UMRBA July 26-27, 2017 UMRS Flood Risk and Sediment Management Summit
Pre-Summit Survey Results

Survey Question	Number of Respondents
1. What is your primary area of interest or expertise related to the Upper Mississippi?	103
2. Will you be attending the July 26-27, 2017 UMRS Flood Risk and Sediment Management Summit?	100
3. How would you best describe your role?	100
4. On a scale of 1-5 with 5 being the greatest and 1 being the least, how familiar are you with flood risk management policies and programs on the Upper Mississippi?	100
5. On a scale of 1-5 with 5 being the greatest and 1 being the least, how familiar are you with 9-foot navigation channel maintenance policies and programs on the Upper Mississippi?	97
6. Reorder the following list to reflect your highest priority concerns that you think should be addressed in a larger study planning effort related to flood risk and channel maintenance. [See answer below for options available.]	52
7. List the most important principles that you believe would result in the best approach to flood risk management.	63
8. List the most important principles for any strategies for sediment management.	52
9. Reorder the following list in what you understand to be the most important ways to improve flood risk and sediment management on the Upper Mississippi. [See answer below for options available.]	44
10. Name 2-3 information sources that you find valuable. This can be information available from any federal, state, or local agency or private source.	58

Question 1: What is your primary area of interest or expertise related to the Upper Mississippi?

Options	Percentage of Respondents
Navigation/freight transportation	18
Economic development	3
Fish and wildlife management	6
Watershed management	13
Flood risk reduction	33
Agriculture	12
Ecological health or resilience	11
Water quality	3
Scientific research, monitoring, and modeling	1
Roads, rails, and bridge management	1
Urban planning and management	0

Question 2: Will you be attending the July 26-27, 2017 UMRS Flood Risk and Sediment Management Summit?

Options	Percentage of Respondents
Yes	41
No	28
Undecided	31

Question 3: How would you best describe your role or position?

Options	Percentage of Respondents
State agency representative	16
Federal agency representative	9
Citizen	12
Local government representative, organization	24
Environmental or conservation NGO	9
Agricultural representative	17
Waterways industry representative	13
Roads or rails transportation representative	0

Question 4: On a scale of 1-5 with 5 being the greatest and 1 being the least, how familiar are you with flood risk management policies and programs on the Upper Mississippi?

Options	Percentage of Respondents
1	4
2	19
3	35
4	28
5	14

Question 5: On a scale of 1-5 with 5 being the greatest and 1 being the least, how familiar are you with 9-foot navigation channel maintenance policies and programs on the Upper Mississippi?

Options	Percentage of Respondents
1	14
2	12
3	23
4	28
5	23

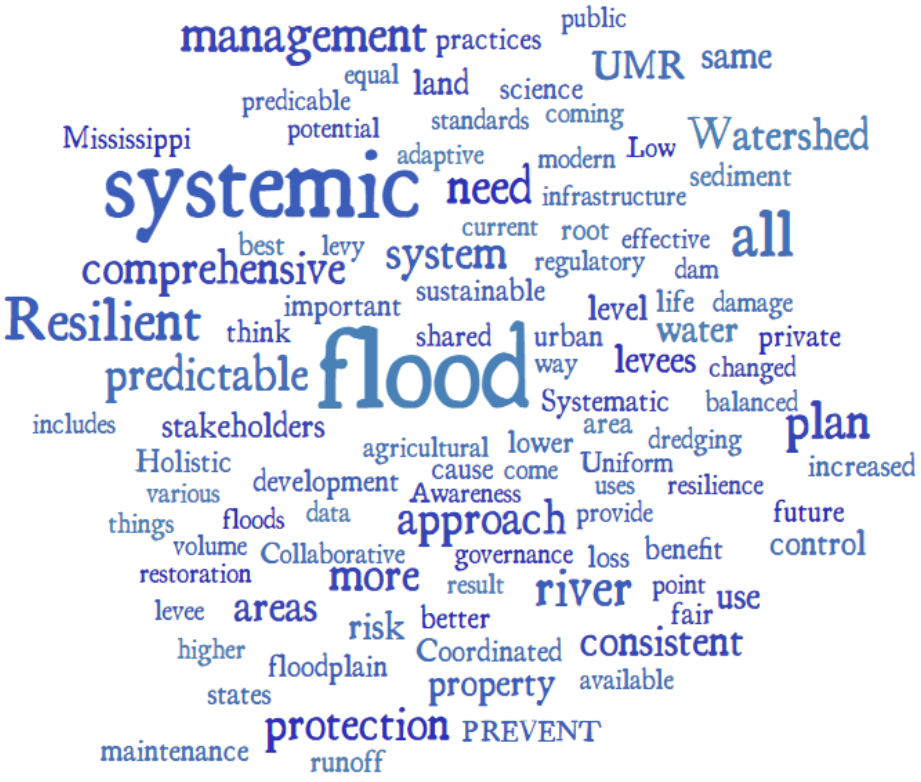
Question 6: Reorder the following list to reflect your highest priority concerns that you think should be addressed in a larger study planning effort related to flood risk and channel maintenance. [See answer below for options available.]

Options	Rank
Land use changes throughout the watershed and in the floodplain – e.g., lack of water storage	1
Federal, state, and local agency laws and policies: consistency, enforcement, effectiveness	2
Dredged material placement planning: capacity constraints of disposal sites and beneficial use	3
Contingency planning to avoid or mitigate emergency situations	4
Water level and sediment deposition forecasting capabilities	5
Resource constraints	6
Sediment accumulation in hot spots (dredging volumes)	7
Lack of early warning detection and communications systems	8
Other	9

Question 7: List the most important principles that you believe would result in the best approach to flood risk management.

