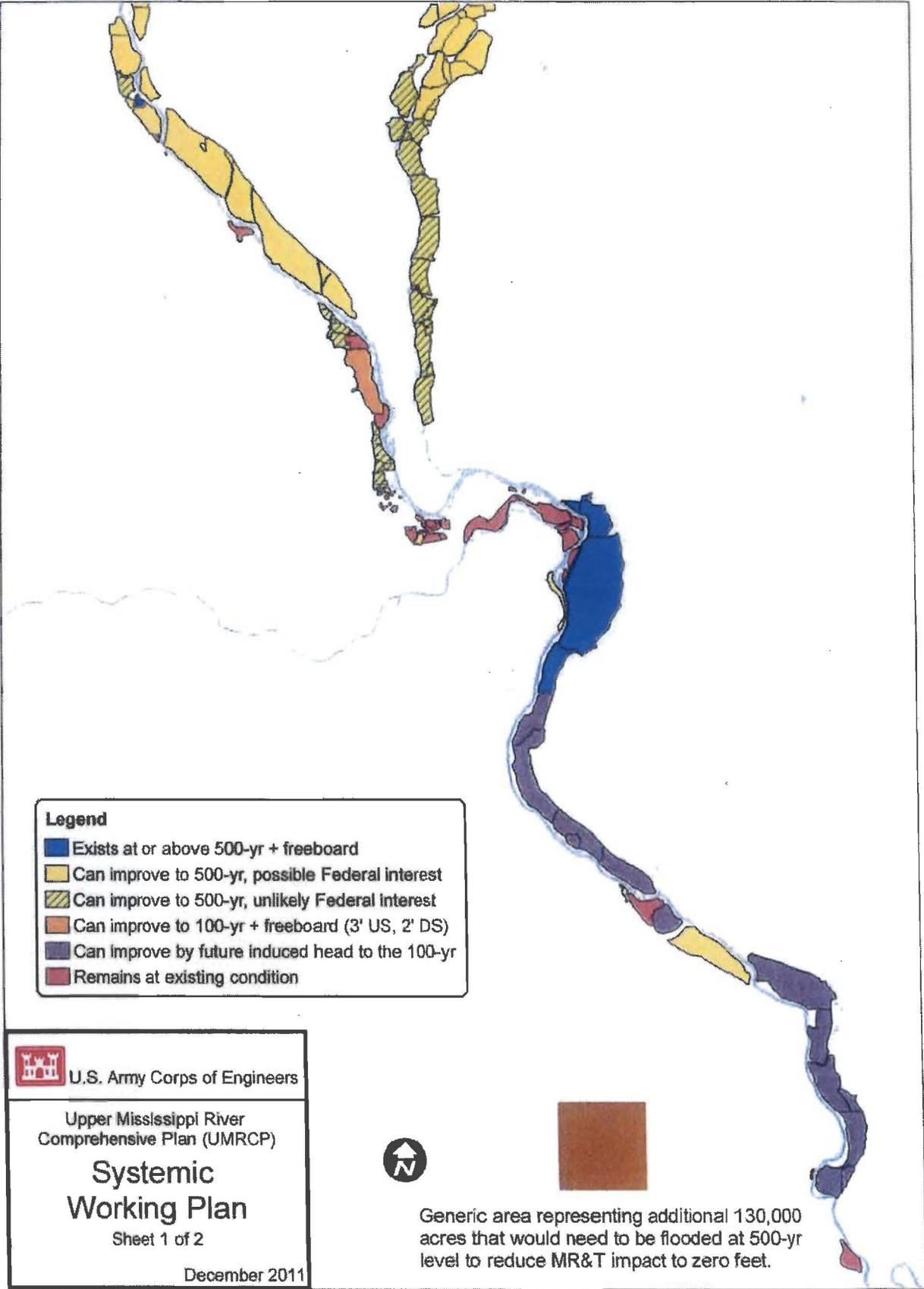
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A handwritten signature in black ink, reading "Michael D. Klingner". The signature is written in a cursive style with a large, prominent "M" and "K".

Michael D. Klingner, P.E., President

Appendix B

Supporting Documents & Maps



- Legend**
- Exists at or above 500-yr + freeboard
 - Can improve to 500-yr, possible Federal interest
 - Can improve to 500-yr, unlikely Federal interest
 - Can improve to 100-yr + freeboard (3' US, 2' DS)
 - Can improve by future induced head to the 100-yr
 - Remains at existing condition

 U.S. Army Corps of Engineers

Upper Mississippi River
Comprehensive Plan (UMRCP)

