The Drought of 2012

A summary of an article written by Chuck Dunning of the USGS and Mike Parsen of WGNHS

In 2012, nearly the entire State of Wisconsin experienced a hydrologic drought at some time during the year, with particularly widespread drought conditions during the spring month of April, and again in the summer months of July, August and September. A hydrologic drought is one characterized by reduction of stream flow and lowering of groundwater levels. The hydrological drought conditions experienced in Wisconsin during 2012 are captured in data collected by both the surface-water monitoring network of Wisconsin, operated by the U.S. Geological Survey (USGS), and the groundwater monitoring network of Wisconsin, operated by the USGS and the Wisconsin Geological and Natural History Survey, University of Wisconsin-Extension (WGNHS). The operation of both these networks is made possible through the support of many local partners and volunteers.

Total stream flow is made up of short-term storm water runoff from recent rain or snow melt, plus long-term contribution of groundwater, or base flow, from shallow aquifers. After long dry periods, the storm flow contribution declines and stream flow is composed almost entirely of base flow.

The state maps show monthly stream flow in watersheds of Wisconsin (USGS Water Watch). The orange and red colors identify watersheds with below average stream flows. Average stream flow in the Rock River Basin is based on measurements at 30 long-term monitoring stream gages located around the basin. The gages showed that streams

New Student Board Member Position

RRC is proud to announce a new student position on our Board of Directors. This special position was created to bring in new ideas and perspectives to the organization and to provide an opportunity for students to learn more about environmental non-profit organizations. The new position will also help the organization reach out to and communicate with a younger generation interested in local water issues.

We hope to fill this position for the first time in the fall of 2014. More details will be forthcoming later this summer on our website, but the position requirements are: 1) the student's academic home must be within the Rock River watershed, 2) the student must be enrolled as a full-time student, and 3) the student must be able to commit to a 9- to 12-month term.

Please pass this information along to students or educators who might like to know about this great resume-building experience.
Spring is a time of new beginnings and excitement for the promise of green plants and flowers in bloom. I felt that type of excitement when I attended the biannual Confluence of stream and lake monitors sponsored by the Rock River Coalition and our partners the City of Fitchburg, Friends of Cam Rock Park, the UWEX Citizen Lake Monitoring Network, Water Action Volunteers and Dane Jefferson, Rock, and Waukesha Counties. Citizens where eager to hear expertise provided by water resource professionals and for the near future when they will once again get their feet wet in pursuit of data about our waters.

I expect to feel the excitement surrounding new beginnings again on May 6th when the Rock River Coalition holds its annual meeting of members. As always, we will hold the election holds its annual meeting of members. Up for re-election are Jane Carlson, Scott Taylor and Suzanne Wade.

New this year will be the opportunity for a college student to serve on the Board. The Rock River Coalition is excited to increase student participation in our activities and efforts, bring new ideas and perspectives to the organization, improve communication with our younger generations, and provide an opportunity for students to learn about nonprofit governance.

Students can apply now and start their Board term at the beginning of their fall semester. Interested students whose academic home is within the Rock River Basin should contact Eric Compas for information at compase@uwuw.edu.

Another new beginning at our Annual Meeting will be the welcoming of 2 new Chapters of the Rock River Coalition. Citizens who are committed to protecting and improving the Maunesha River and Johnson Creek have decided to become Chapters of the RRC.

Thanks to funding provided by the Brandt Quirk Foundation, the Coalition was able to assist both groups define their work plans during the last couple of months. Their action plans are exciting and diverse. We have included them in the sidebar article on page 3.

The benefits of becoming a Chapter of the Rock River Coalition include having donations be tax-deductible, having the Coalition contribute $100 each year to the organization, having a portion of RRC membership dues from Chapter members go into the Chapter’s coffers, and having the Coalition act as the fiscal agent and manager of any future grants that the Chapter receives. It is definitely a way for us to foster the great work being done by local resource groups. To learn more about how to become a Chapter of the RRC, please visit our website at rockrivercoalition.org.