[Note: The synthesized version removes nonessential words (e.g., use), increases consistency of terminology (e.g., changed resilience or resiliency to resilient) and connected related two-word terms with a hyphen so that they're weighted evenly (e.g., land use to land-use or watershed management to watershed-management.]

Raw Results



Top Ranked Words

Flood
Systemic
All
Resilient
River
Management
Need
Protection
Approach
More
Predictable
Systemic
Comprehensive
Consistent
Areas
Watershed
Same
Property

Synthesized Results

Top Ranked Words

Systemic
Predictable
Resilient
Consistent
Watershed-management
Protection
Fair
Floodplain-management
Land-use
Comprehensive
Futuristic
Effective
Science-based
Multi-use
Holistic
Shared
Public-private

Question 8: List the most important principles for any strategies for sediment management.

[Note: The synthesized version removes nonessential words (e.g., use), increases consistency of terminology (e.g., changed resilience or resiliency to resilient) and connected related two-word terms with a hyphen so that they're weighted evenly (e.g., land use to land-use or watershed management to watershed-management.]

Raw Results

Top Ranked Words

Sustainable
Sediment
Cost-effective
Management
Water
Integrated
River
Use
Problem
Watershed
Effective
Cost
Reduce
More
Upstream
Mississippi
Here
Same

Synthesized Results

Top Ranked Words

Sustainable
Cost-effective
Integrated
Sediment-management
Watershed-management
Environmentally-acceptable
Beneficial-use
Effective
Efficient
Low-maintenance
Systemic
Comprehensive
Coordinated
Economical
Locally-driven
Problem-source
Navigation
Modernized
Communicated
Well-planned

Question 9: Reorder the following list in what you understand to be the most important ways to improve flood risk and sediment management on the Upper Mississippi. [See answer below for options available.]

Options	Rank
Complete a long-term, systemic plan for improving flood risk and channel maintenance	1
Create flood storage areas/sediment traps in the watershed and floodplain	2
Define monitoring, research, and modeling needs, and opportunities to better utilize existing data	3
Improve conservation practices	4
Increase investment in flood defenses	5
Protect wetlands and restore floodplain forests	6
Add capacity for sediment management	7
Streamline real estate acquisition for disposal areas and land buyouts	8
Improve warning systems for flood events and rapid sediment accumulation	9
Modify homes, businesses, infrastructure to withstand floods	10
Construct more flood barriers within the Upper Mississippi main channel	11

Question 10: Name 2-3 information sources that you find valuable. This can be information available from any federal, state, or local agency or private source.

Federal agencies (49 mentions)

- U.S. Army Corps of Engineers (19 mentions)
  - Helpful resources cited include "Rock Island District App," District staff, daily reservoir report, Silver Jackets teams, UMRR long term resource monitoring, L&D discharge and elevation data, dredging notices, flood frequency modeling, river gages, Mississippi River Commission, *Our Mississippi* newsletter
- National Oceanic and Atmospheric Administration/National Weather Service (15 mentions)
  - Helpful resources cited include National Weather Service staff and reports, river hydrographs and discharge information, advanced hydrologic prediction service, flood forecast website, precipitation data
- U.S. Geological Survey (9 mentions)
  - Helpful resources cited include streamflow charts, stream and river gages; "Water Data" "Water Watch" and "Flood Inundation" web pages and resources
- U.S. Department of Agriculture (2 mentions)
  - Helpful resources cited include NRCS staff and other information and the Agriculture Stabilization and Conservation Services office
- U.S. Fish and Wildlife Services (1 mention)
- U.S. Environmental Protection Agency (1 mention)
- Federal Emergency Management Agency (2 mentions)
  - Helpful resources cited include floodplain maps and the National Flood Insurance Program

Studies and reports as well as models and maps from unidentified sources (19 mentions)

- River gages (5 mentions)
- The Galloway Report (3 mentions)
- The Upper Mississippi River Comprehensive Plan (2 mentions)
- Flood forecast models
- Channel Maintenance Plans
- 2004 Flow Frequency Study
- GREAT studies
- Sediment monitors in tributaries
- National wetland inventory
- Flood inundation maps
- HEC-RAS/hydraulic models (2 mentions)

State agencies, representatives (13 mentions)

- State Departments of Natural Resource (6 mentions)
- State Departments of Transportation
- State water quality agencies
- UMRBA (5 mentions)

Flood risk experts (7 mentions)

- UMIMRA (2 mentions)
- Levee district commissioners/representatives (2 mentions)
- Iowa Flood Center's Iowa Flood Information System (2 mentions)
- Private hydraulic engineers

Citizens and local groups and representatives (6 mentions)

- Upstream observers [database maintained by NOAA] (2 mentions)
- Citizen watershed boards (local and regional)
- Friends and family

Navigation industry (5 mentions)

- Waterways Council
- Barge industry publications, news sources
- Real-time mapping sources
- National Waterways Conference

Conservation and environmental groups (5 mentions)

- Fishers and Farmers Partnership
- The Nature Conservancy's Floodplains by Design Initiative
- Ducks Unlimited
- Applied Ecological Services
- Wisconsin Wetlands Association

Academia (4 mentions)

- University of Illinois Prairie Research Institute

Personal experience, observations, and research (4 mentions)

Public media (2 mentions)

Agricultural organizations and representatives (1 mention)

- American Farm Bureau

Other (1 mention)

- American Planning Association