**Systemic
Working Plan**

Sheet 1 of 2

December 2011

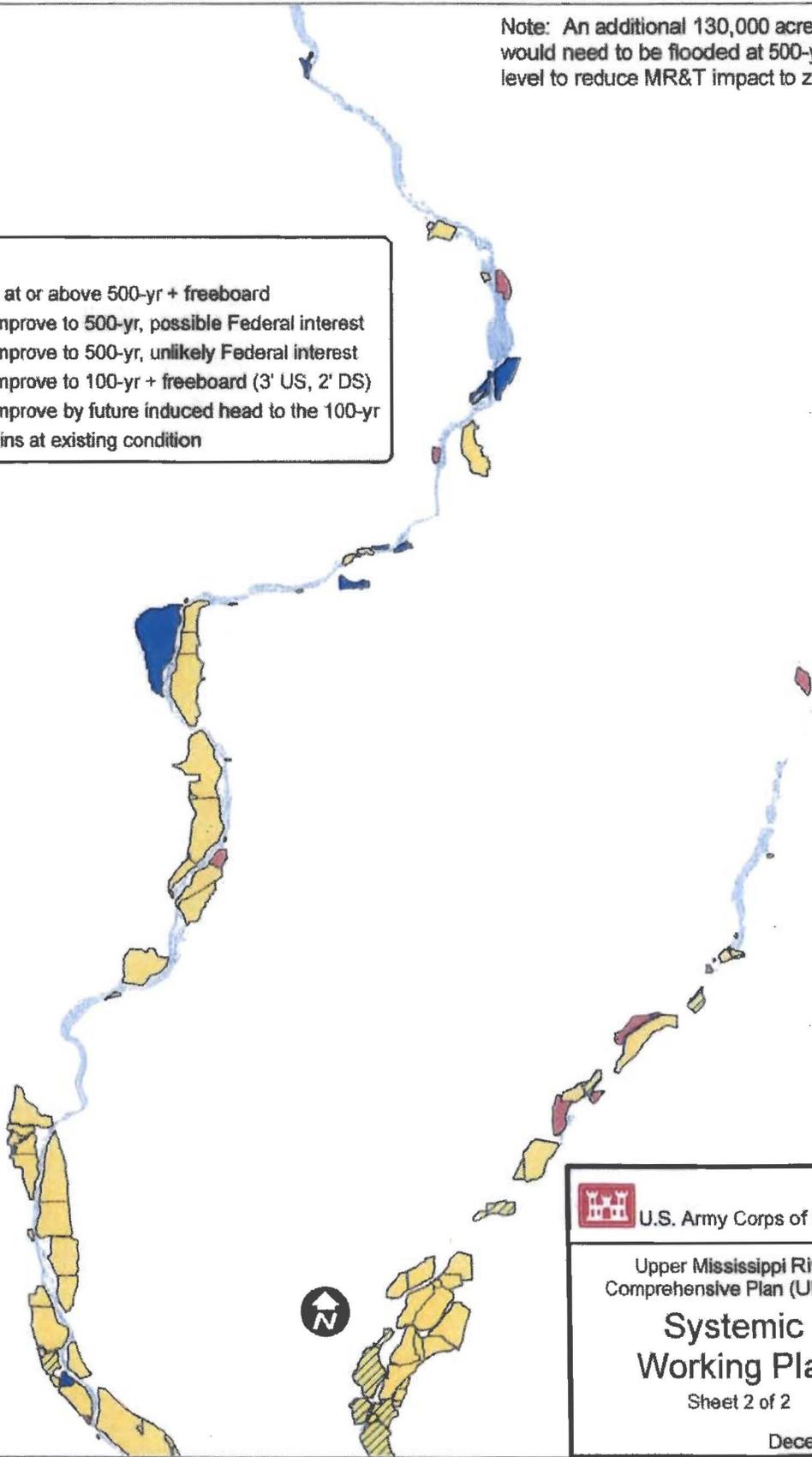


Generic area representing additional 130,000 acres that would need to be flooded at 500-yr level to reduce MR&T impact to zero feet.

Note: An additional 130,000 acres would need to be flooded at 500-yr level to reduce MR&T impact to zero feet.

Legend

-  Exists at or above 500-yr + freeboard
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U.S. Army Corps of Engineers

Upper Mississippi River
Comprehensive Plan (UMRCP)

**Systemic
Working Plan**

Sheet 2 of 2

December 2011

Route	River	Location	ADT (veh/day)	Year	Direction	Structure #	AKA
US 60 & 62	Mississippi	Cairo, IL	2800	2013	EB & WB	002-0005	
I 57	Mississippi	Cairo, IL	10800	2014	EB & WB	002-0022	
IL 146	Mississippi	Cape Girardeau, MO	11000	2013	EB & WB	002-0036	
IL 150	Mississippi	Chester, IL	6250	2013	EB & WB	079-6001	
I 255 & US 50	Mississippi	Millstadt Junction, IL	54900	2013	EB & WB	067-0019 & 067-0020	
I 55/64 & US 40	Mississippi	St. Louis, MO	114100	2013	EB & WB	082-0004	Poplar Street Bridge
Metra Link & FAU 9187A	Mississippi	St. Louis, MO	7100	2014	EB & WB	082-9929	Eads Bridge
MLK Bridge	Mississippi	St. Louis, MO	29000	2007	EB & WB	0825-6001	Martin Luther King Bridge
I-70	Mississippi	St. Louis, MO	30400	2014	EB & WB		Stan Musial Veterans Memorial Bridge
Salisbury St	Mississippi	St. Louis, MO	17600	2013	EB & WB	060-6002	McKinley Bridge
I 270	Mississippi	St. Louis, MO	52300	2013	EB & WB	060-0035	
US 67	Mississippi	Alton, IL	28200	2013	EB & WB	060-0255	
US 54	Mississippi	Louisiana, MO	3400	2013	EB & WB	075-9900	Champ Clark Bridge
I 72 & US 36	Mississippi	Hannibal, MO	13500	2013	EB & WB	075-0155	Mark Twain Memorial Bridge
US 24	Mississippi	Quincy, IL	9075	2013	EB	001-0019	Quincy Memorial Bridge
US 24	Mississippi	Quincy, IL	10800	2013	WB	001-0068	Bayview Bridge
US 136	Mississippi	Hamilton, IL	12400	2013	EB & WB	034-0062	Keokuk-Hamilton Bridge
IL 9	Mississippi	Ft. Madison, IA	2750	2013	EB & WB	034-9902	Fort Madison Toll Bridge
US 34	Mississippi	Burlington, IA	10600	2013	EB & WB	036-0048	Great River Bridge
IL 92	Mississippi	Muscatine, IA	3700	2013	EB & WB	081-9910	
I 280	Mississippi	Quad Cities	20400	2013	EB & WB	081-0106	
IL 40	Illinois	Peoria, IL	19600	2013	EB & WB	090-0122	