We hope you will join us in celebrating these new beginnings and of course our 20th Anniversary at our May 6th Annual Meeting!

Patricia Cicero, RRC President

Want your businesses logo in our newsletter?

Just donate $500 to get an ad in one issue or $1,000 for four issues. This newsletter is mailed to every municipality in the basin and to more than 1000 other individuals, agencies, businesses and organizations. Thank you Baird and Associates for your donation to our organization.

RRC 20th Anniversary Celebration Events

The Rock River Coalition is celebrating our 20th anniversary by both planning our own events, and sponsoring or participating in, other’s events throughout the basin. Here’s what’s on the schedule. Come join us and enjoy our beautiful basin.

April 23: UWW Earth Day Fair, 12-3 University Center Hamilton Room

The RRC will have a booth talking with students about our organization and answering questions about becoming our first student board member.

May 6: RRC Annual Meeting, Cam-Rock Pub and Sport 5:00 - 8:00pm. See our full announcement on page 8.

Don’t miss our celebration as we welcome our two new chapters.

May 17: Maunesha River Alliance Clean-up, Waterloo Fireman’s Park. See page 8 for how you can become involved.

June Date TBD: Maunesha River Alliance Program, Presentation on the current status of the Maunesha River.

July 5: Lake Ripley Fair, 10 - Noon, located at Ripley Park, Cambridge, WI.

The fair will include fun, family-friendly activities, prize drawings, and a Lake Ripley Stewardship Award presentation. For more information: 608-423-4537, ripley@oaklandtown.com, or www.lakeripley.org

July 20: Water Tour of Rock Lake, Sandy Beach, Lake Mills, WI.

Hop on a pontoon boat or bring your own paddle craft to visit different locations and learn about lakes. Stations will highlight water quality sampling, aquatic plants, land practices that protect our lakes, and other fun topics. For more information contact Patricia Cicero at 920-674-7121 or patricia@rockrivercoalition.org.

August Date TBD: Send Your Legislator Down the River

August Date TBD: Rock River Recovery Update Meeting, co-sponsored by DNR and RRC.

September 13: Yahara Riverfest, DeForest. The RRC will host the Carry Creek and Enviroscope Models displays. Search for the critters of the Yahara with our Monitoring Coordinator.


Other events are in planning, watch the RRC Facebook page and Website for up-to-date information.
The Benefits of Engaging Universities in Monitoring

On a cold morning last fall, twelve UW-Whitewater students from three student organizations joined us at Bluff Creek to explore a world they’d never seen before, even though was right in their backyard. They learned to carefully test dissolved oxygen levels and to keep a sharp eye when spotting macroinvertebrates among the leaves and gravel. Despite the grey and the cold, they left with smiles on their faces and asked when we’d be heading out to sample again.

RRC’s water monitoring program not only provides citizens a way to participate in regional science and in the management of our local streams, it provides an incredible learning opportunity for college students to apply theory in the field, learn about their local stream ecology, and gain a sense of civic responsibility. Despite spending significant time studying contemporary issues, students are often unaware of their local surroundings, the environmental issues they face, and the committed individuals and organizations trying to shape these landscapes. Stream monitoring, a “high-impact” practice, serves to get students off campus and complement their academic knowledge.

The decision to get involved in the Water Action Volunteers (WAV) program at the UW-Whitewater campus didn’t emerge from these lofty academic goals – it was actually a student-led initiative. The UWW chapter of the Milwaukee Water Council decided in 2013 to take on Bluff Creek, a monitoring site just to the southeast of campus. This effort soon revealed the main pitfall of relying on students for any long-term environmental initiative: they graduate. When we decided to take over, we understood the need for staff and faculty to provide continuity. We also expanded the number of students involved by inviting members of other organizations – Students Aligned for a Greener Earth (SAGE) and the Ecology Club – and students from our classes.

