Minnesota Stormwater Research Council

in partnership with the

Minnesota Stormwater Research Program

2022 HIGHLIGHTS

18 research projects COMPLETED since 2017

4 ON-GOING research projects

7 NEW research projects beginning 2022

also...

- Prioritizing Urban Stormwater Pond Research

- Requesting Research Funds

- Seeking MSRC Advisory Board Member Nominations

Advancing science, technology and management of stormwater in Minnesota by investing in and facilitating research to prevent, minimize, and mitigate the impacts of runoff from the built environment.

wrc.umn.edu/stormwater

The Stormwater Research Council
in partnership with the
Minnesota Stormwater Research Program

This collaboration pools financial resources to support research, shares research outcomes and engages stakeholders to determine research needs.

Learn more about the council, view the advisory board, and subscribe to our mailing list visit wrc.umn.edu/msrc
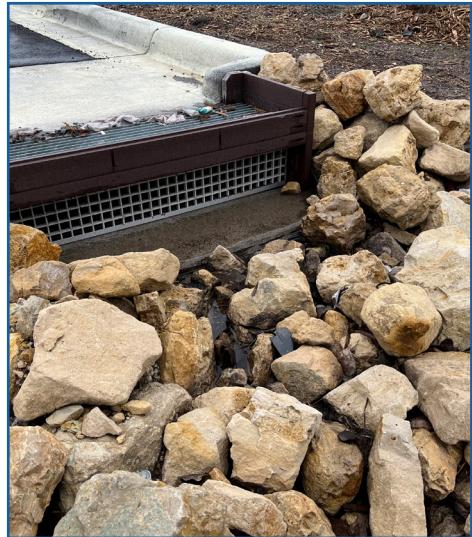
ON-GOING STORMWATER RESEARCH PROJECTS

BIOFILTRATION

How can soil mixes in biofiltration practices impact phosphorus capture and release and plant growth?

GROSS ORGANIC SOLIDS

At what level are gross organic solids contributing to stormwater pollutant loading?

BIOCHAR

Will the addition of biochar help filter practices remove bacteria and dissolved contaminants?

MONITORING

Can we combine stormwater monitoring data from various cities, watersheds and agencies to more specifically characterize urban runoff quantity and quality?

wrc.umn.edu/projects/stormwater

NEW 2022 RESEARCH PROJECTS

Rapid Response Projects

1 **Assessment of Urban Stormwater Chloride and its Impact on Surface Water Trends**
Led by Ben Janke and Jacques Finlay (Univ. of Minnesota), and Brooke Asleson (MN PCA)

2 **Plants for Stormwater Design and creating an Interactive Selection Tool for Stormwater Professionals and the Public**
Led by John Bly and Rich Harrison (Metro Blooms) and Dan Shaw (Minnesota Board of Water and Soil Resources)

3 **Evaluation of Media Effectiveness for Removal of Phosphorus and Other Pollutants in High-Volume Stormwater Filtration BMPs**
Led by Randy Anhorn (Nine Mile Creek Watershed District), Andy McCabe and Keith Pilgrim (Barr Engineering)

Discovery Projects

4 **Iron Enhanced Sand Filters Performance and Maintenance Meta-Analysis**
Led by John Gulliver and Andy Erickson (Univ. of Minnesota), Peter Weiss (Valparaiso University), and Mike Trojan (MPCA)

5 **Performance evaluation for a stormwater treatment train incorporating sedimentation and geomedia-augmented biofiltration**
Led by Bridget Ulrich, Christopher Filstrip, and Chan Lan Chun (Natural Resources Research Institute)

6 **Capturing Contaminants of Emerging Concern (CECs) with Biofiltration**
Led by Andy Erickson and John Gulliver (Univ. of Minnesota), Richard Kiesling and Sarah Elliott (Upper Midwest Water Science Center, US Geological Survey)

7 **Stormwater reduction and pollutant sourcing from urban trees**
Led by Xue Feng, Diana Karwan, and Lucy Rose (Univ. of Minnesota)

Prioritzing Urban Stormwater Pond Research

1. Developed a short term research strategy

2. Completed a comprehensive literature review of past research on ponds - more than 600 published reports were reviewed

3. Established a fund dedicated to pond research

4. Preparing for a pond-only competitive research proposal process in 2022

For more information, please visit our website.

FINANCIAL SUMMARY AND 2022 REQUEST FOR RESEARCH FUNDS

Financial support for the Stormwater Research and Technology Transfer Program is provided by the Clean Water Fund from the State of Minnesota's Clean Water, Land and Legacy Amendment. Additional support comes from the Minnesota Stormwater Research Council and it's member cities, watersheds, private businesses, the University of Minnesota Water Resources Center, Minnesota Sea Grant, the College of Food, Agriculture, and Natural Resource Sciences, and the National Institutes for Water Resources funded by the US Geological Survey.

CLEAN WATER LAND & LEGACY AMENDMENT

JOIN US as a financial partner to achieve or surpass this year's goal

2022 GOAL

$150K

MINNESOTA STORMWATER RESEARCH COUNCIL

Read more about the 2022 request and respond with your organization's commitment on the website at wrc.umn.edu/msrc

THANK YOU to the following cities, watershed districts and organizations, and private sector businesses that provided financial support in 2021:

- Barr Engineering Company
- Capitol Region Watershed District
- City of Bloomington
- City of Edina
- City of Minnetonka
- Emmons & Olivier Resources Inc.
- Mississippi Watershed Management Organization

- Nine Mile Creek Watershed District
- Ramsey-Washington Metro Watershed District
- South Washington Watershed District
- Stantec
- Upper Mississippi River Source Water Protection Project
- Valley Branch Watershed District

Nominate someone for a seat on the advisory board

The Minnesota Stormwater Research Council is seeking new advisory board members starting January 2023. Review the Council Guiding Framework and nomination process on the website wrc.umn.edu/msrc

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Water Resources Center
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