#### Weekly LWC Update 5-12-17

# **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.

Barb Huberty, 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/

FYI: there will not be a weekly update next Friday (5/19)

# **LEGISLATURE**

Here are this week's water-related bill introductions. Of the 5057 bills introduced since January, 352 (7%) are water related.

House File	Chief/ <i>LWC</i> Authors	Senate File	Chief/ <i>LWC</i> Authors	Description (as introduced, not as amended)
2631	Erickson	<u>2371</u>	Mathews	\$1.75M bond proceeds to PFA for grant to Milaca for public infrastructure to support expansion of city service area to include ISD 912, to protect the city's drinking water from new wells/treatment systems, and provide water service to areas not served now to facilitate economic development
<u>2637</u>	Hansen	2376	Dibble	when pipeline operations have ceased or easement rights revert back to the landowner, the operator is responsible for removing all abandoned property unless the landowner requests abandonment in place; an operator must submit and the Commissioner of Public Safety must approve the pipeline abandonment plan

Conference committees continued their work this week on HF4 (taxes) and SF1937 (job growth). The Senate Finance Committee passed SF550 (the environment and natural resources trust fund bill) to General Orders, followed by passage of the bill, as amended, on the Senate floor. The companion bill, HF1265, is slated for action on the House floor on Wednesday, 5/17.

Below is an initial summary of omnibus bills and their water provisions (please let me know of any inadvertently missed provisions):

Bill	Senate Action		Presented to Governor	Governor Response	Water Provisions (by line #)
SF 780 (the omnibus	passed	passed	5/9, Ch 41	Veto 5/11	2.31 Voluntary cleanup funding

agriculture and housing appropriations bill)					7.13 Agricultural growth, research and innovation program includes funding for farmer-led councils and water quality improvement practices
HF 888 (the omnibus environment and natural resources bill)	passed	passed	5/9, Ch 42	Veto 5/11	See separate table below*
HF 890 (the omnibus education finance bill)	passed	passed	5/9, Ch 43	Veto 5/11	78.1 Race2Reduce water conservation education 100.13 Lead in school drinking water
SF 605 (the omnibus state government appropriations bill)	passed	passed	5/9, Ch 44	Veto 5/11	Language repealing the LWC was removed
SF 800 (the omnibus health and human services bill)	passed	passed	5/9, Ch 45	Veto 5/11	556.3 Grants for drug deactivation an disposal
SF1124 (the omnibus lands bill)	passed	passed	5/11, Ch 54	Signed 5/11	26.5 Place Washington Co Judicial Ditch 6 within authority of Comfort Lake-Forest Lake Watershed District
HF1717 (the omnibus ag policy bill)	passed				5.17 Experimental use pesticide products registered only when EPA requires experimental use permit (Secs 3-6)

# \*HF888, 4th eng

	Lines	Tasks/Programs/Topics
	3.21, 5.24	municipal liaison for standards & permit assistance
	3.26, 5.29	economic analysis for water quality rulemaking & cost-effective permitting
	3.30, 5.33	statewide economic analysis & templates for more efficient variance process
ons	4.1, 6.4	coordination with Public Facilities Authority
riati	4.20	registration of wastewater laboratories
o	4.23	perfluorochemical biomonitoring
MPCA Appropriations	5.10, 7.16, 8.33, 12.29	leaking underground storage tank investigation, remediation & prevention and vapor assessment & remediation
APC	6.8	grant to Office of Administrative Hearings to establish sanitary districts
	6.12, 11.1	SSTS program administration, technical assistance/education & grants
	6.28, 11.8	new techn0logy review, local gov't technical assistance & enforcement
	7.26	systems to support permitting, regulatory business, and data

