Our 2014 Milwaukee River Basin Report Card Is Here!

We’re happy to announce the release of our 5th annual water quality report card!

Since 2011, Milwaukee Riverkeeper has published a water quality report card each year. Our report cards play an important role in informing where we focus our efforts to achieve swimmable, fishable rivers throughout our basin.

Each year, we’ve been fortunate enough to improve the geographical extent of the monitoring our dedicated volunteers carry out. In 2014, 90 volunteers tested water quality monthly from May through October.

This year’s report card includes:
- Water quality data from our armada of dedicated volunteer stream monitors;
- Results from MMSD’s Surface Water Monitoring Team and Wisconsin Department of Natural Resources staff;
- Overall water quality grades for each watershed and subwatershed in the Milwaukee River Basin;
- Analysis of water temperature, dissolved oxygen, pH, turbidity, phosphorus, chloride/conductivity, macroinvertebrates, and bacteria; and
- Visuals like charts, graphs and maps to help explain our results.

Overall, the Milwaukee River Basin received a C-in 2014, slightly

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Jennifer Bolger Breceda  | Executive Director

Dear River Friends,

As I write, we are in a fantastic stretch of bright, sunny, endless blue sky, summer-into-fall weather. Fall is one of my favorite times of year. It is a little hard to let go of summer, but the pains of back to school are mostly over now and it seems that we are settling nicely into our regular non-summer routines. While summer is still a recent memory, I want to say thank you to all our partners and sponsors and to reflect with gratitude on all of the events my trusty, talented staff of five were able to accomplish.

We were lucky to partner with the Milwaukee Kayak Company for a second summer to host three amazing paddle events, touring each of the rivers in our great Basin. We co-hosted our 10th successful Milky Moonlight paddle with River Alliance of Wisconsin, and new this year, we hosted two paddles with Clear Water Outdoor. We co-hosted a rain barrel workshop with Lakefront Brewery and were beneficiaries of the Milwaukee River Challenge 5K Run/Walk thanks to Schlitz Park. Our summer season wouldn’t be complete without a couple of river cleanups too. A really big thank you goes out to Leinenkugel’s for partnering with us and out new co-host Urban Ecology Center on our 4th annual Canoes for a Cause event. Last but not least, we are grateful to all of our friends who hosted river cleanups this summer, a tradition we hope will continue well into the future.

One of our mission goals is to connect people to our rivers so they can learn about them, experience the joy of paddling them or have the satisfaction of cleaning up a river section, leaving the environment better than when found. We did that in spades this summer and plan to do much more next season too. If you haven’t yet participated in a paddle or a cleanup, keep in touch with us and sign up for one next season. These are great ways to spend time with family and friends and explore our city.

Thanks again to all our great partners!

With Much Gratitude,

Jennifer

P.S. A special thanks to our communications team who designed our newsletter! Isn’t the new layout fantastic?

On Sunday, September 13, Milwaukee Riverkeeper co-hosted “Convergence at the Confluence” with our friends at Citizens Acting for Rail Safety (CARS). We met at the confluence of the Menomonee and Milwaukee Rivers, under a 100-year old railroad swing bridge to highlight the dangers of shipping crude oil by rail over and along our waterways. The swing bridge is just one of dozens that cross our local waterways.

Railroads often run parallel to our rivers for dozens of miles, making our railroads “virtual pipelines” that endanger the health of our rivers and Lake Michigan. The Milwaukee River flows cleaner today than it has in many decades, and it is unthinkable that as we are finally recovering from decades of legacy pollution that our rivers are now under threat from a crude oil spill that could erase our efforts to bring them back to health.

Nationally, oil train traffic has increased more than 4,000% in the last five years. In our Milwaukee River Basin, Canadian Pacific operates a major rail route, where an estimated 11-14 trains per

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The public comment period to weigh in on the City of Waukesha’s application to divert Great Lakes water officially ended at 11:59 CST on August 28, 2015. Throughout the 60 day comment period, Milwaukee Riverkeeper, as lead of the Compact Implementation Coalition, tracked more than 3,040 written public comments submitted to the Wisconsin Department of Natural Resources (DNR)—all raising concerns about Waukesha’s application.

The DNR held 3 public hearings over the course of 2 days during which they saw more than 450 attendees and heard at least 125 people’s verbal testimony. Additionally, 68 separate press pieces across the Great Lakes Region raised concerns about Waukesha’s application.

