



Rock River Reflections

A publication of the Rock River Coalition
in cooperation with the Rock River Stormwater Group

Spring 2016 Volume 19, Number 2

Testing the Waters Our Adventure: Join Us May 15 - May 25

10 Days of Collecting
Water Quality Data
and Paddling the
Amazing Rock River

*Come Paddle
with Us!*

**TESTING
THE
WATERS**

**A Paddle &
Probe Adventure**

MAY 15 - MAY 25
On The Rock River from Mayville to Beloit

Learn About the Rock River's
Water at our Community Events

Organized by the **Rock River
COALITION**

The Testing the Waters program will feature kayak mounted probes to continuously collect water quality data while paddling the Rock River from Mayville to Beloit. The probes will test waters of the river for temperature, pH, conductivity and dissolved oxygen. The resulting data will be uploaded via cell phone and digitally displayed on a website map. Our paddle will be at a leisurely pace with stops for further monitoring and to produce videos that we'll share on Facebookbe shared.

We'll be hosting community programs (see page 4) and holding school programs as well.

Date	Time	Start Location	End Location	Shorter Paddle	Miles
Sun. May 15	11:00	Mayville Rotary Park/WWTP	Greenhead Landing	Kekoskee - 3.8	10.2
Mon. May 16	9:00	Greenhead Landing	Horicon Legion Park	None	7.7
Tue. May 17	9:00	Horicon Kiwanis Park	Hustisford Neider Park	Ox-Bow Marina - 5.3	8.3
Wed. May 18	9:00	Hustisford Lions Park	Harnischfeger County Park	Monroe Rd - 15.4	17.3
Thur. May 19	9:00	Harnischfeger	Kanow County Park	None	11.3
Fri. May 20	9:00	Kanow County Park	Watertown Willow Street	County P - 10.4	15.7
Sat. May 21	9:00	Watertown Tivoli Island Park	Johnson Creek County B Rock River Park	Senior Center - 11.5	13.7
Sun. May 22	9:00	Johnson Creek Rock River Park	Fort Atkinson Elmore Klement Park	Jefferson Rotary Park - 5.7	10.5
Mon. May 23	9:00	Fort Atkinson Elmore Klement Park (+ Bark River)	Vinnie Ha Ha Road Lake Koshkonong	N Water Street East - 2.8	8.9+
Tue. May 24	9:00	Indianford County Park* *Check for updates on Facebook	Janesville Traxler Park	Janesville Town Launch - 8.1	11.9
Wed. May 25	9:00	Janesville Afton Road Boat Launch	Beloit Riverside Park	Happy Hollow - 7.2	13.6

Paddling Fees: Rock River Coalition Members: \$10/person/day. Maximum family fee of \$25. Non-RRC Members: \$30/person first day with a maximum family fee of \$50: includes a one year membership. Additional days at member rates. Paddlers must provide their own paddle craft and meals. The RRC will provide transport for one person back to their vehicles.

Community Events: RRC members free, all others \$5. No charge for Kick-off in Mayville Call 920-650-0966 for questions. Register at <http://www.rockrivercoalition.org>.

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Rock River Coalition President's Message

Happy spring! It sure has been a strange one, with the weather changing almost every hour it seems. I am a little sad to hang up my skis but excited about paddling soon. I hope you've been able to get outdoors and enjoy our Basin's recreational resources.

Spring makes me think of change and renewal. We've had several changes here at the Rock River Coalition, including a new administrative assistant and some limited term employees who will be with us for the Testing the Waters event. We will have some changes in our board this May when a few terms end. I would like to sincerely thank Jim Kerler and Dan Lynch for their terms on the board and their dedication as past secretary and treasurer, respectively.

This May we will be saying "happy trails" to our longest and probably hardest-working board member, Suzanne Wade, who is retiring. Suzanne has been on the Rock River Coalition since 1999. She was integral to so many RRC accomplishments I can't possibly list them all here. A sampling includes the rain garden initiative, the GFLOW basin-wide

groundwater flow model, educating stakeholders about the Rock River Basin total maximum daily load (TMDL), and the organization of this year's Testing the Waters event. Her enthusiasm and passion for our mission is truly inspirational. Suzanne has generously volunteered to continue editing our newsletter, so we'll be in touch with her through that and hopefully see her at many future events.

Marsha Vomastic, who has been our volunteer webmaster for many years, is also stepping down. We truly appreciate her service including the major web site redesign. Administrative Assistant Ingrid West will be taking on these duties for the time being, but if any of you are interested in volunteering to help, please let us know. Word Press experience is needed for this.

