

FACETS of Freshwater



January 2015

Snowy Owl by Dominique Braud

Weather Facts and Photo from *MN Weatherguide Environment Calendar*

January Monthly Normals:

Temp. Max: 23.7 F Min: 72.5 F Precip: .9 in. Snow: 12.1 in.

 FRESHWATER SOCIETY

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Take a look



Steve Woods

This issue features a summary of our upcoming report on voluntary conservation efforts, representing several years of hard work by our team and numerous partners. It explores how our primary strategy for keeping lakes blue and rivers clear is struggling to scale-up to the magnitude of the problems we face in southern Minnesota. It will be prominent in our discussions at the Capitol this winter.

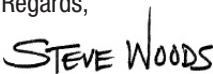
Take another look at the snowy owl photo above by Farmington's Dominique Braud. One of the unexpected joys in my first year here at the Freshwater Society was sifting through the world-class photos submitted

for our MN Weatherguide Calendar. When I laid eyes on Braud's image I was awestruck. Some photos make you wonder how they captured the moment or marvel at the skill of composition.

The first thing out of my mouth was a recommendation that this photo lead off the 2015 calendar. The new executive director was quickly put in his place with the reply, "Well it sure isn't going to be used in July."

Enjoy the moments in 2015 that leave you awestruck.

Regards,



Freshwater Society
Executive Director

The Freshwater Society is a non-profit organization dedicated to educating and inspiring people to value, conserve and protect water resources.

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Freshwater Society Announces Upcoming Release of *Farm to Stream: Recommendations for accelerating soil and water stewardship*

Minnesota is the Land of 10,000 Lakes... and 81,000 farms. Agriculture plays a primary role in Minnesota's economy as well as in the quality and health of Minnesota's lakes and rivers.

From 2011 through 2013, the Freshwater Society, in partnership with the National Park Service Mississippi National River and Recreation Area, implemented the MN FarmWise program. Funded by the Mosaic Co. Foundation, the MN FarmWise program piloted a farmer-led approach to increasing participation in conservation farming practices that improve soil and water health and increase wildlife habitat.



The program initiated a farmer-led approach in the Rice Creek subwatershed at the invitation of the Cannon River Watershed Partnership. This 4,000 acre area includes the only trout stream in Rice County. The lessons learned through the MN FarmWise program, and the additional research conducted during the program's implementation, have been compiled into a set of recommendations, *Farm To Stream: Recommendations for accelerating soil and water stewardship*.

The scale of the challenges Minnesota faces to reduce agriculture's impact on water quality is enormous. Recent studies conducted by the MN Pollution Control Agency have identified row crop agricultural activity as the source of over 70% of nitrogen pollution in the state's surface waters. Approximately half of the land in the state is planted in row crops.

Agriculture has always been a central part of Minnesota's heritage. As farming technologies improved, farms have gotten larger; equipment has gotten larger and more expensive. Record yields, crop prices, and federal policies have driven agricultural land prices to new highs in Minnesota, making it more attractive or landowners to rent their land to other producers rather than farm it themselves. Historic connections between land and family are being weakened.

One of the key findings of the report is that it will take more than just technical expertise to tackle the scale of water quality challenges. Expertise is also needed to address the difficult social dimensions of influencing how farmers work the land in order to reduce row crop agriculture's impact on water quality at a scale appropriate to address the scale of the problem. Minnesota will need to increase capacity at the local level for counties, watershed districts and Soil and Water Conservation Districts to work directly with individual farmers. Efforts should be made to create a deep "bench" to ensure the long-term stability of the outreach effort. There must be a renewed emphasis on strong local partnerships and relationships between agricultural producers and local technical staff. Technical staff members will need professional development to strengthen outreach and education skills. Commodity, agricultural cooperatives, and agricultural interest groups will need to increase their roles in discussing the benefits, costs and expectations of conservation to landowners/operators, and to improve awareness of the importance of conservation strategies as part of farm planning.

With the release of *Farm To Stream: Recommendations for accelerating soil and water stewardship*, the Freshwater Society, along with legislative and agency leaders, natural resource professionals, and agricultural groups, is building momentum to move Minnesota closer to achieving water quality outcomes.

Farm to Stream: Recommendations for accelerating soil and water stewardship will be released at an event on January 30, 9:30-11am, at the Minnesota Valley National Wildlife Refuge, Bloomington.