Total 470,675

#1



Table 19. Summary Comparison of Alternative Plan

	No Action	Plan A	Plan B	Plan C	Plan D	Plan E	Plan F
Plan Description	NO ACTION	Confined 500-yr	500-yr	200-yr Ag levee protection	~100-yr Ag levee protection	50-yr min Ag levee protection	Local protection for towns & bridge approaches @ 500-yr
Alternative Evaluation By Account							
NED	No change						
H&H		Yes	Yes	Yes	Yes	Yes	
Econ (Ann Ben)		\$19,169,000	\$13,461,000		\$12,990,000	\$11,900,000	
Cost (1st cost)		\$8,744,582,000	\$5,422,082,000		\$3,973,000,000	\$3,715,000,000	
Annualized Cost		\$571,538,000	\$314,612,000		\$230,530,000	\$178,190,000	
BCR		0.03	0.04		0.05	0.07	
EQ	No change						
Mitigation (Acres)			2,721		1,755	1,345	
Mitigation (\$)			\$15,200,000		\$9,800,000	\$7,500,000	
Secondary Development (Potential New Acres)			320,037		1,048	4,987	
ER Opportunities (Potential ER Managed)			175,002		131,995	133,889	
ER Opportunities (% Sustainability Achieved)			57%		43%	43%	
ER Opportunities (First Costs, \$)			\$455,000,000		\$672,000,000	\$348,000,000	
Nutrients (Potential Wetlands Acres)			66,501		50,158	50,612	
Sediments (Potential # Tributary Feeders)			124		206	135	
RED	No change	\$30,381,000,000	\$27,091,000,000		\$22,029,000,000		
OSE	No change						

Upper Mississippi River Comprehensive Plan

Main Report

	Plan G	Plan H	Plan I	Plan J	Plan K	Plan L	Plan M
Plan Description	Allow up to 1' rise at Thebes; 500-yr Ag, requires 10,000 acre storage area in Monroe Co.	500-year cost effective buyout	Buyout development in 100-yr floodplain	No development in 500-yr floodplain; buyout development in Ag areas; remove Ag levees	500-yr for Ag with regional critical infrastructure	Local protection for bridge approaches @ 500-yr	Allow up to 1' rise at Thebes; 500-yr Ag, no storage area in Monroe Co, IL
Alternative Evaluation By Account							
NED	Yes	Yes		Yes			Yes
H&H	Yes	No	No	Yes			Yes
Econ (Ann Ben)		\$13,461,000					\$16,133,000
Cost (1st cost)	\$6,191,830,000	\$3,969,970,000		\$3,187,480,000			\$6,166,000,000
Annualized Cost	\$359,276,000	\$259,473,000		\$184,951,000			\$357,780,000
BCR		0.05					0.05
EQ							
Mitigation (Acres)		1,240	No	No			2,972
Mitigation (\$)		\$6,900,000	No	No			\$16,643,000
Secondary Development (Potential New Acres)		215,775	-8,776	-334,328			346,000
ER Opportunities (Potential ER Managed)		175,002	9,791	807,943			42,000
ER Opportunities (% Sustainability Achieved)		57%	3%	261%			14%
ER Opportunities (First Costs, \$)		\$455,000,000	\$25,000,000	\$261,000,000			\$213,000,000
Nutrients (Potential Wetlands Acres)		66,501	3,721	307,018			16,000
Sediments (Potential # Tributary Feeders)		141	No	286			38
RED							
OSE							

Additional Proposal Information

(This is as uploaded, a blank page will show if nothing was submitted)

70001 Upper Mississippi River Comp Plan Final.pdf



WRRDA 2014- Section 7001 Submittal:

The Upper Mississippi River Comprehensive Plan

Submitted to:

www.usace.army.mil/Missions/CivilWorks/ProjectPlanning/WRRDA7001Proposals.aspx

September 23, 2015

SUBMITTED BY THE UPPER MISSISSIPPI, ILLINOIS,
& MISSOURI RIVERS ASSOCIATION (UMIMRA)

Table of Contents

1.0	Non-Federal Interest.....	1
2.0	Study or Modification Type.....	2
3.0	Proposed Project.....	3
4.0	Cost Estimate.....	4
5.0	Benefits of the Proposed Project.....	5
6.0	Local Support.....	6
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8.0	Letters of Support.....	Appendix A
9.0	Cost Benefit Support Documents.....	Appendix B

1.0 Non-Federal Interest

The sponsor for regional coordination is the Upper Mississippi, Illinois, and Missouri Rivers Association (UMIMRA). Federal implementation planning for responsible Federal and non-Federal entities will be by the USACE under existing authorization. Construction responsibilities will be by the responsible Federal and non-Federal entities (local district, municipality, or political subdivision of its respective state, and/or state funded).

2.0 Study or Modification Type

This proposal is a modification to an authorized USACE project. UMIMRA proposes the following modification to Sec.459 of the 1999 Water Resources Development Act. In subsection (a) strike the word "develop" and replace with the word "implement a Public-Private Partnership Plan." So that it reads as follows:

SEC. 459. UPPER MISSISSIPPI RIVER COMPREHENSIVE PLAN.

