

Weekly LWC Update 4-7-17

ERRORS? OMISSIONS? If found, please notify barb.huberty@lcc.leg.mn.

Interested reader: each week, I gather general information for Legislative Water Commission members to help keep them apprised about water issues in Minnesota. This update 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 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.

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LEGISLATURE

COMMITTEES ACTIVITIES THIS WEEK

In the Senate:

- Votes on the Senate Floor resulted in passage of two omnibus bills HF4 and SF800
- The Senate Capital Investment Committee re-referred SFs 396 and 543 to the Finance Committee

In the House:

- The Ways and Means Committee passed HFs 605, 1937, and 945 and SF800 on to the general register
- Votes on the House Floor resulted in passage of the following omnibus bills: HF707, SF780, SF803, SF2214, SF1937, HF1717, SF605 and SF800

Here are a couple of related news articles about legislative actions:

- Strib: [Parks, clean-water projects, historical sites share in \\$527 million in Legacy funding](#)
- Duluth News Tribune: [Capitol Chatter: Who says lawmakers can't agree?](#)

WATER BILLS

There were only 3 new House bills introduced this 14th week of session; click on the File # hyperlinks for more details. As of 4/7/17, 331 of 4,909 introduced bills (7%) are water-related.

2583	Hamilton	\$22M bond funding to PFA for a grant to Lakefield for wastewater infrastructure
2588	Marquart	EAW not required for projects consistent with Red River mediation agreement
2589	Fabian	\$10M CWF to BWSR for grants to SWCDs to cost-share buffer/alternative practice implementation

MN NEWS

WATER ACTIONS

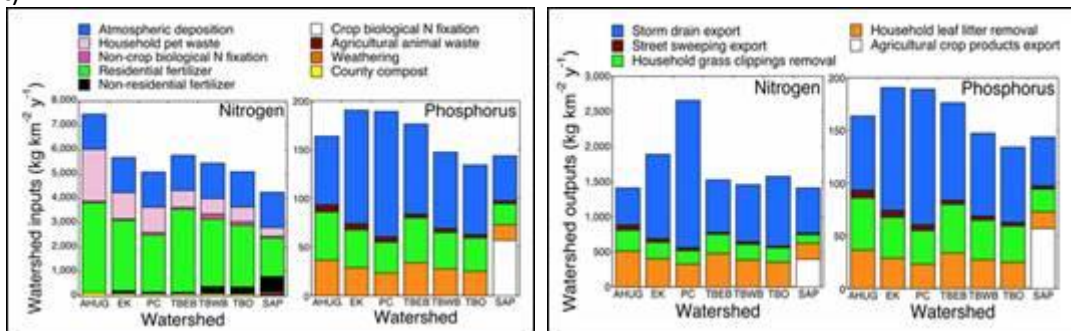
- Strib: [Republicans want to reshape environmental protection, meeting stiff DFL resistance](#)
- Owatonna.com: [Steele County Soil and Water District meet with local legislators](#)
- Winona Post: [Watershed artwork on display at Minnesota Marine Art Museum](#)
- Strib: [Republicans want to reshape environmental protection, meeting stiff DFL resistance](#)

WATER BUSINESSES

- Pioneer Press: [Aquaponic company to offer \\$1 gallons of water from Schmidt Brewery aquifer](#)
- Worthington Daily Globe: [Minnesota entrepreneur speaks of new technology on Day 1 of Worthington Bio Conference](#)

SURFACE WATER/STORMWATER

- MPR: [Update on the Red River flood diversion project](#) [32 min report]; Pioneer Press: [Mark Dayton lobbied feds to limit Fargo-Moorhead flood diversion funding, emails show](#)
- BWSR: [Public Private Partnership Benefits the Poplar River](#)
- BWSR: [Partnerships for Cleaner Water at Clear Lake](#)
- Conservation Minnesota: [Taking up the rains: Shoreview's Mark Maloney explains how rainfall changes affect cities](#)
- Strib: [St. Paul plan for stormwater stream at Ford site could boost flow over Hidden Falls](#)
- MPR: [Pets, lawn fertilizer pose big threats to Mississippi River in Twin Cities](#); Strib: [What pollutes the urban Mississippi? Lawns, dogs and lots of pavement runoff](#); the study evaluated nutrient inputs and outputs across 7 sub-watersheds in St Paul; read the full article in Proceedings of the National Academy of Sciences: [Contrasting nitrogen and phosphorus budgets in urban watersheds and implications for managing urban water pollution](#); graphs below show nutrient inputs (left) & outputs (right):



[Although this study looked at N & P sources in an urban area, [The Minnesota Nutrient Reduction Strategy](#) looks at the distribution of N & P sources in each major river basin, as can be seen below.]

