

Legislative Water Commission Update 03/30/2018

ERRORS? OMISSIONS? If found, please notify jim.stark@lcc.leg.mn.

This update is a roundup of Minnesota water news, as well as articles from beyond Minnesota, that may inform members. It also includes summaries of meetings I have monitored and reports I have read, as well as information about upcoming events. During the Legislative Session, updates on water-related legislation and committee activities are added. Any errors or omissions are inadvertent.

I look forward to continuing to work on water issues that are important to all of us.

Jim Stark, Director, MN Legislative Water Commission

100 Rev. Dr. Martin Luther King Jr. Blvd., Rm 65 State Office Building

St. Paul, MN 55155

Phone: 651/284-6431

Subscribe to the weekly update & follow LWC meetings at: www.lcc.leg.mn/lwc/

Next meeting of the Legislative Water Commission: April 23 at 6:00 pm.

The Commission met on March 26. Minutes are available at: www.lcc.leg.mn/lwc/

Subscribe to the weekly update & follow LWC meetings at: www.lcc.leg.mn/lwc/

MINNESOTA NEWS

White Bear Lake in the news again:

[Judge Won't Overturn White Bear Lake Decision](#)

[Studies of Lake of the Woods show how water can struggle with a legacy of pollution](#)

By Greg Seitz March 19, 2018

[UMN alumnus Joel Larson at home in new role as WRC Associate Director](#)

New WRC Associate Director Joel Larson is back in Minnesota. Joel, is the new Associate Director of the Water Resources Center at the University of Minnesota. Previously, Joel served as the Acting Director for the Southeast Climate Hub in Washington, DC.

[Water resources symposium seeks to increase public visibility of UMN water research](#)

The Water Resources Assembly and Research Symposium., at the University of Minnesota is being organized to the water research community's profile within the University through cooperation with its colleges and units.

MPR News' [Ground Level survey](#) last fall, an overwhelming majority of Minnesotans — 85 percent — said they think the state is on the right track when it comes to providing safe drinking water. The number was almost as high, 80 percent, when respondents were asked about protecting lakes and rivers. That's higher than any other right track/wrong track topic MPR News surveyed, including health care, education and the economy.

Minnesota Water Action Day at the Minnesota State Capitol on May 2nd, is sponsored by many state and regional environmental organizations. This is a day for action to let legislators know the importance of clean, healthy water. Register at: wateractionday2018.eventbrite.com.

[Groundwater sampling planned for Wadena County](#) (Daily Journal Fergus Falls Tuesday, March 20, 2018)

[2018 Clean Water Fund Performance Report](#) Minnesota agencies released their fourth report to help Minnesotans clarify connections between Clean Water funds invested, actions taken and outcomes achieved. Measures provide a snapshot of how Clean Water Fund dollars are being spent and what progress has been made. The measures are organized into four categories: investment, surface water quality, drinking water protection, and external drivers and social measures.

Invisible Heroes: Minnesota’s Drinking Water Providers: Do you think about how the water gets to your home? Minnesota’s invisible heroes – Minnesota’s drinking water providers - make it happen. Tune in to the MDH Drinking Water YouTube page (<http://bit.ly/2np5jL2>) to learn how these heroes provide safe, reliable drinking water. MDH partners with these systems to face and overcome challenges that include contamination, lack of adequate water sources, and aging infrastructure.

St. Martin <http://bit.ly/2EqLN94> *Finding a Tiny Answer to a Big Problem*

St. Cloud <http://bit.ly/2nW8evb> *A Surface Water Superstar*

Fairmont <http://bit.ly/2BcpbtA> *Adapting and Evolving in a Changing Environment*

Worthington <http://bit.ly/2nqcKCz> *Using Partnerships to Protect a Precious Resource*

New Brighton <http://bit.ly/2nkpVPl> *Conquering New Challenges*

Oakdale <http://bit.ly/2rWs9z5> *Taking Care to be Top Notch*

Clean water is essential for ensuring public health, creating recreation opportunities and sustaining economic development. However, the value of clean water remains largely invisible to many. Most households and communities are not actually aware of risks to water quality and often take for granted the benefits of safe and abundant clean water. In support of this work and as a researcher with the Natural Capital Project developed a story map called [The True Value of Water: Drinking Water Protection in Minnesota](#). This interactive website aims to build a deeper understanding of the complexity of drinking water issues in Minnesota. The interdisciplinary and collaborative approach took into account both biophysical threats to drinking water quality and socioeconomic factors that have an impact on community capacity for drinking water protection.

