

Weekly LWC Update 9-30-16

Interested reader: each week, I gather general information for Legislative Water Commission members to help keep them apprised about water issues in Minnesota. It contains a roundup of easily attainable MN water news, as well as articles from beyond MN that may inform member thinking. It also includes summaries of meetings I have attended and reports I have read, as well as info about upcoming events. During the Legislative Session, it also includes updates on water-related legislation. Any errors or omissions are inadvertent.

Barb Huberty, Director, MN Legislative Water Commission
100 Rev. Dr. Martin Luther King Jr. Blvd., 65 State Office Building
St. Paul, MN 55155
Phone: 651/284-6431
Email: barb.huberty@lcc.leg.mn

Web site: www.lcc.leg.mn/lwc/

A lot of information about water infrastructure was shared at the 9/26 LWC meeting. As a follow-up, here are some additional resources on aging infrastructure:

- EPA's [Climate Resilience Evaluation and Awareness Tool](#) (CREAT) to help water utilities assess risk, plan, and adapt to climate change (as referenced by Randy Ellingboe, MDH)
- American Water Works Association: [Buried No Longer: Confronting America's Water Infrastructure Challenge](#) report
- TPT, et al: [Liquid Assets Minnesota](#); a 57 min video giving a comprehensive look at infrastructure issues by local staff and officials
- Here is a good visualization as to why repairing or replacing conveyance infrastructure is so expensive: pipes are most often buried beneath streets, so pavement repair costs are an added expense

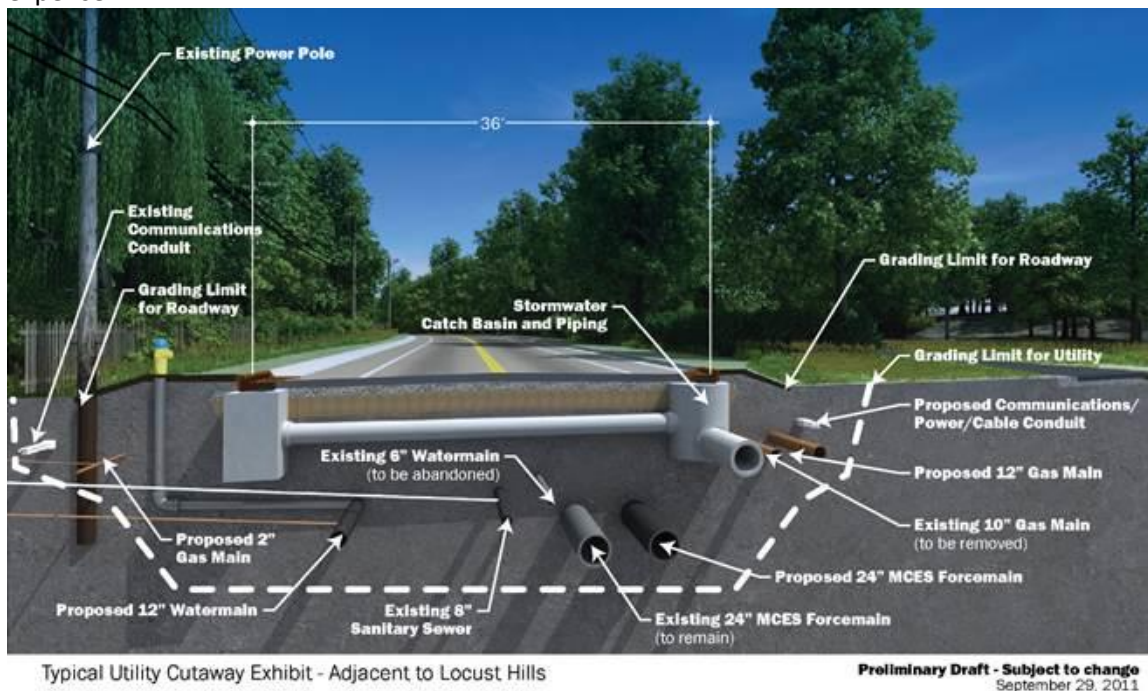


Figure courtesy of AECOM and the MN2050 Infrastructure Report.