The numbers tell us there is clear public opposition to Waukesha’s water application, not just in the state of Wisconsin, but across the entire region. While the DNR’s public comment period is over, the Compact Implementation Coalition and Milwaukee Riverkeeper will continue working to make sure 1,000s of Wisconsin voices are heard as the DNR makes its final decision.

73 state legislators from all 8 Great Lakes states signed onto a letter written and submitted to the Wisconsin DNR by Wisconsin Representative Corey Mason opposing Waukesha’s application to divert Great Lakes water. 19 Minnesota legislators from the House of Representatives submitted a separate letter to the Wisconsin DNR opposing Waukesha’s application to divert Great Lakes water.

Breaking Through

In the first phase of our Menomonee River Fish Passage project, Milwaukee Riverkeeper identified over 382 suspected and 126 actual stream impediments to fish passage along the natural mainstem reaches of the Menomonee and Little Menomonee Rivers, as well as major tributaries that are not concrete channelized or enclosed. These impediments varied from woody debris jams to perched culverts, pipe crossings, fords, and a small dam/weir. We feel the most cost-effective way to improve our fisheries is to improve access to existing high quality habitat areas for fish spawning and rearing in upstream areas of our watersheds.

Decreasing impediments to fish migration has the best chance to increase both diversity and abundance of native fish species resident to Lake Michigan and the Estuary. Riverkeeper hired Great Lakes Community Conservation Corps (Great Lakes CCC), another non-profit that engages urban youth in restoration work, to assist with removal of major woody debris barriers in the Menomonee and Little Menomonee Rivers that are impeding fish passage.

The crew has removed several...
impediments on the main stem and is making good progress on the Little Menomonee. The level of debris and trash that continues to accumulate after major storm events has interfered with progress.

We also hired Interfluve, a consulting firm specializing in stream geomorphology, for design input on 3 culvert retrofits that are likely impeding fish movement, as well as one larger restoration project, funded by Wisconsin Coastal Management Program. With help from WDNR Planning grant funds, we are also making contact with private landowners in the watershed to help educate them on fish passage issues and assist with removal of major barriers. We are pleased that MMSD has approved a contract to remove the 5 “low flow” barriers in Hoyt Park on the lower Menomonee—3 pipe crossings, an old ford, and grade control structure—that are posing problems with movement of native fish during low flow or late summer conditions. The final phase of concrete channel removal from the lower Menomonee will hopefully be done by the end of the year as well! All in all, a good year for the fishies!

Oil And Water Don’t Mix! (Cont)

Milwaukee community members hold signs that say “Oil & Water Don’t Mix” while paddling under the 100 year old swing bridge at the confluence of the Milwaukee and Menomonee Rivers.

Oil train traffic has increased more than 4,000% in the last five years!

Too Much Salt!

Riverkeeper received a $47K grant from Fund for Lake Michigan to expand conductivity monitoring to 35-50 of our sites, along with funds to run chloride samples for select sites with consistently high conductivity levels. We will educate the public about impacts

Oil And Water Don’t Mix! (Cont)

week carry combustible crude oil through our major urban areas and across our rivers, exposing our communities and our waterways to the considerable risk of oil spills. Crude oil from North Dakota (“Bakken crude”) is shipped with gas and other chemicals to keep it in liquid form, consequently making it highly combustible. Our national rail network is in poor condition, with single “hulled” rail tank cars making up the majority of U.S. oil tanker trains. These tankers have serious structural flaws that make them prone to puncture and explosion during a derailment.

In response to public concern, several Federal Agencies including the Department of Transportation and Federal Railroad Administration, are requiring some limited reporting for trains carrying more than 1,000,000 gallons of Bakken crude (around 33 rail cars). These weak regulations also allow disaster-prone rail cars to stay on the rails for decades. In addition, while railroads are required to inspect bridges and railroads carrying this type of cargo, they are not required to share this information with Federal regulators or even with communities they pass through.

An oil spill of any kind poses serious environmental and economic consequences, but a spill of “heavy” crude oil (like Canadian tar sands oil) would be especially difficult to clean-up since it sinks to the bottom of waterways. Oil can stay in sediment for more than thirty years after a spill. Also our Milwaukee River Estuary exhibits a seiche effect, where Lake Michigan surges into our rivers and estuary causing water to (at times) flow both ways. This seiche effect could make any spill response very challenging as oil could spread up and down river. Cleanup of oil spills during winter months when rivers are frozen would also be very difficult, if not impossible.