The March edition of the MPCA’s electronic newsletter contained articles on the following topics. The full articles can be seen by visiting: [March 2018](#)

- Hatfield dishes the dirt (ok, soil) on excess nitrogen in waters
- North Fork Crow River 'one watershed' plan open for review
- RCRC launches work on Redwood, Cottonwood WRAPS

- Root River 1 Watershed-1 Plan ready to go with projects
- DNR meets with livestock producers about groundwater use
- Lower Minnesota River Watershed: Urban, rural, and polluted
- Watershed news briefs
- BWSR plan seeks working lands and watershed restoration
- Nitrogen in spotlight at conferences

WATER ACTIONS

Clean Water Council: The Clean Water Council met on March 19. Meeting highlights included an appropriation request, detailed presentation on Watershed Restoration and Protection Strategies in the Yellow Medicine Watershed (One- Watershed, One-Plan) and as well as presentations about research, evaluations and tool development by BWSR, DNR, MDA, MDH, MPCA and U of M. This was a detailed and coordinated set of presentations on work supported by the Legacy Amendment and how the work is coordinated across agencies.

Sulfate Standard: A bill regarding the standard in water has been introduced in the House. The bill would nullify the existing wild rice water-quality sulfate standard and require the MPCA to begin a new rulemaking process if the agency moved forward with adoption of a new standard. File Number: H.F. 3280 Date: March 7, 2018 Version

New report on sulfate in Minnesota's waters: A new peer-reviewed publication by the Science Museum of Minnesota describes how sulfate changes lakes and streams. In one 10-year study in northern Minnesota, the researchers teased out complicated connections between sulfate, mercury, water, and weather. Source: Minnesota Public Radio.

SURFACE WATER/STORMWATER

The DNR's "Minnesota Conservation Volunteer" (March- April, 2018) has a great article on the impact of the Clean Water, land and Legacy Amendment. Visit: <http://www.dnr.state.mn.us/mcvmagazine/index.html>

Floods and Droughts

National Flood Forecast Center, North Central Region: The snowpack around the region is widespread but has increased of late. Snow depths have increased in portions of the state and in those areas the flood potential for the state has increased. For details, visit: www.weather.gov/ncrfc

SOUTHEAST MINNESOTA

Researchers at the University of Minnesota are studying winter food supply of trout in southeast Minnesota. University of Minnesota University of Minnesota Prof. Len Ferrington and his students are looking into why trout grow quickly in some streams in winter and lose weight in others. The study has used funds from a variety of sources over the years. The money for this last leg, assuming it's approved, would come from the Legislative-Citizen Commission on Minnesota Resources. When completed in a few years, Ferrington said, he expects it will be used to determine which trout streams are the best targets for conservation measures. Star Tribune, March25, 2018

GREAT LAKES

DNR: [Great Lakes- St. Lawrence River Basin Water Resources Compact Annual Water Conservation and Efficiency Assessment](#)

NORTHERN BORDER LAKES

WATER SUPPLY

MPR: [Minn. cities want a break as they face costly sewer work, new rules](#)

WASTEWATER

MPR: [Minn. cities want a break as they face costly sewer work, new rules](#)

AGRICULTURE AND WATER

The Board of Water and Soil Resources (BWSR) has been evaluating the feasibility of developing a Working Lands Incentive Program to help advance research and implementation of perennial crops and cash cover crops. During a workshop, they discussed market opportunities and the bio-economy needed to support this shift. Participants were asked to share their ideas about a working lands incentive program. BWSR staff are taking this input back to their planning group to flesh out recommendations and next steps. The program is supported by an appropriation from the legislature.

Minnesota's plans to reduce nitrates in drinking water are moving closer to completion. Gov. Mark Dayton and agriculture commissioner Dave Frederickson [outlined a proposal years in the making](#): By creating a system of voluntary and mandatory measures on farmland and in public water supplies, the state hopes to safeguard and improve water quality across the state.