MN NEWS

BE ON THE LOOKOUT FOR

On Sunday, [the Star Tribune](#) will be releasing a special report on threats facing MN rivers, titled *Danger Downstream*. The report will examine the threats and how to redeem the Mississippi before it's too late. The Strib has released [this teaser video featuring spectacular drone footage](#) shot Aaron Lavinsky and prepared [this great, information-rich graphic](#), setting the table for this weekend's stories.

WATER ACTIONS

- MPCA: [Water/Ways exhibit moves to Red Wing](#)
- KARE 11: [Gulf oil spill residue found in Minnesota loons](#)
- KSTP 5: [Minn. Students Learn about Water Quality at 'Children's Water Festival'](#)

WATER SUPPLY

- Strib: [Move over rotary phones – meter readers join ranks of the relics](#)
- Minnesota Daily: [University lab seeks solution for pesky PFCs](#)
- Strib: [Twin Cities east metro twists back spigot on water use](#)
- Hibbing Daily Tribune: [Nashwauk Water Main May Be Replaced](#)
- KSTP 5: [North Metro School District Plans New Lead Water Testing](#)

SURFACE WATER/STORMWATER

- City Pages: [Mississippi River: Wildlife making a comeback, but please don't swim](#)
- Gov Dayton's Office: [Governor Mark Dayton Signs Emergency Executive Order 16-08](#) declaring a state of emergency for areas of southern MN affected by significant rainfalls
- St Louis Park Patch: [Officials Kill Off All Zebra Mussels in Twin Cities Lake](#) and MPR: [Officials hope Lake Minnewashta zebra mussel treatment sticks](#)

WASTEWATER

- Fox9: [St. Clair recovering from flooding](#) (note the wastewater plant issues)
- MPCA: [Big floods bring big problems to city of Willow River](#)

AG & WATER

- Litchfield Independent Review: [Cosmos farmer earns water quality certification](#)
- MPCA: [Wet weather challenging manure storage capacity](#)

EXTRACTIVE INDUSTRIES

- MPR: [Groups question Enbridge's plans for proposed oil pipeline project](#)

OPINIONS

- Strib: [Mississippi River requires agriculture's help to stay healthy](#)
- Strib: [Trash talk: Twins president Dave St. Peter describes team with expletive at environmental meeting](#)
- US Water Alliance: [4 Lessons on Corporate Water Stewardship Inspired by Coca-Cola](#)

BEYOND MINNESOTA

REGIONAL

- US Water Alliance: [Taking the Long View in New Mexico - Multi-faceted Strategy, One Water Principles Put Albuquerque's Aquifer into Comeback Mode](#)
- Inside Science: [Measuring 'Best' Practices To Curb Farm Pollution](#)

NATIONAL

- Circle of Blue: [Drinking Water Warning Issued for Nonstick Chemical](#) (PFC's)
- Grist: [Record rains are sending untreated sewage into U.S. cities](#)
- Reuters: [Sunoco, behind protested Dakota pipeline, tops U.S. crude spill charts](#)
- MPR: [Congress reaches agreement to fund government until December](#)
- The Hill: [Investing in water infrastructure keeps our economy flowing](#)
- British Society of Soil Science: [New Book on Managing Agricultural Landscapes of the Mississippi and Ohio Rivers](#)
- Federal Register: [Proposed Collection; Comment Request; Proposed Information Collection Request for the National Study of Nutrient Removal and Secondary Technologies: Publicly Owned Treatment Works \(POTW\) Screener Questionnaire](#)
- EPA: [Renewed Call to Action to Reduce Nutrient Pollution and Support for Incremental Actions to Protect Water Quality and Public Health](#)
- Federal Register: [Meetings of the Local Government Advisory Committee and the Small Communities Advisory Subcommittee \(SCAS\)](#); committees that advise the EPA on issues affecting local governments and small communities will hold a public teleconference on 10/7 to discuss their recommendations for the national drinking water plan that the EPA says it will release by the end of the year
- EPA: [National Enforcement Initiatives](#); every 3 yrs, EPA selects NEIs to focus on national environmental problems where there is significant non-compliance with laws, and where federal enforcement efforts can make a difference (these are in addition to EPA's core enforcement work); beginning 10/1 and continuing for 3 years, here are the water foci:
 - [Keeping Raw Sewage and Contaminated Stormwater Out of Our Nation's Waters](#)
 - [Preventing Animal Waste from Contaminating Surface and Ground Water](#)
 - [Keeping Industrial Pollutants Out of the Nation's Waters](#) (new for FY17-19)