	7.31	grant to Met Council for waste to biofuel development				
	8.25	contaminated sediment projects in St Louis River Area of concern				
	9.8	grant to MN Dept of Health to monitor private wells near unpermitted solid waste facilities and for drinking water advisories from hazardous releases				
	9.17	closed landfill remedial investigations and response actions				
	10.2	small business environmental improvement loans				
	12.17	county feedlot program				
	12.24	feedlot permitting				
	13.5	EQB operations				
	13.9	EQB -led interagency team for silica sand mining assistance				
	14.23	environmental research related to mine permitting				
	14.29	mineral resource management				
	15.1	conservation easement stewardship				
	15.19	invasive species management, monitoring, water access inspections, invasive plant management				
	15.3	grant to Mississippi Headwaters Board for plan implementation				
	16.7	grant to Leech Lake band for implementation in the upper Mississippi				
S	16.12	Red River mediation agreement implementation				
DNR Appropriations	17.6	financial reimbursement & technical support to LGUs for groundwater level monitoring				
rop	17.10	surface water monitoring				
√pp	17.12	groundwater monitoring				
NR.	17.14	incorporate stormwater & groundwater analyses in permit application review				
۵	17.17	precipitation data for irrigation improvement				
	17.19	info technology, electronic permitting, & integrated data management				
	17.22	compliance and monitoring				
	17.23	Lake Koronis aquatic invasive species management				
	17.28	economic impact analysis of groundwater management areas and water appropriation permit plans				
	18.3	MN Aquatic Invasive Species Resource Center @ U of MN				
	27.15	legal support				
	28.1	Natural resource block grants to LGUs				
BWSR Appropriations	28.25	grants to SWCDs for Boards and programs, general purposes, engineering & implementation of the Reinvest in MN program				
	29.5	water quality cost-share grants				
	29.11	SWCD cost-sharing contracts for conservation practices				
SR A	29.22	wetland conservation act implementation				
3WS	29.28	examine Clean Water Act Section 404 assumption				
	30.7	technical assistance to drainage authorities & Drainage Work Group support				

	30.11	grant to Red River Basin Commission for water quality and floodplain management, including program administration				
	30.2	grant to MN River Basin Area II for floodplain management				
	30.24	conservation easement stewardship				
	30.27	Lower MN River Watershed District grant for O&M of dredge spoils site				
	31.1	BWSR operations				
DoR	34.13	riparian protection aid payments				
	35.7	permitting efficiency, public notice				
	36.11	expedited costs, reimbursements				
	37.5	Irrevocability, suspensions, or expiration of permits; environmental review				
	37.2	unadopted rules				
	48.9	prohibited activities related to invasive species				
	49.2	Lake Minnetonka Pilot Study re: invasive species				
	49.21	Gull Lake Pilot Study re: invasive species				
	50.4	Cross Lake Pilot Study re: invasive species				
	50.19	permit for invasive carp				
	62.21	allocates surplus wetland credits approved under a permit to mine				
	63.2	modifies commissioner review & hearings requirements				
	63.21	property owners adjacent to permitted mining areas may petition for a contested case hearing regarding completed applications				
	65.11	modifies appeals for reclamation of mine lands				
es	78.11	modifies authority language related to soil loss ordinances				
Statute Changes	78.16	modifies the riparian protection and water quality practices law regarding: definitions for public waters & with jurisdiction, clarifies application of law to waters with and without shoreland classification and SWCD authorities, revises compliance deadlines, requires Palmer amaranth-free seed mixes, and modifies enforcement provisions				
	82.12	defines constructed management facilities for storm water				
	82.18	adds bank service areas for purposes of wetland replacement to >80% area				
	82.24	adds bank service areas for purposes of wetland replacement to <50% area				
	82.29	may allocate surplus credits from approved wetland replacement plans associated with post-7/1/91 permits to mine to future mining-related wetland impacts, with notification to affected counties				
	87.2	wetlands in <80% areas can't be replaced in >80% areas; wetland replacement sites ID'd in adequate EIS may be approved for a wetland replacement plan without further modification				
	88.16	for calcareous fens, DNR must allow temporary reductions in groundwater seasonally under approved management plan for appropriating water; measures to mitigate adverse effects must be considered				
	89.16	Tech Eval Panel members with financial interest or official capacity regarding wetlands must disclose their interest to the LGU				