Table 3-2. Minnesota phosphorus and nitrogen sources by major basin, average conditions *

Nutrient source	Mississippi River		Lake Superior		Lake Winnipeg	
	P	N	P	N	P	N
Cropland runoff	35%	5%	6%	2%	42%	11%
Atmospheric ^b	8%	6%	7%	10%	18%	21%
NPDES permitted wastewater discharges ^c	18%	9%	24%	31%	11%	6%
Streambank erosion	17%	—	15%	—	6%	—
Urban runoff and leaching	7%	1%	10%	1%	2%	0%
Nonagricultural rural runoff ^d	4%	—	32%	—	15%	—
Individual sewage treatment systems	5%	2%	3%	4%	3%	2%
Agricultural tile drainage	3%	43%	0%	5%	0%	7%
Feedlot runoff	2%	0%	0.1%	0%	0.3%	0%
Roadway deicing	1%	—	2%	—	2%	—
Cropland groundwater ^e	—	31%	—	9%	—	35%
Forest runoff	—	4%	—	38%	—	19%

Notes: P = phosphorus; N = nitrogen

a. Source estimates are based on Barr Engineering (2004) with more recent MPCA updated wastewater (2011 conditions) and atmospheric deposition sources (2007). Source percentages do not represent what is delivered to the major basin outlets, but what is delivered to local waters.

b. Atmospheric deposition is to lakes and rivers (atmospheric deposition to wetlands is not reflected in this table).

c. Nutrient loads in the Lake Superior Major Basin are lower than other major basins in the state and therefore wastewater is a larger portion of the overall sources. Western Lake Superior Sanitary District (Duluth area) accounts for more than 50 percent of the wastewater phosphorus load in the major basin.

d. Includes natural land cover types (forests, grasslands, and shrublands) and developed land uses that are outside the boundaries of incorporated urban areas.

e. Refers to nitrogen leaching into groundwater from cropland land uses.

Scale: Low High

WATER SUPPLY

- MDH has updated its Perfluorochemicals (PFCs) in Minnesota website; the portal page is [here](#); several maps showing contaminant plumes in Washington County were posted in March and they are linked at the bottom of this [page](#)
- Bureau of Criminal Apprehension: [Minnesota Fusion Center](#); the BCA takes water security very seriously – their Fusion Center staff investigated the recent Blaine water outages to insure that criminal activities were not to blame. During their investigations they evaluate possible cyber, people and physical threats to water systems. The American Water Works Association has developed new [Cybersecurity Guidance & Tools](#) to help water suppliers improve their cyber defenses.

WASTEWATER

- Waseca County News: [Rural Minn. has much to lose in Trump's budget plan](#)
- Met Council: [Council Offers Grant to Assist Manufactured Housing to Hook Up to Regional Wastewater System](#)

AG & WATER

- BWSR: [Preliminary Estimates Show Promising Progress on Buffer Law](#)
- Brownfield: [Contentious Battle Over Buffers Looms for Minnesota Legislature](#)
- West Central Tribune: [Farmers speak out in Willmar, message to be carried to Gov. Dayton](#); one concern: buffers
- West Central Tribune: [What is Minnesota's buffer strip law?](#) [also printed in the Duluth News Tribune and the Grand Forks Herald]
- Strib: [Minnesota releases 6 alternatives for buffer law compliance](#); BWSR: [More Buffer Law Options Available for Minnesota Landowners](#) and [Common Alternative Practices - Buffer Law Implementation Technical Guidance](#); Pioneer Press: [Minnesota releases 6 alternatives for buffer law compliance](#); Alexandria Echo Press: [Minnesota water board releases possible alternatives to buffers](#); US News and World Report: [Minnesota Releases 6 Alternatives for Buffer Law Compliance](#)
- Strib: [Anderson: With some reservations, Stearns County buffer law compliance widespread](#)
- BWSR: interested persons can review and comment on the following documents through May 3rd:
 - [Policy 9](#): BWSR's Review of County and Watershed District Buffer Rules, Ordinances and Official Controls
 - [Administrative Penalty Order \(APO\) Plan for Buffer Law Implementation](#)
- Discovery Farms WI: [Meet the newest Discovery Farms MN participant](#)
- Austin Daily Herald: [Mower SWCD assisting landowners with state buffer law](#)