We're pleased that board member and president elect Joe Zakovec of the Janesville Wastewater Treatment Plant will stay on for another term. We hope to have a meeting and tour at his beautiful (really!) treatment facility sometime this summer.

Congratulations to board member Patricia Cicero for her recent citizen monitoring program award! In addition to her many other hats, Patricia is our monitoring program coordinator for Jefferson County.

We still have a vacancy or two on the board. If you're passionate about one or more areas of our mission and interested in serving, please let one of us know! Our meetings are informal and prior board experience is not required.

We look forward to seeing many of you at Testing the Waters: a Paddle and Probe Adventure which culminates with our Annual Meeting this May!



Jane Carlson
RRC President

Patricia Cicero Named Citizen Monitoring Outstanding Employee of the Year, Two Other RRC Monitors Win Awards



Since 2002, the University of Wisconsin-Extension and the Wisconsin Department of Natural Resources have recognized exemplary work in volunteer stream monitoring in Wisconsin with the Volunteer Stream Monitoring Awards Program.

Patricia Cicero, Rock River Coalition Board Member and Water Resources Management Specialist with the Jefferson County Land and Water Resources Department was honored with the Outstanding Employee Award. She was recognized for her work with Volunteer Stream Monitoring, Project RED, Clean Boats/Clean Waters programs (to name only a few) as well as her leadership roles at Jefferson County, Rock Lake Improvement Association and the Rock River Coalition.

As Peggy Compton, WAV Coordinator stated when presenting the award. "Patricia Cicero has dedicated her career to water resources. Patricia works at Jefferson County Land &

Water Conservation Department and has been contributing data to the DNR through various monitoring programs since 2005. She has been a go-to resource for WAV when launching new initiatives by securing volunteers or monitoring herself. Her connections and experience through these programs and her position with Jefferson County provide Patricia the background and knowledge to be a great resource locally and answer the questions that arise about what and why data collection is needed. Whether on a stage or in a boat, she can always be counted on to talk to groups about the importance of monitoring our water resources."

Also winning awards were Laura DeGoller as Adult Volunteer of the Year and Camryn Kluetmeier as Student Volunteer. Laura has monitored for more than ten years on the Fond du Lac River and with her Water Warriors on two branches of the Rock River.

In the process of selecting a monitoring site, Camryn Kluetmeier decided that she wanted to pick a stream close to her school and invite her classmates to join in. That spring, she started the Eagle School Stream Monitoring Club on Nine Springs Creek, with the help of her mom and Amy Walden, a DNR staffer and Eagle School mom.

Camryn has made a real commitment to sharing her joy of stream monitoring with younger kids in a number of ways.

Well deserved awards everyone! We are so proud that we have such amazing people working on behalf of our waters.



Camryn Kluetmeier (right) shows a French exchange student, Julia, the stream monitoring ropes in July 2015, on Swan Creek in Fitchburg.
Photo by Nancy Sheehan



Mission

"To educate and bring together people of diverse interests to protect and improve the economic, environmental, cultural, and recreational resources of the Rock River Basin in Wisconsin"

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A letter-sized color version of this newsletter is available at www.rockrivercoalition.org.

Sign up for a monthly email update at <https://lists.uwex.edu/mailman/listinfo/rock-river-basin-update>.

Contact Marie Rubietta at marier@jeffersoncountywi.gov if you'd prefer a pdf of the newsletter emailed to you.

RRC is a 501(c)(3) not-for-profit organization, providing equal opportunity in employment & programming.

TTY: 711 for Wisconsin Relay

If you need special accommodation for programs please contact the RRC at least two weeks in advance.

Successful Field Test of Real-time Water Quality Array

By Dr. Eric Compas, Associate Professor, Department of Geography, Geology and Environmental Science, UW-Whitewater

Who wouldn't pass up an opportunity to spend the summer paddling our local streams in the name of science? Last summer two of my undergraduate research students, Michael Smith and Karl Brandstaetter, conducted the first successful field trials of a real-time water quality array I'm developing. The array includes probes for temperature, dissolved oxygen, pH, and electrical conductivity and is an attempt to bring an "internet of things," or intelligent web-connected devices, to citizen science and water-quality monitoring.

Eventually, the device will be able to measure changes through time at fixed location – high temporal resolution sampling – or to map changing water quality along a stream corridor – high spatial resolution sampling – and provide the results immediately.

