

Rock River Reflections

A publication of the Rock River Coalition in cooperation with the Rock River Stormwater Group and the University of Wisconsin-Extension

Fall 2014 Volume 17, Number 4

Look Inside

President's Message New Fish Virus

Page 2

Wetland Webinars Signing the Rock Thank you Joleen/Scott Page 3

Stream Side Notes

Page 4

Kayakers on National Water Trail Maunesha River Alliance Welcome Monitoring Intern

Page 5

Behind the Scenes Stream Monitoring Close of Season Instructions Page 6

Rock River Recovery **Annual Meeting** Enbridge Update

Page 7

20th Anniversary Water Quality - Illicit Discharge Water Star Sustainability Webinars

кетпш гецисе кедпегед

PERMIT NO. 7

JEFFERSON, WI

U.S. POSTAGE PAID

иоиррогіт орб.

Page 8

Friends of Badfish Creek Watershed

By Lynne Diebel



The sale of this fine canoe, donated to FBCW by Jim Danky and Christine Schelshorn, netted the group \$1,000. Photo by Jim Post

This past spring, longtime Friends of Badfish Creek Watershed (FBCW) members Jim Danky and Christine Schelshorn donated their Wenonah Sundowner kevlar canoe, complete with paddles and life jackets, to FBCW to use as a fundraiser. And in July, FBCW member Jim Post sold it for the group.

"I posted it on Craig's List and in less than twelve hours it was gone, for the asking price of \$1,000," said Post, "A guy in his 30s who lives in Milwaukee was looking for this exact canoe. At first he wanted to knock the price down a bit, but when he found out it was

for the Friends. he said he would pay full price."

Ever since the group's inception in 2006, Danky and Schelshorn have been strong and active supporters of FBCW and its efforts on behalf

of the creek. "We want to encourage more people to use the Badfish," said Danky.

The couple's significant donation is an important source of matching funds for the proposed canoe landing on Old Stage Road, a project the group is planning with the

In addition, Danky is FBCW's Keeper of the Signs. "Patrolling and replacing the Badfish Creek road signs has turned into a major occupation," said Danky.

Vandals apparently covet the green and white signs that identify the creek at every crossing, and after four signs disappeared this past



Micah Kloppenburg (above) is a Level 1 monitor at Old Stage Road on Badfish Creek.

Sue Craft (left) does WAV Level 1 monitoring at North Casey Road on Badfish

Photos by Nancy Sheehan

summer alone, road crews now weld rather than bolt the replacements to the posts.

In other news, two new WAV Level 1 monitors began testing the waters of the Badfish this

Sue Craft of Janesville, who enjoys kayaking the Badfish and wanted to get involved in protecting the health of the creek, monitors the Badfish at North Casey Road.

Micah Kloppenburg of Madison monitors the creek at Old Stage Road.

Kloppenburg is also interested in leading a canoe trip down the Badfish in 2015.

In September, as part of Town & Country RC&D's annual fundraising bike ride, "Wheel Against the Weeds," FBCW hosted an educational stop at the Riley Road bridge.

FBCW members Marsha Vomastic, Chris Felton and Ingrid West explained the group's Japanese knotweed eradication project, handed out literature, showed riders specimens of various invasive species, and shared Vomastic's delicious recipe for Knotweed Squares.

This fall, FBCW is completing the Aquatic Invasive Species (AIS) grant project by planting native grass plugs—cordgrass, Virginia wild rye, switchgrass, side-oats grama, and little bluestem—at the Riley Road

For more information about the Friends of Badfish Creek. go to rockrivercoalition.org and click on the About tab, then Chapters.



Lynne Diebel, Christine Schelshorn, Jim Danky and Jim Post, all FBCW members, stand by the Old Stage Road bridge, the proposed site of a DNR Photo by Bob Diebel

Jefferson, WI 53549-1976 864 Collins Rd

Rock River COALITION In cooperation with Jefferson County

Badfish Creek canoe landing.

UOISU31X-

Rock River Coalition President's Message



The Rock River Board and staff have been working hard on preparations for our 20th Anniversary celebration! It certainly is a

back on all of our accomplishments and to reconnect with volunteers and previous board members. We have been unearthing photos that make us recall the great projects that were implemented and all the collaborations that made them possible. Again and again we are encountering friends who are proud of our history and want the Coalition to continue fulfilling our







mission into the future.

The celebratory party we are having on November 2nd (see page 8 for your invite) is possible because of the generosity of a variety of sponsors. They include Strand Associates, MSA Professional Services, Kunkel Engineering Group, and American Transmission Company among others. There is certainly time for other sponsors to help make the event a success. Please contact me if you are interested!

I also want to thank Sarah Congdon, a friend of the Rock River Coalition. She volunteered her time and expertise to design the invitations and other materials associated with the event.





I look forward to celebrating our successes and the future of the Rock River Coalition on November 2nd, I. hope you can join us! The Packer's have a bye that Sunday, so there should be nothing else as important on your schedule!

Patricia Cieero, RRC President



Send Your Legislator Down the River participants enjoyed a beautiful night on the river through Fort Atkinson. Representative Steve Nass joined us with his paddling companion, Sheila Reiss, Walworth County Clerk providing a great opportunity to talk about actions of importantce in the basin.

