

**UMRBA and USACE
Upper Mississippi Flood, Drought, Sediment Management Summit
Flood Issue Area Team – Working Session Meeting Minutes**

Flood Team Participant List (“1” = September 30; “2” = October 1)

Individual	Affiliation	In-Person	Remote
Hal Graef	US Army Corps of Engineers, MVS	X (1/2)	
Loren Wobig	Illinois DNR	X (1/2)	
Ceil Strauss	Minnesota DNR	X (1/2)	
Rick Pohlman	Illinois DNR	X (1/2)	
Jill Crafton	Isaac Walton League	X (1/2)	
Allen Rowland	Missouri DNR	X (1/2)	
Joan Stemler	US Army Corps of Engineers, MVS	X (1/2)	
Katie Fennewald	Missouri Farm Bureau		X (1)
Kirsten Wallace	Upper Mississippi River Basin Association	X (1)	
Mark Ellis	Upper Mississippi River Basin Association	X (1/2)	
Tammy Conforti	US Army Corps of Engineers, HQ	X (1)	
Stephanie Rhodes	Landowner		X (1)
Ken Henderson	MO Department of Agriculture	X (1/2)	
Mark Gaikowski	U.S. Geological Survey	X (1/2)	
Corey Loveland	NWS	X (1/2)	
Steve Buan	NWS	X (1/2)	
Jessica Brooks	NWS		X (1/2)
Sara Straussman	Wisconsin DNR		X (1)
Nancy Guyton	Neighbors of the Mississippi		X (2)
Luis Ramirez	Audubon Society	X (1/2)	
Jeff Walk	The Nature Conservancy	X (1/2)	
Brent Hoerr	UMIMRA		X (1)
Sheila Phillips Dorsey	Public, Local Community		X (1)
Bruce Brinkman	UMIMRA	X (1/2)	
Rylee Main	Lake Pepin Alliance		X(1)
Kirby Wagner	Illinois Farm Bureau		X (1)

Day 1, 30 September, 2019

Flood Issue Area Team Leads:

- Discussed roles/responsibilities of the flood team
 - o UMRBA/USACE have partnered to produce the Planning Assistance to States report
 - Building upon prior UMRBA initiatives
 - UMRBA State Floodplain Management Comparison (Feb 2013)
 - UMRBA Flood Risk and Sediment Management Summit (July 2017)
 - UMRBA/USACE Flood, Sediment, Drought IWRM Pilot (Oct 2018)
 - o PAS study has 2 main tasks
 - Task 1: host series of Open Space Sessions
 - Task 2: develop assessment (flood team)
 - Include problems, opportunities, list of questions, etc
 - Identify potential actions (both short and long term)
 - o Schedule
 - Anticipate 4 meetings (combination of face-to-face and virtual)
 - Draft of flood chapter available late winter/early spring
 - Draft of entire report available late spring/early summer
 - Final report completed no later than August 2020

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- Flood team participants requested to:
 - Participate in the process (4 meetings)
 - Participate in the report reviews
 - Identify potential action items
- PAS Study:
 - Limited time/funds
 - Not a complete watershed study (focus on riverine flooding)
 - No detailed analysis of Operations/Maintenance
- Review of hydraulic model
 - Objectives:
 - Develop an updated Upper Mississippi River System Hydraulic (UMR) HEC-RAS model to allow to provide a tool for UMR system floodplain management in support of flood risk management and 408 Levee Modification studies
 - Develop methodology to analyze historic and proposed changes to Mississippi River mainstem levees
 - Phase I Model Extent: Mississippi River from Lock and Dam 19 at Keokuk, IA to Thebes, Illinois (320 River Miles, 5 Dams) Time-line: 12 months. [FY17 Funded]
 - Phase II Model Extent: Mississippi River from Lock and Dam 10 to LD 19 (250 River Miles, 9 Dams) Time-line: 12 months.
 - Phase III Model Extent: Illinois Waterway Lockport to Grafton (290 River Miles, Dams) Time-line: 12 months.
 - Phase IV Model Extent: Mississippi River from Anoka to LD 10 (250 River Miles, 13 Dams) Time-line: 12 months.
- Reviewed the six Open Space common themes (not complete list)
 - Changing weather – more extreme weather events
 - Need for systemic hydraulic model
 - River is different/has changed
 - Economic and ecological interface
 - Need to manage for multiple uses
 - Issues are integrated
 - Habitat impacts – sediment in backwaters, nutrients, high water
 - “Slowing water” (storage, spillways, levee setbacks, buyouts, etc)
 - Who is responsible for managing the river, and for what? How is it regulated, why and by whom?
 - Misunderstandings
 - How to affect/trigger change
 - Need for systemic plan
 - Authority question
 - Aging infrastructure
 - Limited funding
 - Transportation interruptions
- Group Discussion
 - Some municipalities contribute to flooding (increased development)
 - Buyouts have been successful in some areas
 - Hold water on land (where it falls)
 - Some states have mitigation funds to assist with buyouts

