

STORMWATER TOPIC MEETING

Introduction

The Upper Mississippi - Grand Rapids Watershed flows from Laurentian Continental divide to where it empties into the Mississippi River near Palisade. It drains over 1.3 million acres and contains almost 2,000 miles of streams and 625 lakes greater than 10 acres. It includes the cities of Grand Rapids, Nashwauk, Coleraine, Hill City, McGregor, Remer and Cromwell. This watershed has an abundance of beautiful lakes that make it an important recreational destination. It is also home to unique plant and animal species such as wild rice and trout, along with an abundance of healthy forests.

The Upper Mississippi - Grand Rapids One Watershed, One Plan (1W1P) is a planning partnership between Aitkin County, Aitkin SWCD, Carlton County, Carlton SWCD, Cass SWCD, Itasca County, Itasca SWCD, Logan Township, Mille Lacs Band of Ojibwe and Salo Township. The goal of this partnership is to prioritize restoration and protection opportunities and target valuable resources. The result will be the development of a comprehensive watershed management plan with actions that make progress towards measurable goals.

The general 1W1P process is outlined in Figure 1. For the first step, which is to gather and prioritize opportunities/issues in the watershed, a series of five topic meetings will be held. The meeting topics include: 1) lakes, 2) forests, 3) wetlands & ditching 4) rivers & streams 5) stormwater and 5) farms & groundwater.



Figure 1. The 1W1P process is divided into six main steps. The topic meetings are the first step in the process (circled).

The 1W1P process is driven by local units of government, guided by an Advisory Committee made up of local stakeholders and state agencies. The decision-making body for the plan is a Policy Committee made up of elected officials from each County, SWCD Tribal Government or Township.

Upper Mississippi – Grand Rapids Watershed Stormwater

Although much of the watershed is covered with forests and wetlands, there are 16 incorporated cities near lakes and streams. In these areas, managing stormwater is an



important consideration. Stormwater best management practices help protect property and natural resources by reducing flood risks and flood damage and filtering pollutants before they are washed to lakes and streams. Stormwater management also helps protect groundwater. However, stormwater planning, designs and construction can be expensive.



Figure 2. Stormwater

The largest city in the watershed is Grand Rapids with a population of over 11,500 people. This city has a municipal separate storm sewer system, and it is required to satisfy the requirements of the MS4 permit. This permit is designed to reduce the amount of pollution entering lakes and streams using best management practices. Although no other cities in the watershed are required to have an MS4 permit, many are implementing practices to protect their nearby lakes and streams. Outside of cities, most development in the watershed is found along lakeshores.

Upper Mississippi Grand Rapids Watershed Stormwater Issues

To illustrate the diversity of viewpoints, at the beginning of the stormwater meeting, we asked the experts and Advisory Committee members to tell us what comes to mind when they think about the watershed's stormwater. The responses were assembled to create a word cloud.



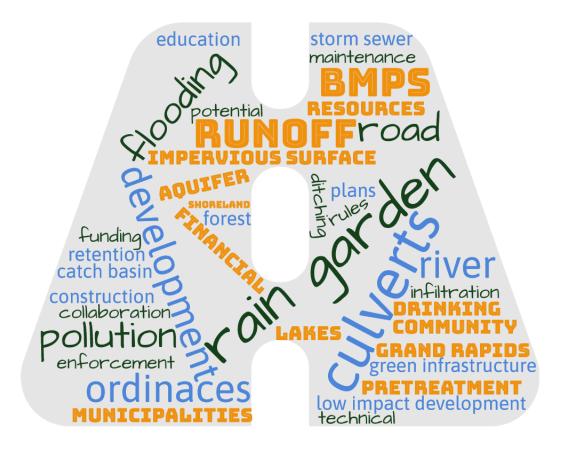


Figure 3. Word cloud depicting the diversity of responses to the question, "when you think of the Upper Mississippi Grand Rapids Watershed's stormwater, what comes to mind?"