(a) DEVELOPMENT.—The Secretary shall ~~develop~~ **implement a Public-Private Partnership Plan** to address water resource and related land resource problems and opportunities in the upper Mississippi and Illinois River basins, from Cairo, Illinois, to the headwaters of the Mississippi River, in the interest of systemic flood damage reduction by means of—

- (1) structural and nonstructural flood control and floodplain management strategies;
- (2) continued maintenance of the navigation project;
- (3) management of bank caving and erosion;
- (4) watershed nutrient and sediment management;
- (5) habitat management;
- (6) recreation needs; and

(7) other related purposes.

(b) CONTENTS.—The plan under subsection (a) shall—

(1) contain recommendations on management plans and actions to be carried out by the responsible Federal and non-

Federal entities;

(2) specifically address recommendations to authorize construction of a systemic flood control project for the upper Mississippi River; and

(3) include recommendations for Federal action where appropriate and recommendations for follow-on studies for problem areas for which data or current technology does not allow immediate solutions.

(c) CONSULTATION AND USE OF EXISTING DATA.—In carrying out this section, the Secretary shall—

(1) consult with appropriate Federal and State agencies; and

(2) make maximum use of data in existence on the date of enactment of this Act and ongoing programs and efforts of Federal agencies and States in developing the plan under subsection (a).

(d) COST SHARING.—

(1) DEVELOPMENT.—Development of the plan under sub-section (a) shall be at Federal expense.

(2) FEASIBILITY STUDIES.—Feasibility studies resulting from development of the plan shall be subject to cost sharing under section 105 of the Water Resources Development Act of 1986 (33 U.S.C. 2215).

(e) REPORT.—Not later than 3 years after the date of enactment of this Act, the Secretary shall submit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Environment and Public Works of the Senate a report that includes the plan under subsection (a).

3.0 Proposed Project Purpose

To implement a systemic approach that reduces cumulative flood risk costs and annual flood damages, while simultaneously providing long term improvements to other system values and uses (ecological, economic, recreation, transportation, etc.).

Currently, the Upper Mississippi and Illinois Rivers have no plan when high water occurs, each levee district must resort to flood fighting in an "every man for himself" atmosphere. This is dangerous to human life and is stifling to economic development. An Upper Mississippi River Comprehensive Plan takes the guess work out of flooding, providing a plan of action so everyone knows where the water goes. Currently, areas are flooding at more frequent intervals and not receiving compensation for their damages; whereas, with the Comprehensive Plan, we will know where the water will go and can put in place compensation agreements with the local sponsor. The proposed project will bring many levee districts in the Upper Mississippi and Illinois rivers in compliance with the new Federal Flood Risk Management Standard.

4.0 Cost Estimate

The USACE Rock Island District estimates that the completion of the modification to Sec. 459 of WRDA 1999 will require 2.5 million each year for the next 3 years. This modification will require additions to the hydrology and hydraulic study, fine tuning of the "Working Plan" in the Pike, Lincoln and St. Charles area, additional public meetings, development of crop insurance and/or flood easements in those areas unable or electing not to improve, implementing an elevated pump station authority under PL 84-99, and enacting an upland passive storage funding plan (similar to the Iowa Watershed Project) for all five (5) Upper River States.

The USACE Rock Island District estimates construction cost in range of \$4.0 billion for Plan H, to \$6.2 billion for Plan M (2008 dollars). Lower costs would be anticipated if built by the local sponsors. The Public Private Partnership would be formulated so structural improvements would be privately funded by the local

sponsor and the non-structural flood easements would be funded by the federal government at an estimated annual cost of 15.4 million, equating to approximately 100/acre for up to 160,000 acres. This would more than achieve the Mississippi River Commission recommendations to minimize induced head on the Mississippi Rivers & Tributaries System (MR&T).

5.0 Benefits of the Proposed Project

Implementation of a large, systemic flood risk reduction plan would result in significant regional economic benefits. The Tennessee Valley Authority estimated that every dollar spent on comprehensive flood risk reduction (i.e., 500-year level of risk reduction for urban areas and 100-year or greater level of risk reduction for agricultural areas - Plans A, B, D, G, H or M) would generate as much as \$5 in increased gross regional product for every dollar expended. According to the "Detour and Transportation Infrastructure Costs Due to a Major Flood Event on the Upper Mississippi and Illinois Rivers", Center of Transportation Research, University of Tennessee, July 5, 2012 report, the total costs of detour and repairs to highways and rail tracks are \$1.027 billion, and if no improvement, by year 30, the diversion costs of the 10 bridges of the Upper Mississippi becomes \$3.1 billion.

Employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive flood risk reduction plan. Other Social Effects (OSE) benefits for public health and safety and displacement would occur if a systemic alternative plan were implemented.

From a stakeholder view, the results of applying the Risked Informed Decision Framework (RIDF) indicated a preference for a comprehensive plan with a high level of risk reduction, for the entire Upper Mississippi River System. We know flood control works, since the Great Flood of 1993, according to the USACE Rock Island Corps of Engineers District, eleven of our member districts have prevented damages totaling nearly \$5.2 Billion. This number not only shows how successful flood control projects have been, but how imperative the maintenance and improvement of these structures are to the viability of the communities that depend on them.

6.0 Local Support

During the planning process of the Comprehensive Plan, all three governors of the primary impacted states of Illinois, Missouri and Iowa showed support for a systemic, high level of protection plan. UMIMRA (NGO) has been the lead on local coordination. The additional public and state meetings will assist in fine tuning the Mississippi River Commission recommendations, who also support implementation.

