

Weekly LWC Update 12-01-16

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/

The LWC will have its last meeting of the 2015/2016 biennium on Wednesday, December 14th, from 9:30 to 11:30 a.m. in Rm 200 of the State Office Building. Representatives of local units of government will be explaining their water infrastructure needs.

MN NEWS

WATER ACTIONS

- Healthy Lakes: [Funding Opportunity: Up to \\$26 Million Available from EPA for GLRI Projects](#)
- International Falls Journal: [Hufnagle partnership, Drehers to be recognized](#)
- Post-Bulletin: [Far-sighted scientist's Sea Grant Program celebrates 50 years](#)
- New York Times: [Capella University Students Win First Place at Analytics Competition](#)

SURFACE WATER/STORMWATER

- Kenyon Leader: [DNR updates Minnesota buffer map; implementation continues](#); Northland Press: [DNR updates Minnesota buffer map; implementation continues](#); Wahpeton and Breckenridge Daily News: [Minnesota's DNR updates buffer map](#); the update includes 645 changes and more than 600 locations require field review
- USGS: [Removal of Fallen Leaves Can Improve Urban Water Quality](#)
- The Caledonia Argus: [Watershed management plan approved for Mississippi-Winona watershed](#)
- Daily Globe: [Zebra mussels, still not found in southwest Minnesota, explode in Iowa Great Lakes](#); with 26 new sites invaded by zebra mussels in 2016, MN is now has 121 infested water bodies (<2% of all lakes)
- MPR: [Red River diversion foes ask federal judge to halt project](#)

WATER SUPPLY

- Workday Minnesota: [Union plumbers step up to keep water safe in schools](#)
- Pioneer Press: [Traces of lead in water corrected in South Washington County schools](#)

WASTEWATER

- International Falls Journal: [Board awaits state OK on sewer project](#)

AG & WATER

- West Central Tribune: [Investors press meat producers to cut water pollution](#)

- Meat + Poultry: [Pilgrim's Pride to acquire GNP from The Maschhoffs](#); first as family-owned Gold 'n Plump and then as GNP under the Maschhoff's, GNP has been a leader in adopting water conservation technologies, testing the applicability of wastewater reuse, and other sustainability initiatives, like their Field Stewards work with Environmental Initiative

EXTRACTIVE INDUSTRIES

- Pioneer Press: [Twin Metals-sponsored poll finds strong regional support for copper mining](#) and Duluth News Tribune: [Poll finds Northeastern Minnesota support for copper mining](#)
- WEAU: [Winona County passes ban on frack sand mining](#)

OPINIONS

- Strib: [Water quality: A Minnesota maelstrom](#)

BEYOND MINNESOTA

REGIONAL

Midwest

- MLive: [DEQ overruled computer model that flunked Nestle groundwater bid](#); the Michigan Dept of Environmental Quality Water Resources Division uses an online [Water Withdrawal Assessment Tool](#) to determine the potential effect of groundwater withdrawals on surface water features; when model results show likely impacts, this generic screening tool can be supplemented with site-specific modeling to determine whether withdrawals should be authorized; the DEQ authorized Nestle to boost its allowed pumping to 400 gpm (2.5X higher than the original rate), but the public is concerned about this much water extraction; more details on Michigan's appropriations approach can be found here: [Considering aquatic ecosystems: The basis for Michigan's new Water Withdrawal Assessment Process](#)
- Strib: [DNR: Large farms could write own permit applications](#) in WI
- Water Online: [Madison Utility Tries 'Unusual' Approach To Conservation With Giveaway](#)

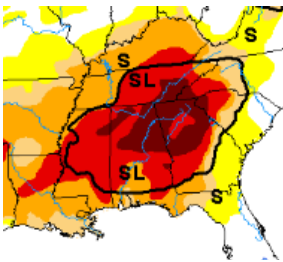
West

- The Seattle Times: [EPA approves parts of Washington clean-water plan](#)
- The Mercury News: [California drought: Wealthy Hillsborough residents sue, saying water rates are too high](#); claiming that its drought rules and penalties intended to keep people from over-watering big lawns are illegal
- UCLA Newsroom: [A problem: water and inequality](#); related links: [The New California Water Atlas - Making water understandable in California](#) and the original [California Water Atlas](#); The Planning Report: [The Role of Water Data in California's Conservation Efforts](#) (discusses California's Open and Transparent Water Data Act [AB 1755] that requires the creation of a statewide water data platform
- Reuters: [California seeks long-term water savings as drought lingers](#); CA is developing a state conservation plan with recommendations such as: tighter oversight of ag irrigation, a permanent ban on wasteful water practices, and submission of urban annual water use budgets and 5 year drought plans; more details in Lake County News: [State plan seeks to make water conservation a way of life](#) and CA.gov: [Making Water Conservation a Way of Life](#)
- Santa Rosa's Press Gazette: [Researcher: Neighborly conversations can help with water conservation](#)
- Stanford Water in the West: [Modeling Groundwater: Key Step for Implementing Landmark CA Water Law](#) (article) and its [A Framework for Groundwater Model Development under SGMA](#)