Such a system promises data that is more likely to educate and influence

The results appear in real-time on a web map.
The Testing the Waters May 15-25 the first use of the array to communicate directly with the public.

the public and our decision-makers.

Our initial field trial focused on spatial mapping and developing a kayak mount, a mobile phone application, calibration procedures, and a web system to store and display the data. Mike and Karl spent much of the summer floating streams from urban Milwaukee to rural Jefferson County.

The successful operation of the array requires a complicated synchronization procedure and communication between several components.

For the array, we're using an open hardware Arduino microcontroller with



Michael Smith and Karl Brandstaetter test the monitoring array under the shadows of the Milwaukee river walk.

Photo by Eric Compas

a Bluetooth chip, sensors from Atlas Scientific, an Android-base phone, and server with special GIS software. When operating, the phone requests a reading through Bluetooth at a preset frequency, receives the results, adds a GPS location and the date and time, and sends the data through the phone's internet connection.

The results appear in real-time on a web map and can be used for further analysis.

Our initial data revealed several expected and surprising data. We expected to find a gradual increase in dissolved oxygen levels throughout the day, and we usually did. Our pH values were all within generally acceptable ranges. Conductivity readings generally increased throughout the summer as streamflow decreased and temperatures increased.

In general, we documented moderate variation in stream cross section and gradual spatial variation along our sample streams, highlighting the need for sampling more than a single location in a stream.

Our most unexpected and significant finding was a hypoxic zone in the Kinnickinnic River in southern Milwaukee. Where the overland flow of the Kinnickinnic ran into the still water of the Lake Michigan estuary, we found an area of near-zero dissolved oxygen levels and high conductivity values.

This zone likely serves as a barrier to movement of fish species from

the estuary to the upper Kinnickinnic. The discovery of this hypoxic zone highlights the need for more than traditional point sampling carried out by our Water Action Volunteers (WAV).

We learned a great deal during our summer of detailed spatial sampling. I'm pleased that we validated the concept, established efficient procedures, and discovered the significant hypoxic zone mentioned above. We also verified that careful and frequent calibration of our probes was needed to ensure consistent results and maintaining the probes at a consistent depth, and we've identified issues that require refinement.

Pushing our probes to uses they weren't initially designed for, we noticed different lag times of each probe to changing conditions (longest for the dissolved oxygen) that we have yet to fully account for.

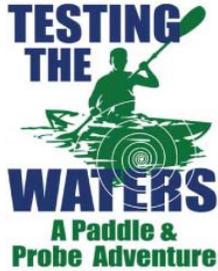
While we met our goal for the summer of sampling a broad cross section of streams, future uses of the array will need a more strategic sampling design: either intensive and repeated sampling of the same stream segments or a long profile of stream system in a relatively short amount of time.

The Testing the Waters project from May 15-25 will be first test of the latter sampling strategy and the first use of the array to communicate directly with the public.

Additional maps and graphs are available at <http://gis.uww.edu/category/water-quality/>

Testing the Waters Float Plan

May 15-25, 2016



Each day's paddle segment is shown in alternating blue and green. Non-paddle segments are shown in light blue. Callouts indicate the start location for each day.

Features

- Paddle Segments
- Non-paddle Segments
- Rock River Basin

Source: USGS, 2010; ESRI, 2014

Cartography by Jeffrey Smyczek, 2016

Community Program Evening Schedule

Doors open at 6:00 with light refreshments served

6:30 Welcome - Our Project: An Overview

6:45 Welcome from Local Leaders

6:50 Water Quality in the Rock

7:10 Report from the River: Hear what we learned about your river from our paddlers. View the webmap and learn how to watch our daily paddle.

7:30 Keynote Speaker (for topics see below)

8:00 What can you do

8:20 Closing

Keynote Titles & Speakers

May 16 **A Vision for the Riverfront in Horicon: River-based ecotourism as a basis for downtown placemaking** - Jim Schaefer, Horicon Economic Development Coordinator and

The Importance and Role of Citizen Stream Volunteers - Nancy Sheehan, RRC Monitoring Coordinator
IAM Local 873 Lodge, 258 Barstow Street, Horicon, WI,

May 17: **Water Quality, Recreation and Economic Development** - Dennis Uecker, Hustisford Village President.
Hustisford Community Library, 609 W. Juneau St.

May 18: **Preserving Farmland for the Benefit of All** - Jill Bedford, Tall Pines Conservancy

May 23: **Cities and Water Quality Improvements: Progress made to date and goals for the future** - Andy Selle, Fort Atkinson City Engineer, Fort Atkinson Club, 211 S Water St. East

May 24: **Our Industries and Wastewater Treatment: what they are doing to protect our waters.** Janesville Traxler Park Warming House, 600 N Main St. Speaker tbd.