EXTRACTIVE INDUSTRIES

MNDNR released a draft permit for **PolyMet Mining**, a major step forward for what's poised to be the first copper-nickel mine in the state. The project would spur a new mining industry on the Iron Range, but would carry with it new environmental risks in the most pristine corner of the state. Visit:

<https://www.mprnews.org/story/2018/01/05/dnr-polymet-copper-nickel-mine-draft-permit-iron-range>

OPINIONS

South Washington County Bulletin: [Rep. Tony Jurgens viewpoint: Investigating water pollution lawsuit](#)

REGIONAL and NATIONAL

USDA: [USDA Highlights \\$40 Million in Infrastructure Investments in Rural Communities](#)

MEETINGS

Clean Water Council: The Clean Water Council met on March 19. Meeting highlights included detailed presentation on Watershed Restoration and Protection Strategies (WRAPS) in the Yellow Medicine Watershed (One- Watershed, One-Plan) and as well as presentations about research, evaluations and tool

development by BWSR, DNR, MDA, MDH, MPCA and U of M. This was a detailed and coordinated set of presentations on work supported by the Legacy Amendment and how the work is coordinated across agencies. Contact Deepa deAlwis (651) 757-2572

UPCOMING EVENTS

- **Workshop on Harmful Algal Blooms, March 29.**
Visit: <https://drive.google.com/file/d/1Any8Co2eE9hKAcvk-bT-qPi5Y3MFTr1W/view>
- Conservation Minnesota and Freshwater Society are sponsoring the: **State of Water Conference**. Learn more about protecting the lakes and rivers you love on **April 13-14 at the Breezy Point Resort**. Registration deadline is March 31st. [Register now!](#)
- **Minnesota Groundwater Conference: Groundwater Past, Present, and Future:** April 26, 2018, St Paul. What were hydrogeologists worried about 30 years ago? What came of those worries? What did they foresee and what couldn't be forecast? Most of all: what can we learn from their experience? As we face the retirement of the baby boomers (the generation that led the cleanup of Superfund sites and made computerized groundwater modeling widely available and accessible) we also risk losing hard-won knowledge and perspective. For conference registration information contact WRI by phone at (651)705-6464 or email: office@mgwa.org
- May 1-3: **The 2018 Surface Water Treatment Workshop** is scheduled for May 1-3, at the Courtyard by Marriot in Moorhead, MN. The event is put on by the ND, MN, and SD sections of the American Water Works Association (AWWA) every other year. The conference provides current regulatory, technical, process, and operational information to around 200 engineers, scientists, municipalities, and end users of water treatment facilities with an emphasis on surface water. For more information, go to <http://www.mnawwa.org/page/SWTWHome>
- May 10, 2018: **Smart Water Technology Roundtable: Workshop for IOT Solutions in Water Treatment;** Uptonor, 5925 148th St W, Apple Valley; contact Steve.Riedel@state.mn.us for more info
- June 3-7, 2018: American Society of Civil Engineers **World Environmental and Water Resources Congress;** details to come at www.ewricongress.org
- July 10-12, 2018: US Water Alliance's **One Water Summit** will be at the Hyatt hotel in downtown **Minneapolis; details to come.**
- **The International Association of Great Lakes Research** and Michigan Technological University are pleased to announce that the 2018 State of Lake Superior (SOLS) Conference will be held October 9-12 in Houghton, Michigan. Hosted on the MTU campus, SOLS will be a multi-day conference and include invited sessions and abstracts, plenary sessions, field trips, and associated meetings. Stay tuned for more details and the Call for Sessions in coming weeks at iaglr.org/sol/sols18.
- **The biennial 2018 Upper Midwest Invasive Species Conference (UMISC)** will be a Joint Conference with the North American Invasive Species Management Association, **October 15-18, 2018** at the Mayo Civic Center in Rochester, MN. Abstract Submission Is Open. Deadline

to Submit an Abstract for Presentation: Wednesday, April 11, 2018. They are expecting about 700 people to attend. See <https://www.umisc.net/> or contact Doug Jensen, conference co-chair.