7.0 Financial Ability

Plans B, G, H and M are all similar in providing a high level of flood risk reduction. Plan H includes a cost comparison. For Plan H, the construction cost of increasing the system height (typically raising a levee) is compared to the cost acquiring of the district, and the cost effective option (either the levee raise or acquisition) then becomes a part of Plan H for that site. Any district could choose not to be a part of the plan and the district would stay “as is” or find other resources to improve the existing level of protection. Of the existing flood damage reduction systems, 37 systems should be further evaluated using a cost comparison methodology.

Most of the Levee districts, if no Federal funds are available, could proceed over time with local assessments or state support. Local assessments in the Upper Mississippi River main stem levee districts range from \$5.00 to \$40.00/acre. In accordance with the Mississippi River Commission recommendations, those districts able to improve within FEMA induced head guidelines have a total acreage of 728,000 acres. Using an improvement assessment rate as approved by local landowners and local sponsors, improvements would be made over time, as coordinated by the Mississippi River Commission and the local sponsor.

For areas not improved, assurance for crop insurance or flood easements will be necessary to fully implement the plan. These districts may be eligible for Federal funding.

8.0 Letters of Support

Please see the attached letters in Appendix A.

Appendix A

Letters of Support



Affiliated Districts:
Levee District 16
Drainage Districts 4, 7, & 8

September 23, 2015

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

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Thank you for your consideration,

A handwritten signature in cursive script, appearing to read "Vicki Stoller, Administrator".

Two Rivers Levee & Drainage District
Vicki Stoller, Administrator



P.O. Box 68
Oakville, Iowa 52646
(319) 766 - 2230

September 23, 2015

U.S. Army Corps of Engineers
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Making Connections, Building Community

Chamber of Commerce
Economic Development
Convention & Visitors Bureau
Downtown Partners, Inc.

September 23, 2015

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

Dear Ms. Keifel,

The Greater Burlington Partnership is the leading economic and community development organization serving Burlington/West Burlington, and the surrounding area. This letter is in support for the modification of the Upper Mississippi River Comprehensive Plan. The organization supports the proposed modification to Sec. 459 of the 1999 Water Resources Development Act. In subsection (a), I would encourage you to strike the word "develop" and replace with the words "implement a Public-Private Partnership Plan"

From an economic perspective, hundreds of jobs and millions of dollars of private capital investment are protected by our local flood control system. As a river community, we see vast potential for additional large-scale economic development projects with river access. The one limiting factor: flood control. An upgraded levee protection system as outlined in the comprehensive plan could unleash numerous economic development projects. Estimates suggest employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region with the implementation of the comprehensive plan.

How do we feed a starving world? By fully utilizing our fertile soil between the bluffs and the Mighty Mississippi. Fully implementation of the Upper Mississippi Comprehensive Plan levees system would protect over 853,000 acres of prime farm land- enough to feed more than 8.5 million people for an entire year.

From a transportation perspective, diversion detours carry a significant cost to our economy. The Comprehensive Plan found a four-bridge diversion cost of \$478.1million (\$2008), or \$510.0 million (\$2012). The Corps estimate of \$510 million increases by \$454 million when diversion costs found at the remaining bridges are added to the total cost. Rail diversion costs are also significant. According to the Center for Transportation Research at the University of Tennessee, (CTR) train diversion costs incurred roughly \$3 million per day and total roughly \$60 million for a 30 day period. In

combination, the diversion costs for highway and rail transportation total \$1.024 billion. Additionally, the estimated total costs of the detour and repairs to highways and rail tracks are \$1.027 billion.

In addition, we also can not ignore the value of human life including the danger and displacement that occur with a major flood event. We are likely to see increased hydrological intensification in the future, and we must do something to protect human life and investment from the raging river.

As you can see, there is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the world. The time to act is now. Thank you for your consideration.

Best regards,

A handwritten signature in black ink, appearing to read "Jason Hutcheson", with a stylized flourish at the end.

Jason Hutcheson, CEcD, MBA
President & CEO

Fabuis River Drainage District
8203 County Road 346
Taylor, Missouri 63471

September 23, 2015

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

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From an economic perspective, the Upper Mississippi River Comprehensive Plan will play a large role in mid-west economic development. According to the Tennessee Valley Authority Study, improving our flood control system in the Upper Valley can return 5 dollars for every one dollar invested in Regional Economic Development. Also, employment could increase by more than 20,000 jobs annually in the five-state Upper Mississippi Valley Region resulting from upgraded levee protection provided by the full implementation of a comprehensive plan.

From a humanitarian perspective the UMRCPP is necessary to ensure that the naturally fertile soils of the Upper Mississippi Valley are protected to produce food for a growing world population. One acre of corn, yielding 150 bushel, produces enough kilo-calories to feed 10 people for an entire year. The Upper Mississippi Comprehensive Plan Levees protect over 853,000 acres of prime farm land. Therefore, these levees protect the land that feeds more than 8.5 million people for an entire year.

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From a local perspective, the UMRCP is necessary to ensure the safety of human life and alleviate the stress of knowing where the water will go in a high water event. According to the American Geophysical Union, Mississippi river discharge is projected to greatly increase during 2011-2099, attributing to hydrologic intensification, meaning that the Upper Mississippi Valley can expect more recurring issues over the coming years.

There is much to gain by implementing the Upper Mississippi River Comprehensive Plan for the people of Missouri, Illinois, and Iowa who are working to improve flood protection, stimulate the economy and feed the hungry.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "Roger Sutter", with a stylized flourish at the end.