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- NWS
 - In order to not have excessive flood warnings (hence, more impactful), raise flood stage – goal of fewer flood warnings (i.e.; after improvements to infrastructure such as road raises)
 - Incorporate USACE climate resiliency Community of Practice (CoP)
- Brief discussion on some agency limitations; hence, the need for multi-agency approach
- Silver Jackets
 - Interagency Flood Risk Management
 - IL/IA identification of risk assessment
- Some agriculture communities have aging infrastructure
 - Lack consistent political will
 - Not capturing all economic benefits (flood water storage)
 - Lack framework for compensation
 - Could use more outreach
 - Beyond USACE levee safety/risk communication
 - “Farmers want to farm”

Day 2, 1 October, 2019

Flood Issue Area Team Leads led the team through a series of exercises to hone in on potential actionable items.

Exercise 1

- Step 1: Break out into small sub-teams (in this case, 3)
- Step 2: Each team member identified “high leverage” actions with likelihood of regional consent
- Step 3: Each sub-team paste action items on wall and reorganize according to clusters of similar ideas
- Step 4: Assign clusters of ideas to sub-teams
- Step 5: Summarize the action each cluster calls for
- Step 6: Summarize the action with level of impact and level of regional consent
- Step 7: Sub-teams take turns presenting their findings with larger flood group

Exercise 2

Seek up to five actions or questions that need more exploration through a Section 729 Watershed Study

Summary of Potential Action Items

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Baseline Data	Governance and Regulation	Funding	Mitigation
<ul style="list-style-type: none"> • Promote use of unified hydraulic model • ID high risk flood areas that may not be protected • Complete damage assessments of unprotected areas • Data layer of known and potential upland water storage • Incremental compensated storage • Large scale water retention strategy • Review/modernize NWS website products (seek multipurpose use) • Update LiDAR mapping • Flood fight planned impacts (who does what when?) 	<ul style="list-style-type: none"> • Development of commission to coordinate policy and management of UMRS • County level stormwater storage ordinances • Update regulations with current data and support consistent enforcement • Emergency response flood plan (i.e.; plan for flood fighting) • Learn from places that have succeeded in flood management/storage • Incentivize industry for flood/nutrient • Systemic reservoir plan • More interaction/communication between USACE districts during emergency • Increased outreach (levees; locks and dams; navigation); partner with local entities; include social media 	<ul style="list-style-type: none"> • Compensation of ground forfeited (Fed, non-Fed, combination) • GLRI equivalent for Mississippi • Leverage GLRI research • NCRS Programs; leverage (equip) for upland storage 	<ul style="list-style-type: none"> • Promote existing buyout programs [mitigate future damages]

Future work will require confirming the below action items, assigning team members to research and determining whether these action items are short or long term.

Categories	Action Items	Agency/ Org	Anticipated outcomes	Notes	Short term	Long term
Baseline Data						
	Promote use of unified hydraulic model	USACE	One hydraulic model used by all in the basin	Seeking funds (not yet secured)	X	X
	ID high risk flood areas that may not be protected					
	Complete damage assessments of unprotected areas					
	Data layer of known and potential upland water storage					
	Incremental compensated storage					
	Large scale water retention strategy					
	Review/modernize NWS website products (seek multipurpose use)					

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	Update LiDAR mapping					
	Flood fight planned impacts (who does what when?)					
Governance and Regulation						
	Development of commission to coordinate policy and management of UMRS					
	County level stormwater storage ordinances					
	Update regulations with current data and support consistent enforcement					
	Emergency response flood plan (i.e.; plan for flood fighting)					
	Learn from places that have succeeded in flood management/storage					
	Incentivize industry for flood/nutrient					
	Systemic reservoir plan					
	More interaction/communication between USACE districts during emergency					
	Increased outreach (levees; locks and dams; navigation); partner with local entities; include social media					
Funding						
	Compensation of ground forfeited (Fed, non-Fed, combination)					
	GLRI equivalent for Mississippi					

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	Leverage GLRI research					
	NCRS Programs; leverage (equip) for upland storage					
Mitigation						
	Promote existing buyout programs [mitigate future damages]					

Notes:

- A few of the action items span the four main topic areas. For example, funding sources are instrumental to policy development, establishment of local funding sources (maybe trust fund), and implementation of any mitigation measures
- Brief discussion on the pros/cons of buyouts (general consensus at the regional level, but opposition at the local property owner level)
- Reminder to go to UMRBA.org website for further information on the PAS study, Open Session notes, etc.

Next steps Short Term (to achieve short term successes with regional consent):

- Review/assign organization (with POC) to each action item for follow-up (i.e.; can this be done using existing authority, funding, and resources?)
- Seek commitment within that organization to implement the action item
- PAS report is intended to be a concise report to inform decision-makers

Next steps Longer Term (to address in watershed study):

- Identify action items without existing authority, funding and resources (i.e.; commission to oversee management of UMRS, funding, etc)
- Further define the problems and opportunities with respect to inclusion in watershed study
- Identify watershed vision