report discuss the political and physical complexities (like groundwater basin boundaries that don't align with jurisdictions, complex subsurface geology, and limited information about the resources) that present challenges to implementing CA's 2014 Sustainable Groundwater Management Act; the report stresses the need to develop models of the hydrogeologic system as a whole rather than for individual groundwater basins or sub-regions within them to reduce conflicts over boundary issues, enable cost sharing between agencies, and ensure consistency in model assumptions

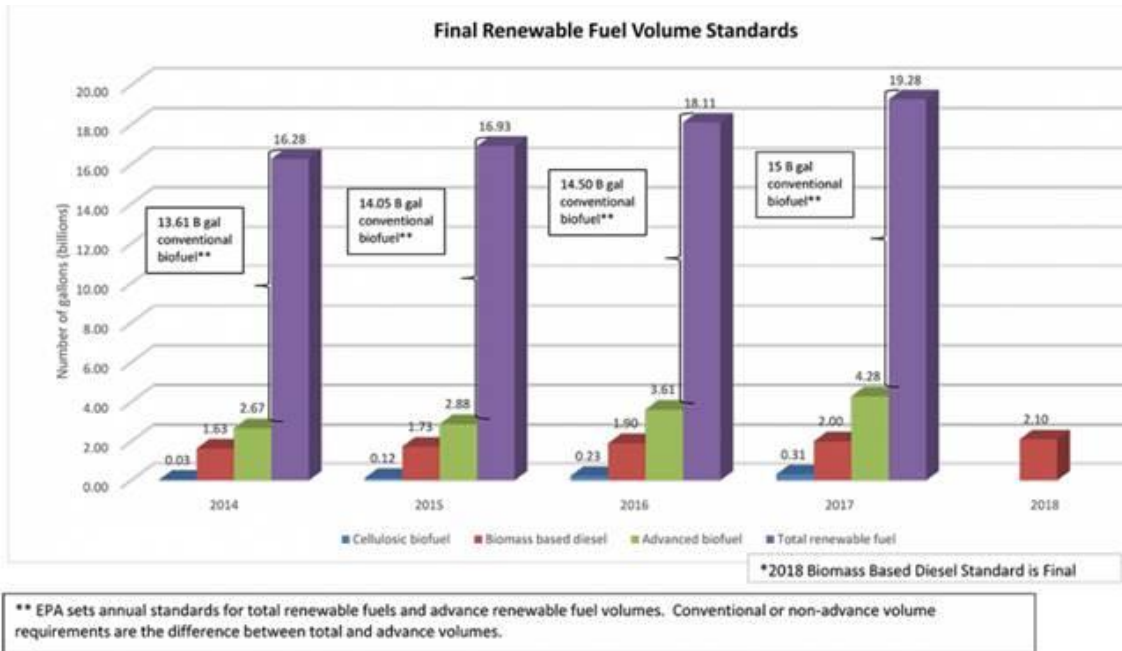
East

- The Washington Times: [D.C. Council seeks to flush towelettes from city sewers](#)
- phys.org: [Binge-eating bacteria extract energy from sewage](#); researchers in Belgium have developed a contact-stabilization process that recovers up to 55% of the organic matter from sewage (existing recovery rates are only 20-30%); this process could provide enough energy to treat sewage without added external electricity; DC Water is conducting a contact-stabilization trial on part of their full-scale wastewater treatment facility
- ABC: [Brown Water, Beaver Battle Among Early Signs of Water Woes](#) in the drought-stricken SE U.S.



NATIONAL

- Food Safety Magazine: [EPA Announces Plans for Safer Drinking Water](#) and EPA: [Drinking Water Action Plan](#)
- YouTube: [Understanding the Water-Energy Nexus](#); the Irvine, CA water district has produced this easy-to-understand video explaining the interconnectedness between water use, energy consumption and greenhouse gas emissions
- Strib: [North America's grasslands are quickly disappearing into farmland, report says](#); loss of grassland could threaten water, animals and atmosphere
- phys.org: [Survey shows homeowners want incentives to conserve more water](#)
- EPA: [Final Renewable Fuel Standards for 2017, and the Biomass-Based Diesel Volume for 2018](#);



Some key points:

- Total renewable fuel volumes grow by 1.2 billion gallons from 2016 to 2017, a 6 percent increase
- Advanced renewable fuel – which requires 50 percent lifecycle carbon emissions reductions – grow by roughly 700 million gallons between 2016 and 2017
- Non-advanced or “conventional” renewable fuel increases in 2017 meet the 15 billion gallon congressional target for conventional fuels
- The standard for biomass-based biodiesel – which must achieve at least 50 percent lifecycle greenhouse gas emission reductions compared to petroleum-based diesel – grows by 100 million gallons. The required volume of biomass-based diesel for 2017 is twice as high as the minimum congressional target [*biodiesel can include soybean oil as well as oil from annual cover crops, like those being advanced by the U of MN’s Forever Green project*]
- Cellulosic biofuel – which must achieve at least 60 percent lifecycle greenhouse gas emissions reductions – grows by 35 percent over the 2016 standard [*cellulosic biofuel comes from plant parts other than seeds or fruit; such as corn stover, wood or perennial grasses*]
- The advanced biofuel standard – which is comprised of biomass-based diesel, cellulosic biofuel, and other biofuel that achieves at least 50 percent lifecycle greenhouse gas emissions reductions – increases by 19 percent over the 2016 standard

GLOBAL

- Water and Wastewater Treatment: [Water companies worldwide back flushability statement](#); label wet wipes and similar products “do not flush” until industry technical standards are set
- Rice University: [Pine product offers fresh take on fine chemical synthesis](#); [*does this forest product have potential to make forest protection more economically competitive?*]

MEETINGS

REDUCING LEAD IN ST PAUL WATER

Staff from St Paul Regional Water Services hosted two open houses in November to discuss lead in drinking water. After giving some background about SPRWS operations and noting that they are in compliance with all drinking water regulations, they affirmed that no lead is present in their water supply when it leaves their treatment plant. Instead, lead may be added to tap water as it travels through pre-1927 lead service lines or comes in contact with lead solder in plumbing fixtures. The City has had an ongoing program to replace the city-owned service lines (from the water main to the property line), completing about 500 replacements/yr. With each replacement project, they also provide homeowners filter pitchers to collect particulates dislodged during the construction process. Of its 90,000 homes, SPRWS estimates that about 28,000 city-owned lead service lines still need replacement (at 500/yr, full replacement will take 56 yrs).

What else is SPRWS doing to address lead?

- Ongoing testing of homes, as per the federal lead and copper rule and when individual homeowners request testing
- Educating customers
- Financing privately-owned lead service lines, if requested (~\$2,700/line, with a 20 year assessment period)
- Replacing the city's connected service line when a homeowner replaces their private lead service line, if notified
- Staffing an engineering service desk (651/266-6270) to provide more information on replacing water service lines, including checking addresses to learn what metal a service line is made from

A few other key points that emerged from the discussions:

- Who owns what portion of a service line differs from city to city; for instance, in Minneapolis, service lines are privately owned from the house to the water main
- The 1988 federal Lead Contamination Control Act required EPA to develop guidance to help day care centers, kindergartens, primary and secondary schools develop a voluntary lead testing program; EPA also had to publish a list of leaded water coolers and directed the Consumer Products Safety Commission to require manufacturers and importers of water coolers with lead-lined tanks to repair/replace/recall the coolers and prohibit future manufacture or sale of water coolers that are not lead free; there is not a regulation that requires community water systems or others to test for lead in tap water at non-single-family structures
- The 1991 federal Lead and Copper Rule requires community water systems to test for lead and copper at single family structures that contain copper pipes with lead solder (post-1982), contain lead pipes, and/or are served by a lead service line (there are provisions to sample at other sites if the pool of single family structures is too low)
- EPA anticipates updating the Lead and Copper Rule; their October 2016 [Lead and Copper Rule Revisions White Paper](#) provides examples of regulatory options to improve the existing rule; they expect to publish a Notice of Proposed Rulemaking Revisions in the Federal Register for public review and comment in 2017

REPORTS

STATE OF MN WATER

- DNR: Stream Flow Report – discontinued until spring
- National Drought Mitigation Center: [11/29 Drought Monitor](#)

GREAT LAKES

Each year, DNR must submit a report of water conservation activities within the Lake Superior watershed; here is their [2016 Great Lakes- St. Lawrence River Basin Water Resources Compact Annual Water Conservation and Efficiency Assessment](#) report. It provides a broad overview of the many water protection activities being undertaken by many groups in NE MN.

INNOVATION ECONOMY

As you learned during the June 2015 LWC meeting, MN's water technology businesses have relied on having an educated workforce and government investments in research and development (R&D), like the U of MN's MnDRIVE program. The Minnesota High Tech Association's [A Review of the State of Science and Technology in Minnesota](#), published this fall, notes MN's technology and science rankings (below) and highlights the MnDRIVE program in its report. 3M and Ecolab, companies with strong water-based markets, are in the top 10 companies to have received utility patents in 2015. The report also recognized actions by the Legislature in 2016 to: extend the angel investment tax credit for 1 yr, invest in broadband deployment, and modernize MN's telecommunications regulatory framework.