Roger Sutter, President
Fabius River Drainage District

KEACH DRAINAGE & LEVEE DISTRICT
102 NORTH WESTGATE AVENUE
JACKSONVILLE, ILLINOIS 62650

September 23, 2015

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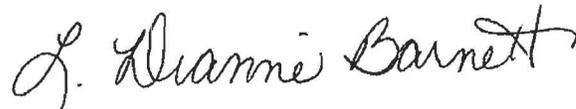
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Thank you for your consideration,

A handwritten signature in black ink that reads "L. Dianne Barnett". The signature is written in a cursive, flowing style.

L. Dianne Barnett, Commissioner

HUNT-LIMA DRAINAGE & LEVEE DISTRICT
705 LAFAYETTE
WARSAW, ILLINOIS 62379

September 23, 2015

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Thank you for your consideration,

A handwritten signature in black ink that reads "L. Dianne Barnett". The signature is written in a cursive, flowing style.

L. Dianne Barnett, Commissioner

MARION COUNTY DRAINAGE DISTRICT

7265 County Road 336, Palmyra, MO 63461

September 23, 2015

U.S. Army Corps of Engineers
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441 G Street NW
Washington, DC 20314-1000

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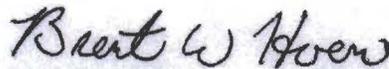
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Thank you for your consideration,



Brent W. Hoerr
President

September 23, 2015

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

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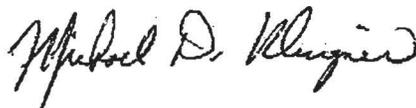
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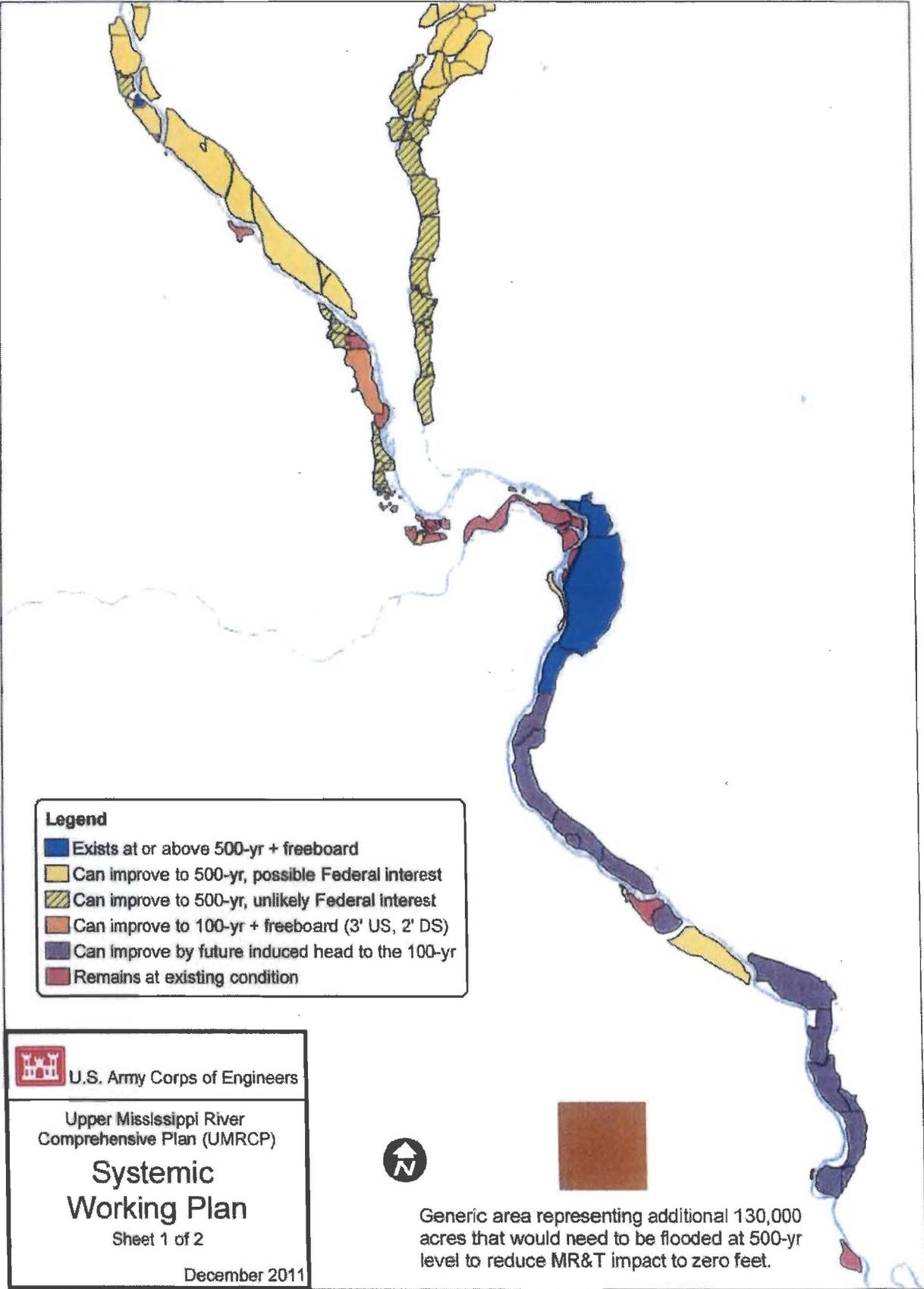
Thank you for your consideration,

A handwritten signature in cursive script that reads "Michael D. Klingner".