- **Reservoir Sedimentation:** The nation's 90,000 dams and reservoirs constitute a critical component of the country's infrastructure ensuring the stability of water and energy supplies and flood risk management. However, the reservoir storage capacity, essential to meeting these purposes, has been filling with sediment. The Subcommittee on Sedimentation's National Reservoir Sedimentation and Sustainability Team presents sustainable solutions to reservoir sediment management. To register for the webinars, go to:

<https://cires.colorado.edu/events/sedimentation-management-multi-purpose-reservoirs-federal-perspective>

- **WE ARE MINNESOTA WATER:** The Minnesota Historical Center, in cooperation with several state agencies have a display which is touring across the state. Visit: [We are Water MN](#) for the tour locations and dates. For more information contact: Margaret Wagner: [651-201-6488](tel:651-201-6488), margaret.wagner@state.mn.us

REPORTS AND PUBLICATIONS

- Sherburne County Geologic Atlas, Part B: The DNR recently published the Part B hydrogeology portion of the Sherburne County Geologic Atlas. It illustrates the hydrogeologic setting and inherent pollution sensitivity of the aquifers in the county. This information can be used to make land-use decisions that concern aquifer sensitivity, water quality, and sustainability. Part B expands on the Part A geology portion that was previously published by the Minnesota Geological Survey. For more information: Sherburne County Geologic Atlas, Part B DNR County Geologic Atlas program, Part B For Part A and to purchase paper copies of this atlas: MGS County Geologic Atlas Program, Part A
- The USGS has a new arsenic variability article 'online early' at Groundwater: 6 Erickson, M.L., Melinda, H.F. and Berquist, E.C., 2018, How or when samples are collected affects measured arsenic concentration in new drinking water wells: Groundwater, accepted Author Manuscript.
- Smith, E.A., Sanocki, C.A., Lorenz, D.L., and Jacobsen, K.E., 2017, Streamflow distribution maps for the Cannon River drainage basin, southeast Minnesota, and the St. Louis River drainage basin, northeast Minnesota: U.S. Geological Survey Scientific Investigations Map 3390, pamphlet 16 p., 2 sheets.
- Reeves, H.W., Bayless, E.R., Dudley, R.W., Feinstein, D.T., Fienen, M.N., Hoard, C.J., Hodgkins, G.A., Qi, S.L., Roth, J.L., and Trost, J.J., 2017, Generalized hydrogeologic framework and groundwater budget for a groundwater availability study for the glacial aquifer system of the United States: U.S. Geological Survey Scientific Investigations Report 2017–5015, 49 p. 6 Stackelberg, P., 2017,
- Groundwater quality in the Cambrian-Ordovician aquifer system, midwestern United States: U.S. Geological Survey Fact Sheet 2017–3056, 4 p.
- Stackelberg, P., 2017, Groundwater quality in the glacial aquifer system, United States: U.S. Geological Survey Fact Sheet 2017–3055, 4 p. 6 Stackelberg, P.E., Szabo, Z., Jurgens, B.C., February 2018, Radium mobility and the age of groundwater in publicdrinking-water supplies from the Cambrian-Ordovician aquifer system, north-central USA: Applied Geochemistry, v. 89, February 2018, Pages 34–48.
- Krall, A.L., Elliott, S.M., Erickson, M.L., Byron, B.A., March 2018, Detecting sulfamethoxazole and carbamazepine in groundwater—Is ELISA a reliable screening tool?: Environmental Pollution, v. 234, p. 420–428. Recent MGS publications of note for the groundwater community include the following:
- Lusardi, B.A., Gowan, A.S., Meyer, G.N., Thorleifson, L.H., 2016, Quaternary stratigraphy of Minnesota: statewide cross-sections, Minnesota Geological Survey Open File Report 16-1. 6

- Jirsa, M.A, Boerboom, T.J., Radakovich, A.L., Chandler, V.W., Peterson, D.M., Schmitz, M.D., Dengler, E.L., Wagner, K.G., Meyer, G.N., Horton, J.M., Setterholm, D.R., Lively, R.S., 2016, Preliminary geologic maps of Lake and St. Louis Counties, northeastern Minnesota: Minnesota Geological Survey Open-File Report 16-04. 6 Lusardi, B.A., 2017, Minnesota Geological Survey 1:100,000 surficial geologic texture database: Minnesota Geological Survey Open-File Report 17-01.