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"

PRESIDENT:

Patricia Cicero patricia@rockrivercoalition.org

DIRECTORS:

James Kerler, Secretary Suzanne Wade, Treasurer Jane Carlson, President Elect Eric Compas Dave Hoffman Jim Koepke Dan Lynch Joe Zakovec

Stream Monitoring Coordinator:

Nancy Sheehan nancy@rockrivercoalition.org

Wetland Monitoring wetlands@rockrivercoalition.org

Water Star Coordinator: Andy Yencha

andrew.yencha@ces.uwex.edu

RRC Address:

864 Collins Road Jefferson, WI 53549-1976 RoxAnne Witte, Admin Assist. info@rockrivercoalition.org www.rockrivercoalition.org

Newsletter Editor:

Suzanne Wade, 608-334-4517 suzanne@rockrivercoalition.org

Next deadline is January 5, 2014.

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.

New Fish Virus Found In Rock River

Laura Stremick-Thompson, WDNR Fisheries Biologist

A virus that is new to Wisconsin waters and affects only koi (ornamental carp) and common carp is to blame for large-scale fish kills in the Rock River system during the summer of 2014.

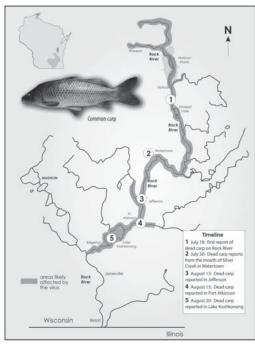
Dead fish were first observed in the headwaters of the Rock River in Dodge County in mid-July. Two weeks later dead fish were reported in the Rock River at Watertown, over 42-miles downstream. By Labor Day weekend the fish kill had spread to Lake Koshkonong.

While humans and pets are not at risk from the koi herpesvirus, its presence hampered public recreation on the river system and its impoundments as dead fish collected along riverbanks.

Once present in a waterway, no treatment is available to control koi herpes virus in the wild. Koi herpes virus is most active when water temperatures are between 71-79 °F. Outside of this temperature window, the virus remains present but is less likely to induce fish kills. Reports of dead fish in the Rock River declined as the summer progressed and fall's cooler nights brought water temperatures down. It is expected that the virus will induce future fish kills of common carp when water temperatures approach the preferred temperature range.

Koi herpesvirus has been documented in other states, including New York in 2005, Michigan in 2011, Indiana in 2011, Missouri in 2012 and in Ontario, Canada in 2007 and 2008.

Areas affected by koi herpes virus



While the source of the virus in Wisconsin's waters may never be determined, scientists elsewhere have linked its presence to the release of ornamental koi.

The discovery of koi herpes virus in the Rock River highlights the importance of preventing the spread of aquatic invasive species and the diseases they may harbor. The 2014 Rock River fish kills document how decisions to release pond and aquarium pets into natural waterways often have unintended consequences for both aquatic organisms and the public, including recreational users and private property owners.

A Koi herpes virus fact sheet is available as a pdf on our website, in the news section: http://rockrivercoalition.org/widnr-faq-on-koi-herpes-in-the-rock-river/.

RRC & Environmental Law Institute's Wetlands Webinars feature Scott Taylor and Amanda Gray

By Beth Gehred, Town and Country RCD, webinar coordinator

Two webinars in the Rock River Coalition's "Wetlands, Wildlife and Flood Hazards in the Rock River Basin" are now open for registration.

The next to air features former Rock River Coalition president, Scott Taylor, of Taylor Conservation, LLC. Taylor's talk is *Landscape Scale Identification of Actually Restorable Wetlands*.

The show will outline a procedure for identifying restorable wetlands at large scales. Scott will share preliminary results of his work in the Rock River basin that brings together GIS analysis and rapid field reconnaissance to locate the most promising wetland restoration sites. The fuller picture gives insights into the potential of wetland restoration for watershed-wide reduction of polluted surface water run-off and enlargement of wildlife corridors.

The webinar will air at 3 pm on Tuesday, October 21.

The final webinar for the 2014 series features a slate of experts on the topic of Cost Benefit Analysis and Natural Conservation as a Mitigation Strategy.

Roxanne Gray of Wisconsin Emergency Management will recount the latest policy changes regarding costeffectiveness accounting for mitigation projects, including recent changes to the FEMA benefit-cost analysis methods

Participants are asked to consider how they could impact projects in the Rock River Watershed including Jefferson County.

Then hear from Jeff Stone and Alan Lulloff, Association of Sate Floodplain Managers, and Dave Fowler, MMSD, on work they are doing to in addressing how environmental benefits benefit mitigation projects.

This webinar will air at 3 pm on Tuesday, November 11.

The series is co-produced by the Rock River Coalition, Environmental Law Institute, and Town and Country RC&D. The series is funded by a grant from the McKnight Foundation. Dr. Rebecca Kihslinger, Science and Policy Analyst, and Director of the Wetlands Program for the Environmental Law Institute. moderates.