Michael D. Klingner, P.E., President

Appendix B

Supporting Documents & Maps



- Legend**
- Exists at or above 500-yr + freeboard
 - Can improve to 500-yr, possible Federal interest
 - Can improve to 500-yr, unlikely Federal interest
 - Can improve to 100-yr + freeboard (3' US, 2' DS)
 - Can improve by future induced head to the 100-yr
 - Remains at existing condition

 U.S. Army Corps of Engineers

Upper Mississippi River
Comprehensive Plan (UMRCP)

**Systemic
Working Plan**

Sheet 1 of 2

December 2011

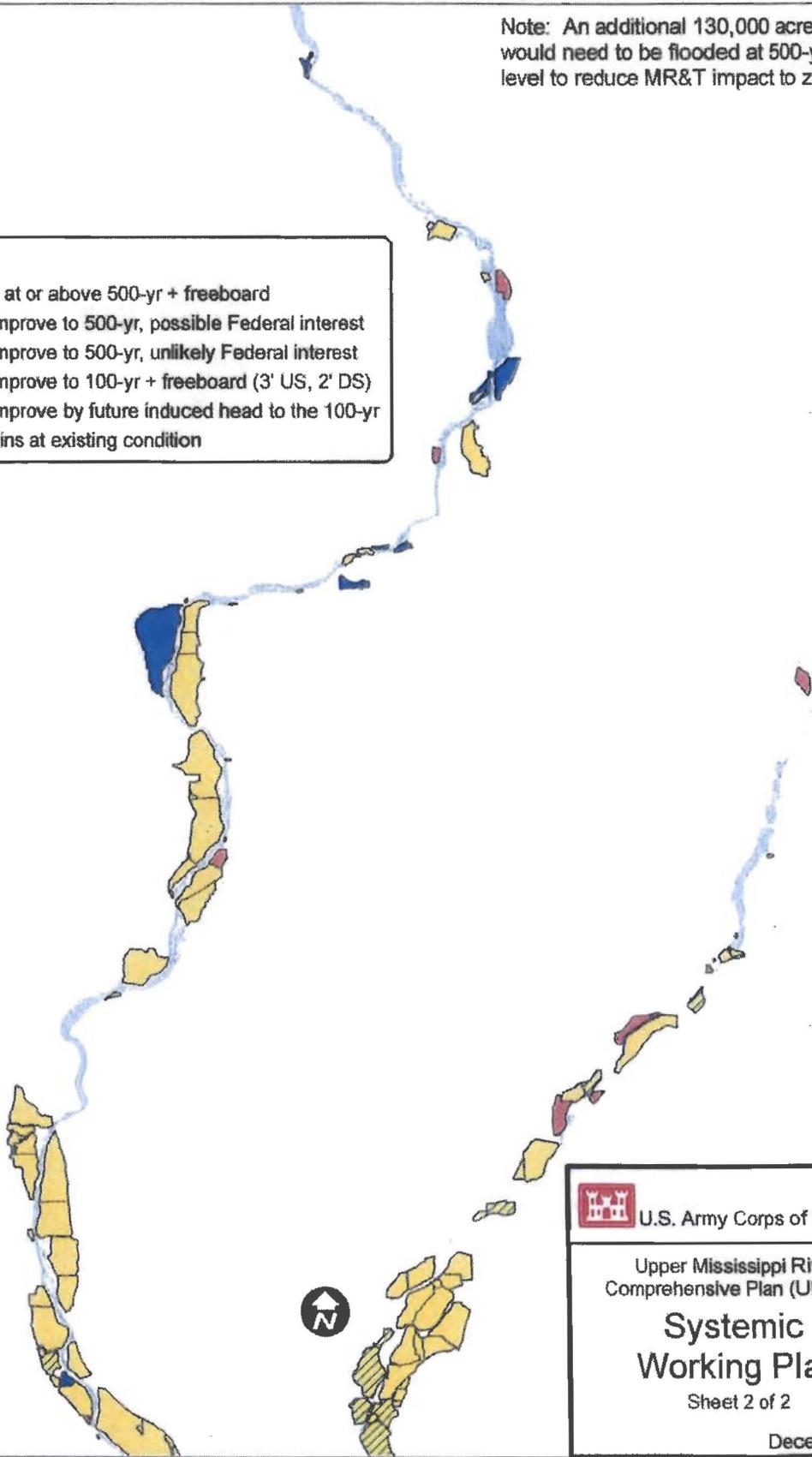


Generic area representing additional 130,000 acres that would need to be flooded at 500-yr level to reduce MR&T impact to zero feet.

Note: An additional 130,000 acres would need to be flooded at 500-yr level to reduce MR&T impact to zero feet.

Legend

-  Exists at or above 500-yr + freeboard
-  Can improve to 500-yr, possible Federal interest
-  Can improve to 500-yr, unlikely Federal interest
-  Can improve to 100-yr + freeboard (3' US, 2' DS)
-  Can improve by future induced head to the 100-yr
-  Remains at existing condition



U.S. Army Corps of Engineers

Upper Mississippi River
Comprehensive Plan (UMRCP)