GLOBAL

- CNN: [16-year-old South African invents wonder material to fight drought](#) – a fruit-based polymer

MEETINGS

BROUGHT TO YOU BY LMC

The League of MN Cities hosted a webinar to demonstrate how one city successfully addressed some aging water infrastructure problems by incorporating them into a large, joint road reconstruction project. The City of Gaylord and MnDOT executed a joint powers agreement to reconstruct about 2 miles of road (900' local and 9,100' of trunk highway), which netted several water infrastructure improvements: 8,900' of storm sewer, 4,000' of sanitary sewer, and 7,000' of water main. Over the course of 8 years, MnDOT studied pavement improvements, the City undertook a scoping study to identify needs (including infrastructure needs), the preliminary and final designs were completed, and the project was constructed over 2 seasons. Planning, cooperation and coordination, citizen engagement, money, and adequate lead time contributed to the project's success.



MN WATER TECH SUMMIT – PT 2

Slides from the 9/20/16 Water Technology Summit are now available [here](#).

HIGH INTEREST IN WATER REUSE

The first of four stakeholder meetings this week had a packed house, with a very diverse group of about 60 stakeholders including: representatives of professional organizations, local elected officials, higher education campus staff, builders-developers, consultants, state agencies, municipalities, watershed districts, and businesses that are interested in the capture/use of rainwater and stormwater and reuse of wastewater. The purpose of the Water Reuse Clean Water Fund Project was explained and presentations were made about water reuse projects already developed in MN, the current regulatory structure, and the Water Reuse Workgroup’s identified definitions, successes and issues (presentations will be posted on the [project web site](#).) Local and national movement toward “one water” approaches, similar to the American Water Works Association’s “Total Water Solutions”® (see graphic below), incorporate reuse as a fundamental component. In MN, guidance for stormwater reuse is being added to the MN Stormwater Manual. There is recognition that water should be “fit for purpose” with quality standards matching the given uses. Risk vs benefit will be incorporated into the process and it is conceivable that less risky reuse options (like stormwater for irrigation) might be tackled first in order to move reuse forward. It was suggested that the benefits of reuse should be added to the definition. The six month progress report for the project has been published: [Water Reuse Interagency Workgroup: July 2016 Project Update](#).



The last half of the meeting was dedicated to obtaining feedback via small group discussions. A 4-page “Issues for water reuse in Minnesota” document was included in the meeting materials and a worksheet asked people to provide input on their general impressions/questions thus far, missing information, critical successes/issues, and advice. One question raised was whether suggestions for legislative change would be honored. Staff indicated that they will be open to hearing about legislative proposals, but that the final project report must filter through the agency commissioners, who may or may not recommend/support any legislative changes. The most common discussion areas were the issues of education, regulations, and the true value of water as they relate to promoting or thwarting reuse. There will be a 2nd stakeholder meeting on Nov 17 (1:30 – 4:30 pm) at MPCA to get more feedback on recommendations.

WBL WSPs

For several months, DNR staff have hosted periodic meetings for water suppliers in the White Bear Lake area to provide a coordinated approach as they develop their water supply plans, which are due this coming December. At this meeting, attendees received information about the White Bear Lake (WBL) settlement agreement, the status of the USGS NE Metro study, the Green Step Cities program, and the Race2Reduce program and provided input on DNR plans to track water conservation data.

In Julie Eckman’s (DNR) update on the WBL settlement, she explained that one requirement of the settlement agreement was that the legislature had to pass legislation to switch cities from groundwater to surface water use by 8/1/16. Since this did not happen, the Judge lifted the stay on a trial and also set a trial date of 3/6/17. Reportedly, the Judge was disappointed that the USGS study is not done but was impressed with DNR’s conservation efforts to date. Julie went on to clarify some terms that will become important as the case proceeds:

- The Ordinary High Water Level (OHWL) is the boundary of a water body as determined by a vegetation survey, where terrestrial vegetation is above the OHWL and aquatic vegetation is below the OHWL; she clarified that landward jurisdiction resides with the local unit of government and water-ward jurisdiction resides with the DNR
- The protective elevation is that elevation needed to maintain aquatic life and habitat, existing uses and other criteria listed in statute. The requirement to set protective levels had first existed for surface water withdrawals; groundwater regulations adopted later require that if there are negative impacts to surface waters from groundwater withdrawals, then the surface water statute applies and a protective elevation must be set. A protective elevation is NOT “the” elevation to maintain. DNR is progressing with setting a protective elevation by Nov 1, 2016; they are at the stage of meeting with affected cities. They have already met with WBL, WB Township and Birchwood and they will be meeting with Mahtomedi tomorrow. One of the things they have been discussing with water suppliers is outdoor water use and the possibility of attaching permit restrictions for that activity, how they would implement restrictions and how that would impact them.

Brian Davis, Met Council, gave an update on the USGS study on behalf of Lanya Ross, who is Met Council’s manager for this project. The USGS will release the study “*Characterizing Groundwater and Surface Water Interactions in Selected Northeastern Twin Cities Lakes, MN*” in 2 parts, Part 1 (statistical analysis and field data collection) and Part 2 (the groundwater flow model. Here is there planned schedule of related release activities:

- Oct 1: USGS will release Part 1 of the report to the Met Council
- Mid Oct: USGS will post Part 1 on their web site
- Oct 18: USGS has two 20-minute presentation slots (about Part 1 and Part 2) within the 1:15 – 2:45 concurrent session at the Water Resources Conference (I will be attending)

- End of Oct: USGS will release the draft Part 2
- Mid Nov: USGS will be making a presentation about the study to stakeholders (date/time/location to be determined)
- Jan: USGS will release the final Part 2 to the Met Council

Note that USGS does not make recommendations in its reports; they only draw science-based conclusions.

Phil Muessig, manager of MPCA's Green Step Cities program gave an overview of the program (its best practices, best practice actions, and rating system), identifying where the existing program includes water. MPCA is considering a more comprehensive approach to include drinking water as a component of the program and shared their draft outline for how that might work. Comments provided in response included the idea of limiting chloride tracking to city efforts (since there are other contributors to salt impairments), considering a "one water" approach and including wastewater and stormwater in addition to drinking water, perhaps using some of the same criteria established in the blue star program for stormwater. Phil noted that there will be an upcoming LMC training on water conservation.

Carmelita Nelson, DNR, reported on the Race2Reduce toilet retrofit program in WBL. Those homes that changed to dual flush toilets realized an estimate 26% reduction in water use and \$126/yr savings. R2R focused on toilets because they are the largest use of indoor water use. They estimated that 87MG could be saved annually if all WBL households changed to dual flush toilets and that available rebate programs and cost savings could offset the cost of making this change.

Carmelita also explained DNR's efforts to develop a water conservation data tracking system (there isn't currently a statewide collection system for this type of data) that is modeled on the conservation improvement program that 180 utilities use to track energy conservation savings. Such a system would help cities quantify water conservation savings, share water saving strategies and identify their cost-effectiveness to help water suppliers adapt their practices. Conceivably, it could also be used to develop ways to reward conserving cities during drought periods. Implementation of such a tool could be used by the WBL area cities to track their progress toward meeting the settlement agreement's 17% goal.

The remainder of the meeting was spent providing input on what type of information should be tracked, identifying concerns associated with each, and suggestions for best practices. Generalized input fell into these categories (with multiple points under each):

1. Measuring base demand
2. Data Collection
3. Irrigation/Outdoor Water Use
4. Rate changes/structures
5. Tracking "deemed" savings

As a next step, DNR staff will also be seeking input from outstate water suppliers and surface water users.