90.12	court rulings of no violation on wetland replacement orders may not be recorded and if deed restrictions exist, they must be removed
91.8	water appropriation permits are not required for non-consumptive diversion of surface waters from a natural channel to produce hydro power if in existence by 1/1/37 AND for stormwater used to reduce runoff volume, treat stormwater or sustain groundwater supplies when extracted from constructed stormwater management facilities
91.30	water-use permit processing fee for facilities that temporarily divert water for hydro power may not exceed \$5K/yr
94.8	Fees for past unpermitted appropriations may be waived for hydro power facilities that temporarily divert water from its natural channel
94.18	If notified, the DNR must transfer a water appropriations permit to the successive owner
94.25	Before requiring a change to a management plan for appropriating water, the DNR must provide estimates of the economic impact of any new restriction or policy on existing and future groundwater users in the affected area.
95.2	for groundwater appropriations applications and preliminary well construction approval, DNR's letter providing preliminary approval must include test-well information needed to obtain the permit AND the DNR must provide all the info used to make a determination to those given permit restrictions, reductions or denials
96.7	before making changes under a groundwater management area plan, DNR must provide estimates of economic effects of new restrictions or policies on existing users in the affected area
97.8	removes attorney general approval from the stipulation of a low-water mark
97.20	MPCA must allow at least 60 days for public comment after publishing draft impaired waters lists; a person may petition MPCA to hold a contested case hearing on the draft impaired waters list; challenges may include MPCA reliance on data that don't reflect recent infrastructure investments and documented pollutant reductions
97.28	provides for review of proposed MPCA actions by removing administrative deference to the MPCA by the administrative law judge and allowing the Office of Administrative Hearings to review scientific basis by convening independent expert review panels; these actions don't abrogate or repeal Ch 14 requirements
101.7	MPCA must provide publicly owned wastewater treatment facility permit applicants a copy of the draft permit 30 days before it is put on public notice and public comment period is extended to 60 days

112.18	permitting efficiency: when requested by applicant of individual Tier 2 permit, MPCA must provide the applicant with a schedule for reviewing the application; public notice must be issued within 150 days of receiving the application unless a the permittee and MPCA agree on a different schedule
115.27	permit fees: applicant & MPCA must have a written agreement for estimated costs for expedited permitting & recourse to applicant for failing to meet the schedule
118.7	if MPCA is not funded, permits and environmental review activities can't be suspended
118.22	MPCA can't implement in a permit or enforce a penalty unadopted rules (e.g., guidance, criterion, policy, etc.)
120.18	modifies membership of EQB and modifies their jurisdiction
132.19	BWSR to certify which LGUs assume jurisdiction for the buffer law & DNR identifies the # of public watercourses and public drainage ditch centerline miles on the buffer protection map; sets for procedures to determine the proportional share of riparian protection aid each LGU will receive
138.11	EQB member transition provisions
139.22	DNR must issue a water use permit for calcareous fens in Pipestone Co if listed permit conditions are met
141.2	water-use permits issued before 1/1/17 that are exempted in 103G.271 are canceled
141.16	MPCA to modify MN Rules, 141.18 part 7001.0150, subpart 2, item A so that publicly owned treatment works are not required to apply new standards sooner than 16 yrs after the date of capital investment/initiative of operations; MPCA may adopt rules under the good cause exemption

# **MN NEWS**

# **WATER ACTIONS**

- Water Online: <u>Student Scientists To Compete To Represent The U.S. In Stockholm Junior Water Prize Contest</u>; the Minnesota contestant is Maxwell Vogel, Oakland Jr High School (Science Teacher Katy Pupungatoa, Sponsored by the Central States Water Environment Association) for his project "Can a Golf Course Riparian Buffer Zone Reduce Fertilizer, Pesticide and Sediment Runoff into the Brown's Creek Watershed?: Year One Phase I"
- St Croix 360: Free three-day St. Croix River workshop offered for science teachers
- MMB: <u>Capital Budget Instructions</u>; the Capital Budget System (CBS) is open for state agencies and local
  units of government to submit bonding requests for consideration in the 2018 capital budget; 6/16 is
  the deadline for local government final project submissions
- U of MN: <u>Become an AIS Detector</u>
- Stillwater Gazette: Column: Talking turf and water
- Hibbing Daily Tribune: Range Entities Found in Violation of Pollution Rules
- MnDOT: <u>MnDOT/LRRB Research Request for Proposals (RFP) FY2018</u>; this can include projects researching how to protect water, like these