Our plans are to add an additional monitoring site this year and to expand the number of participating students and faculty. Students are already asking when we’ll be starting up again, and another group of students has initiated a class project to further monitor and research local streams. The project has also highlighted the need to create more roles for students within RRC (see New Student Board Member in this issue) to provide expanded opportunities.

By their very nature, students are a transient population engaged in various academic and social challenges that compete for their attention. Stream monitoring gives us a chance to provide students with a sense of place and to help them understand the responsibilities and rewards of local stewardship. We hope these experiences will translate to more civic engagement and volunteer activities wherever they land.

By Wes Enterline UWW campus sustainability coordinator and Eric Compas UWW associate professor in the Geography & Geology Department and a RRC board member.

Congratulations Nancy & Friends of Yahara River Headwaters!

Story adapted from state media release, Kris Stepenuck, Wisconsin Water Action Volunteer Coordinator.

An individual and a citizen monitoring group from the Rock River Basin were recognized for their contributions to the health of Wisconsin’s streams at the annual Volunteer Stream Monitoring Symposium held last week at the University of Wisconsin-Stevens Point.

Every year, the University of Wisconsin-Extension and the Department of Natural Resources present the Wisconsin Stream Monitoring Awards to recognize volunteers, employees and teachers for their commitment to monitoring, collecting data, raising awareness and sharing knowledge about Wisconsin streams.

Friends of the Yahara River Headwaters. Based in DeForest, this group has been actively involved in monitoring the Yahara River since 2010. Eight volunteers monitor 12 sites representing all three levels of the Water Action Volunteers Stream Monitoring program, including both the road salt and total phosphorus monitoring projects. Members also work with DeForest High School to engage students in hands-on monitoring, building students’ appreciation for the Yahara River as an important part of their community.

The group sponsors an annual river clean up, fishing instruction for youth, and worked with the Village of DeForest to open a path for recreational paddlers. The Friends of Yahara River Headwaters is currently developing a long-term stewardship plan for the river.

Nancy Sheehan of Madison has coordinated stream monitoring for the Rock River Coalition since 2012. When she was hired, the Rock River Coalition was seeking to increase the number of sites and citizen monitors in the Basin. Nancy’s efforts to coordinate trainings, communicate with volunteers and involve a multitude of partners have paid off, with 79 active volunteers monitoring their time to assess water quality at 72 sites across the Basin—a significant increase from 2011.

Nominator Patricia Cicero noted the importance of Nancy’s efforts to provide education to help citizens become good stewards of the environment, to create partnerships and to help generate data that can be used by resource professionals.

Her efforts have resulted in a first-of-its-kind partnership to have municipalities sponsor citizen monitoring efforts, and to enable citizens to collect data to be used in the Yahara River Basin’s adaptive management project with the Madison Metropolitan Sewerage District.

New Chapter Update

The Maunesha River Alliance and a group in the Johnson Creek area are hard at work developing their action plans. Here are the current goals of the two chapters:

Maunesha River Alliance

1. Increase awareness of the Maunesha River and increase people’s involvement in the river: Annual Stream Clean-up

2. Learn more about the river, its challenges, positive aspects and government goals:
   - Schedule June meeting with DNR/other agency staff.
   - Write grants to complete information and begin implementation based on study results.
   - Stream Monitoring: Develop at least one team of citizen monitors. Fund one WAV Level 1 monitoring kit.
   - Survey river for impediments to paddling and other issues.
   - Clear the river of barriers such as downed trees to make it amenable to paddling.

Johnson Creek Watershed Alliance

1. Develop clear direction with attainable goals and actions both near term (1-3 years) and long-term (5-10 years).

2. Learn about the creek’s ecology, challenges and potential:
   - Develop plan to survey the creek and the riparian corridor.
   - Develop a 2014 RRC citizen stream monitoring team.

3. Maintain a dynamic group, reaching out through the web, social media and marketing.

4. Educate local residents about the creek, its location, history and importance: Annual Stream Clean-up starting in 2015.

