

Thinking Like a Watershed

Black Earth Creek Watershed Association

FALL 2023

Dane County Purchases Land for Black Earth Creek Fishery Area

Joe Parisi - Dane County Executive

The Dane County Land & Water Resources Department is partnering with the Wisconsin Department of Natural Resources (WDNR) to purchase 14.6 acres of land in the Town of Black Earth owned by SRR Properties, LLC, containing ~.3 miles of stream frontage along class 1 Black Earth Creek (BEC) and connecting a public fishing easement property to the east to the WDNR-owned fishery area lands to the west.

Dane County along with WDNR and other partner organizations (Southern Wisconsin Trout Unlimited and BECWA) have a long history of making investments in the area. For example, WDNR has long-held public fishing easements nearby and acquired a new one in 2021. The same year, the county funded a grant to Groundswell Conservancy to limit development on approximately 111 acres along BEC. In 2022, WDNR conducted a large habitat improvement project along the easements and WDNR owned lands at South Valley Road (bank sloping to reduce soil erosion and sedimentation, root wads and boulder complexes to improve in-stream habitat for trout, and riparian plantings of hardwoods, native shrubs, and prairie grasses). The result is easier angler access with much improved fish habitat and a healthier riparian corridor.

Plans are still in development, but the goal is to convert agricultural lands to prairies, and future trout habitat improvement projects downstream of the South Valley Road project. Acquiring this SSR parcel for public recreation not only further protects the watershed from excess nutrient inputs, erosion, sedimentation and future development but also provides trout habitat, and invaluable recreational opportunities to improve angler experiences for residents and visitors.

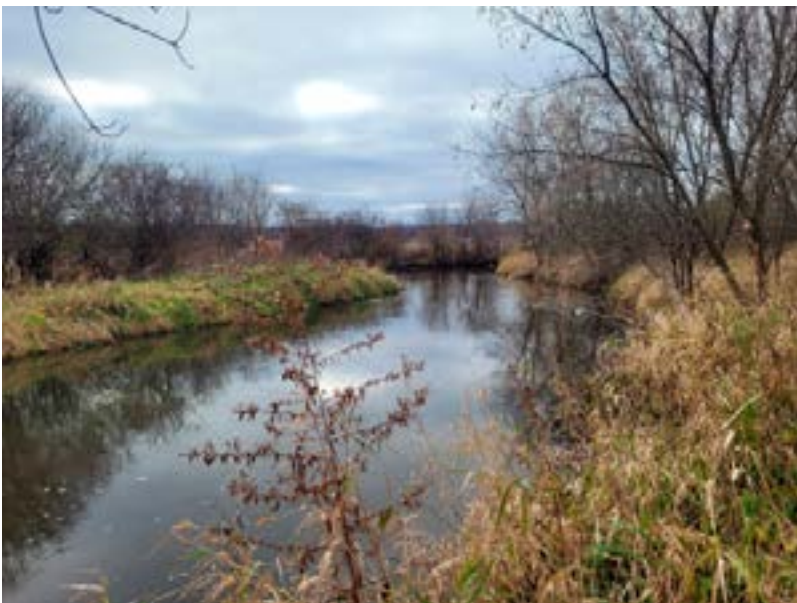


Photo Credit: Dane County Land and Water

SRR Properties LLC, approx. 16.6 acres, T Black Earth
Black Earth Creek NRA/Black Earth Creek Fishery Area



Prepared by Dane County Land & Water
Resources Department, March 10, 2023



**Black Earth Creek
Watershed
Association**

BECWA.ORG

For the wise management of the land and water resources in the Black Earth Creek Watershed.

BECWA Goals

- To protect, conserve, support and advocate for the wise, long term management of the physical, biological, environmental, cultural and historical resources that constitute the heritage and future of the watershed.
- To foster and encourage citizen and locally-based stewardship among the many members of the Watershed community.
- To provide a forum for civilized discussion of issues and problems in the Watershed.