• Students from John Glenn Skyview Middle School in Maplewood can participate in an afterschool program called Project Citizen, which explores issues in government, politics, social justice, and the environment; student teams are tasked with finding real solutions to real community issues and then their ideas are presented at the state Capitol; one group tackled lead in school water systems:



#### **WATER BUSINESSES**

- Business Wire: <u>ALLETE CEO Describes Growing North American Footprint at Annual Meeting of Shareholders</u>; in addition to producing hydropower, Allete owns <u>U.S. Water Services</u> in St. Michael
- Twin Cities Business: Pentair Spinning Off Its Electrical Business; Strib: Pentair to split company into two separate businesses; the water and electrical departments will now become independent, publicly traded companies; "Its water company, responsible for water and fluid processing systems for residential, commercial and industrial settings, will maintain the Pentair name and ticker symbol (PNR). The group's three business divisions Filtration & Process, Flow Technologies and Aquatic & Environmental Systems generated \$2.8 billion in sales in 2016."

### **SURFACE WATER/STORMWATER**

- MPR: MN-ND flood fight shows not all public works spending gets applause
- MPR: Stearns County offering dock owners cash to stop invasives
- LMC: Stormwater Reuse Provision Included in Conference Committee Agreement
- MPR: Mississippi River cities: Feds should take climate change seriously
- Worthington Daily Globe: Clean water project moves forward
- White Bear Press: A filter here, a filter there helps water quality
- BWSR: The Minnesota Wetland Bank: A National Success
- Brainerd Dispatch: Studies show good news, bad news for Rum River watershed

#### **GREAT LAKES**

- NPR: <u>Trump's Budget Would Eliminate A Key Funder Of Research On Coastal Pollution</u>; the Great Lakes
  are the US's inland coast, so Great Lakes states have Sea Grant programs, too; see <u>MN Sea Grant</u> for
  examples of their research and outreach work
- The Blade: Leaders cheer Great Lakes funding survival

#### **WATER SUPPLY**

- MPR: Climate Cast: Grass isn't always 'greener'; "Grass covers more land in the US than any other crop. It's estimated that there's up to three times more acres of lawns than corn, according to NASA. Homeowners use up to 10 times more chemical pesticides on per acre on their yards compared to what farmers use on their crops, according to the U.S. Fish and Wildlife Service. The EPA estimates that just under one-third of water from public sources goes toward landscaping with over half of all outdoor water being used on grass."
- WCCO: How To Save Money, And Water, With Your Sprinkler System

- Madelia Times Messenger: <u>Courtland Council moves forward with treatment plant and water tower</u> design
- Alliance for Water Efficiency: <u>Net Blue Toolkit to Help Communities Pursue Water-Neutral Growth</u>; links to all 4 parts of the tool kit can be found here: <u>Net Blue: Supporting Water-Neutral Community Growth</u>
- Strib: Irrigation law changes risking prairie wetlands get tucked into Minn. environmental bill



#### **WASTEWATER**

- Strib: From toilet water to tap water? Minnesota officials consider future of wastewater reuse; KXRA Voice of Alexandria: Minnesota Officials Look At Ways To Use Cleaned-Up Wastewater
- LMC: Conference Committee Agreement Includes City Wastewater Infrastructure Investment Protection
- Mesabi Daily News: Wastewater Plant Operators Commended by MPCA
- KARE11: <u>St. Francis water bills rest on bonding bill</u> [note: funding for the St Francis plant is not in the current bonding bills]
- KAALTV: State Delegation Discusses Albert Lea Wastewater
- MPCA: The Challenge of Meeting Water-Quality-Based Permit Limits: A Working Group Proposal to
   Address Chloride from Municipal Wastewater Treatment Facilities; most Minnesotan's receive very
   hard or extremely hard water, so they install water softeners to reduce hardness, but this adds
   untreatable chloride to wastewater discharges; reducing wastewater salt concentrations can be done
   by either providing already softened water (like St Peter or other cities that treat their water supply
   with reverse osmosis) or by putting high-efficiency softeners into use



# **AG & WATER**

- West Central Tribune: MN CREP sign-up starts on 5/15
- Le Center Leader: Rural GOP says Dayton wages 'war on agriculture'
- BWSR: BWSR Announces Expanded Buffer Law Alternative Practice Options