The broadcasts are meant to encourage emergency management professionals to make links with policy makers, educators, land use managers, and wetlands specialists to discover under what circumstances wetlands can act to mitigate flood hazards.

The shows are informative and interactive, and feature experts and case studies from around the state. Registration is free and can be accessed at www.tacrcd.com/wetlands-webinars-2014.html.

Anyone wishing to learn more about the wetlands webinar series may contact Beth Gehred at 920-541-3208.

Thank You Joleen & Scott! Welcome Dave!

Joleen Stinson is saying good-bye to the RRC hoard

She has decided that with a five



month old, a demanding job with DeForest Parks and a new farmette to remodel that she just can't give to the RRC the time and effort that is needed.

We wish her well, and know that we can count on her for help when needed

Joleen's last two duties were to gather the articles and edit this edition of the newsletter and find a board member to take her place. She did a great job on both.

Dave Hoffman of Rock County Parks, has agreed to take a one year term. We hope that like the rest of us he gets hooked and stays with the board for a long time.



Taylor has also decided that he needs to focus on his family and business. So we

are looking for his replacement. We would love to replace his expertise in restoration ecology. Scott will continue to work on our wetland mapping project.

The RRC strives to have varied representation on our board. We think we do that well with staff from parks, land and water conservation and wastewater treatment departments, private consulting engineers, retired educators, a university professor of geography, a retired water professional and a farmer.

If you believe in partnering with a diversity of individuals, organizations and agencies to make positive strides for the Rock River Basin, consider joining our board.

It's work, but what fulfilling work. Contact Patricia Cicero, patricia@rockrivercoalition.org if interested.

Signing the Rock River Trail: Water, Bike, Scenic & Historic Trails

By Greg Farnham, Coordinator, Rock River Trail Initiative



Efforts are underway in Wisconsin and Illinois to complete installation of signage to mark the Rock River Trail -- Rock River National Water Trail, Rock River Trail Scenic and Historic Route and Rock River Trail Bike Route. The iconic flying blue heron - a registered service mark in both states - serves as the unifying graphic element for the three trail signs. Signs are produced by Badger State Industries and Illinois Correctional Industries, divisions of their respective state department of corrections.



Representatives of the Rock River Trail Initiative Council are working with the Wisconsin and Illinois departments of transportation and natural resources, counties and municipalities on the signing project.

Marking the Rock River water trail began in 2012 with ribbon-cutting ceremonies in Beloit, Wis. and Dixon, III. Most of the 155 river access sites for paddle craft have been marked; some sites are also marked with the National Water Trail sign of the National Park Service. Production and installation of signs for dam warning, dam safety and portage are in process for each of the 22 dams on the river in both states.

Installation of signage to mark the motorized scenic and historic road route along the river was begun in 2013 in Beloit and Hustisford, Wis. County highway departments and municipal DPWs are installing the road signs according to directions



from state DOTs. In Wisconsin most of the municipalities have finished sign installation within their communities and Dodge and Fond du Lac counties are complete. Illinois DOT will install signs on state and federal roadways, while counties and municipalities will mark local roads. Selection of the bike route along the river in both states has been finished and the Council is preparing static maps, links to dynamic maps and cue sheets for the route. A sign to mark the bike route has been developed and will be installed at various sites for route identification and promotion. The bike route information, maps of the road route and water trail maps and information are available online.

The Rock River is a precious natural resource with a rich history. It has the potential to be a regional and national leisure destination for those seeking an American Heartland experience with recreational and cultural opportunities. Visit www.rockrivertrail.com to learn more

Vational Water Tra

Stream Side Notes

By Nancy Sheehan, RRC Volunteer Stream Monitoring Coordinator

Thank you all for a great stream monitoring season. From the rush of the spring recruitment and training period to the final days of monitoring, there are many stories to relate. But the big story is you, our volunteers. Here is one statistic that should knock your socks off.

Level 3 volunteers working in the Yahara River watershed have collected 70 nutrient samples from 19 stream sites which represents over 1,995 hours of volunteer time. If I were to add the time all our Level 1 and Level 2 volunteers have committed to monitoring, this number would be even more impressive.

Over the winter months, I will develop a more rigorous accounting of volunteer hours as well as use national standards to assign a monetary value to the volunteer hours contributed to our program. There certainly is a time and a place for this type of analysis – particularly as I begin to research grants to support our program next year. But so much of what we do and why we do it isn't just about time, money and data. We give of our time freely because of the intangible values that our streams give back to us. Standing by a healthy stream helps to raise our spirits. In our non-stop, busy world, streams connect us to what is timeless and priceless – like being captivated by the bristle tails of craneflies, amazed by dragonfly nymphs, disgusted by leeches, and outraged by increasingly levels of muck in our streambeds. So for this newsletter article, I want to thank each of you for what cannot be quantified – the energy, enthusiasm, and curiosity each of you bring to your monitoring efforts across the Rock River Basin.

Now I invite you to read about some recent events that illustrate the power of volunteers and partnerships.