Meet our Aesthetic Monitors

Linda Reid

Where is your favorite place to monitor? My favorite place to monitor is in South Shore Park in Bayview. It’s a beautiful park, no matter the weather or time of day. I’ve been fortunate enough to be there on many beautiful sunny days, during moonlit nights, and when the fog quietly rolls in.

How long have you been monitoring? I just started monitoring this year, as we moved to Milwaukee from the Chicago area in March.

Why do you monitor? I monitor because I’m concerned about the environment and think Riverkeeper is doing a wonderful job educating citizens and policy makers about the value of our water resources.

Right: Linda with her monitoring buddies: husband Bill, grandson Oliver, and grand dog Luna.
A crude oil spill into the rivers would cause **long-lasting**, if not permanent, damage to populations of fish and aquatic life. A spill could also impact public safety, threaten our drinking water supply, and impact tourism and other shoreline resources. This is all a recipe for disaster.

- We support the creation of new safety rules that address oil tank rail car design, **alternate routing** through cities, reduced speed limits, better preparation for emergency responders, and plans for cleaning up oil spills in our waterways.
- We support Senator Tammy Baldwin’s introduction of the Crude by Rail Safety Act of 2015, which would require **new safety regulations** to mitigate the volatility of gases in Bakken crude oil and immediately halt the use of older-model “high risk” tank cars.
- We support immediate action to eliminate a 1996 loophole that only railcars with capacities larger than 1,000 barrels would need oil spill response plans (when most individual railcars carry less than this amount).
- We support rail and infrastructure improvements and investment.
- We support the State of Wisconsin increasing its capacity to inspect railroad infrastructure and prevent and respond to oil spill accidents.
- We support **transparency** of inspection and safety information of railroad bridges and other infrastructure.

Our communities and first responders are entitled to this information, as well as the general public.

The idea of a rail accident in our area is not speculation. Two years ago, a Bakken oil train passing through Milwaukee—over the confluence bridge we paddled under at our event—went on to explode in Lac Megantic, Quebec killing 47 people and destroying 30 buildings. Unless changes are made to rail safety, it is not a question of if a disastrous spill will occur on or near the Milwaukee River, it is a question of **when**.
We will also be strategizing how to address this pollution source through permitting efforts like the Menomonee River Watershed Based Stormwater Permit as well as a new tool called a “Total Maximum Daily Load”, which will require sources of bacteria to be ratcheted down to achieve bacteria standards for both our rivers and lake beaches. We are also in discussion with EPA, fellow Waterkeepers and other NGOs about the status of the new Federal recreational use criteria released in 2012 for bacteria. These criteria aim to improve safety at beaches and waterways, and create more realistic and “real time” indicators to eliminate problems with “lag time” between sampling and notification.

Aesthetics Matter

We received a $10K grant from WDNR through their Area of Concern (AOC) program to train 30 volunteers to conduct aesthetic evaluations at 9 sites throughout the AOC from May through October. In 1987, the Milwaukee River Estuary was named a Federal Area of Concern, with 11 associated impediments for meeting “beneficial uses.” We fail to meet goals for clean water and healthy and wildlife populations. One of the impediments is “degradation of aesthetics” and the goal of our monitoring program is to document whether or not visual conditions have improved enough to “delist” that impairment and focus on other issues. Many of the impairments are associated with legacy pollution, and are lower than 2013’s overall grade of a C, but up from 2011’s overall D+. While the best grade for a watershed was a B+ (Cedar Creek) and the lowest was a D+ (Menomonee River), results from the last half decade of monitoring have been fairly consistent. Watershed grades are determined by averaging grades for all parameters, and the overall Milwaukee River Basin grade is determined by averaging grades from all watersheds.

The Milwaukee River Basin’s phosphorus, conductivity and bacteria levels all received failing grades, consistent with results from 2013 and 2012. In fact, all three river watersheds received poor grades for conductivity and bacteria. The Kinnickinnic River Watershed was the only one to receive higher than an F for phosphorus (receiving a C+).

The report card demonstrates that we have come a long way in improving certain aspects of the Milwaukee River Basin’s water quality, and focuses in on where we still have a lot of work to do to achieve clean water. The Report Card also highlights how individuals can take part in the effort to improve our waters through changing behaviors such as reducing application of lawn chemicals and road salt or by volunteering to monitor water quality.