5. Establish solid partnerships with groups to work together to protect and improve the creek.

6. Understand and enlist support of the agricultural community in the watershed.

7. Restore free flow in the creek.

8. Develop a water quality improvement strategy and begin implementation.
A New Generation of Citizen Stream Monitors
By Tamara Johnson, Field Biologist, Wisconsin Green Schools Network

Welcome to a new generation of citizen stream monitors. Elementary students at the School for Agriculture and Environmental Sciences (SAGES) in Fox Lake have been studying the "World of Water" with Tamara Johnson, a biologist with the Wisconsin Green Schools Network (WGSN) FIELD Corps program. WGSN's "Fostering Innovation and Empowering Learners through Discovery" program (FIELD Corps) pairs a school with a field biologist who works with the teachers to provide weekly outdoor learning opportunities. The WGSN is committed to helping teachers take students outside to use the environment as a context for learning, to develop environmental literacy while increasing academic achievement. WGSN invites all types of schools -- traditional, charter, private, independent -- to join the network free of charge.

SAGES students kicked off their study of watersheds and aquatic habitats this fall with a visit to the International Education Center at Horicon Marsh where they dipped for macroinvertebrates and learned about wetland ecology. In October, the upper elementary students became citizen scientists, collecting stream monitoring data at Mill Creek as part of the RRC Volunteer Stream Monitoring Program.

and measure stream velocity, biotic index, temperature, turbidity, oxygen concentration, and E. coli levels.

In general we have found this section of the Bark River to be a fairly healthy one – we were very excited to find a Water Penny – an aquatic beetle – while performing a biotic index study. This is a rare find in the waters of Waukesha County.

I have obtained support to perform these tests from several sources: the Academy, which provided partial funding, Waukesha County, which loaned us materials, the Green Schools Project, which also provided funding, and a parent who donated meters.

The donation of these meters has allowed us to progress to Level 2 volunteer monitoring, for which we will enter our data directly into the DNR's Surface Integrated Monitoring System (SWIMS).

We have used our stream data to do some very interesting projects in my classrooms, including data analysis and data entry, making posters of the natural history of the macroinvertebrates we found, and comparing and contrasting our section of the Bark River with other sections of rivers from all over the state of Wisconsin. We were able to access data for comparison by going to the WAV website and entering the data bank section.

My students are enthusiastic about this project and proud of the data that they have collected. My associated research into this project-based approach has shown they feel more connected to science and the natural world as a result of applying themselves to a larger, real world problem.

More watershed education activities are in store for SAGES students this school year. Mr. Hoffman, SAGES 6th grade teacher and STEM educator, recently acquired a groundwater model at a DNR sponsored groundwater education workshop and students will be demonstrating the model at SAGES Fest, an open house for prospective families on March 8th. Mr. Hoffman's and Mrs. Smith's 5 & 6th grade classes have also been working with their field biologist to design a demonstration rain garden for the school that is slotted for installation sometime this spring. They will be ending the school year with another trip to the creek to collect more monitoring data. What a wonderful water-filled school year at SAGES.

Want to learn more about SAGES? Visit their webpage at: http://www.waupun.k12.wi.us/sages/

Or contact the school office at: 920-928-3136. Interested in the WGSN Field Corps? Go to wisconsingreenschoolsnetwork.org

It takes leaders from many places to put on a program such as SAGES. From left to right are the people who helped make this program work. Tamara Johnson WGSN FIELD Biologist, Mark Hoffman SAGES Science Teacher, Ben Nadolski WDNR Warden, Nancy Sheehan RRC Stream Monitoring Coordinator and Bob Roell Beaver Dam Lake Improvement Association Volunteer Lake Monitor.
The Snail Stops Here
By Deborah Seiler, DNR Aquatic Invasive Species Outreach Coordinator

By now, many river lovers have heard the news: last October, researchers discovered hundreds of tiny New Zealand mudsnails in a DNR sample taken from Black Earth Creek, Dane County. The snails are a potentially harmful aquatic invasive species that first arrived in the United States in the late 1980s and quickly spread through western streams on recreational gear, reproducing asexually as clones. Until last fall, no “Clone 1” populations had been found further east than Colorado, making Black Earth Creek ground zero for mudsnails in the Mississippi River Basin.