EXTRACTIVE INDUSTRIES

- MPCA: [Intent to Reissue NPDES and SDS General Permit MNG490000 Nonmetallic Mining/Associated Activities](#); this draft permit would replace the National Pollutant Discharge Elimination System/State Disposal System General Permit for Nonmetallic Mining and Associated Activities that expired 10/31/16; comments due 5/3
- Pioneer Press: [Minnesota regulators push back release of pipeline review](#) and [House Republicans move to exempt pipeline project from state regulators](#); Strib: [Minnesota governor says he'd veto pipeline replacement](#)
- MN PUC: [Minnesota Public Utilities Commission determines Public Meeting Locations for Proposed \[Enbridge\] Line 3 Project](#); to be held in the yellow counties that are intersected by the “Applicant’s Proposed Route” (red line on the map below):



OPINIONS

- Strib: [Anderson: Proposals that hurt state's environment would hurt our business interests, too](#)
- MinnPost: [Legislature makes a sweeping assault on Minnesota's environmental traditions](#)
- Mankato Free Press: [Our View: Water quality: Report shows that city folks need to do their part](#)
- Southwest Journal: [Water is life](#)
- Strib: [Anderson: Proposals that hurt state's environment would hurt our business interests, too](#)
- Duluth News Tribune: [Local View: Stop Enbridge Line 3 to save Minnesota's wildlife, hunting heritage](#)

BEYOND MINNESOTA

REGIONAL

- NPR: [With Drought Emergency Over, Californians Debate Lifting Water Restrictions](#); Strib: [California governor: Drought over, conservation must go on](#)
- Public News Service: [Wisconsin Water Utilities Urge EPA Not to Eliminate WaterSense Program](#)
- Water Online: ['Ghost Water' Haunts Kansas City](#); all cities struggle with system water loss, which translates to lost investments in treatment and energy for distribution and supply sustainability
- Strib: [Wisconsin Senate OKs high-cap well bill](#)
- Strib: [Finally, Michigan is cleaning up Flint's water](#)

- Strib: [Legionnaires' bacteria found in Pennsylvania school's water](#)

NATIONAL

- Strib: [EPA denies petition to ban pesticide used on crops](#)
- GreenBiz: [Treating wastewater wastes energy, but it doesn't have to](#); the organic matter in wastewater contains up to 5X as much energy as the treatment plants use
- The Washington Post: [New EPA documents reveal even deeper proposed cuts to staff and programs](#); the plan maintains funding for states to administer waste treatment and drinking water programs, with the effect of cutting the remainder of EPA's budget by 43%; the 2 biggest losers are the Great Lakes Restoration and nonpoint source grant programs, both of which will affect MN
- Strib: [Some Republicans pushing back against EPA cuts](#)
- E&E News: [Supreme Court to hear WOTUS litigation](#)
- Science Daily: [Americans are water conscious, survey shows](#)
- Working with Water: [Reusable carbon nanotubes clean up polluted water](#)
- Center for American Progress: [Green Is Good - How Smart Policy Can Sustain Growth of Private Investment in Conservation](#)
- Strib: [First evidence found of popular pesticides in drinking water – in Iowa](#); this is the 1st time neonicotinoids have been found in treated tap water

GLOBAL

- Strib: [Pentair launches 5-year, \\$5 million clean-water project in Honduras](#)
- Science Alert: [Scientists Have Invented a Graphene-Based Sieve That Turns Seawater Into Drinking Water](#)
- Science Daily: [New invention uses bacteria to purify water](#)
- Chemical and Engineering News: [Tracking exposure to endocrine disrupters through signals in the sewer](#)
- MinnPost: [Agriculture is depleting world aquifers, new satellite measurements show](#)

MEETINGS

WATER SUPPLY PLANNING

Every 10 years, water suppliers serving more than 1,000 customers are required to submit a Water Supply Plan (WSP, formerly known as the Emergency and Water Conservation Plan) to the DNR for approval. In 2016, DNR staff provided assistance to the half of water suppliers whose plans were due last December. DNR staff have been back on the road since March 22nd, helping the 2nd half of water suppliers whose reports will be due this coming December.