Systemic Working Plan

Sheet 2 of 2

December 2011

Route	River	Location	ADT (veh/day)	Year	Direction	Structure #	AKA
US 60 & 62	Mississippi	Cairo, IL	2800	2013	EB & WB	002-0005	
I 57	Mississippi	Cairo, IL	10800	2014	EB & WB	002-0022	
IL 146	Mississippi	Cape Girardeau, MO	11000	2013	EB & WB	002-0036	
IL 150	Mississippi	Chester, IL	6250	2013	EB & WB	079-6001	
I 255 & US 50	Mississippi	Millstadt Junction, IL	54900	2013	EB & WB	067-0019 & 067-0020	
I 55/64 & US 40	Mississippi	St. Louis, MO	114100	2013	EB & WB	082-0004	Poplar Street Bridge
Metra Link & FAU 9187A	Mississippi	St. Louis, MO	7100	2014	EB & WB	082-9929	Eads Bridge
MLK Bridge	Mississippi	St. Louis, MO	29000	2007	EB & WB	0825-6001	Martin Luther King Bridge
I-70	Mississippi	St. Louis, MO	30400	2014	EB & WB		Stan Musial Veterans Memorial Bridge
Salisbury St	Mississippi	St. Louis, MO	17600	2013	EB & WB	060-6002	McKinley Bridge
I 270	Mississippi	St. Louis, MO	52300	2013	EB & WB	060-0035	
US 67	Mississippi	Alton, IL	28200	2013	EB & WB	060-0255	
US 54	Mississippi	Louisiana, MO	3400	2013	EB & WB	075-9900	Champ Clark Bridge
I 72 & US 36	Mississippi	Hannibal, MO	13500	2013	EB & WB	075-0155	Mark Twain Memorial Bridge
US 24	Mississippi	Quincy, IL	9075	2013	EB	001-0019	Quincy Memorial Bridge
US 24	Mississippi	Quincy, IL	10800	2013	WB	001-0068	Bayview Bridge
US 136	Mississippi	Hamilton, IL	12400	2013	EB & WB	034-0062	Keokuk-Hamilton Bridge
IL 9	Mississippi	Ft. Madison, IA	2750	2013	EB & WB	034-9902	Fort Madison Toll Bridge
US 34	Mississippi	Burlington, IA	10600	2013	EB & WB	036-0048	Great River Bridge
IL 92	Mississippi	Muscatine, IA	3700	2013	EB & WB	081-9910	
I 280	Mississippi	Quad Cities	20400	2013	EB & WB	081-0106	
IL 40	Illinois	Peoria, IL	19600	2013	EB & WB	090-0122	

Total 470,675

#1



Table 19. Summary Comparison of Alternative Plan

	No Action	Plan A	Plan B	Plan C	Plan D	Plan E	Plan F
Plan Description	NO ACTION	Confined 500-yr	500-yr	200-yr Ag levee protection	~100-yr Ag levee protection	50-yr min Ag levee protection	Local protection for towns & bridge approaches @ 500-yr
Alternative Evaluation By Account							
NED	No change						
H&H		Yes	Yes	Yes	Yes	Yes	
Econ (Ann Ben)		\$19,169,000	\$13,461,000		\$12,990,000	\$11,900,000	
Cost (1st cost)		\$8,744,582,000	\$5,422,082,000		\$3,973,000,000	\$3,715,000,000	
Annualized Cost		\$571,538,000	\$314,612,000		\$230,530,000	\$178,190,000	
BCR		0.03	0.04		0.05	0.07	
EQ	No change						
Mitigation (Acres)			2,721		1,755	1,345	
Mitigation (\$)			\$15,200,000		\$9,800,000	\$7,500,000	
Secondary Development (Potential New Acres)			320,037		1,048	4,987	
ER Opportunities (Potential ER Managed)			175,002		131,995	133,889	
ER Opportunities (% Sustainability Achieved)			57%		43%	43%	
ER Opportunities (First Costs, \$)			\$455,000,000		\$672,000,000	\$348,000,000	
Nutrients (Potential Wetlands Acres)			66,501		50,158	50,612	
Sediments (Potential # Tributary Feeders)			124		206	135	
RED	No change	\$30,381,000,000	\$27,091,000,000		\$22,029,000,000		
OSE	No change						

Upper Mississippi River Comprehensive Plan

Main Report

	Plan G	Plan H	Plan I	Plan J	Plan K	Plan L	Plan M
Plan Description	Allow up to 1' rise at Thebes; 500-yr Ag, requires 10,000 acre storage area in Monroe Co.	500-year cost effective buyout	Buyout development in 100-yr floodplain	No development in 500-yr floodplain; buyout development in Ag areas; remove Ag levees	500-yr for Ag with regional critical infrastructure	Local protection for bridge approaches @ 500-yr	Allow up to 1' rise at Thebes; 500-yr Ag, no storage area in Monroe Co, IL
Alternative Evaluation By Account							
NED	Yes	Yes		Yes			Yes
H&H	Yes	No	No	Yes			Yes
Econ (Ann Ben)		\$13,461,000					\$16,133,000
Cost (1st cost)	\$6,191,830,000	\$3,969,970,000		\$3,187,480,000			\$6,166,000,000
Annualized Cost	\$359,276,000	\$259,473,000		\$184,951,000			\$357,780,000
BCR		0.05					0.05
EQ							
Mitigation (Acres)		1,240	No	No			2,972
Mitigation (\$)		\$6,900,000	No	No			\$16,643,000
Secondary Development (Potential New Acres)		215,775	-8,776	-334,328			346,000
ER Opportunities (Potential ER Managed)		175,002	9,791	807,943			42,000
ER Opportunities (% Sustainability Achieved)		57%	3%	261%			14%
ER Opportunities (First Costs, \$)		\$455,000,000	\$25,000,000	\$261,000,000			\$213,000,000
Nutrients (Potential Wetlands Acres)		66,501	3,721	307,018			16,000
Sediments (Potential # Tributary Feeders)		141	No	286			38
RED							
OSE							