New Zealand mudsnails are a concerning species, especially to trout anglers. In the worst case scenarios, mudsnails in some western U.S. waterbodies have been found growing at densities of up to 500,000 per square meter, harming native food webs and trout health. However, in other locations they have had minimal impact, or the snail populations have crashed after an initial boom.

It’s too soon to tell which route the mudsnails will take in Wisconsin, but in the meantime the DNR is asking Wisconsin citizens for help stop the snails from spreading.

At less than 6 mm in length, New Zealand mudsnails are tiny and thus more easily transported and more difficult to kill than many earlier invasives in Wisconsin. They have a structure called an operculum, or “trap door,” that they can close over the end of their shell when threatened. This makes them resistant to most chemicals and able to survive out of water in a damp environment for up to 26 days. They can live in many types of waterbodies and even survive passage through the gut of a fish.

Fortunately, a response team including UW-Extension, Trout Unlimited, River Alliance of Wisconsin, DNR and others has developed some effective cleaning steps that water users can follow to stop New Zealand mudsnails in their tracks. With thick winter ice finally melting, researchers are also hard at work to determine if the tiny snails are also present in any other high-risk waterways.

They may well find that the mudsnail invasion was caught early, giving water users like you enormous opportunity to determine whether Wisconsin’s streams, lakes and rivers are impacted by this invasive species. As this story unfolds, it’s important that everyone who uses a stream or lake – especially in the Driftless region – take a few minutes to learn how to stop the spread of these tiny snails, as shown in the graphic to the right, and share the word widely!

For additional information and alternative prevention steps, visit http://dnr.wi.gov/topic/invasives/fact/newzmsnail2012.html.

Unbelievable growth is possible, up to 500,000 snails/meter!
Soil Testing – Give Your Lawn a Checkup Before You Fertilize

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

After a long winter under a blanket of snow, your lawn is finally visible again, matted and brown. You may be thinking about spring cleaning and maintenance, including an application of fertilizer to ensure lush, green grass this summer. Before you fertilize, consider having your soil tested to see what your lawn needs.

Most of us simply follow rules of thumb on fertilizing, such as our own Renew the Rock advice to fertilize on Memorial Day and Labor Day. But you may be wasting your time and money, and sending excess nutrients to local waterways where they feed algae and damage fish habitat. If your soil already has the right balance of nitrogen, phosphorous and potassium, you don’t need to fertilize. To figure out your lawn’s needs, send in a soil sample to be tested.

The University of Wisconsin has soil testing laboratories in Madison and Marshfield. Any Wisconsin soil can be submitted for analysis at a cost of $15/sample. A sample is two cups of soil collected in multiple places from a depth of 4 inches. The laboratory will return a report for each sample indicating soil pH, percent organic matter, phosphorus and potassium analysis. It will also provide recommendations on the addition of lime (for pH) and fertilizer.

You can continue to keep your lawn healthy and our area waters clean by:

• leaving grass clippings on the lawn
• avoiding weed and feed products
• calibrating fertilizer spreaders correctly
• keeping fertilizer off of paved surfaces
• selecting fertilizers with little or no phosphorus (based on soil test results)
• choosing fertilizers with at least 25% - 50% of the nitrogen in slow release form

This message is brought to you by the Rock River Stormwater Group in partnership with the Madison Area Municipal Storm Water Partnership. Both groups thank you for helping to Renew the Rock by reducing stormwater pollution throughout the Rock River area.

Learn more at www.renewtherock.com.

