



# **UPPER MISSISSIPPI RIVER** **SOURCE WATER PROTECTION PROJECT**

*Protecting Drinking Water through Partnerships*

## **2020 Summary**

### **Summary of UMRSWPP Activities Include:**

- 💧 Members of and participation in:
  - 💧 American Water Works Association.
  - 💧 EPA Source Water Protection Team - Source Water Collaborative.
  - 💧 Minnesota Source Water Protection Collaborative.
  - 💧 Minnesota Headwaters Advisory Committee.
  - 💧 Clean Water Action Steering Committee.
  - 💧 Participants in the Met Council Drinking Water Source Protection group.
- 💧 Developed a web application to assist in location of stormwater inlets and determination of effects on the water quality of the Mississippi River. <http://umrswpp.mapfeeder.net/>
- 💧 Active participants and provide feedback for Sauk River and Rum River Watershed District's 1W1P (One Watershed, One Plan) and the Upper Mississippi River, Sartell, and Coon Creek WRAP studies.
- 💧 Applied for pass-through funding for The Freshwater Foundation, Watershed Districts, WMOs and Soil and Water Conservation Districts through Minnesota Department of Health (MDH) Implementation Grants. This year's focus was on outreach to Natural Resource Conservation Service (NRCS) and Watersheds to assist in stormwater and erosion management.
- 💧 All three Cities participate in the "Adopt-a-Storm Drain" program and have included a link on the UMRSWPP Website: <http://www.umrswpp.com/>
- 💧 Provide financial support to the Minnesota Stormwater Research Council.
- 💧 **American Water Works Association** has produced a video, educating landowners about the land use effects on the drinking water supply. It can be found at: [Land Use Effects on Drinking Water](#)
- 💧 **Conferences:** UMRSWPP participated in a round-table discussion at the Minnesota Water Resources Conference. Conferences this year were limited due to the inability to participate in person. UMRSWPP also supplied information at the Minnesota Rural Waters Conference in April. Understanding what the UMRSWPP is about and inclusion of drinking water protection in plan updates is an important step in protecting the drinking water resource.
- 💧 **2020 Financial Expenditures:** \$10,000 from each of the utilities: Minneapolis, St. Paul and St. Cloud was contributed to the UMRSWPP dedicated funds. \$16,630 was spent on tradeshow, meetings, grant writing, website hosting and maintenance and educational display items. Dedicated funding is committed to this project by all three utilities.

UMRSWPP Dedicated Fund Expenditure 2020	
<b>Beginning Balance (from 2019)</b>	<b>\$25,422.65</b>
2020 Expenses (non-grant)	-\$16,630.00
2020 Payment by Utilities	\$30,000.00
2020 Interest	\$209.93
<b>Ending Balance</b>	<b>\$39,002.58</b>

- 💧 **UMRSWPP Plan Update:** The UMRSWPP team is working with the Minnesota Department of Health to update the source water protection plan criteria to better reflect the current needs of the drinking water supply and the protection of the resource. UMRSWPP is looking at focusing on stormwater runoff and other threats to the drinking water supply – the Mississippi River. We will also be focusing on maintaining close relationships with the Watershed Districts and the Water Management Organizations and participation in the "One Watershed, One Plan" advisory group. Please contact us if you are interested in participating on our advisory team.



## Individual Utility Updates:

CITY OF  
**ST. CLOUD**  
MINNESOTA

### PROJECT BACKGROUND

The City of St. Cloud is partnering with Stearns Soil & Water Conservation District (SWCD) to install an underground regional stormwater treatment system using a \$697,000 Clean Water Legacy grant through the Board of Water & Soil Resources. This project, in conjunction with the in-lake aluminum sulfate (alum) treatments, will improve water quality.

A large underground concrete stormwater treatment system will act like a wet detention pond. The system will maintain a ponding depth in the pipe and have strategically placed baffles and weirs to settle solid materials and

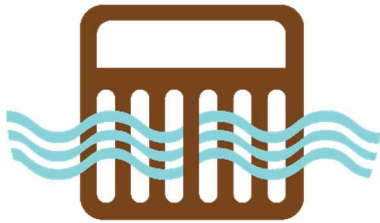


trap floatable materials. Water will enter a second small concrete vault where filtration cartridges using a Perlite base will absorb and filter phosphorus before the treated water enters the lake. The system will treat stormwater runoff from the Lake George area neighborhood and a section north of Division Street that previously drained directly to the lake untreated.

**The project goal is to be able to de-list Lake George from the MPCA's Impaired Waters list.**







[adopt-a-drain.org](http://adopt-a-drain.org)

The City of Minneapolis leads the Adopt-A-Drain program with 4,851 drains adopted by 2,194 volunteers. An estimated 54,712 pounds of debris was reported collected since March 2019.

The City of St. Paul reports 3,057 drains adopted by 1,777 volunteers. An estimated 62,338 pounds of debris was reported collected since March 2019.

The City of St. Cloud started the program in 2020 and currently has 269 drains adopted by 144 volunteers. An estimated 6,422 pounds of debris was reported as being collected and removed by the volunteer storm drain adopters in 2020.