Fly Fishing: An Event for Our Monitoring Volunteers

RRC partnered with Rock County Parks Department, Orvis of Middleton, Badger Fly Fishers, Southern Wisconsin Trout Unlimited and the Water Action Volunteers Program.

somewhat like a leech

stepping out

on a fancy

date! Turtle

Creek Parkway facility operated by Rock County Parks Department was the ideal location for this event.

An exciting time was had by all on the shores of Turtle Creek near Clinton in Rock County. Volunteer stream monitors gathered to learn tips and techniques for better identification of macro-invertebrates from Kris Stepenuck, Water Action Volunteers Coordinator.

Volunteers then tried their hand at fly casting under the instructions of master fly fisherman, Robert Harrison, President of Badger Fly Fishing Club. Amy Klusmeier of the Southern Wisconsin Chapter of Trout Unlimited led a session on fly tying. Orvis of Middleton provided all the materials for tying a woolly bugger... which looked



Karen Richardson and Robert Harrison practice casting. Photo by Nancy Sheehan



Amy Klusmeier of the Southern Wisconsin Chapter of Trout Unlimited taught the RRC stream monitoring volunteers the ins and outs of fly tying. Photo by Nancy Sheehan







Thank you to our event sponsors, Southern Wisconsin Trout Unlimited, Badger Fly Fishers and Orvis.

DeForest Yahara Riverfest

DeForest Yahara Riverfest unites local businesses and watershed groups to celebrate the Yahara River!



In September, I participated in the Village of DeForest Yahara Riverfest. I borrowed an Enviroscape© watershed model from the Dane County Office of Lakes and Watershed. Younger children flocked to this demonstration watershed model as my son, Patrick, and daughter,

Julia, simulated rain clouds and challenged the children to think about what happens as rainwater flows over the landscape. (See picture above)

I also set up a Carry Creek model which mimics a flowing stream. I worked side-by-side with Taylor Kratochwill-Loomis, a confident and accomplished 9th grader from DeForest High School, as Festival goers exclaimed over the crawfish, blackfly larva, leeches and other macro-invertebrates swimming around the model stream.



Carry Creek enthralls visitors with a view of life in the rocks and runs of a stream. Photo by Nancy Sheehan

Another 6th grader became so enthralled with the aquatic insects in

the stream model that he became an instant volunteer and stayed with me until I packed up all my supplies. As you can see from the photos, young

and old alike came alive when we hiked down to the banks of the Yahara River to find aquatic critters.





We hope you enjoy these pictures of the DeForest Riverfest. Photos by Nancy Sheehan



Kayakers on the Rock River National Water Trail

By Greg Farnham, Coordinator, Rock River Trail Initiative

Two students from Maranatha Baptist University in Watertown, Wisconsin and their friend from Illinois embarked May 13th from the Burnett Ditch Access to the Rock River on the Horicon Marsh State Wildlife Area to paddle the entire length of the Rock River National Water Trail

Fifteen days, 10 counties, 33 municipalities, 22 dams, 15 campsites and 300 miles later the three exhausted yet exhilarated young men entered the Mississippi River at the confluence with the Rock River. They disembarked at Sunset Park and Marina in Rock Island, Illinois to newspaper reporters, TV cameras and cheers from family and friends.

Jake Boucher and Garrett Feik, students at Maranatha, and Jon Gress wanted to begin their summer with an adventure on the Rock. They also hoped to raise money for the athletic program at the university to support a new mascot for the school -- the Sahercats!

Greg Farnham, coordinator of the Rock River Trail Initiative, and other Wisconsin members of the RRTI Council assisted the kayakers on their journey by securing camping facilities and recommending safe means to portage the dams. Once at the state line in Beloit, the kayakers were passed to the care of Frank Schier, RRTI founder and coordinator, and the Illinois members of the council. Dean Mathias, Rock Island County representative to the RRTI, was on hand at Sunset Marina to help at the trail's end

Officials of a number of the river cities and villages came out to welcome the students, celebrate their efforts and bestow wishes of bon voyage for the next leg of their paddling journey. As advanced word of the paddling event traveled downstream, many volunteers and well wishers offered meals and encouragement to the students, while others paddled with them for a few miles

The event was covered in the local



Three kayakers on the Rock River National Water Trail at River Bend Park in Horicon, Wis.
--Photo by Grea Famham

media along the length of the river and RRTI used social media and its website to further publicize the river paddle. Promotion of the Rock River National Water Trail will encourage others to experience the water trail, drive on the Rock River Trail Scenic and Historic Route and bike on the Rock River Trail Bike Route.

All of these efforts are focused on establishing the Rock River and its communities as a recreational and leisure destination with national reach

Chapter Updates: Maunesha River Alliance Raises Funds for Monitoring Test Kit

Waterloo's Maunesha River Alliance chapter of the Rock River Coalition has been working diligently to raise funds in part to supply the community with a second river monitoring test kit. With such a kit we will be able to double our capacity to observe our river and report results to entities such as the Wisconsin Department of Natural Resources and river conservation organizations.

We are calling out for individuals interested in joining our river monitoring team. This scientific process is not only fun, and child friendly, it is also highly educational. Would you like to know more about the state of the Maunesha River and the species it holds? Get in touch with us today!