- U of MN Open Rivers: Agriculture and the River: The University's Role in Societal Learning, Innovation, and Action
- Owatonna People's Press: Minnesota Corn Growers Association funds farmers tackling conservation
- KARE11: Outdoors groups defend rural buffer strips
- The Post Review: First Chisago County farm in the Minnesota Ag Water Quality Certification Program
- Red Wing Republican Eagle: Area farmers work with Cannon River Watershed Partnership
- BWSR: Sustainable Conservation Practices for Healthier Water and Soil A Farmer-Led Approach
- BWSR: Healthy Soil is a Benefit to Everyone
- Rochester Post Bulletin: Winona board approves expansion of two hog farm sites; without adding a requirement for water quality monitoring, the Winona Co Commissioners voted 4-1 to approve a pair of conditional-use permits that will allow for expansion at two Holden Farms site, adding 1,734 animal units in total; combined, Holden Farms will produce 8M gallons of manure/yr
- Marshall Independent: Marshall OKs zoning for shrimp production

### **EXTRACTIVE INDUSTRIES**

- DNR: <u>State Nonferrous Metallic Mineral Leasing Public Lease Sale</u>; Duluth News Tribune: <u>Minnesota DNR ready to auction more mineral rights</u>
- MPR: Dakota Access pipeline leaked 84 gallons of oil in April
- Rochester Post Bulletin: Land Stewardship to help Winona County defend frac sand ban

#### **OPINIONS**

- Mankato Free Press: In Response: Unanimously approved Legacy bill wasn't partisan
- MinnPost: Mining Minnesota study misfires on tourism
- Brainerd Dispatch: Reader Opinion: Powering Minnesota's future
- MinnPost: We can't all live upstream
- Marshall Independent: Legislature 'brutal' toward Minnesota environment
- Pine Journal: Clean, safe drinking water is Priority No. 1
- Duluth News Tribune: Reader's View: Oppose legislation that enables polluters
- Rochester Post Bulletin: Our View: Big feedlots need fair, full environmental review
- Duluth News Tribune: Reader's View: Water on Iron Range cleanest in the state
- Pioneer Press: <u>Letter: Stop the Minnesota farm buffer law</u>
- Strib: Counterpoint: Let's stick to the facts on environmental proposals
- Strib: 'Farmers vs Fens'

# **BEYOND MINNESOTA**

## **REGIONAL**

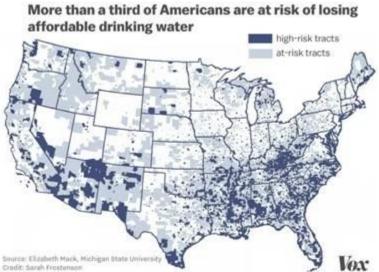
- Council of State Governments: South Dakota adopts new tax incentive to protect its waterways
- Milwaukee Wisconsin Journal Sentinel: <u>In low-key rollout, DNR begins giving water to those with</u> tainted wells; Strib: Wisconsin DNR offers bottled water for contaminated wells
- Water Deeply: Why California Can't Go Back to 'Normal' After Drought; Some lessons learned that could apply to MN: "An example would be stormwater. For decades, stormwater has been this liability that causes coastal pollution. Now there's a much greater sense that it's a water supply. Traditionally, there just hasn't been a solid revenue stream for that. Is it wastewater or street runoff, or is it a water supply? And who pays for that investment? The other thing that's much more pronounced, both as a policy and revenue issue, is safe drinking water for disadvantaged communities. Another thing we should have in place is a clear environmental water supply for when you have drought conditions."