Members of the Rock River Stormwater Group include: Beaver Dam, Beloit, Town of Beloit, Fort Atkinson, Janesville, Jefferson, Milton, Waupun, Whitewater, UW-Whitewater, the Rock River Coalition, Lake Sinissippi Lake District and the Town and Country RCD.

Rock River Stormwater Group
Jason Valerius, Education & Outreach Coordinator
MSA Professional Services, Inc.
jvalerius@msa-ps.com, 608-242-7779

The Drought of 2012

continued from page 1.

in the Rock River Basin experienced normal flow conditions for April while streams of neighboring basins experienced some degree of drought. However Rock River Basin streams did show the effect of drought between June and September before returning to normal flows again in October.

Groundwater levels

The effect of drought on groundwater levels is the result of complex interplay between aquifer characteristics and hydrologic factors, including reduced ground water recharge by rainfall, interaction between surface water and groundwater, and increased pumping of groundwater in response to the drought. The 2012 hydrologic drought is reflected clearly in the measured level of groundwater in some Rock River Basin monitoring wells. For example a monitoring well in Dodge County, situated in the Cambrian-Ordovician aquifer and drilled to a depth of 125 feet, clearly showed a ground water response to the lack of rainfall in 2012; water levels dropped by roughly 8 feet between April and September. Nonetheless, even lower water levels have been measured in this well over its 50-year monitoring history.

A Dane County ground water monitoring well showed a similar response to drought in 2012. Drilled to a depth of 285 feet deep and completed in a deep Sandstone aquifer of the Cambrian-Ordovician aquifer, this well showed a 4-foot decline in ground water level between April and September. This well has only been monitored for 4 years and 2012 showed the lowest ground water levels yet seen in this well during its brief history.

Extended periods of drought provide scientists with valuable data about the response of the groundwater system to hydrologic stress, allowing them to calibrate groundwater flow models more accurately. As a drought begins, recharge to the groundwater system is slowed and flows in streams and water levels in aquifers often decline. This response to drought can be incorporated into the testing and calibration of groundwater-flow models to ensure the model is correctly simulating the natural hydrologic system. As an example, the hydrologic response to the 2012 drought was recently used by the WGNHS and USGS to calibrate a groundwater-flow model for Dane County, Wisconsin.

Data collected by hydrologic networks are critical to documenting average as well as extreme conditions and are regularly used to track the stage of rivers and lakes, forecast drought conditions, and predict the quality of recreational activities such as fishing or kayaking. Monitoring the response of stream flows and groundwater levels to prolonged periods of extreme weather, wet or dry, are particularly important for resource managers, conservationists, regulatory officials, and scientists who incorporate this information into the decisions and recommendations they make to protect life and property in the Rock River Basin.
Wisconsin State Water Trail for the Rock River?!

Under existing law the Wisconsin Department of Natural Resources plans, develops and manages a state park system, which includes a system of state trails open for public use by hikers, bicyclists, equestrians, cross-country skiers and other recreational users.

Currently water trails are not part of the state trail system. That may soon change.

In February I had the pleasure of providing testimony at the Capitol in favor of AB 793 before the Assembly Committee on Natural Resources and Sporting Heritage and in favor of SB 596 before the Senate Committee on Natural Resources. The companion bills authorize the WDNR to include water trails in the state trail system in order to expand public recreation opportunities and to encourage canoists and kayakers to enjoy paddling on exemplary state water trails.

The bills also provide that the state trail system will be named the “Aldo Leopold Legacy Trail System.”

My testimony before both committees followed statements of support by bill sponsors Senator Luther Olsen and Representative Alvin Ott, and by Brigit Brown, WDNR State Trails Coordinator. Brigit has been an advocate for the Rock River Trail Initiative and supported our application to the National Park Service for designation of the Rock River Water Trail into the National Water Trails System. We hope the Rock River Water Trail will be one of the first water trails included in the state trail system.

