

## Freshwater Society News

Facets is primarily a digital publication.  
To visit links, go to [freshwater.org](http://freshwater.org).

# Facets of FRESHWATER



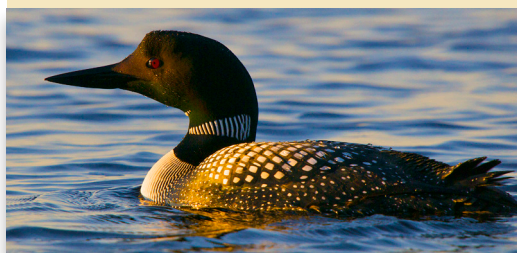
PHOTO: JONATHAN MORTENSON

## March 2017

March monthly normals from  
the Minnesota Weatherguide  
Environment™ Calendar:

**Temperature:** Max 41.3°F Min 24.3°F

**Precipitation:** 1.89 in. (Snowfall 10.2 in.)



## Don't miss Ice OUT Loon IN!

April 9, 4:30-8:30 p.m.

Coffman Memorial Union Great Hall

See back page for details.

**FRESHWATER  
SOCIETY**

## Shop your values

by Steve Woods, executive director



We have been on  
fire this year.

Just look inside  
this newsletter  
to see our latest  
report, recent  
conference,  
and upcoming  
speaker. We put

out five publications this year and followed them up with speaking gigs, workshops, and policy initiatives to make them real. We've worked with seven universities, 16 watershed organizations, mayors from 38 cities, eight professional associations, three state agencies, 28 lake associations, and 160 Master Water Stewards whose projects are infiltrating more than 2 million gallons of stormwater each year.

If you *like* this sort of collaborative approach to making practical things happen on the ground, we'd love you to "shop your values" by coming to our annual gala — Ice OUT Loon IN — on April 9. It is a late afternoon start on a Sunday because you told us that weeknight rush hours make it tough to pick up spouses and friends. A 4:30-8:30 p.m. event at the refurbished Coffman Memorial Union at the University of Minnesota will be a perfect way to have a nice meal, support us, *and* get home at a civilized hour.

It's been a decade since Pres. G.W. Bush encouraged the country to *go shopping*. Right now, that sounds like good advice to us, with a focus on shopping for what matters to you. So please [register here](#) and join emcee Paul Huttner (MPR), Governor Dayton (invited), and a surprising array of awardees for a night of good food, laughter, and outstanding silent and live auctions.



Freshwater Society is a nonprofit organization dedicated to educating and inspiring people to value, conserve, and protect water resources.

#### **Freshwater Society Board of Directors**

Rick Bateson, Chair  
Lisa Whalen, Vice Chair  
Corrine Ricard, Treasurer  
Paige Winebarger, Secretary  
Julie Blackburn  
Todd Bolin  
Jeremy Duehr  
Valery Forbes, PhD  
Mike Hanson  
Ryan Hurt  
Jim Manolis, PhD  
Lili Tod McMillan  
Joan Nephew  
David Webb

#### **Emeritus Directors**

Richard Caldecott, Ph.D.  
JoEllen Hurr  
Dr. Barbara Luikens

#### **Freshwater Foundation Board of Directors**

Blyth Brookman  
Stuart Grubb  
David Knoblauch  
Kent Warden  
Lisa Whalen

#### **Staff**

Steve Woods, PE, Executive Director  
Deirdre Coleman, Program Coordinator  
Julie Fliflet, Director of Finance  
and Administration  
Carrie Jennings, PhD, Research  
and Policy Director  
Jen Kader, Program Manager  
Peggy Knapp, EdD, Special Projects  
Connie Lanphear, Communications  
and Program Manager  
Shanti Penprase, Minnesota  
GreenCorps Member  
Alex Van Loh, Program Assistant  
Theresa Wondra, Administrative  
Assistant  
Leslie Yetka, Director of Programs

#### **Interns**

Brian Bohman, Research and  
Policy Intern

#### **Freshwater Society**

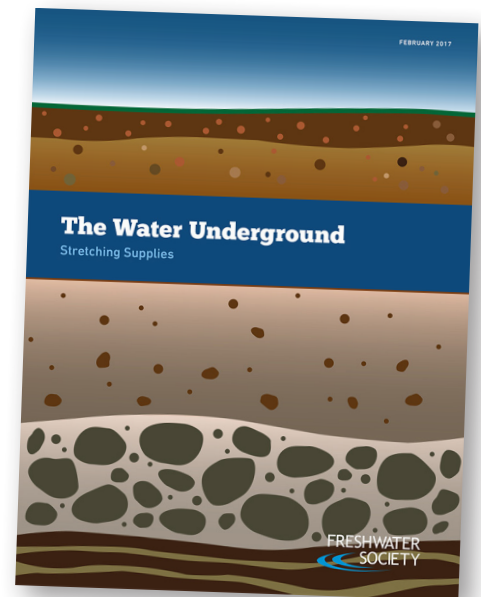
2424 Territorial Road Suite B  
St. Paul, MN 55114  
651-313-5800 | freshwater.org  
freshwater@freshwater.org

## **Freshwater Society releases latest groundwater report**

by Carrie Jennings, research & policy director

Freshwater Society has released a new report, *The Water Underground: Stretching Supplies*, which focuses on three approaches to building groundwater resilience by stretching local supplies: **reducing** use, **reusing** water before discarding it, and **recharging** supplies.