The MRA made \$107 at its bake sale during Waterloo's annual Weiner and Kraut Day celebration. Through volunteer efforts organized via management of Waterloo Fireman's Park the chapter raised \$400 volunteering at the 4th of July celebration.

To date we have surpassed our goal and raised a total of \$592 in part through donations and support of the Waterloo and surrounding communities.

We would like to thank all patrons and volunteers responsible for allowing this to happen. Job well done everyone!



The Maunesha River Alliance would like to call on citizens of the Marshall, Portland and Waterloo areas interested in preserving the Maunesha River as a tributary to the Rock River to join our chapter. Please contact us on Facebook through the "Maunesha River Alliance" page or contact our Chair, Matt Ziaja, at 920.541.6942 or matt.ziaja@gmail.com for more information.

Through added volunteerism we expect to accomplish great goals including more river cleanups, educational seminars and guest speaker events. We strive to learn more about our local ecology, local history and ways to preserve and protect the basin. Many hands make light work and our momentum is growing thanks to the help of many.

RRC Monitoring Program Welcomes Intern

We would like to introduce you to Stefinie Winter. As part of her senior year coursework at UW Whitewater, Ms. Winter will be working with Nancy Sheehan to enhance the Coalition's communication strategy with the use of social media. Nancy hopes that by creating a more effective collaborative internet space we can foster greater information sharing about water quality, generally, and about "our" streams, specifically. Stay tuned for invitations to "friend" our stream monitoring program on Facebook and beyond.

"Hi my name is Stefinie Winter. I'm from the town of Park Ridge, Illinois, which is a suburb of Chicago, but am currently finishing my senior year at UW-Whitewater.



My area of study is Environmental

Science with an emphasis in Natural Resource Management. One day I hope to work within the realm of creating and implementing policies to protect the environment. In my free time I enjoy baking, traveling, and participating in campus organizations such as Students Allied for a Greener Earth.

I'm excited to be an intern for the Rock River Coalition!"

Behind the Scenes

By Nancy Sheehan, RRC Stream Monitoring Coordinator

There were several moments this monitoring season where I had slight panic attracts. Did I order enough equipment to support all the volunteers interested in participating our stream monitoring program? Would our budget support the purchase of more equipment if needed? Hopefully, for volunteers, the stream monitoring training, site selection and delivery of equipment felt seamless to you. But a lot went on behind the scenes to make this year a success.

Tom Lawrence of Lawrence Enterprises not only efficiently filled all our orders for transparency tubes on time but also donated three transparency tubes to the Rock River Coalition. I want to officially thank Tom for his donation but also spotlight Tom's lifelong commitment to volunteer water quality monitoring. I interviewed Tom recently to find out a bit about the man behind Lawrence Enterprise. Like me, you may never hold your transparency tube the same way again.

Lawrence Enterprises is owned and operated by Tom Lawrence. Tom not only supplies Rock River Coalition with our transparency tubes but also supplies two other major distributors of water quality monitoring equipment,

Ben Meadows and Forestry Supplies. Tom hales from a small town near Acadia National Park in Maine. Before my telephone conversation with Tom, I envisioned a large manufacturing enterprise but in reality, Tom handcrafts all the transparency tubes he distributes through his privately owned company. His wife, Marjorie, works as the office manager. When I asked Tom how he manages to fill orders operating all on his own, he just gave a chuckle and said that his winter months are spent in his garage making transparency tubes and other items he stocks for water quality monitoring.

Tom's life long association with water quality monitoring began as a volunteer. When he was still a university student, he traveled to Minnesota to participate in two summer field limnology classes. These classes were "eye-openers." After moving back to Maine, Tom found himself sitting with friends and family at a town meeting where the state lake monitoring coordinator and Acadia National Park (NP) staff were recruiting volunteers to monitor 12 lakes around Acadia NP. Tom immediately raised his hand. He began using the existing equipment but soon felt he could build a better tool to measure water clarity.

Beginning in the 1980s a New Zealand team of researchers had developed a clarity tube that was horizontal. An all-black target was attached to a magnet located inside the tube. The observer moved the target back and forth using an outside magnet, or slider. In the 1990s the Australians then modified this New Zealand model to create a vertical tube known as the



The Noel Morgan horizontal turbidity tube.

Noel Morgan tube. Noel Morgan was a farmer and a water quality chemist who was passionate making a cheap and accurate tool to measure soil loss on farms. Using a plastic soft-drink bottle, Morgan drew a standard symbol with black felt-tip pen and white paint on the bottom, calibrated each bottle and marked the sides in NTUs (nephelometer turbidity units) with the felt-tip pen. He distributed these bottles to farmer friends who then monitored before, during, and after storm events to pinpoint where problems were most severe.

In the meantime, back in Maine, Tom had adapted a simple view finder to better measure clarity. Then with his prototype in hand, Tom traveled to a national conference in Florida where he met the group from "down under." Tom tweaked their model to include a drainage pipe at the bottom of the tube. The tube that we use today is a version of this early model.

What about Father Secchi? With all this talk about New Zealand, Australian and Maine inventors, I would be remiss if I didn't mention Father Peitro Angelo Secchi, the Jesuit priest who created the first Secchi disk used during the mid-1800s.