At the 4/4 meeting for water suppliers from the west metro area, representatives of 13 cities and one college came to learn about the WSP process. Participants started the meeting by sharing some of their recent water conservation success stories, which ranged from: conducting periodic leak surveys, installing new meters, improving irrigation technology and enforcement, making process changes, promoting the use of practices to capture and reuse stormwater (e.g., rain barrels, rain gardens, and stormwater irrigation), conducting conservation outreach, switching to month billing, adopting a tiered conservation rate billing structure, recovering system backwash water, incentivizing low-flow water fixtures (e.g. toilets), and reducing pumping rates. Perhaps because the Master Water Supply Plan for the metropolitan area shows significant aquifer impacts in this part of the metro area, these communities have become more proactive in reducing water use through operational improvements as well as customer conservation.

A) Drawdown in the Prairie du Chein-Jordan aquifer under average projected pumping.



DNR and Met Council staff explained the contents of the WSP, some of the benefits of completing it, the review process, and how the WSP ties to other requirements, like metro comprehensive planning and wellhead protection planning. Participants also received a broad overview of resources available to help them with their water conservation programs, contacts for technical assistance to help them with WSP preparation, and resources to identify local water issues.

Attendees expressed appreciation for DNR's updated WSP format, which will significantly reduce preparation time and enable communities to complete them without hiring consultants, as well as their multi-agency coordinated approach and the assistance to get them started.

PERFORMANCE BASED FUNDING

Anticipating an appropriation of Clean Water Funds for a pilot program to provide performance based grants to certain LGUs, BWSR staff are holding a series of meetings to get feedback from metro stakeholders prior to preparing a draft policy that will outline the funding distribution plan. At this time, HF707 (passed on 4/4/17) includes \$10,450,000 over 2 years, while SF 566 (still waiting a hearing in the Finance Committee) appropriates \$9,750,000 over 2 years. According to the legislation, the grants may be used to "...implement projects that protect, enhance, and restore surface water quality in lakes, rivers, and streams; protect groundwater from degradation; and protect drinking water sources. Projects must be identified in a comprehensive watershed plan developed under the One Watershed, One Plan [1W1P] or metropolitan surface water management frameworks or groundwater plans. Grant recipients must identify a nonstate match and may use other legacy funds to supplement projects funded under this paragraph."

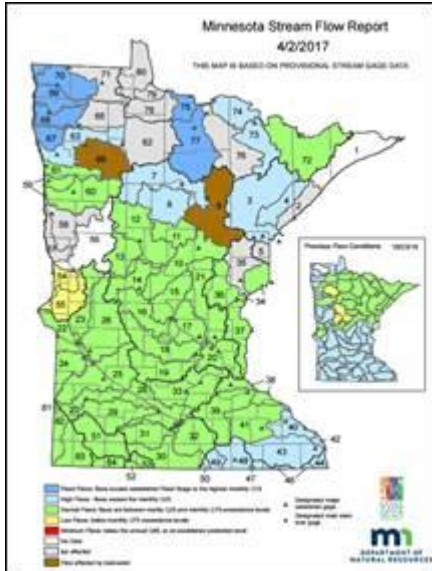
This will be a trial approach to shift a fraction of local funding from unpredictable competitive grant funding to a more stable equation for receiving block grants based on performance criteria that are yet to be established. To facilitate the discussion, BWSR completed a Strength-Weakness-Opportunities-Threats analysis of 6 different options and asked participants to add to the SWOT analysis, add additional approaches, and identify which approaches or combination of approaches is most palatable. In the metro area, there are number of watershed districts and watershed management organizations that are much smaller than the scale of 1W1P boundaries selected for greater MN, so the question of selecting priorities at which scale will be key to the funding distribution plan. BWSR staff intend to complete draft policy by mid- to late summer.