Senator Neal Kedzie (Jefferson County) is a co-sponsor of the bill and Representatives Mark Born (Dodge County) and Debra Kolste (Rock County) are co-authors.

The bill passed the Senate unanimously on March 11 and was concurred in by the Assembly on March 20. The bill is now on its way to Governor Scott Walker for signature.

Rock River Recovery Plan Implementation Planning Update
By Mark Riedel, DNR TMDL Implementation Planner and Outreach Coordinator

The Rock River Recovery has begun implementing the pollution reductions identified in the Total Maximum Daily Load (TMDL) Report for phosphorus and sediment with point sources in the basin. I.E. wastewater treatment plants and industries as well as with municipalities with stormwater permits.

We are writing the official implementation plan following EPA requirements with a goal of having a practical, useful plan.

Some methods that will help lead to a restoration of the watershed at a lower cost involve wastewater treatment plants working to implement practices on agricultural lands. However, while some wastewater treatment plants have relationships with their farmers that use municipal sludge as a fertilizer, most of the time they don’t know each other. Therefore we are working with local municipalities, counties, nutrient and crop management experts, and other partners to foster relationships and explore opportunities for water quality improvement projects. The goal is to identify opportunities where WPDES Discharge Permit holders (e.g. wastewater treatment plants, municipal storm sewer systems, CAFO’s, etc) can partner with other sources in the watershed, such as agricultural operations, to reduce pollutant loading to the Rock River and its tributary waters.

This process, known as Pollutant Trading or Adaptive Management, provides a mutually beneficial way of implementing pollutant reduction practices to improve water quality, soil conservation, permit compliance, and helps restore the beneficial uses of our impaired waters. Typical practices include a wide variety of watershed and river practices to limit the introduction of excessive soil, phosphorus, and other pollutants to our surface waters.

Many people in rural communities may already practice things such as conservation tillage, contour farming, and nutrient management. As we work to expand these successful practices to more of the basin, we are also considering restoration solutions that include such practices as wetland restoration, stream bank stabilization, and riparian restoration.

Rock River Recovery Update Meeting being Planned for Summer 2014
During the warm weather of late July or early August, the RRC, UW-Extension and WI DNR will host a Rock River Recovery Update meeting. The meeting will focus on the status of TMDL implementation for the basin. The meeting announcement will also be on the RRC Facebook page and in our monthly email update that goes out to all RRC members and others who have requested being added to the list.

For more information, please visit the Rock River Recovery website (below), or contact the TMDL Implementation Planner and Outreach Coordinator, Mark Riedel (marks.riedel@wisconsin.gov).

WI DNR Rock River Recovery website: http://dnr.wi.gov/topic/tmdls/rockriver/

Becomes 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

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>$ 25</td>
</tr>
<tr>
<td>Family</td>
<td>$ 35</td>
</tr>
<tr>
<td>Student/Senior Citizen</td>
<td>$ 15</td>
</tr>
<tr>
<td>Classroom</td>
<td>$ 25</td>
</tr>
<tr>
<td>Affiliates*</td>
<td>$ 50</td>
</tr>
<tr>
<td>Municipal**</td>
<td>$125</td>
</tr>
<tr>
<td>Corporate</td>
<td>$200</td>
</tr>
</tbody>
</table>

*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.rockrivernoalltion.org

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

Tax Deductible Donations

<table>
<thead>
<tr>
<th>Amount</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Support</td>
</tr>
<tr>
<td></td>
<td>Citizen Monitoring</td>
</tr>
<tr>
<td></td>
<td>Other:</td>
</tr>
</tbody>
</table>

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 Annual Meeting to Welcome Two New Chapters!

Register by May 2nd, 2014 by sending your name, address, phone and email along with a check to: RRC Annual Meeting, 864 Collins Rd, Jefferson WI 53549.

Cost: $15/person

5:00 - 5:30 Mingle: with members, friends, board of directors and guests.