LSOHC

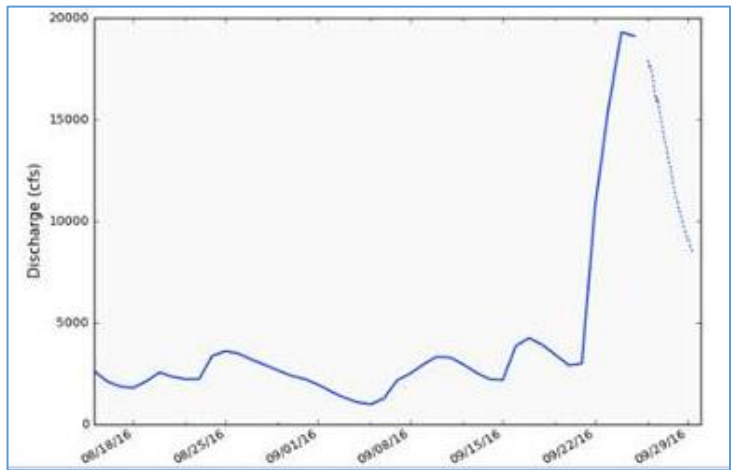
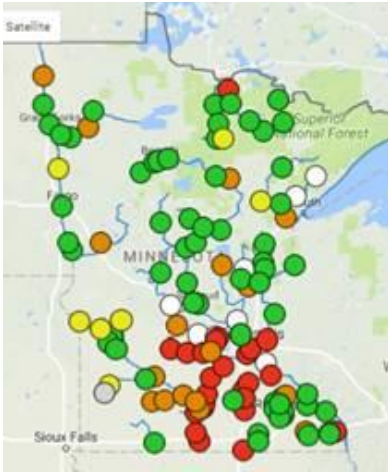
The Lessard-Sams Outdoor Heritage Council met this week and, with some minor modifications, approved the [chair's proposed allocations](#) for FY 17/18. Next steps: project proposers must submit their accomplishment plans within 10 days and the recommended allocations will be converted into bill format for introduction to the legislature in January.

REPORTS

STATE OF MN WATER

- 9/25 [Stream Flow Report](#); not surprising – SE MN streams are at flood flow stage and most of MN streams are at high flow stages, but one area of NW MN has streams at low flow stages;

DNR's [stream gages](#) show that streams are recovering in far SE MN, but that high and very high flows still plague south central MN; the Le Sueur River (a field tour stop) has crested but flows are still above normal



- 9/27 [Drought Monitor](#)

UPCOMING EVENTS

- Oct 1 – Nov 13: **Smithsonian Water/Ways exhibit** at the Goodhue County Historical Society (1166 Oak Street, Red Wing); after the opening, join the **WaterTalks** at the Saint James Hotel (more info on WaterTalks [here](#); no cost, but registration is required); Red Wing has planned many Water/Ways activities; go [here](#) to see the full list
- Oct 4-6: **Great Lakes Public Forum**; Toronto, Ontario, Canada; agenda [here](#); it will be live streamed [here](#)
- Oct 5-6: **Aquatic Invaders Summit II**; River's Edge Convention Center (10 4th Ave. S, St. Cloud); \$165 (early)/\$180 (late) registration; register [here](#)
- Oct 5-6: **Minnesota Coastal Conference 2016**; Two Harbors; registration and agenda to come [here](#)
- Oct 14: **Mississippi River Forum Workshop**; 8:30 am to 12:30 pm; Science Museum of Minnesota; topics: Getting to Clean Water: How Do the Economics of Cropping Systems Measure Up? - Ecosystem Services: Putting People and Land into Water Management - Water: Right or Commodity; RSVP to: lark_weller@nps.gov
- Oct 18-19: **MN Water Resources Conference**; agenda [here](#); cost before 9/22 is \$245 2 days/\$170 1 day (\$265/\$190 after 9/22); registration link [here](#)
- Oct 24-26: **BWSR Training Academy**; Cragun's in Brainerd; agenda and registration details can be found [here](#)
- Nov 16-18: [MN Association of Floodplain Managers 2016 Annual Conference](#); \$160; Kelly Inn, St. Cloud; brochure [here](#); register [here](#)
- Nov 17: **MN's Water Reuse Stakeholder Meeting** (open to the public); 1:30 – 4:30; MPCA Board Room
- Nov 17: **Minnesota River Congress** meeting; Mankato; details to come
- Dec 5-6: Association of MN Counties Annual Conference; Hyatt Regency Minneapolis; \$375 before 11/4 & \$400 after; schedule [here](#); registration [here](#)
- Jan 23-24, 2017: **MN Water Well Association's 95th Annual Trade Show and Convention**; Minneapolis Marriott NW; more info to come [here](#)