Listening Session Data and Evidence Sources

This section provides a summary of data referenced within testimony. Where there was no quantitative data provided with a source cited, we have identified a data gap for future reference.

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
Testimony with cited supporting data				
Altered Hydrology, Flooding, and Funding Watershed Initiatives	**Holly Bushman, Watershed Coordinator** Lower Minnesota River East Watershed Partnership	Funding for protects incorporating climate resiliency measures to mitigate consequences of altered hydrology and flooding	**Yes**	Long Term Precipitation Patterns: Minnesota Department of Resources (MnDNR) State Climatology Office Lower Minnesota River Watershed Restoration and Protection Strategy Report (Minnesota Pollution Control Agency [MPCA] 2020) Climate Change Trends and Actions Plan (Board of Water and Soil Resources [BWSR] 2019) Why so much sand in the Lower Minnesota River? (Carrie Jennings 2016)
Minnesota River Flooding Causes, Impacts, and Amelioration through Water Storage	**Norm Senjem** Lake Pepin Legacy Alliance	This proposal promotes a “treatment train” approach to deal with high-rainfall events by implementing a set of practices within the ravine catchment, ravine head, ravine/cropland interface and in the ravine itself. Local technicians should design the treatment train to control runoff and ravine erosion from events which	**Sources Referenced by not Provided in Writing**	Minnesota River Channel Widening Figure (Wes Lauer, University of Washington) Ravine in Minnesota River Basin Figure (John Niebuhr, University of Minnesota)

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
		exceed the current WASCOB design standard. The goal is to integrate multiple conservation efforts to keep pace with the trend of higher, more intense, rainfall events.		Treatment Train Approach (US Army Corps of Engineers [USACE]) MnDNR Rainfall Data (Note: date range of data not included) Metropolitan Council Environmental Services (MCES) Total Suspended Solids (TSS) Data (2005-2021) St. Croix Watershed Research Station TSS Data (Note: Timeframe and specific source unknown) No Till Agriculture Example Photo (Nicollet County Soil and Water Conservation District [SWCD]) Field Office Technical Guide (Natural Resources Conservation Service [NRCS]) Modeling Study of Seven Mile Creek Watershed (USACE) Constructed Water and Sediment Control Basin WASCOB Example Photo (Goodhue County SWCD)

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
				USACE Study On "Ground Cover Vegetation Reducing Sediment Load and Promoting Savannah Restoration"
Solutions for Ike's Creek	**Tom Worthington and Vicki Sherry** Minnesota Valley National Wildlife Refuge	Provided information on and requested support for proposed Ike's Creek Restoration Project	**Yes**	Internal data from US Fish and Wildlife Service (USFWS) project Ike's Creek Restoration- Proposed Work Areas A and B (Inter-fluve)
Agricultural Drain Tile: Contributor to Water Quality and Flooding Issues in the Minnesota River	**Steve Knutson**	In order to fully understand and develop solutions to the impact of agricultural drain tile systems on the Minnesota River, the two issues described above need to be addressed and resolved. Issues identified: 1. Lack of information 2. Lack of tools required to implement solutions	**Yes**	Federal Farm Bill Chapter 103E of Minnesota Drainage Law

Ike's Creek, the Only Stream in Hennepin County with Trout, is At Risk.	**Tom Fahey** Master Naturalist and Group Volunteer Coordinator for Bloomington Neighbors Nurturing Nature (BNNN) & Minnesota Valley National Wildlife Refuge (MVNWR)	Awareness and support of this fragile ecosystem (Ike's Creek), is needed before water quality deteriorates to the point that it no longer supports the resident brook trout	**Yes**	Environmental Assessment (MVNWR 2024) Natural Resources Inventory of the City of Bloomington, Minnesota - 2007. Presentation by Vicki Sherry (2023)