SPONSORED BY:



14th Annual Road Salt Symposium: Slurries and Salt-Reducing Tools

14th Annual Road Salt Symposium will feature presentations on the current state of chloride in MN waters. Learn about cutting-edge tools, methods and research that will help us maintain safe roads while *repairing our waters and using less salt!*

Agenda Highlights:

- Keynote: Jim Gilbert, Naturalist and WCCO personality
- Twin Cities Chloride Project Implementation Plan
- Optical Salt Sensors from Spain
- Increasing Public Awareness while Decreasing Salt
- Salt Slurry Technique
- Economic Analysis of Salt Use
- Latest Research on Winter Maintenance Efforts
- EPA's recommendations: Protecting Water from Chloride
- 2015 Environmental Leadership Awards
- Attendees earn Road Scholar Credits

February 5, 2015
U of MN Landscape Arboretum
Register on-line today!

Sponsored by:



What would you have said?

A handful of groups were asked to brief the second meeting of the newly reformed Legislative Water Commission on two or three of the major water issues confronting Minnesota. So on December 11, Darrell Gerber and Steve Woods shared the following graphic with the Commission. "As we sifted through all the possible topics it became clear we needed to mention sizeable challenges, but also steer clear of those we knew others would address," said Darrell.

	Surface Water	Ground Water
Quality	<ul style="list-style-type: none"> • Barriers to expanding voluntary conservation measures • Local capacity to assist producers 	<ul style="list-style-type: none"> • Increasing nitrate in drinking water sources
Quantity	<ul style="list-style-type: none"> • Total runoff volumes are increasing • Detrimental to public waters, private lands, and fisheries • More water carries more N, P, and eroded soil 	<ul style="list-style-type: none"> • Need a clear consensus on sustainable goal while DNR assembles defensible (not perfect) baseline data

We recommend doing your own version of this graphic and use it for a spirited discussion with friends over a beverage.

Jan. 20-21 Moos Speaker Series: St. Paul and Mankato Double-Header



Sediment, science, and stakeholders: clearing the muddy waters of the Minnesota River

The Minnesota River cuts a wide valley through southern Minnesota before merging with the Mississippi River. It crosses fertile lands and transports high volumes of sediment. The geologic history of the Minnesota River makes it a large source of sediment, but land use choices and climate changes have greatly increased the amount of sediment. What can be done about the negative effects on water quality and loss of private crop land?

Join us for a fascinating and timely lecture by **Dr. Peter Wilcock**, Head of the Department of Watershed Sciences at Utah State University. Dr. Wilcock has been leading a study of the river and will discuss how technology is used to identify and evaluate our options so Minnesota can clear up the muddy waters of the Minnesota River.

Register here

January 20, 7 pm

U of MN - St. Paul Student Center
 (Map and Parking)

January 21, 3 pm

City Center Hotel, Mankato, MN (Map)
 Post-lecture discussion at **Mankato Brewery** tasting room

Sponsored by:



Celebrate MN's Decision to Protect Our Resources

Minnesotans made a landmark decision in 2008 to increase their sales tax to support our natural resource and cultural heritage. Five years later we have begun to see the results of the Clean Water, Land and Legacy Amendment but there remains much to do.

The Clean Water Fund Host Committee invites you to attend the Minnesota's Clean Water, Land and Legacy Amendment 5th Anniversary Celebration and Forum to learn the status of projects and programs and explore what is next.



Minnesota's Clean Water, Land and Legacy Amendment

Fifth Anniversary Celebration and Forum

Thursday, January 15, 2015

Noon to 6 p.m.

(program begins at 12:30)

Minneapolis Marriott Northwest

7025 Northland Drive North

Brooklyn Park, MN 55428

[Register](#)

Cost is \$10 per person.

Support Our Programs — Enjoy the Wonders of MN

[Order](#) now or become a member or renew your Freshwater Society [membership](#) and you'll receive a [complimentary](#) 2015 Minnesota Weatherguide Environment Calendar!

Enjoy amazing regional photos, Nature Notes by Jim Gilbert, weather history, meteorological information, gardening tips and much more. Your purchase supports the protection of freshwater resources!



Photo By Carrie Pedersen

UPCOMING EVENTS

JANUARY 20

[Sediment, Science and Stakeholders Lecture](#)

U of MN, St. Paul Student Center

JANUARY 20

[Aquatic Invaders Summit](#)

St. Cloud

JANUARY 21

[Sediment, Science and Stakeholders Lecture](#)

City Center Hotel, Mankato

JANUARY 30

Report release –

Farm to Stream: Recommendations for accelerating soil and water stewardship

9:30-11am

[Minnesota Valley National Wildlife Refuge](#)

[Bloomington](#)

FEBRUARY 5

[14th Annual Road Salt Symposium](#)

MN Landscape Arboretum

FEBRUARY 7

[Big Island and Back!](#)

10K XC ski dash and fundraiser – no hills!