We’re still working to increase the number of sites monitored in the northern part of our Basin to bring you an even more complete picture of the health of the entire Milwaukee River Basin.

This year our report card also elaborates on the impact bacteria, phosphorus, conductivity and chloride have on our local streams. The main culprit causing high phosphorus levels is agricultural and urban runoff, while poor chloride levels are largely the result of low grades for bacteria are likely the result of deteriorating pipes and “cross mixing” within sewage and stormwater infrastructure, as well as agricultural and urban stormwater runoff.


We’d like to thank our Water Quality Intern Brad Lukasz for all of his hard work in pulling together...
expected to slowly improve once those toxins have been removed.

**Dams Mean Dredging**

The second phase of removal of contaminated sediments from the Milwaukee River in Lincoln and Estabrook Parks (upstream of the dam) is coming to a close, and restoration work up there is beginning, which is great news. That site alone was expected to account for nearly 70% of all PCBs in the Milwaukee River. In the last decade, DNR and EPA have also removed other deposits of contaminated sediments from the Blatz Pavillion area of the Milwaukee River, Lincoln Creek downstream Green Bay Road, the Kinnickinnic River between 1st and Becher Ave, and the Little Menomonee River from Brown Deer Road to Appleton.

**Our Area Of Concern**

We are also working with partners to revamp the Citizen Advisory Committee for the AOC, which would advise on targets and projects needed to “delist” many impairments that we have in the Estuary, and which are documented in a Remedial Action Plan Update each year.

**Something Is Fishy...**

USGS has been surveying fisheries this summer and last to assess changes in fish populations since a 1987 study done by WDNR. Results of a fish tumor study came back recently, and sadly, the Milwaukee River had the highest levels of tumors in the State with tumors being found in livers of about 14% of the fish tested.

**Not A Member Yet? Join Today!**

**Individual Memberships**

Become an individual member to start receiving special discounts at local businesses, a Milwaukee Riverkeeper t-shirt, and more!

Visit www.milwaukeeriverkeeper.org/donate today to discover all of the great benefits that come with being a Milwaukee Riverkeeper member!

**Business Memberships**

Business members receive special recognition and acknowledgment of your support on our website, our quarterly newsletter, social media and more!

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**Update:**

**Estabrook Dam**

An aerial view of the Estabrook Dam taken by Butch Jorgenson.

Milwaukee Riverkeeper has two lawsuits against Milwaukee County regarding the Estabrook Dam. The first is to ensure the County abates the public nuisance the Estabrook Dam creates. The second is regarding an open meetings violation from a Finance Committee meeting vote in late January of 2015 changing County policy back to Dam repair.

As of July 2015, a Milwaukee County judge postponed our trial on the public nuisance since the County’s only has a “plan” to create a plan and cannot currently demonstrate that it will have sufficient funding to repair and then successfully operate the Dam for the remainder of its lifetime (an expected 20 years), without increasing flood risk upstream. For these reasons, in addition to our pending open meetings violation lawsuit, the judge agreed to stay the case and meet again in December, when the County will need to demonstrate it has a plan and financing in place to repair the Dam.

The County is seeking an operational order from the Wisconsin Department of Natural Resources (DNR) to operate the Dam. The County will submit a full EIS to the DNR in early October 2015. The DNR will then need to finalize the draft EIS and release it for a 30-day public comment period, which will most likely happen late fall or early winter. We understand that the County will submit repair plans without fish passage to the DNR due to concerns over insufficient funding for fish passage construction and operation. Milwaukee Riverkeeper currently has legal action against the County and a right to go back to court to debate their “remedy” to the public nuisance if we do not feel that it is adequate and if DNR has not addressed our concerns through the operational order process. Stay tuned!

“I am disgusted that so much time has been wasted discussing this issue when the choice is clear.”

- Barb, Milwaukee, 9/25/15

Sign the petition today at www.savethemilwaukeeriver.competition!
ANNUAL MEMBER EVENT
10.18.2015

RSVP TODAY!

Come hear our staff recount all of the great work we did in 2015, including highlights from our 2014 Milwaukee River Basin Report Card!

Where: Bavette La Boucherie
When: 12pm-2pm

RSVP at www.milwaukeeriverkeeper.org/2015-annual-member-meeting!