

To: Mississippi River Commission

Hannibal, Missouri

August 11, 2016

From: Michael D. Klingner, P.E.

Chairman, Upper Mississippi, Illinois and Missouri Rivers Association (UMIMRA)

General Wehr and Commissioners, thank you for today's opportunity to further discuss the important issues facing our Upper Mississippi River system. General Wehr, we also want to thank you for the many prior listening sessions with UMIMRA since taking on your leadership role with the MRC. Your time to better understand our concerns is greatly appreciated. We especially look forward to your help hosting the Levee Stakeholder Summit to be held in Hannibal later this month.

What can we do today to reduce flood damages? As you know, we are here in the Upper Mississippi, with no agreement on where the water will go during a major flood event. We were hit in 1993, then again in 2008, and part of the Upper Mississippi yet again just this last Winter. Billions of dollars of damage, and more loss of life is not acceptable. Enough is enough. Many of our main stem levees are constructed of sand, and an overtopping failure at the upper end of a district causes unnecessary damages. However, no one with the Corps today seems to be willing to make a decision to follow the Corps own guidance—the upper part of levee districts should be higher, and as history has shown us, significantly higher due to the sand construction. If water does enter a district, it needs to do so at the very low end of the district over hardened, clay levees, not along these sand main stem levees. These improvements could be done immediately, and have no impact to others.

Some districts would like to make additional improvements. The current flow frequency profiles used existing levee conditions and top of levee elevations in place in 2003, and this condition was approved by USACE, FEMA and all the Upper States. As modeling is probability based, these elevations and associated probabilities provide the foundation. The elevations used for the flow frequency profiles, provide the appropriate baseline to evaluate future levee alterations and any impact to others. The best and most complete reference of this base condition is the National Levee Data Base, performed just before the 2008 flood, and before any 408 guidance was being used in the Upper Mississippi. General Wehr, as your September 25, 2015 letter clearly states, "it is important that models created by the applicant accurately represent how flood waters moves through the river system". Unfortunately, we are seeing a misapplication of 408 guidance that does not acknowledge all of the Corps construction, as well as "Previously Approved Alterations" of the local sponsor performed prior to July 2014, the date of current EC 1165-2-216. I've attached recommendations to clarify this guidance for the updated EC, currently in process.

What can we do mid-term over the next few years? The major goal of UMIMRA is to see a Comprehensive Plan implemented that allows real improvements and reduce risk to the entire Upper Valley. The goal of the Comprehensive Plan is to pass a major flood event, like 1993 with minimal property damage and no loss of life. We appreciate the MRC endorsement of the 2008 Comprehensive Plan Final Report. However, we recognize the Plan did not gather the full public support needed and did

not fully address how the plan could be implemented, or how to compensate those that may agree to take water. We are very supportive of Section 4010 of the upcoming WRDA bill to re-start the Comprehensive Plan and find a way forward to have a plan in the upper five states, similar to the lower five states successful MR&T. We desire this plan to address flood control needs, and also coordinate closely with navigation and environmental needs of our Upper Valley. We need to treat the Mississippi as one river with similar levels of protection in both the upper and lower sections.

We hope the Levee Stakeholder Summit provides the springboard to kick start the Comprehensive Plan. We have invited all the political subdivisions of their respective states which deal directly with flood control to attend. Over 140 levees and Cities have been invited, and many personal calls have been made to encourage attendance. We want you to hear directly from the stake holders who deal with flooding issues in the Upper Valley. We hope this Summit can start a productive dialog on how best to structure any additional alternatives that may better allow implementation as soon as possible. We have asked each stakeholder to list their desired level of protection, how they feel they can finance improvements, what incentives would be required to store water that exceed the stakeholders level of protection, and if they want to be more directly involved in the planning process.

Long term, a watershed approach to reduce discharge rates, as well as improve water quality in the upper tributaries would be beneficial. We strongly support the efforts of the State of Iowa in its encouragement of small private ponds and lakes and improving water quality; we would like to see this same effort in the other Upper States. However, we don't want a watershed approach to delay the implementation of the Comprehensive Plan. We cannot be stuck in a non-systemic 1950s piecemeal level of protection for another 25 years while waiting for a watershed plan. The Risk Informed Decision Framework (RIDF), developed after Katrina, clearly showed increased protection is necessary, and necessary now, for the economic health and safety of the Upper Valley.

In summary, we look forward to the Levee Stakeholder Summit and the re-start of the Comprehensive Plan. We look forward to working with the Corps and stakeholders in implementing the plan as quickly as possible to help us prevent another disaster.

Thank you, and Best Regards,

Michael D. Klingner, P.E

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Attachment to MRC Comments, August 11, 2016

We appreciate the opportunity to provide recommendations in the 408 as part of the updated version in process.

ADD: at the end of F-3,g. (we simply define what is meant by authorized and what is meant by existing. That way we are not changing the original intent, we are simply better defining the process.)

i.e.

Impacts will be determined by comparing performance parameters (annual exceedance probability (AEP), assurance (conditional non-exceedance probability (CNP), etc.) for the existing and authorized conditions, if they are different to the conditions resulting from the project alteration. Where the authorized conditions are defined as the "best available" levee profile information established prior to the effective date of this EC, including but not limited to, the surveyed as-built condition of USACE projects, National Levee Database levee profiles, USACE approved Flow Frequency Study levee profiles, USACE PL84-99 project as-built survey data, Section 208.10 submittals, or FEMA certification projects reviewed by USACE; where the existing conditions levee profile is the current conditions in the field representing changes or modifications since the "best available" data was collected; where the project alteration is proposed project levee profile.

We think the recommendation for the flows to be modeled would most likely fall under section F-3 d:

Add: at the end of F-3d:

The hydraulic analysis will consider the full range of loading conditions up to and including the 0.2% probability flood event. Lesser flood event probabilities should not be considered unless previously performed modeling or data exists for these lower probability floods.