Actually, Father Secchi was involved in far more than just measure water clarity in the Mediterranean Sea. He was an astronomer and science advisor to the Pope. He was a pioneer



in astronomical spectroscopy and was one of the first scientists to state authoritatively that the Sun is a star. He discovered three comets and has one named after him.

Father Secchi worked during the time with the Papacy had an active navy. For sailors, aboard ships like the L'Imanacolata Concezione, water clarity was another navigational tool in the days of no GPS. Sailors did not have the ability to correctly determine longitude at sea until 1850 – so more clues as to a ship's location were critical. Water clarity indicated ocean currents

For example, the Sargasso Sea in the Atlantic Ocean is extremely clear as opposed to coastal upwellings. In 1900 the Secchi disk was modified for use in lakes

The transparency tube is essential to the work of volunteer stream monitors across the country. And while the story of the Secchi disk has its roots in the 1800s, today volunteers are using apps on smart phones to submit readings from Secchi disks in the oceans.

The passion of innovators like Tom who are dedicated to making these tools available at reasonable prices to volunteers makes me hopeful for the future of our waterways.

Thank you Tom... keep up the good work!

Stream Monitoring Close of Season Instructions

October is the last month for stream monitoring. Many of you have already received an email from me describing end of monitoring season procedures. I have included instructions here just in case you wish to refer to a hard copy. If you have questions, please contact Nancy at 608-233-7758 or nancy@rockrivercoalition.org.

All Level 1 Volunteers

- 1. Enter in all data for the season.
- Mail all completed Level 1 data sheets to me at the following address: 2416 Gregory Street, Madison, WI 53711.
- Wash D-nets with a bleach solution (1 cap per gallon of water) and thoroughly dry the net before storage to avoid mold.
- 4. If needed, re-mark tenths of inch lines on the side of D-Net pole.
- Clean HACH kit and store AT ROOM TEMPERATURES to avoid freezing.
- Check the expiration dates on your HACH dissolved oxygen chemicals. If they have expired, please dispose of them.

- 7. Clean transparency tubes.
- Leave the outtake hose of your transparency tube open to avoid mildew build up.

Yahara River Watershed Level 2 Volunteers

- Please return all your Level 2
 equipment to me. Please call or
 email me to arrange a pick up
 time. Your Level 2 kits should
 include: YSI DO meter; distilled
 water containers; thermistor
 removed from stream bed; rebar;
 and transparency tubes. I will
 maintain this equipment over the
 winter months.
- Please return all your completed data sheets and thermistor log.
 I need the thermistor logs in order to upload the temperature readings.

Level 2 Volunteers from Rock, Jefferson, and Waukesha Counties

 Please return all your Level 2 equipment to your local county coordinators. Call or email to arrange a pick up time.

- Anne Miller [amiller@co.rock.wi.us] for Rock County, Patricia Cicero [patriciac@jeffersoncountywi.gov] for Jefferson County and Jayne Jenks [jjenks@waukeshacounty.gov] for Waukesha County.
- Your Level 2 kits should include: YSI DO meter; distilled water containers; thermistor removed from stream bed; rebar; and transparency tubes. The WDNR will maintain this equipment over the winter months.
- Please return all your completed data sheets and thermistor log with your other equipment.

Yahara River Watershed Level 3 Volunteers

Please return all your Level 3
 equipment to the MMSD lab
 when you deliver your last
 October sample. I will collect the
 equipment from this location.

Your Level 3 kit may include the following items: A cooler; sample bottles; folders with extra sample labels and chain of custody forms; rubber bands; ziplock bags; and PVC extension pipes.

Enbridge Update

By Eric Compas. RRC board member & Associate Professor, UW-Whitewater Geography & Geology Department

In our last issue, we told you about the quickly-unfolding story of Line 61, a crude oil pipeline owned and operated by Enbridge, and its proposed expansion. Line 61 runs from Superior, Wisconsin, to connections to other pipelines in northern Illinois. Originally constructed in 2007, the pipeline currently carries up to 400,000 barrels per day (bpd) of crude oil – both conventional crude and "tar sands" crude, or "dilbit," diluted bitumen, from Alberta, Canada. Enbridge had proposed expanding the capacity of the pipeline first to 540,000 bpd and then to 1.2 million bpd. This expansion would make the pipeline one of the largest in North America – 36% larger than the proposed Keystone XL pipeline.

Despite significant local concern over the pipeline expansion, the project appears to have received all the state and federal approvals needed to move ahead. On June 11th, the Wisconsin Department of Natural Resources (DNR) approved the air quality permit that was needed for the expansion of the storage tanks in Superior. Of note, the approval deemed the original Environmental Assessment (EA), completed in 2006, sufficient for the pipeline expansion. The Corp of Engineers also approved the Section 404 permits for filling approximately 2 acres of wetlands in the expansion of pumping stations across the length of the pipeline in Wisconsin (I haven't been able to locate the approval, but Enbridge claims to have received these approvals in May 2014).