We are at a crossroads with groundwater use in Minnesota, using groundwater faster than it is being replaced. There is no one-size-fits-all solution when it comes to groundwater sustainability because water use and availability varies. Freshwater Society will be presenting its recommendations at conferences, regional meetings, and state government visits. The third report in the series, to be released in late 2017, will address the intersection of agricultural practices and our groundwater future.



## **READ AND DOWNLOAD THE FULL REPORT**



## **Road Salt Symposium draws record crowd**

A record 270 attendees joined us at the Mounds View Event Center to learn about the latest innovations, trends, and best practices for reducing salt use while maintaining safe roads. Reducing salt use is a win-win that protects the environment, but also greatly reduces expense. Attendees connected with colleagues and came away with useful and practical ideas.

We presented five Environmental Leadership Awards to recognize exemplary work and innovative solutions to reduce impacts of winter maintenance on our freshwater: Park Nicollet Health Services (see sidebar), City of Jordan, St. Cloud VA, City of Woodbury, and Curt Pape from MnDOT. Their success stories were inspirational, real life examples of what can be done.

Check out all the presentations [here](#) and find information there about a Model Snow and Ice Policy that was inspired by last year's symposium.

Thank you to our co-host – Fortin Consulting – and the many sponsors who made this event possible.

## **PARK NICOLLET HEALTH SERVICES WINS ENVIRONMENTAL LEADERSHIP AWARD**



Jim Holm of Park Nicollet and Consultant Charles Glossop

By committing to help the environment over the past few snow seasons, Park Nicollet implemented a salt reduction program at its 36 sites. Along with ongoing training and mentoring, site monitoring, and equipment calibration, they started using liquid brine to reduce the volume of granular salt. These efforts cut their salt use by more than half (using 2,000 tons less each year!), reduced landscape damage by over 75%, and saved \$300,000 in just three years. [Their story](#) is an inspiration to us all!

# The Death and Life of the Great Lakes



## FREE LECTURE AND RECEPTION

Featuring **Dan Egan**, Author,  
Pulitzer Prize finalist, reporter for  
the *Milwaukee Journal Sentinel*

**Tuesday, April 25, 2017** | University of Minnesota, St.  
Paul Student Center Theater  
5:30 p.m. public reception | 7:00 p.m. lecture

**Wednesday, May 24, 2017** | University of Minnesota  
Duluth, Swenson Science Bldg  
6:00 p.m. public reception | 7:00 p.m. lecture

The Great Lakes provide the largest source of fresh surface water in the world as well as food, work, and weekend fun for tens of millions of people. Yet they are under threat as never before, and it's only getting worse. In an age when dire problems like the Flint water crisis and the California drought bring ever more attention to the indispensability of safe, clean, easily available freshwater, two-time Pulitzer Prize finalist Dan Egan has written an urgent and powerful wake-up call, and makes a clear and convincing case for how our problems can be fixed.

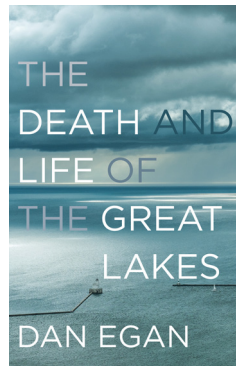
**RSVP HERE**

Thanks to our sponsors:



And our co-host:

College of  
**Biological Sciences**  
UNIVERSITY OF MINNESOTA  
Driven to Discover<sup>SM</sup>



## Q&A

### with Dan Egan

In preparation for Dan's lectures, we asked him a few questions. We have excerpted his answers here. Read the full text [here](#).

**Q:** Do you have a favorite memory or place on the Great Lakes that motivated you to write the series of columns in the *Milwaukee Journal Sentinel* that led to this book?

**A:** I have the fondest memories swimming and fishing off my grandparents' dock in Door County, beyond the reach of much of the pollution from paper mills down in Green Bay... [read more](#).

**Q:** Your book is titled "The Death and Life of the Great Lakes." What makes you hopeful about the future of the lakes?

**A:** Look at... Lake Huron. The salmon fishery has collapsed. The reason is because the alewives have all but disappeared, due largely to the zebra and quagga mussel invasions. Alewives themselves are an invasive species from the Atlantic Ocean. Salmon are a sport fish from the Pacific planted in the lakes to eat the alewives. Now they are both essentially gone, but native species are rebounding... [read more](#).