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
Testimony with some cited supporting data				
Tools for Minnesota River Health: Water Quality and Storage Program and Minnesota River Commission	**Scott Sparlin, Coordinator and Facilitator** Minnesota River Congress	Two recommendations: 1. Join others currently legislatively advocating for appropriations for our new state Water Quality and Storage Program. 2. Join efforts currently underway in creating a Minnesota River Basin Commission/ Management Board.	**Partial**	Minnesota River Assessment Project (MPCA 1988) Minnesota River Implementation Project (1990)
Solutions for Clean Water Advocacy	**Tom Crawford, River Watch Program Coordinator** Friends of the Minnesota Valley	Three recommendations for the LMRWD: 1. The LMRWD takes on responsibility as the legal advocate for the well-being of the downstream communities on the county, and state levels. 2. Further expand funding for educational programs related to the hydrology of the Lower Minnesota River and its tributaries. 3. Become the primary advocate for reducing the negative effects of chloride on the Minnesota River, with a specific	**Partial: Water quality information is based in fact.** **Recommendations on the function of the LMRWD are based on professional opinion, which highlights a gap.**	Schottler, Shawn P. Et al. "Twentieth Century Agricultural Drainage Creates More Erosive Rivers." Hydrological Processes. (2013) Wiley Online Library 2022 US Department of Agriculture (USDA) Survey Percentage of County Drainage by Subsurface Tile Figure

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
		focus on getting local organizations into the Smart Salting training by the MPCA.		
Testimony without data, but where relevant LMRWD sources exist				
Historic Changes in the Minnesota River and Implications of Rapidan Dam Failure	**Greg Genz** Citizen Advisory Committee (CAC) Member	1. Flood surges move more quickly 2. River width is expanding 3. Sediment transport downstream is a huge issue. Dredging efforts need to be continual to prevent undue strain on flood mitigation structures **4.** Determining who is responsible for maintaining flood mitigation infrastructure. Determining who pays for impacts in the case of its failure.	**No sources provided, anecdotal information.**	Stories and opinions provided were observations from personal experiences. The LMRWD has internal references that validate the information of the speaker: • "The Minnesota River is Growing", (Freshwater Society). • "Sediment Accumulation in the Floodplain of the Lower Minnesota River Watershed" (Freshwater Society): Page 29 of 34.
Dean's Lake Water Storage	**Victoria Ranua** Citizen	Expressed the importance of storing water on the landscape, specifically on Dean's Lake. Dean's Lake levels are lower in comparison to pre-outlet structure installation. Speaker expressed the need to re-evaluate the purpose of the structure and its relationship to storing water on the landscape.	**No sources provided, anecdotal information.**	Stories and opinions provided were observations from personal experiences. The LMRWD has internal references that validate the information of the speaker: • Historical Water Quality, Ecological Change, and Sedimentation in Dean Lake (Hobbs and Edlund, 2015).

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
Downstream Impacts on the Minnesota River (LMRWD and Lake Pepin)	**Lee Peterson** CAC Member	Upstream practices may have adverse effects on downstream river segments. The LMRWD Board should be an active voice when projects are occurring upstream.	**No sources provided, anecdotal information.**	Stories and opinions provided were observations from personal experiences. The LMRWD has internal references that validate the information of the speaker: • Sediment Accumulation in the Floodplain of the Lower Minnesota River Watershed (Jennings, et. al): "Changes in river flow have been documented by gauging efforts (Wilcock et al., 2009; Groeten et al., 2016).
Testimony that lacks data and requires further research				
Water Quality Impairments of the Minnesota River and Policy Needs for Flood Storage Projects	**Kirby Templin, PE, Water Resource – Environmental Manager** City of Shakopee	Three recommendations: 1. Provide continued partnership and funding of projects to mitigate Minnesota River streambank erosion. Advocate for policy changes in the greater Minnesota River Basin at the state level to reduce Minnesota River flooding and erosion. 2. Advocate for regional flooding solutions in the greater Minnesota River Basin. Support communities through partnership and funding. 3. Where impairments exist, work with community partners on projects to reduce	**No sources provided**	

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
		pollutants and work towards achieving any state required reduction goals. Support communities through partnership and funding.		
Railroad Coordination	**Jenna Olson** City of Eagan	Our request is for the Lower Minnesota River Watershed District to help facilitate a better working relationship between the railroad and the communities that border it within the District.	**No**	Cited struggles of the City when coordinating with the railroads, which is qualitative/experiential data
Education and Outreach for Stormwater Runoff, Flooding, and Erosion	**Judy Berglund** CAC Member	Sharing information with/educating our neighbors as to what they can do to help control stormwater runoff and erosion, mitigate flooding, and preserve water quality of our lakes and streams is a real motivator. It makes everyone feel included in making a real difference. Young people are increasingly concerned about protecting lakes and streams, and they are concerned about chloride use and its impact on aquatic species. Expressed the importance of the educator mini-grant program in keeping youth engaged.	**No sources provided, anecdotal information.**	Stories and opinions provided were observations from personal experiences.