Special Program Schedule

Sunday May 15: **Paddle Crew Arrives at Rotary Park, Mayville at 11:00** Welcome to the Rock, and Testing the Waters Our Hopes and Goals by Rock River Coalition President and Sponsoring Organizations. Hands-on demonstrations of water quality monitoring.

Saturday May 21: **Watertown Fire and Rescue, Swift Water Rescue:** View the boats and talk to the fire department staff. Check Facebook for specific time and location. Our water quality program will start about Noon at the Watertown Senior Center, 514 S. First Street. At 6:00 pm, after our day's paddle is completed, we'll enjoy a picnic and conversation with Johnson Creek Watershed Alliance and Friends of the Glacial Heritage Area, Rock River Park on County B, Johnson Creek. Brats and beverages available for purchase.

May 22: **The Fishery of the Rock River Basin:** DNR Fisheries Expert, Jefferson Rotary Park, Noon - 1:30

May 25: **Focus on Our Paddle Adventure:** Our discoveries through videos, photos and stories. Cake and light refreshments served. RRC Annual Meeting immediately following the program. 4:00 - 6:00, Rotary Center, Riverside Park, Beloit

Prairie Restoration Slated For Zeloski Marsh Area

Thanks To Local Birders

By Clare Carlson

A five-acre parcel of the Lake Mills Wildlife Area will be converted to native prairie due in part to fundraising efforts by local bird enthusiasts during last spring's Great Wisconsin Birdathon.

The donation, made through the Friends of Glacial Heritage Area, will help the Department of Natural Resources purchase a variety of prairie grass and forb seeds in anticipation of fall planting.

The restoration site is alongside the Zeloski Marsh, a well-known birding

hotspot west of Lake Mills and east of London. The marsh, also known as the London Marsh, is comprised of large water impoundments that host both migratory and nesting wetland birds. It's also easily accessible as the Glacial Drumlin Trail runs through the northern portion of this 1,500-acre wetland.

The local birders were participating in the 4th annual Great Wisconsin Birdathon - a joint effort by the Natural Resources Foundation and Wisconsin Bird Conservation Initiative (WBCI) to raise money for important bird habitat projects.



Birders throughout the state form birding teams or can bird individually ("backyard birders") to count as many species as possible from sunup to sundown on one day in springtime.

The more species counted, the more money raised for bird habitat. The Birdathon gives bird watchers a chance to not only have fun bird watching, but to raise money for birds while out in the field.

And this team does have fun – they call themselves the "Finch Gang" after the colorful history of the old London (Zeloksi) Marsh. In the mid-1800's, horse thieves from the Finch family hid from the law within the interior of the marsh.

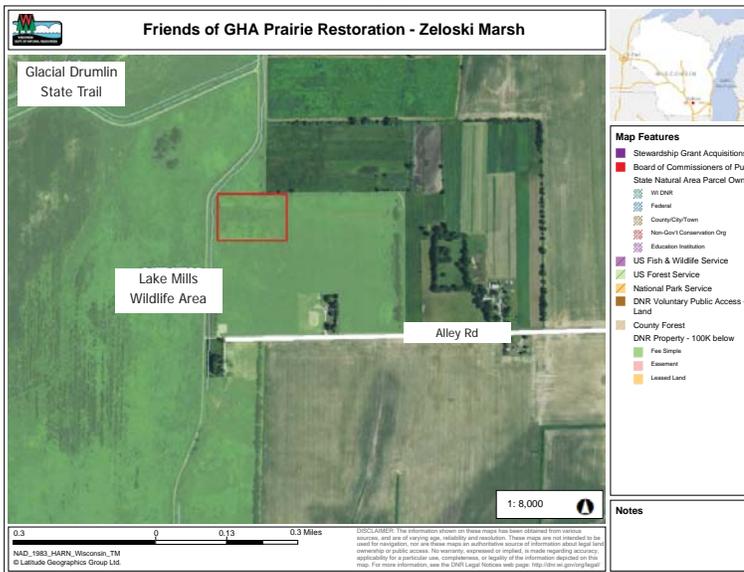
Finch also happens to be a great bird name, so it suits these birders well. The Finch Gang take an annual lawless-looking photo during a Birdathon break (see photo above).