5:30 - 6:00 Eat: Meal will include: Queso & pico served with blue chips, hummus platter with assorted veggies & toasted flatbread, meatballs in BBQ sauce, assorted toasted sandwiches - quartered, strawberry spinach salad and assorted cookies. Also ice tea and water. Other beverages available for purchase. Price includes tip and tax.

This is a good time to talk about the Coalition and what we should be doing together to protect and improve our Rock River Basin.

6:00 - 6:30 Annual Meeting: Election of Board Members Signing of charters with our new chapters: The Maunesha River Alliance and the Johnson Creel Watershed Alliance

6:30 - 7:30 Keynote: The Rock River Recovery Process - the need to reduce phosphorus throughout the Rock River Basin by Mark Riedel, DNR Rock River Basin TMDL Planner and Outreach Coordinator

All RRC members are encouraged to attend, enjoy and meet with others involved in RRC activities. The public is welcome!

Call for Nominations

If you care about the Rock River Basin and want to encourage cooperation between people of diverse interests, want to see improved water quality in the Rock River, a vibrant economy that supports agriculture and sustainability and recreational opportunities for all, then please consider running for the Rock River Coalition’s Board of Directors.

We are particularly interested in adding a stream monitor to the board. Student terms are one year, other board positions are three year terms.

If interested contact President Patricia Cicero at patricia@rockrivercoalition.org.

Come one come all! Maunesha River Spring Cleaning - May 17

A Maunesha River Clean-up will take place once again this season! Celebrate a day filled with fun, food, old fashioned hard work, prizes, networking, and education.

Join us on May 17th by 9 a.m. at Waterloo Firemen’s Park. (Rain date June 7th)

Feel free to attend our River Monitor presentations and learn about your river, local ecology, and species of the Rock River Valley.

Stay tuned in to local announcements regarding sponsorship, scheduling, event updates and equipment check lists.

Please RSVP on the Maunesha River Alliance Facebook event page, email matt.ziaja@gmail.com, or call Matt at 920-541-6942 by May 3rd.

You may reach us for questions or donations as well.

Thanks to last year's 50+ volunteers we cleaned over four miles of the Maunesha in under a day!

Please remember, since many hands make light work, you might want to spread the word.

Thank you. We look forward to seeing you at our first event as a RRC Chapter.

The Maunesha River Alliance

Friends of Badfish Creek Watershed Partner with DNR to Improve Canoe Access

Badfish Creek is a popular paddling route, and RRC’s chapter organization, the Friends of Badfish Creek Watershed (FBCW), wants to improve access to the lower reaches of this delightful little stream, where it meanders and riffles through relatively remote land, emptying into the Yahara River just upstream of Hwy 59.

To this end, the group has proposed a new canoe landing at the south end of the Badfish Creek Wildlife Area in Dane County, where Old Stage Road crosses the creek and where there’s an existing parking lot.

This new landing would solve several problems. Paddlers already access the creek on the south side of the Old Stage Road where the banks are lower, but this is private land. There is a canoe landing at the north end of the wildlife area, but the creek has been straightened and deeply ditched throughout the wildlife area, diminishing its interest to paddlers.

Many paddlers access the creek at Hwy 138, but highway traffic is a hazard and vandalism has occurred on nearby private land. The proposed new landing would sit 1.8 miles upstream of the Hwy 138 crossing.

At a recent FBCW meeting, DNR Wildlife Area Manager Andy Paulios told the group that the DNR is redoing master plans for wildlife areas, a process which will include a public meeting in late May or June, and will be complete by about October 2014.

If this idea fits into the master plan—and Paulios seemed optimistic—FBCW will apply for grants to fund the cost of grading the landing, installing an information kiosk, and possibly enlarging the parking lot.

The group will recruit volunteer labor, including the various canoe clubs that use the creek: Mad City Paddlers, Prairie State Canoest, and Sierra Club River Touring Section.

If the project goes through, and if you’re interested in helping, please contact Lynne Diebel at lsdiebel@gmail.com.