**Freshwater Society News** Facets is primarily a digital publication. To visit links, go to freshwater.org.

# Facets of FRESHWATER



### October 2016

October monthly normals from the Minnesota Weatherguide Environment™ Calendar: **Temperature:** Max 58.0°F Min 39.7°F **Precipitation:** 2.43 in. (Snowfall .6 in.)



2017 calendars are available! See back page for information about **The Easiest Fundraiser Ever!** 



# Water resilience... what's that?

by Leslie Yetka, program manager



Many scientists refer to our current geologic age as the 'Anthropocene', where humans are the dominant influence on both climate and the environment.

What does this have to do with our freshwater resources here in Minnesota? Plenty!

In addition to water quality concerns, we are seeing fundamental changes in the way water 'happens'. Notice how storms are dropping more rain more quickly, how streams, fields, and low areas are flooding more often, how lake ice-in and ice-out dates are changing... all cascading effects of our changing climate. It's definitely an age of change, and that's where water resilience — our ability to bounce back from disturbances — comes into play. Communities can choose to take actions that reduce impacts from floods, drought, lake warming, aquatic invasive species, changes in fisheries, and harmful algal blooms. Building up our water resilience is a process of asking ourselves three basic questions:

- What changes are we experiencing now?
- What changes do we expect to continue?
- What are *we* willing to do about these changes?

Your answers to these questions will be as varied as our seasons, as will the solutions. But we need to be asking them — now — and Freshwater Society can help! Freshwater Society is a nonprofit organization dedicated to educating and inspiring people to value, conserve and protect water resources.

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# Class is now in session for new Master Water Stewards

### by Deirdre Coleman

This month we welcomed another class of stewards who will be certified in 2017! Seventy Master Water Steward candidates came together at the University of St. Thomas to begin their year-long course that will give them tools to improve the health of our water. They will attend 12 more classes and then do a capstone project in Summer 2017. With this class, we'll now have over 200 Stewards in Minnesota! We are excited to see the work they will accomplish during their process of certification.

All Stewards would like to remind us that as the leaves are falling, keep them out of the streets where they can be carried into stormdrains. This organic material feeds algae in our lakes and streams, making them turn green. We all have waterfront property when our stormdrains lead directly to the lake!

# Winter is just around the corner... **so is the Road Salt Symposium** Save the Date: February 2, 2017

NEW LARGER LOCATION! Mounds View Community Center

We have awesome presentations locked in for this year including Laurel McKean of MoDOT talking about Solar Roads (Google it and be blown away) on Route 66 in Missouri. Louis Smith returns with the results of a Model Snow and Ice Ordinance the grew out of the 2015 conference evaluations. The effort revolved around documenting how today's crews manage risk using technology to manage for traction, cost reductions, and cleaner water.



# **MOOS Lecture Series:**

## **Designing for Our Future — Sustainable Infrastructure and the Triple Bottom Line**

### Tuesday, November 15, 2016 St. Paul Student Center Theater (2017 Buford Ave, Saint Paul, MN 55108) 5:30 pm public reception | 7:00 pm lecture | FREE and open to the public

### Featuring Janet L. Attarian, AIA, LEED AP BD + C

Deputy Director, Department of Planning and Development, City of Detroit, Michigan

Our urban communities face ever-increasing pressure to find elegant solutions to grand challenges – shifting economies, changing demographics, and impacts to our landscapes and natural systems – compounded by the added stress of a changing climate. Join Ms. Attarian to hear about designing for our future – incorporating sustainable design into every street corner, and what that means to our community's sense of place. She will share stories and lessons learned from her own work with the cities of Chicago and Detroit.

Ms. Attarian joined the City of Detroit in June 2016 as the city's first Deputy Director for the Planning and Development Department. For the previous two decades, Janet worked for the City of Chicago, serving most recently as project director for the Streetscape and Sustainability Program and sustainability coordinator for the Chicago Department of Transportation, working to turn Chicago's streetscapes, river walks, bicycle facilities, and pocket parks into great urban places.



Thanks to our sponsors:



### College of Biological Sciences

University of Minnesota Driven to Discover<sup>544</sup>

# The Minnesota River is growing

Let's agree on the facts. Minnesota River flows are increasing. Opinions about why this is happening vary, but include some combination of changes in climate, ground cover, and drainage. The data show **Minnesota River flow has increased** at an alarming rate over the last 60 years.

### **River widening**

The result has been river widening throughout the watershed that is consuming, on average, 80 acres of land a year. That is about 6" per year distributed over the **13,000 parcels** along the Minnesota River and its tributaries that have steep banks, ravines, and bluffs. Land is devalued, crops and productivity lost, and infrastructure costs increase for local governments. Are landowners okay with losing 15' of river frontage over the course of a 30year mortgage?



Source: Data from USGS 05330000 – MINNESOTA RIVER NEAR JORDAN, showing Average Annual Mean Daily Flow in cubic feet per second.

### Read more at freshwater.org.

## Freshwater Society is excited to offer The Easiest Fundraiser Ever!

By simply sending an email, your group can raise significant funds selling a local product that benefits the environment



Minnesota Weatherguide Environment<sup>™</sup> Calendars make perfect under-\$20 gifts for everyone on your list: teachers, parents, grandparents, aunts, uncles, colleagues and co-workers, party hosts, and nature enthusiasts. They will appreciate it every day and use it all year long.

Find all the details at freshwater.org/weatherguide-fundraiser. For more information about fundraising or to purchase a calendar, contact Connie at 651-313-5808 or clanphear@freshwater.org.

# Meet new (and repurposed!) staff



### Carrie Jennings, research and policy director

Carrie joined Freshwater Society in May. She has been a field geologist for 24 years, 22 of those with the Minnesota Geological Survey and two with the DNR, Division of Lands and Minerals.



### Shanti Penphase, Minnesota GreenCorps Member

We are excited to have another Minnesota GreenCorps member for 2016-2017, focused on the Master Water Stewards program. Shanti is a 2016 graduate of Carleton College and holds a degree in geology.



#### Alex VanLoh, program assistant

Alex served as a Minnesota GreenCorps member focused on the Master Water Stewards Program. We couldn't let him go! In August, he was hired in a permanent position to support all programs.



#### Theresa Wondra, administrative assistant

Theresa joined Freshwater Society in July. She communicates with our members, donors, and sponsors and assists in raising money for various programs. Theresa has a degree in environmental studies and a minor in geography.



#### Leslie Yetka, program manager

Leslie joined Freshwater Society in July. For the past 18 years, she has worked in education, community engagement, and public planning.

Read more about all of them at freshwater.org/staff-2.

### **Upcoming events**

### Minnesota Water Resources Conference

October 18-19, 2016 Saint Paul RiverCentre



Hear the latest innovative, practical, and applied water resource engineering solutions, management techniques, and current research including two presentations by Freshwater Society staff members! Learn more.

### 2016 State of the Waters: Clean Water Challenges and Solutions in the Twin Cities October 20, 2016, 7-8:30 pm Ramsey Co. Public Works Building

Come to this free public event to hear local experts and officials — including Freshwater Society ED Steve Woods — discuss the state of our water, how precipitation trends are affecting water resources, and plans to manage them. This event is part of Gov. Dayton's Year of Water Action.

### APWA-MN Fall Conference November 17-18, 2016 Earle Brown Heritage Center

Learn about technical issues and earn hours toward professional continuing education requirements. The chapter will



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announce winners of their awards and scholarship program. **Details here.** 

### Give to the Max Day November 17, 2016

The biggest day of giving in Minnesota is just around the corner!

Watch for details about how you can keep our lakes and river healthy and our drinking water safe.