Needless to say, Zeloski Marsh and the surrounding landscape is very special to the Finch Gang. Lake Mills resident Karen Etter Hale - Finch Gang team captain, former executive secretary at Madison Audubon and chairperson with WBCI - said this donation "is especially meaningful as we can help birds right here in the Lake Mills Wildlife Area, a place close to home and a place we've enjoyed bird-watching many, many times over the years."

The Finch Gang will bird again this May during the 5th Annual Birdathon and hopes to raise more money for important bird habitat.

A map of the restoration area can be found on page 2.

To learn how to get involved, visit the team's page at wibirdathon.org or by contacting the Friends of Glacial Heritage Area at friendsofgha@gmail.com.



Bass Creek Canoe Launch

The Rock Trail Coalition and Green-Rock Audubon Society (aka GRAS) installed signage and cleared brush from Bass Creek to the Rock River, near Beloit. GRAS acquired the property from the defunct Bass Creek Dam Association in 2014.

Here are members installing the new sign shown to the right.



River Alliance Clean-up on Koshkonong Creek

A crisp spring day on Koshkonong Creek with Capitol Water Trails, Great Lakes Brewing Company, and Friends of Cam Rock Park Inc.. Together they cleared brush in the waterway and trash pick up along the banks and in the creek.



Everyone WINS with Clean Water

By Emily Jones of Madison Metropolitan Sewerage District

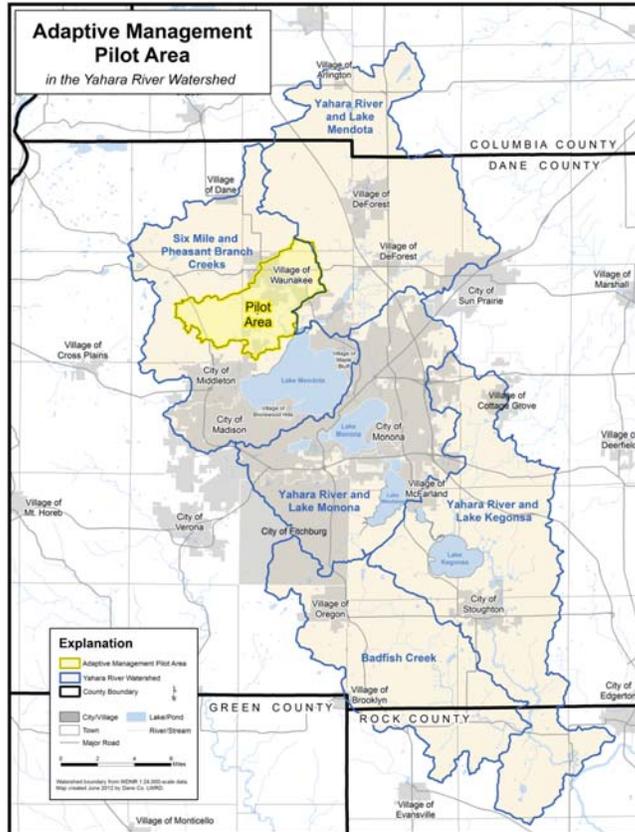
Regardless of different backgrounds, everyone can agree on the need for clean water. United by the common goal of improved water quality, a diverse group of partners called Yahara Watershed Improvement Network (Yahara WINS) is about to embark on a 20-year effort to reduce the amount of phosphorus entering streams, rivers and lakes in the Yahara watershed.

This collaborative approach will rely on a strategy called adaptive management, in which all sources of phosphorus in a watershed work together to meet water quality goals. Adaptive management is an alternative to other possible phosphorus reduction options, such as expensive phosphorus removal technology and water quality trading.

The adaptive management option was selected because it has the potential to reduce phosphorus at the lowest overall cost to the watershed and its residents. Like many watersheds, the Yahara watershed is threatened by excessive phosphorus from sources including agricultural runoff, discharges from wastewater treatment plants and industries, and urban stormwater.

As a result, several phosphorus sources in the watershed, including Madison Metropolitan Sewerage District (MMSD), are required by law to reduce phosphorus. But rather than take the typical approach of working independently to reduce their own phosphorus, partners in the Yahara watershed are pooling resources and expertise to reduce phosphorus collectively.

The Yahara WINS effort will rely on a mix of rural and urban practices to reduce phosphorus pollution, which can cause algae blooms and other water quality issues. The goal of the project is to achieve a long-term improvement in water quality in the



Yahara watershed.