To help us understand what issues and opportunities surround stormwater in the watershed, issues listed in previous plans, reports, state agency comment letters and public input were gathered and compiled into common themes, becoming the basis of creating the priority stormwater issues for the Upper Mississippi Grand Rapids Watershed.



Gather issues described in existing plans, state agency comment letters and public kickoff meeting feedback

Compile common themes within all sources

Brainstorm issues at the topic meeting, edit and combine with issues gathered from existing sources

Topic meeting participants prioritize issues by selecting their top two highest priority themes for the Upper Mississippi Grand Rapids Watershed

Topic meeting participants discuss possible actions and measures to address priority issues

Figure 4. Issue statement development process

A diverse group of stormwater experts plus the Upper Mississippi Grand Rapids Watershed Advisory Committee gathered to brainstorm issues for stormwater in the watershed. The brainstormed list was either grouped with the compiled themes or new themes were created. The group then agreed on a final list of three issue themes (Table 1).

Table 1. Stormwat	er issue statements	developed a	at the Stormwater	Topic Meeting

#	Draft Issue Statement	References	
	Stormwater runoff from developed areas	Carlton & Itasca Counties, DNR	
1	delivers sediment, nutrients, and bacteria to	& MPCA Comment Letters,	
	lakes, streams, and wetlands.	Public	
De-icing and dust control chlorides ca		Aitkin County, Public, MPCA	
2	negatively impact lakes, streams, and wetlands.	Comment Letter	
	Flooding can cause sewage overflows and		
3	communities need assistance preparing for	Carlton & Itasca Counties	
	future flood events.		

Since the concerns focused on three themes, it was determined that further narrowing of issues was not necessary and the group agreed that these three themes would be the top priorities for stormwater concerns.

The group brainstormed a list of possible actions to address the priority issues along with ways success might be measured.

Stormwater Actions and Measures

Education & outreach to private residents on stormwater, yard cleanup & salt use



- Smart Salting training
- Small scale stormwater management (raingardens, rain barrels)
- Stormwater ordinances / require stormwater BMP with new development permits
- Proper site selection for stormwater basins to protect groundwater; use checklist from Minnesota Stormwater Manual
- Enhanced street sweeping & sweeping in smaller cities/towns
- Urban forestry green infrastructure
- Partner with counties for retrofit studies
- Chloride brine equipment
- Regional stormwater protection group in Duluth has good education resources
- Construction site stormwater protection with building permits
- MIDs (minimum impact design standards)
- Curb & gutter near lakes/streams
- Stormwater management near roads/road ditches
- Community projects to manage stormwater
- Fund maintenance of stormwater BMPs
- Consider BMPs with lower maintenance or do not require special equipment
- Current aging infrastructure and redesign for future precipitation (climate resilience)
- Training for construction site management and enforcement of stormwater permits
- Snow storage include where they are located in the stormwater management plan
- Review of stormwater ordinances, impervious surface / lot coverage between municipalities, counties

Meeting Attendees

- Andy Arens, Itasca SWCD
- Melanie Bomier, Carlton SWCD
- Mitch Brinks, Technical Service Area 8
- Perry Bunting, Mille Lacs Band
- Karola Dalen, Carlton County
- Dom DeGuiseppi, City of Grand Rapids
- Bonnie Goshey, MPCA
- Dana Gutzmann, Cass SWCD
- Matt Gutzmann, Itasca SWCD
- Jeff Hrubes, BWSR



- Kory Johnson, Itasca County Hwy Dept
- Dave Lange, Hill City Mayor
- Dave Lick, Itasca Waters
- Perry Loegering, Isaak Walton League, Itasca Waters
- Veronica Lundquist, Aitkin SWCD
- Matt Myer, MN DOT
- Tom Nelson, Itasca SWCD
- Chris Parthun, MDH
- Dave Peterson, Cass SWCD
- Tracy Ritter, UPM Blandin
- Moriya Rufer, HEI (facilitator)