LOWER MINNESOTA RIVER WATERSHED DISTRICT

PUBLIC LISTENING SESSION

WED. JANUARY 8, 2025
1-4PM

Testimony	Speaker/Author	Key Topic Message	Data Source Provided:	Data Source Referenced
Advocate for Drainage Authorities to Decrease Sediment and Nutrient Loads	**Len Kramer** Retired Water Resources Engineer	Groups should work with project proposers and drainage authorities to ensure projects don't have an impact on increased nutrient or sediment loads or on volume.	**No sources provided, anecdotal information**	Stories and opinions provided were observations from personal experiences, notably working with drainage authorities. More information on specific drainage authorities could be requested.
Minnesota River Solutions	**Ted Suss** Friends of the Minnesota Valley	LMRWD Board should use legal authority to protect the water resources in the Lower Minnesota River Basin as well as upstream. A basin-wide entity must be created that has planning authority and provides guidance to the counties and the other watershed districts. A cooperative feeling and philosophy amongst governmental districts must accompany this.	**No sources provided, anecdotal information**	Stories and opinions provided were observations from personal experiences.
Manipulating Ordinary High Water (OHW) Levels to Look at Water Storage to Reduce Downstream Flooding Impacts	**Mike Schultz** LeSueur County	Manipulating OHW elevations has rippling ecological effects, but we need tools to look at everything that's out there if we're trying to make a difference in the state of Minnesota and flood storage.	**No sources provided, anecdotal information**	Stories and opinions provided were observations from personal experiences.

Summary of Claims

Data-Supported Claims
Flood surges move more quickly
To fully understand and develop solutions to the impact of agricultural drain tile systems on the Minnesota River, the two issues described above need to be addressed and resolved. Issues identified: 1. Lack of information 2. Lack of tools required to implement solutions
Awareness and support of this fragile ecosystem (Ike's Creek), is needed before water quality deteriorates to the point that it no longer supports the resident brook trout
Local technicians should design the treatment train to control runoff and ravine erosion from events which exceed the current WASCOB design standard, in order to keep pace with the trend of higher, more intense, rainfall events.
River width is increasing
Sediment transport downstream is a huge issue. Dredging efforts need to be continual to prevent undue strain on flood mitigation structures
Dean's Lake levels are lower in comparison to pre-outlet structure installation
Upstream practices may have adverse effects on downstream river segments

Data-Limited Claims and Recommendations
Data-Limited Claims
Manipulating OHW elevations has rippling ecological effects, but we need tools to look at everything that's out there if we're trying to make a difference in the state of Minnesota and flood storage.
Sharing information with/educating our neighbors as to what they can do to help control stormwater runoff and erosion, mitigate flooding, and preserve water quality of our lakes and streams is a real motivator. It makes everyone feel included in making a real difference.
Young people are increasingly concerned about protecting lakes and streams, and they are concerned about chloride use and its impact on aquatic species
Recommendations
Join others currently legislatively advocating for appropriations for our new state Water Quality and Storage Program.
Join efforts currently underway in creating a Minnesota River Basin Commission/ Management Board.
The LMRWD takes on responsibility as the legal advocate for the well-being of the downstream communities on the county, and state levels. The LMRWD Board should be an active voice when projects are occurring upstream. The LMRWD Board should use legal authority to protect the water resources in the Lower Minnesota River Basin as well as upstream.
Further expand funding for educational programs related to the hydrology of the Lower Minnesota River and its tributaries.
Become the primary advocate for reducing the negative effects of chloride on the Minnesota River, with a specific focus on getting local organizations into the Smart Salting training by the MPCA.
Determine who is responsible for maintaining flood mitigation infrastructure. Determine who pays for impacts in the case of its failure.

The speaker expressed the need to re-evaluate the purpose of the structure (Dean's Lake outlet) and its relationship to storing water on the landscape.
Where impairments exist, work with community partners on projects to reduce pollutants and work towards achieving any state required reduction goals. Support communities through partnership and funding.
Provide continued partnership and funding of projects to mitigate Minnesota River streambank erosion. Advocate for policy changes in the greater Minnesota River Basin at the state level to reduce Minnesota River flooding and erosion.
Advocate for regional flooding solutions in the greater Minnesota River Basin. Support communities through partnership and funding.
LMRWD should help facilitate a better working relationship between the railroad and the communities that border it within the District.
Groups should work with project proposers and drainage authorities to ensure projects don't have an impact on increased nutrient or sediment loads or on volume.
A basin-wide entity must be created that has planning authority and provides guidance to the counties and the other watershed districts.