The full-scale Yahara WINS project, which will work throughout the Yahara Watershed, builds off a smaller-scale pilot project that took place in the Six Mile Creek watershed just northwest of Lake Mendota from 2012 to 2015. See the watershed map for the pilot location. Led by MMSD, the pilot project brought together over thirty partners representing local governments, environmental organizations, the agricultural community, and other sectors. The

purpose of the pilot project was to test the adaptive management approach, particularly whether these diverse groups would be willing to work together on phosphorus reduction. The project was a success, bringing together local groups and achieving phosphorus reductions from both rural and urban sources. One of the agricultural practices implemented was cover cropping, as shown in the photo to the left.

Encouraged by the success of the pilot project, MMSD and its partners are preparing to kick off the full-scale watershed project in 2017. Local governments are entering into an agreement that commits them to provide financial support to the project, and agricultural professionals are working with farmers across the watershed to start implementing practices that control phosphorus-rich surface runoff.

The Rock River Coalition is training and placing citizen monitors in the watershed to help measure progress toward meeting water quality goals. With everyone working together to clean our water, everyone wins!



Wisconsin Manure Irrigation Workgroup Report

A UW-Madison/UW-Extension-led workgroup tasked with assessing manure irrigation practices shared its finding during a webinar held on Thursday, April 14. Immediately following the webinar, the workgroup's final report was made available online at <http://fyi.uwex.edu/manureirrigation/>.

Publication Layout and Graphic Design Help Needed

The Rock River Coalition needs layout and design help for a report of stream volunteer data assessment. This water quality report card will also assist the RRC in our recruitment of new volunteer monitors. We are looking for someone who can turn boring excel graphs into visually appealing charts (ZingChart, Dygraphs).

If interested, please contact Patricia Cicero at 920-674-7121 or patricia@rockrivercoalition.org.

New Interactive Rock River Flood Inundation Map

The Rock River Flood Inundation Mapping tool has been created for five stretches of the Rock River through Dodge, Jefferson, and Rock counties.

Chris Olds, DNR lead floodplain engineer, said the web maps help communities by illustrating areas covered by water at various stages of a flood event. Specifically, the maps can be used to:

- find real-time river stages and the associate flood risk;
- plan ahead and mitigate for the impacts of flooding;
- pinpoint an address to see the forecasted impact on a specific property; and
- determine the flood stage at which roadways will become impassable.

Olds said flood inundation mapping tools have been successfully used at several locations across the country, but this is the first of its kind in Wisconsin.

The public can learn how to access and navigate the map through an online tutorial.

Update on Citizen Clean Water Act Petition

By Dave Marshall, Aquatic Ecologist – P.H., Underwater Habitat Investigations LLC

Many Rock River Coalition members and other partners may have heard of a citizen petition filed in fall 2015 by 16 Wisconsin residents from throughout the State, including myself. The Petition for Corrective Action (PCA), filed by Midwest Environmental Advocates on behalf of those 16 water champions, asked the U.S. Environmental Protection Agency (EPA) to help bring Wisconsin back into compliance with minimum Clean Water Act requirements.

Broadly speaking, the PCA alleges not only that the Wisconsin Department of Natural Resources (WDNR) needs to improve certain components of its water pollution permitting (WPDES) program, but also that the Wisconsin Legislature needs to support law changes and increases in WDNR staffing and funding that give the WDNR better resources to follow federal water pollution laws. The PCA, in other words, calls for change not just from our state natural resources agency but from our elected officials and other decision-makers.

As a WDNR retiree, I was introduced to MEA as a participant in water pollution permit challenge. I became involved in the PCA because I see personal efforts and individual permits challenges as having limited capacity to improve the way in which Wisconsin implements the Clean Water Act. My primary concern has been the deregulation, loss of local control and resulting expansion of CAFO's across the state, that in numerous cases have contaminated drinking water supplies and caused water pollution. As a consultant, I monitored a CAFO in Rock County that was allowed to expand even though it discharged, via drain tiles, nitrate concentrations exceeding 200 mg/l to a tributary of an Exceptional Resource Water (ERW) stream.

USEPA and USGS have recommended TN standard not to exceed 2 mg/l in surface waters but the state has not adopted it, other states, including Minnesota have. Camargo et al (2006) demonstrated that when nitrate concentrations exceed 2 mg/l sensitive fish and aquatic organisms are harmed. The lack of nitrogen criteria in Wisconsin is significant since more and more research has demonstrated that excessive nitrogen as much as phosphorus degrades water quality.