However, the company has yet to receive all the local building and zoning permits for new pumping stations required for the expansion. One station in particular, near the town of Marshall, will require approval by the Dane County Board. Given concerns raised early this summer by the Board, this permit may prove to be key for the pipeline expansion. Both before and after these decisions, several county boards, including those in Jefferson and Walworth Counties, have raised concerns about potential spills and asked the DNR to rescind the permit and/or conduct a new, expanded EA.

Even if Enbridge receives all the permits it needs for Line 61, it is not clear that the company will be able to pump 1.2 million bpd of dilbit through the pipeline. Its key feeder line, Line 67, the "Alberta Clipper," does not have the approved capacity to supply this much crude. Enbridge needs a State
Department approval – requested in 2012 – since the line crosses the US border. The company has found two potential loopholes, though. They are connecting Line 67 to Line 3 - which doesn't have a capacity limit on its older approval to move dilbit between the two. This is allowing them to increase the overall capacity to around 800,000 bpd. Additionally, Line 3 is being upgraded to increase its capacity – a "renovation" that the company claims won't require a new State Department approval and would allow them to fully utilize the 1.2 million bpd in Line 61. This Line 3 expansion, though, will require approvals in Wisconsin; this project is currently in the "scoping" phase (see http://dnr.wi.gov/topic/eia/enbridge.html) and is open for public comment.

Questions still remain about the legality of the expansion and the potential impacts on the Rock River. Enbridge claims that its pipeline was originally constructed to carry 1.2 million bpd. This number appears nowhere in the original 2006 environmental assessment or approval for the project. It hasn't yet been required to prove this assertion. In addition, no information is available about the hydrostatic testing that was conducted on the original pipeline and on the proposed pressures once all new pumping stations are in place. Enbridge should be forced, either by a public agency or by public pressure, to provide more information about the limits of Line 67 and how close the increased capacity will encroach on these limits. Only with this information will we better understand the risks that this expansion poses to our local waters and streams.

Rock River Recovery Annual Meeting Summary

By Mark Riedel, TMDL Implementation Planner and Outreach Coordinator

The second annual Rock River Recovery workshop was held September 17 at UW-Whitewater. The workshop was hosted and organized by the Rock River Coalition, UW-Extension and the WDNR. The workshop was well attended by approximately 50 people representing the entire array of stakeholders in the basin.

The workshop included reviews of work over this past year on Total Maximum Daily Load (TMDL) Implementation, updates on progress for stormwater and municipal separated stormwater Systems (MS4's), Education and Outreach activities, and new watershed projects across. However, the highlight of the workshop was a dynamic breakout session of small focus groups to discuss three questions;

- Are you involved in any projects currently related to Rock River TMDL efforts? If yes, please share status.
- 2. Any issues preventing greater progress?
- 3. Suggestions & project ideas for next year.

Some of the common themes from the discussions were:

- challenges in communication/engagement between point and non-point source partners,
- resource and networking challenges for smaller rural watershed organizations,

- economic uncertainty in land prices and development pressure inhibiting watershed practices
- confusion about TMDL implementation and the draft phosphorus variance (WI Act 378),
- challenges facing municipalities with implementation of stormwater BMPs (Best Management Practices) in redevelopment areas.

The results of these focus groups, and a larger group discussion are being summarized. These, along with presentations, meeting contact info, and additional resources will be posted on the WI DNR Rock River Recovery website: http://dnr.wi.gov/topic/tmdls/rockriver/

A very insightful nonpoint source meeting with basin Agronomists was recently held at UW Extension in Jefferson. The focus of the meeting was exploring ways to reach out and engage with the rural non-point source (NPS) community and encourage NPS BMPs, water quality trading, and adaptive management projects. For more information, please visit the Rock River Recovery website, or contact the TMDL Implementation Planner and Outreach Coordinator, Mark Riedel (marks.riedel@wisconsin.gov).

Become a RRC Member

In addition to supporting RRC work, members

	,	otices of confe ome a member	rences, and r, complete the
Name			
Title			
Affiliation			
Address			
City			State
Zip		Phone (_)
E-mail			
I am a men	nber 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



Celebrating 20 years of improving water and communities

To Our Friends, Members, Donors, Volunteers and Partners

Please join us in a Celebration of 20 Years Protecting and Improving the Rock River Basin.

Our accomplishments could not have been done without you.

We are truly hoping to see each of you at the party.



20TH ANNIVERSARY CELEBRATION

November 2, 3:00-7:00pm Koshkonong Mounds Country Club, Fort Atkinson

Music by Caiun Strangers: 3:00-5:00pm

Music by Cajun Strangers: 3:00-5:00pm Dinner: 5:00pm

A delicious buffet featuring Chicken Breast with Roasted Red Peppers, Onions

and Feta Cheese, Chef Carved Pork Loin, Stuffed Manicotti, Tarragon Infused Rice Pilaf with Almonds, and Fresh Sautéed Green Beans.