- McClatchy DC Bureau: Oh, well. California water info can remain secret, court rules
- The Reporter: <u>Court rules Chromium 6 water standard not economically feasible</u>; EPA's standard for total chromium is 100 ppb; in 2014, CA changed its standard of 50 ppb for chromium 6 (a subset of total chromium) to 10 ppb; a court recently found that CA had not conducted the required economic feasibility analysis of implementing the new standard and ordered that it be withdrawn and a new standard be established
- Philly.com: Repair crews discover 200-year-old wooden water mains in Center City; records show it
  was installed between 1811 and 1812, but Philadelphia began installing cast-iron pipes in 1819 and
  took its last wooden pipes out of service in 1858, but didn't remove all the old pipes; this is what a 200
  year old wooden water pipe looks like a hollow tree trunk:



#### **NATIONAL**

- Strib: Huge sinkholes are now appearing in the wrong places
- The Aspen Institute: <u>Internet of Water: Sharing and Integrating Water Data for Sustainability</u>; view the full <u>report</u>
- Vox: <u>America has a water crisis no one is talking about</u>; 5.1% of MN census tracts are high risk and 18.1% of MN census tracts are at-risk; read the research paper in the Public Library of Science: <u>A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States</u>



- The Hill: <u>EPA seeks governors' input in rewriting Obama water rule</u> and <u>EPA chief recuses himself from</u> climate, water rule cases
- Circle of Blue: Congress Budget Deal Protects Water Programs

- Union of Concerned Scientists: New Study Shows Diversified Crop Rotation System Could Be Adopted
  Widely Across Corn Belt And Increase Corn-Soy Yields While Slashing Soil Erosion and Water Pollution;
  read the UCS report: Rotating Crops, Turning Profits; these findings stem from 13 years of data from
  research plots at the Iowa State University Marsden Farm conducted by the Leopold Center for
  Sustainable Agriculture in cooperation with the USDA National Research Initiative, the Iowa Soybean
  Association, and the Organic Center that compares a 2 year corn-soybean rotation with more diverse
  cropping system here are the Leopold Center's Frequently Asked Questions about cropping system
  diversity and profitability
- Phys.org: Sweet compounds aid water retention in dry soil
- Successful Farming: <u>Erosion: Treat the Problem, Not the Symptoms</u>; "Edge-of-field practices (such as buffers) slow down water movement and stop those sediment and nutrient runoffs before they get too far," says Watts. While valuable practices, they only treat symptoms not the problem and should only be half of the system."
- Inside Sources: Are Plastic Pipes for Drinking Water a Better Alternative?
- Politico: What broke the Safe Drinking Water Act?; "...political pressure, scientific uncertainty and bureaucratic inertia can feed off one another to bring federal regulation to a halt"



Strib: <u>EPA dismisses half of scientific advisers on 10-person review board</u>; The Washington Post: <u>EPA dismisses half of key board's scientific advisers</u>; <u>Interior suspends more than 200 advisory panels</u>; <u>Strib: Trump's overhaul of EPA science panel worries U professor who heads it</u>; <u>MPR: Nine EPA science advisers cut loose</u>

### **GLOBAL**

- 620ckrm.com: <u>University of Saskatchewan involved in world's largest water study</u> to develop a cross-Canada drought and flooding prediction system
- EurekAlert!: New research could transform how we filter water; Homeland Security News Wire: New water filtration technology uses 1,000 times less energy

### **CELESTIAL**

• Strib: <u>Equipment water leak shortens spacewalk by 2 US astronauts</u> [no matter where we go, water infrastructure woes are sure to follow]

### **MEETINGS**

# **CHALLENGES AND SOLUTIONS IN STORMWATER**

The Dept of Employment and Economic Development hosted a MN Water Tech Export Roundtable in Duluth this week. About 30 representatives of the U of MN's Natural Resources Research Institute and St Anthony Falls Laboratory joined staff from engineering and environmental consulting firms and from businesses like <a href="Maintain Peat Technology"><u>American Peat Technology</u></a> and <a href="Rainwater Management Solutions"><u>Rainwater Management Solutions</u></a> to share their stormwater-related research, products, and services. The participants demonstrated that, while MN has a lot of stormwater expertise, many challenges for nonpoint source pollution control remain to be tackled through innovation and research.