In the Central Sands I testified in a contested case hearing where a CAFO has been permitted to operate even though data indicates likely groundwater contamination and predicted water

level declines in lakes, streams and wetlands related to the CAFO operations high capacity wells. The EA environment assessment and permits in this case ignored the existence and impacts to a calcareous fen and critical spawning habitats in lakes and ERW streams. In the Spring Green area, we documented excessive nutrient applications over the sand terrace that contaminated drinking water supplies and polluted ERW environmentally sensitive oxbow lakes. In all cases, antidegradation violations, water quality standards violations, and general environmental degradation occurred since standard nutrient management planning trumped water quality concerns. This questioned my confidence in state government's ability to function as trustee for protecting natural resources for the citizens of Wisconsin and as the delegated authority under the Clean Water Act.

Both in and outside of the current WDNR, some view the PCA as another adversarial action against the state. Yet it's also possible to view the Petition as action that allows for broad-sweeping conversation involving multiple stakeholders, which could prove more effective for all parties involved, including WDNR staff. Since the Petition was filed, for example, the EPA has already set up a collaborative investigation process with the Department to understand the claims outlined in the PCA. Not every challenge to the WDNR policies and procedures need be viewed as a negative attack on the Department's scientists and other program staff. Sometimes, citizen action is what's necessary simply to start a cooperative dialogue about clean water and our State's protective role over our waters.

Lake and river groups, particularly those such as Rock River Coalition that have diverse membership and support, will play a crucial role in the future of water quality in our water-rich and water-dependent state. Although actions like this citizen Petition are complex and may initially create controversy, it's important to remember that these actions were granted by the Clean Water Act in order to give citizens the opportunity to voice concerns about the public health, environmental and economic impacts of water quality issues. It's possible to start dialogue with differing viewpoints in the name of focusing on our common need for safe drinking water, rivers, and other water resources that help to define us as a state.

Become a RRC Member

In addition to supporting RRC work, members receive newsletters, notices of conferences, and special events. To become a member, complete the following:

Name _____
 Title _____
 Affiliation _____
 Address _____
 City _____ State _____
 Zip _____ Phone (____) _____
 E-mail _____
 I am a member of _____ Chapter.

Memberships Fees

Individual	\$ 25
Family	\$ 35
Student/Senior Citizen	\$ 15
Classroom	\$ 25
Affiliates*	\$ 50
Municipal**	\$125
Corporate	\$ 200

*Includes small businesses, organizations, lake districts, small municipalities and individual municipal departments
 **Covers entire municipality including all departments, administrative staff and elected officials

Any donation or membership of \$150 or more will be recognized and linked to your website from our website: www.rockrivercoalition.org

Donors of \$500 or greater will receive an ad in this newsletter. Check out our website for more information.

Tax Deductible Donations

Amount	Purpose
	General Support
	Citizen Monitoring
	Other:

Donations are greatly appreciated and can be targeted towards specific projects.

Please mail this completed form with check to:

Rock River Coalition
 864 Collins Rd
 Jefferson, WI 53549

or register and pay online with PayPal at:
www.rockrivercoalition.org/membership.asp

RRC Welcomes Ingrid West as New Administrative Assistant



Welcome aboard to our new administrative assistant, Ingrid West! Ingrid holds a BS degree from UW-Stevens Point in water resource management with a fish management and environmental education emphasis.

Her experience with nonprofits and beyond is extensive, and aligns very well with our position description.

She is also owner-operator of Misty Dawn Farm which produces mushrooms and is home to a plethora of pets and farm animals.

Ingrid told us that she is happy to be working for an organization that shares her care for the environment. We are happy about that, too!

Economic Benefits of Recreational Trails

By Greg Farnham, Coordinator, Rock River Trail Initiative, www.rockrivertrail.com



One of the key objectives of the Rock River Trail Initiative is to support economic development and revitalization of our river communities. This is not based on wishful thinking but on the experience of recreational trails in diverse communities across the nation. The data are unequivocal: Recreational trails and green space provide a positive impact to the economy. The Outdoor Industry Association found that in 2012 active outdoor recreation contributed over \$640 billion annually to the US economy while supporting 6.1 million jobs.

American Trails defines active outdoor recreation as bicycling, hiking, paddling, snow sports, camping, fishing, hunting and wildlife viewing. All of these activities are readily available and easily accessible within the Rock River corridor.

In Wisconsin total visitor spending in 2014 was \$18.5 billion. This represented a 5.3% increase over the previous year with strong growth in leisure visits. The share of visitor spending on recreational activities showed a significant increase with outdoor recreation adding \$6.7 billion to the economy and providing 129,000 jobs. The greatest participation in outdoor recreation activities in Wisconsin was wildlife viewing, bicycling, camping and hiking.