2016 Milken Institute's State Technology and Science Index Rankings

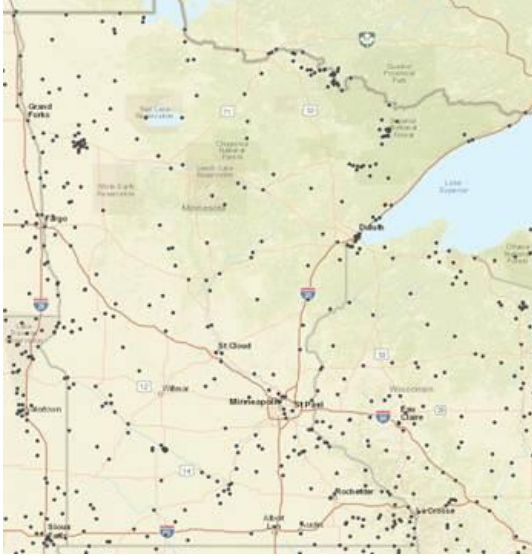
Category	MN Ranking	Top State
Overall	7	Massachusetts
Research and Development Inputs	19	Massachusetts
Risk Capital and Entrepreneurial Infrastructure	16	California
Human Capital Investment	5	Colorado
Technology and Science Workforce	4	Maryland
Technology Concentration and Dynamism	15	Maryland

AG RESPONSES TO DELUGE OR DROUGHT

USDA has produced the technical bulletin: [Adaptation Resources for Agriculture - Responding to Climate Variability and Change in the Midwest and Northeast](#) to help the agricultural community adapt to changes in climate and extreme weather. It includes information to help ag producers, service providers, and educators in the Midwest and NE US make decisions that consider changing climate impacts. The Adaptation Workbook provides producers a flexible, structured process to ID impacts and adaptation tactics to improve their responses to extreme and uncertain conditions. A menu of potential responses is given that address short- and long-range timeframes for a wide variety of local conditions and cropping practices. One of the adaptation examples (p.53) looks at corn and soybean production to demonstrate how these adaptation process resources can be used. Water-related tactics are the focus of Strategy 1 (Sustain fundamental functions of soil and water) and Strategy 8 (Alter infrastructure to match new and expected conditions).

ACCESS USGS WATER DATA

The USGS has established an online tool, the [National Water Information System: Mapper](#), to enable easier sharing of data they have collected, just click on the gaging stations or research sites to view data.



UPCOMING EVENTS

- Nov 19-Jan 1: **Smithsonian Water/Ways Exhibit** at the [Audubon Center of the Northwoods](#) in Sandstone
- Dec 4-6: **MN Association of Soil and Water Conservation Districts Annual Meeting & Trade Show**; \$145 to \$220 (depending on days participating); Double Tree Hotel – Bloomington; details [here](#)
- Dec 5-6: **Association of MN Counties Annual Conference**; Hyatt Regency Minneapolis; \$375 before 11/4 & \$400 after; schedule [here](#); registration [here](#)
- **Dec 14: LWC Meeting, Room 200, State Office Building, 9:30 – 11:30 am**
- Jan 17-19: 34th Annual **Red River Basin Land & Water International Summit Conference** “Passport to Progress: Thinking Beyond Our Boundaries”; \$225, Ramada Plaza Hotel in Fargo; more info [here](#)
- Jan 23-24: **MN Water Well Association’s 95th Annual Trade Show and Convention**; Minneapolis Marriott NW; more info to come [here](#)
- Jan 31-Feb 2: **MN Erosion Control and Stormwater Management Annual Conference and Trade Show**; 1 Day fee-\$170 member/\$200 Nonmember or 2 Day fee-\$330 member/\$390 nonmember; Verizon Wireless Center in Mankato; schedule [here](#); register [here](#)
- Feb 7: **Nutrient Management Conference**, St. Cloud; details to be announced
- Feb 9: **Water Technology Export Roundtable: Opportunities in Water Reuse**; 9:30AM – 1PM; \$30 includes lunch; @ Dow Water & Process Solutions, 7600 Metro Boulevard, Edina; register [here](#)
- Feb 16: U of MN Extension’s **Nitrogen: Minnesota's Grand Challenge and Compelling Opportunity**; Verizon Wireless Center (1 Civic Center Plaza, Mankato); details to come [here](#)
- Mar 7-9: 33rd Annual **MN Rural Water Association Water & Wastewater Technical Conference**; St Cloud; details to come [here](#)
- Apr 18: **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)
- May 9: Minnesota Day at the **National Climate Adaptation Forum**; registration can be found [here](#)