**Q:** Can you give an example of successful policy that has applied a scientific solution to improve the quality of the Great Lakes?

**A:** Requiring oceangoing ships to flush their ballast tanks with saltwater in mid-ocean has gone a long way to stopping freshwater invaders from sneaking into the lakes via ship-steadying ballast tanks. Prior to this requirement in 2006, species were arriving in the lakes at a rate of about once every eight months... [read more](#).

**Q:** You refer to routes that invasive species have used to enter the Great Lakes. How would closing them now improve an already damaged ecosystem?

**A:** Think of that (probably apocryphal) story of the U.S. patent office, how they talked about shutting it down in the late 1900s because everything that needed to be invented had been invented. Same thing with the Great Lakes... [read more](#).

## Book review: *The Death and Life of the Great Lakes*

by Janet Jennings, guest writer

I thought I was reasonably well informed about the Great Lakes system. I knew less than I thought about the history of 20% of the world's fresh water supply.

As a journalist with the *Milwaukee Journal Sentinel*, Dan Egan wrote exclusively about the Great Lakes from 2003-2011. This book grew out of his reporting and continued personal interest in the lakes. His research is current and even includes the Toledo water crisis of mid-2016.

Egan writes in clear, non-scientific language, using anecdotes, direct quotations, and humor. For example, to make a point about the improbability of Asian carp passing through locks, he uses the analogy of a cockroach riding an elevator in an apartment building to migrate to another floor. I'm still chucking over that image.

He covers many topics in graphic language—sea lampreys, rotting alewives, failed fish-stocking schemes, mussel-crusted intake valves, leaping Asian carp, slimy algae, floating feces, and ineffectual governments. He offers some answers, but hints darkly that human conflict in the future will likely be over water rather than oil.



Freshwater Society invites you to our annual Ice OUT Loon IN gala to celebrate the retreat of ice and return of loons to our Minnesota lakes, a harbinger of spring and a sign of healthy waters.

**Sunday, April 9, 2017 | 4:30-8:30 p.m.**

**University of Minnesota's Great Hall, Coffman Memorial Union**  
[300 Washington Ave SE, Minneapolis, MN 55455](#)

Join us for a relaxing and entertaining evening along the beautiful Mississippi River. This year's event will be held on Sunday evening to make for a less hectic and more enjoyable night. The scramble to get out of work, drive home to meet with others in your party, arrange dinner for the kids and a babysitter, and drive to the event through rush hour has been eliminated, allowing us to start earlier and get you home earlier.

Dine on a delicious dinner and enjoy the program emceed by MPR Chief Meteorologist Paul Huttner, be inspired by the work of our Clean Water Champion Award winners, bid on fabulous silent and live auction items, and be proud to support a local nonprofit protecting Minnesota waters.

**Single Ticket \$95.00 | Reserved Table of 8: \$760.00 | Reserved Table of 6: \$570.00**

**REGISTER TODAY!**

Thanks to our sponsors:



**BEST & FLANAGAN**



## Upcoming events

### Ice OUT Loon IN Gala

April 9, 2017

Coffman Memorial Union Great Hall

**See article at left for details.**

### Minnesota Water Action Day

April 19, 2017 | 8 a.m.-4 p.m.

Christ Lutheran Church, State Capitol



A full day of public action and advocacy to let lawmakers know we care about our water, including a rally, issue trainings, and meetings with your legislators. [Learn more.](#)

### Moos Free Lecture: The Death and Life of the Great Lakes

**Tuesday, April 25, 2017** | University of Minn, St. Paul Student Ctr Theater

**Wednesday, May 24, 2017** | University of Minn Duluth, Swenson Science Bldg

**See article inside for details.**

### Lake Minnetonka Half Marathon

May 7, 2017 | 8 a.m.

Wayzata to Excelsior

A portion of proceeds from this event will support the work of Freshwater Society. [Learn more.](#)



## ICE OUT IS IN

In 1973, Freshwater Society Founder Dick Gray authored *Passwords for All Seasons*, his reflections on the symbiotic relationship of humans and the natural world he observed daily, much of it on or near Lake Minnetonka. After listing all the factors that play into ice melt, he credited snow — or the lack of — as most significant since solar radiation with bounce off snow but transmit through clear ice, transforming at a high rate into heat. The noteworthy trend of decreasing snow cover and warming temperatures is causing earlier ice out dates for lakes across Minnesota and an earlier return of loons. Next year's gala may be in March!

“Long-term records show that chances are the ice will go out earlier and earlier. Various records prove that, in our general area, there are shorter periods of ice cover during the twentieth century than the nineteenth.”

— Dick Gray, April 1971