Paddle sports are becoming increasingly popular as organized water trails provide enhanced recreational experiences. A study of canoeists and kayakers on the Kickapoo River in Vernon County, Wis. found that 16,000 paddlers used the river during the season and contributed more than \$1.2 million to the local economy. Paddlers using the river for a day trip spent \$38 - \$90, while paddlers who overnight in the area spent on average \$125 a day.

Trails and outdoor recreation strengthen communities in more ways than just with tourism dollars. Recreational trails also contribute positively to the quality of life in our communities.

- Trail-related events and cultural offerings for trail users and community residents.
- Urban redevelopment and community improvement with safe trails and leisure service infrastructure.
- Enhanced property values, employment opportunities, entrepreneurship and economic investment.
- Community wellness and health care savings.

In 2007 the Trail Town Program(R) was launched to assist economic development efforts in six Pennsylvania towns along the Great Allegheny Passage rail-to-trail line. The program has helped the communities maximize the economic potential of trail tourism. Trail towns promote a "trail-friendly" character, make a strong and safe connection between the town and the trail and educate local businesses on the benefits of meeting the needs of trail users.

Trail towns work closely with neighboring communities to promote the entire trail as a leisure destination. Information on the Trail Town Program is available at www.trailtowns.org.

Picture Yourself a Stream Monitor

Become a RRC Stream Monitor

- Learn more about our waters
- Enjoy the waters in your own backyard
- Help the RRC gather important information about our waterways.

Contact Nancy at nancy@rockrivercoalition.org to register for the April 23 or May 21 workshops and Jane Jenks for the May 14 workshop.

Saturday, April 23

Level 1 Training, Amundson Center, Cambridge

Saturday, May 14, 2016

Level 1 Training
Hartland Public Library, 110 E Park Avenue,
Contact: Jayne Jenks, Waukesha County
Email: jjjenks@waukeshacounty.gov

Saturday, May 21st

Level 1 Training, Turtle Creek Parkway, Clinton

What do volunteer stream monitors do?

RRC: <http://rockrivercoalition.org/projects/citizen-stream-monitoring/> or

WAV: <http://watermonitoring.uwex.edu/wav/monitoring/index.html>

Waukesha County: <http://wiatri.net/cbm/whoswho/results.cfm?OrgID=191>



UWW students and staff conducting Level 3 phosphorus sampling at Bluff Creek RRC site. More info on DNR's 2015 WAV phosphorus sampling at <http://watermonitoring.uwex.edu/level3/TP.html>

Photo by Eric Compas

Green Grows our Waters?

April showers bring May flowers! Everyone loves blossoming flowers, but April showers combined with fresh grass clippings in the street can cause another type of unwanted growth: algae blooms in our waterways.

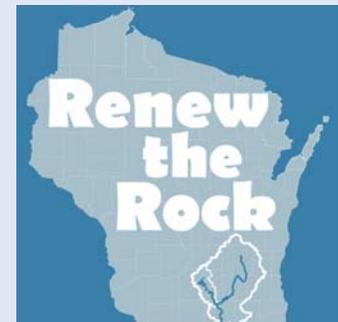
The link between grass clippings and green lakes and rivers may not be obvious. Most people understand the damage that petroleum and other chemicals can cause in our waters. But grass is just a natural thing, right? Natural things like grass, leaves and mulch are rich in phosphorus—the same stuff that used to be in lawn fertilizer. When left in the street gutter, it gets washed into the storm drains and eventually the river, decomposing along the way and adding that phosphorus directly into the water. Like a chemical fertilizer, the phosphorus promotes plant growth. Consider this—a pound of grass clippings left in the street can result in a pound of algae growth in the river!



Algae is natural, but fertilized algal blooms hurt our waterways. Besides the "yuck" factor that turns people away, algae uses up oxygen in the water as it decays, which can kill off fish and other wildlife. Algal blooms can also produce toxins harmful to people or pets.

The good news is that you can play a critical role in keeping grass clippings out of the streets and doing your part to prevent algae blooms. Either point mowers so that clippings land back on the grass or blow clippings back onto the grass after the lawn has been cut.

The Rock River Stormwater Group (RRSG) is a coalition of ten municipalities, UW-Whitewater and WDNR representatives that work together to promote sustainable stormwater practices in the Rock River Basin. RRSG thanks you for helping to Renew the Rock by keeping grass clippings out of the streets.



Learn more at www.renewtherock.com.