### Saint Paul Regional Water Services

Saint Paul Regional Water Services (SPRWS) is providing analytical support for a portion of the samples collected for the *Improving Drinking Water for Minnesotans through Pollution Prevention*, research project. The University of Minnesota Project, led by Professor Ray Hozalski, is funded by a grant through the Environmental and Natural Resources Trust Fund (ENTRF).



The main goals are to identify significant sources of N-nitrosodimethylamine (NDMA) precursors, and to develop pollution prevention strategies for reducing precursor inputs. NDMA is a toxic and cancer causing chemical. NDMA is not present in the river water, but the chemical is formed by the reaction of precursors in the water with chloramines, a form of chlorine added to drinking water for disinfection. Samples are collected at strategic locations on the Crow and Mississippi Rivers. This three-year project is scheduled for completion June 30, 2022.



SPRWS continues to support and collaborate with the Vadnais Lake Area Watershed Management Organization (VLAWMO).

SPRWS has committed to help fund a VLAWMO carp harvesting project in Pleasant Lake. However, as with many planned projects for 2020, the carp harvesting has been delayed and is now planned for fall 2021.



The City of Minneapolis Drinking Water Utility strives to partner with local governments and state/federal agencies on the common goal of improving the water quality of the Mississippi River. We are working with the Rum River Implementation Advisory Committee to develop their 'One Watershed One Plan'. This plan will lay the foundation for protecting the watershed which runs from the northern end of Mille Lacs Lake to the Rum River discharge into the Mississippi River at mile point 872 in Anoka.

In late 2019—in partnership with a powerful coalition of Minnesota state agencies and non-profit organizations—the documentary "On The Crow" was released. It is composed of short films, podcasts, illustrations, and information artworks that focus on seven key themes. Each depicts a key aspect of life on the river, creates awareness of problems faced by the watershed and shows potential solutions that might transform specific destructive activities into regenerative practices that benefit both people and the environment.



Each year, spring rains and snowmelt carry pollutants down the Mississippi River to the Gulf of Mexico, where they create a dead zone the size of New Jersey. The trouble begins near the river's headwaters when it flows past a tributary called The Crow. Can what we learn traveling up a single tributary reveal conservation practices that can help us clean up the rest of this mighty river? Take a trip upstream at: <https://www.thelexicon.org/onthecrow/>

As we know 2020 proved to be a difficult year and Minneapolis had to put off participating in community events targeted at raising awareness of source water protection, but we are hoping to renew the effort in 2021.

*If you or anyone you know wish to be added to our email list, please send a request to*

[umrswpp@gmail.com](mailto:umrswpp@gmail.com)

**For additional information, contact the following project staff:**

Lisa Vollbrecht	St. Cloud Public Utilities	320-255-7225	<a href="mailto:Lisa.Vollbrecht@ci.stcloud.mn.us"><u>Lisa.Vollbrecht@ci.stcloud.mn.us</u></a>
Justine Roe	St. Paul Regional Water Services	651-266-1628	<a href="mailto:Justine.Roe@ci.stpaul.mn.us"><u>Justine.Roe@ci.stpaul.mn.us</u></a>
George Kraynick	Minneapolis Water Works	612-661-4923	<a href="mailto:George.Kraynick@minneapolismn.gov"><u>George.Kraynick@minneapolismn.gov</u></a>
Marilyn Bayerl	Bayerl Water Resources	320-766-6126	<a href="mailto:Marilyn@BayerlWaterResources.com"><u>Marilyn@BayerlWaterResources.com</u></a>



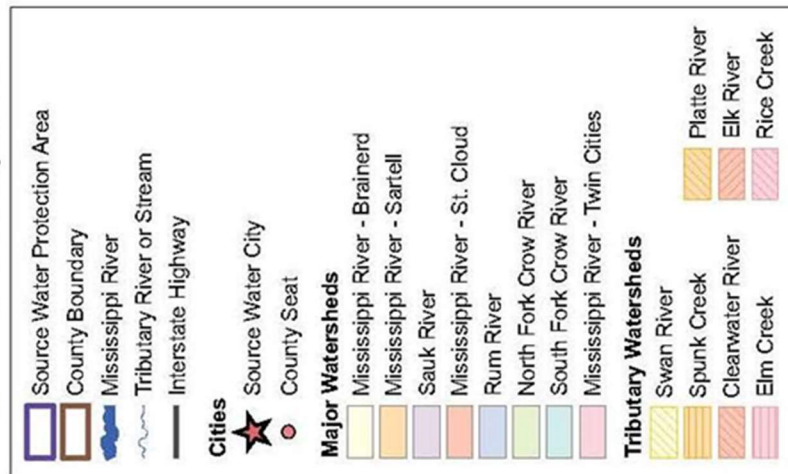
*Bayerl Water Resources*  
Marilyn@BayerlWaterResources.com



320-766-6126  
9083 State Hwy 114 SW  
Alexandria, MN 56308  
**Marilyn Bayerl**



# Composite Source Water Protection Area (SWPA) for St. Cloud, St. Paul and Minneapolis



Watershed information is from Minnesota Department of Natural Resources (DNR) - Division of Waters, Minnesota Watersheds, 1999.

Prepared by Stearns County Soil and Water Conservation District (SWCD)



November 2009