# **REPORTS**

### **STATE OF MN WATER**

- DNR: MN Stream Flow Report 5/8/17
- National Drought Mitigation Center: <u>5/9/17 MN Drought Monitor</u>; the first abnormally dry area has appeared in western MN

### **NEW REPORTS**

- DNR: Minnesota River Valley Recreation and Conservation Master Plan
- WRF & EPA: Evaluation of Lead Service Line Lining and Coating Technologies
- Science Direct: Nationwide reconnaissance of contaminants of emerging concern in source and treated drinking waters of the United States (wastewater indicators and inorganic chemicals) and Pharmaceuticals; Microbial pathogens in source and treated waters from drinking water treatment plants in the United States and implications for human health; Comparison of in vitro estrogenic activity and estrogen concentrations in source and treated waters from 25 U.S. drinking water treatment plants; Human health screening and public health significance of contaminants of emerging concern detected in public water supplies; A regional assessment of chemicals of concern in surface waters of four Midwestern United States national parks
- USFWS: Contaminants of Emerging Concern in the Great Lakes Basin: A Report on Sediment, Water, and Fish Tissue Chemistry Collected in 2010-2012
- EurekAlert!: US streams carry surprisingly extensive mixture of pollutants;
- USGS: <u>Suspended-sediment concentrations</u>, <u>bedload</u>, <u>particle sizes</u>, <u>surrogate measurements</u>, <u>and</u> <u>annual sediment loads for selected sites in the lower Minnesota River Basin</u>, <u>water years 2011 through 2016</u>
- USGS: <u>Lake Levels and Water Quality in Comparison to Fish Mercury Body Burdens, Voyageurs</u> National Park, Minnesota, 2013–15

# **UPCOMING EVENTS**

- May 15-19: Infrastructure Week It's Time to Build in Washington, DC and across the nation; participation details here
- May 17: Fond du Lac Water Gathering; 5:00-9:00pm; Black Bear Casino and Resort (1785 MN-210, Carlton); more details 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 <a href="here">here</a>
- May 22: MN Public Drainage Manual Broad User Outreach Workshop; 10 am to 3:30 pm; \$25 (lunch provided); MN State Community & Technical College, Moorhead; register <a href="here">here</a> by 5/12
- May 23: MN Public Drainage Manual Broad User Outreach Workshop; 10 am to 3:30 pm; \$25 (lunch provided); Coyote Moon Event Center, St. Cloud; register <a href="here">here</a> by 5/12
- May 24: The Death and Life of the Great Lakes; Freshwater Society Moos Family Lecture Series; U of MN Duluth Kirby Student Center (1120 Kirby Drive); 6 pm reception on 2<sup>nd</sup> floor in the Griggs Center; 7 pm lecture is on the 3<sup>rd</sup> floor in the Kirby Ballroom; register here
- May 25: MN Public Drainage Manual Broad User Outreach Workshop; 10 am to 3:30 pm; \$25 (lunch provided); New Ulm Conference Center, New Ulm; register here by 5/12
- June 8: Open House on the Minnesota River Valley Recreation and Conservation Master Plan; Redwood Falls Public Library community room; 4:30 to 7:30 pm
- June 15: LWC Meeting, 10:30 am to 12:30 pm; Rm 5 State Office Building; more details to come here
- June 21-23: MN Association of Watershed Districts Summer Field tour; details here

- July 31: "25 by 25" Water Quality Town Hall, evening, Rochester, details to come here
- Aug 1-3: **Farmfest**; more information <u>here</u>
- Aug 7-9: WaterWorks! Drinking Water Institute for Educators; Lakeville; details <a href="here">here</a>
- Aug 16: "25 by 25" Water Quality Town Hall, evening, Marshall, details to come here
- Aug 17: "25 by 25" Water Quality Town Hall, evening, Mankato, details to come here
- Aug 22: MN Technical Assistance Program Intern Symposium; U of MN McNamara Alumni Center; more info here
- Sept 5: "25 by 25" Water Quality Town Hall, evening, Crookston, details to come here
- Sept 6: "25 by 25" Water Quality Town Hall, evening, St Cloud, details to come here
- Sept 12: "25 by 25" Water Quality Town Hall, evening, Ely, details to come here
- Sept 13: "25 by 25" Water Quality Town Hall, evening, Bemidji, details to come here
- Sept 19-20: **Great Lakes Commission Annual Meeting**; Duluth Entertainment Convention Center; more details to come
- Sept 26: "25 by 25" Water Quality Town Hall, evening, Minneapolis, details to come here
- Oct 4: "25 by 25" Water Quality Town Hall, evening, Burnsville, details to come here
- Oct 5: "25 by 25" Water Quality Town Hall, evening, Maplewood, details to come here