> Program: 6:00pm Cake cutting: 7:00pm Cost: \$40/person

PROGRAM AGENDA

- Thank You to Past Presidents and Board Members
- Volunteer monitor, chapter and past award member recognition
 - A look to our past and dreams for the future
 Preview of new interactive web map
 - Kickoff announcement of a unique 2015 event
- \bullet Stay afterwards to share your memories and enjoy the RRC family

REGISTRATION

On-line at rockrivercoalition.org or by mailing a check to 20th Anniversary Celebration, 864 Collins Rd, Jefferson Wi or by emailing info@rockrivercoalition.org



Water Quality Experts Ask for Help with "Illicit Discharges"

Jason Valerius, Rock River Stormwater Group Education & Outreach Coordinator, MSA Professional Services

Our municipalities are working to keep our lakes and rivers clean by keeping pollution out of the stormwater system. People sometimes dump things on the ground or into storm sewers that harm our waters. When anything other than clear stormwater ends up in the stormwater system, for example laundry wastewater or overflow from a septic tank, it is called an "illicit discharge." Residents can help protect our waters by correcting or reporting such pollution.

Some illicit discharges are one-time events and are easy to recognize as a problem. Consider, for example, a ruptured oil pipeline or liquid manure spill, or even someone dumping paint down a storm drain. These need to be cleaned up immediately, and municipalities have procedures for dealing with such toxic spills.

Other illicit discharges are ongoing problems and are often harder to recognize. Examples include a failed, leaking septic system or a workshop floor drain that is connected to the stormwater system instead of the wastewater sewer system. These are also illegal pollution per state and federal laws, but because they develop over time, or were acceptable in the past, they are more easily overlooked.



Photo by Ben Dunham

What can you do? First, consider your own house, especially if you have an older home. Do you have any waste pipes from inside the house that go anywhere other than your sewer or septic line when they leave the house? If so, you probably have an illicit discharge problem – look for ways to redirect those pollutants to your wastewater system.

Second, pay attention in your neighborhood. Watch for signs that someone has dumped something inappropriate into a storm drain, ditch, waterway, or onto the ground – oil, paint, cleaning solvents, anything other than clean water. If you do spot such pollution, take a picture and then contact your city engineer or public works department to report the pollution.

Third, tell your community leaders that you support policies and practices that reduce and clean runoff, such as installation of permeable pavement.

As a society we have made great strides over the past 50 years in our efforts to stop polluting our lakes and rivers. We've corrected many of the worst problems, such as the direct discharge of industrial waste into rivers. But our waterways are still not as clean as we'd like because of stormwater pollution. Please do your part to help keep our stormwater runoff clean and clear.



Permeable pavement allows stormwater to infiltrate on-site. This reduces the amount of runoff and filters pollutants from the water.

Photo by Center for Neighborhood Technology

This article is brought to you by the Rock River Stormwater Group, a coalition of ten communities and UW-Whitewater committed to improving the Rock River's health. Thank YOU for helping to Renew the Rock by detecting, reporting and correcting illicit discharges throughout the Rock River area. Learn more at www.RenewTheRock.com.

Water Star's Sustainable Strategies Fall Webinars Announced

The Fall 2014 series of Sustainable Strategies webinars kicks off at noon on Thursday, October 16th and features Perry Lindquist, Land Resources Manager at Waukesha County Dept. of Parks & Land Use, with a talk about stormwater maintenance best management practices.

Despite budget constraints, municipalities strive to maintain stormwater infrastructure for optimal performance. Perry Lindquist, both an expert and a practitioner of stormwater management, addresses methods for handling this on-going concern.

The series is co-produced by Water Star Wisconsin, WDNR Green Tier Legacy Communities, and Town and Country RC&D.

The broadcasts are meant for Wisconsin's municipal staff, officials, consultants, state workers and others interested in helping municipalities protect their natural resources in a sustainable way. The shows are informative and interactive, and feature experts and case studies from around the state.

The show airing Thurs. November 13th, will focus on marketing government services, with speakers to be announced.

The December 18th show highlights financial sustainability for municipalities. Chuck Marohn, president of Strong Towns, a non-partisan non-profit organization that helps America's towns achieve financial strength and resiliency, will be the featured presenter. Marohn invites participants to share in a dialog that will cover five main areas:

- 1. Background on the current financial crisis facing many of Wisconsin's municipalities.
- 2. The triggers forcing changes in the way we inhabit the landscape.
- 3. The "dead ideas" we need to overcome to renew prosperity in our towns and neighborhoods.
- 4. What the coming new economy is likely to look like.
- 5. What local leaders can do to position their communities for success in the new era.

Registration for consultants, private sector professionals and out-of-state participants can be found at the Wisconsin League of Municipalities website, under the Green Tier Legacies tab.

Registration for public and nonprofit sector workers, educators and interested citizens in Wisconsin, register directly at GoToWebinar: https://www1.gotomeeting.com/register/967701048.

Water Star Wisconsin is a program that guides, inspires and celebrates the work that top municipalities of all sizes do to protect and improve their water resources.

Water Star believes municipalities who meet these challenges should be thanked and celebrated. Download the Water Star brochure (PDF) at http://waterstarwisconsin.org/documents/ WaterstarBrochure4-27.pdf for more information. Anyone wishing to learn more about Water Star Wisconsin, or helping his community become a Water Star community, is invited to contact Beth Gehred at 920-541-3208.