REPORTS

STATE OF MN WATER

- DNR: [HydroClim Minnesota for Early April 2017](#)

- DNR: MN Stream Flow Report – [4/2/2017](#)



- National Drought Mitigation Center: [4/4/17 Drought Monitor](#)

NEW REPORTS

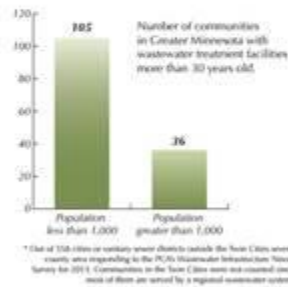
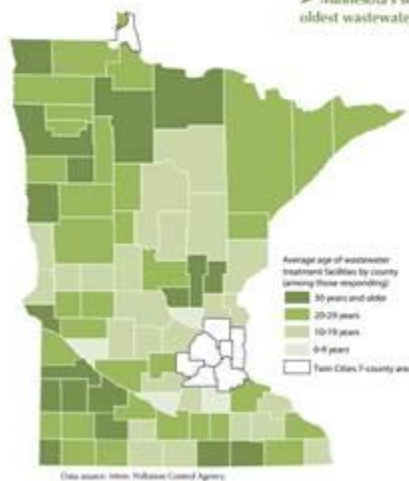
- WERF: [Final Report, Risk-Based Framework for the Development of Public Health Guidance for Decentralized Non-Potable Water Systems](#)
- Barr Engineering: [Engineering Cost Analysis of Current and Recently Adopted, Proposed, and Anticipated Changes to Water Quality Standards and Rules for Municipal Stormwater and Wastewater Systems in Minnesota](#)

OLD REPORT, BUT WORTH REPEATING

- RuralMN.org: [The state of water](#); this 2014 report summarizes water issues facing rural MN

RuralReality: the state of water

► Minnesota's smallest communities tend to also have the oldest wastewater infrastructure.



Visit our web site at www.ruralmn.org to read the policy brief.

Center for rural policy and development

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UPCOMING EVENTS

- Apr 10-12: **International Biomass Conference & Expo**; Minneapolis Convention Center; more info [here](#)

- Apr 18: DEED **MN Water Technology Export Roundtable: The Water Energy Nexus**, 10:00 a.m. to 1:00 p.m. @ Aeration Industries (4100 Peavey Road, Chaska) \$30 (includes lunch); register [here](#)
- Apr 19: **Water Action Day**; 8-4 pm meet with legislators, rotunda rally @ 1 pm; more info [here](#)
- Apr 24: **LWC Meeting**, 6-8 pm, State Office Building basement hearing room; details to come [here](#)
- Apr 25: Freshwater Society Moos Family Lecture: **The Death and Life of the Great Lakes** by Dan Eagan; St Paul Student Center; reception at 5:30 pm & lecture at 7:00 pm; free but registration is required [here](#)
- Apr 26: MGWA Spring Workshop: **Management, Analysis, and Optimization of Groundwater Data**; 8 am - 4:30 pm; U of MN Continuing Education and Conference Center (1890 Buford Ave, St Paul); \$145 member/\$195 nonmember; register [here](#)
- April 29: **Water for People Benefit Concert** featuring Big Bob & the High Rollers; Bogart's Event Center (14917 Garrett Ave, Apple Valley); \$10; opens at 7:30; organized by the MN American Water Works Association, the concert raises money to provide water infrastructure for 3rd world countries without clean drinking water
- May 5: **N & E Metro Groundwater Management Area Project Advisory Team Meeting**; 8:30-11:30; DNR Central Office, 500 Lafayette Road, St. Paul
- May 9: Minnesota Day at the **National Climate Adaptation Forum**; registration can be found [here](#)
- May 9: DEED **MN Water Technology Roundtable: Challenges & Solutions in Stormwater**; 9:30 am– 3 pm; \$30; more event info and registration link [here](#)
- May 18: **MN River Congress**; 4:30 pm networking fair and 7-9 pm program; Redwood Falls Community Center; Redwood Area Community Center (901 East Cook Street, Redwood Falls); \$30; register [here](#)
- May 22-25: **MN Public Drainage Manual Outreach Workshops**; 10:00-3:30; \$25 (includes lunch); 3 locations noted below; registration info to come
 - May 22, MN State Community and Technical College, Moorhead
 - May 23, Coyote Moon Event Center, St. Cloud
 - May 25, New Ulm Conference Center, New Ulm
- Aug 7-9: **WaterWorks! Drinking Water Institute for Educators**; Lakeville; details [here](#)
- Sept 19-20: **Great Lakes Commission Annual Meeting**; Duluth Entertainment Convention Center; more details to come