Board of Directors

Bobbi Peckarsky - Vice-Chair & Acting Chair
 Steve Born - Past Chair
 Barbara Borns - Secretary & Past Chair
 Johnny Armstrong - Website Manager & Treasurer
 Kate Beardmore, Mary Devitt, Andy Morton, Debra Weitzel

Deborah Nemeth - Newsletter Design
 Bobbi Peckarsky - Newsletter Editor

Save the Date

Member & Donor Appreciation Picnic

**Festge Park - Shelter #1
 Saturday, September 30
 11 AM - 2 PM**

Watch for your email invitation with details & RSVP link closer to the event.

Membership

We hope you enjoy reading the BECWA newsletter. It is our pleasure to share news and information from the watershed.

If you are not already a member - please join today! To become a BECWA member go to <https://www.becwa.org/join-becwa> and fill out a form to mail with a check or donate online.

If you choose to send a check please mail to:
 BECWA
 PO Box 164
 Cross Plains, WI 53528

If you are already a member, renew today by going to www.becwa.org

Lifetime Member - \$100
 Household - \$25

Help us continue this important work!
 We appreciate your support.

BECWA would like to recognize the following donors who have supported our organization between June 2022 – August 2023

- Anonymous
- Marilyn Boyer
- Michele Doolan
- Robert Dunnagan
- Sharon and Warren Gaskill
- Michelle and Andrew Harris
- John Hutchinson
- Thomas Krauskopf
- John Magnuson
- Rachel McAlexander
- Nancy McGill
- Rose Meinholz
- Gary and Gayla Olsen
- Bobbi Peckarsky and Steve Horn
- Bill Sonzogni
- James Van Duerzen

Thank you!

State of the Black Earth Creek Watershed Report: Planning Update

Mary Devitt and Michelle Harris – BECWA

Information shared at the November 2022 BECWA public event at Wisconsin Heights High School highlighted the need for an annual update on the State of the Black Earth Creek Watershed. At this event, experts gave presentations about emerging threats to Black Earth Creek including contamination by PFAS and neonicotinoid pesticides (see full article on page 4). One outcome of this forum was the decision to produce an annual report on the Black Earth Creek State of the Watershed (BECSW).

The BECSW Report planning meeting committee has met throughout summer 2023 to discuss the goals of the report. This report will present a user-friendly compilation of the status of the Creek, highlighting data such as dissolved oxygen levels, which are a bellwether for water quality, for municipalities and other stakeholders.

Goals for readers of the report are to:

- understand the current health of the creek and watershed;
- appreciate how the health of the creek affects members of the community; and
- use data-driven decision making to propose and support actions involving stakeholders, government, and partners at the local level to monitor and improve creek health.

We anticipate the first BECSW Report to be completed by late Fall 2023. The report will be available on the BECWA website and a public presentation and discussion will follow.



Photo Credit: Dennis Franke

News Brief

BECWA Completes WDNR River Planning Grant

Andy Morton, BECWA

BECWA completed work on a \$10,000 Wisconsin Department of Natural Resources River Planning Grant that included assessing organizational effectiveness, developing a strategic plan, and implementing a variety of outreach activities to promote appreciation and stewardship of the Black Earth Creek watershed (even during the COVID pandemic). We upgraded our website, installed educational signs in the watershed, and collaborated with Middleton High School to produce informative videos about BECWA and the watershed. We greatly appreciate receiving the grant from the WDNR and the assistance of their staff to accomplish the objectives. (See www.becwa.org for links to products.)

BECWA recognizes the following who provided their time and expertise without which the WDNR River Planning Grant could not have been completed: Johnny Armstrong, Kate Beardmore, Bill Boehm, Steve Born, Barbara Borns, Kurt Byfield, Gary Cox, Mary Devitt, Dennis Franke, Gateway to the Driftless, Mindy Habecker, Greg Hyer, Kim Kuber, Dave Lucey, Melody Moore, Andy Morton, Dan Oele, Gaila and Gary Olsen, Bobbi Peckarsky, Dave Rowe, Sara Shackleton, The Shoe Box, Trout Unlimited, Fred Wolf, the Video Editing Class Middleton High School, and the Village of Cross Plains.

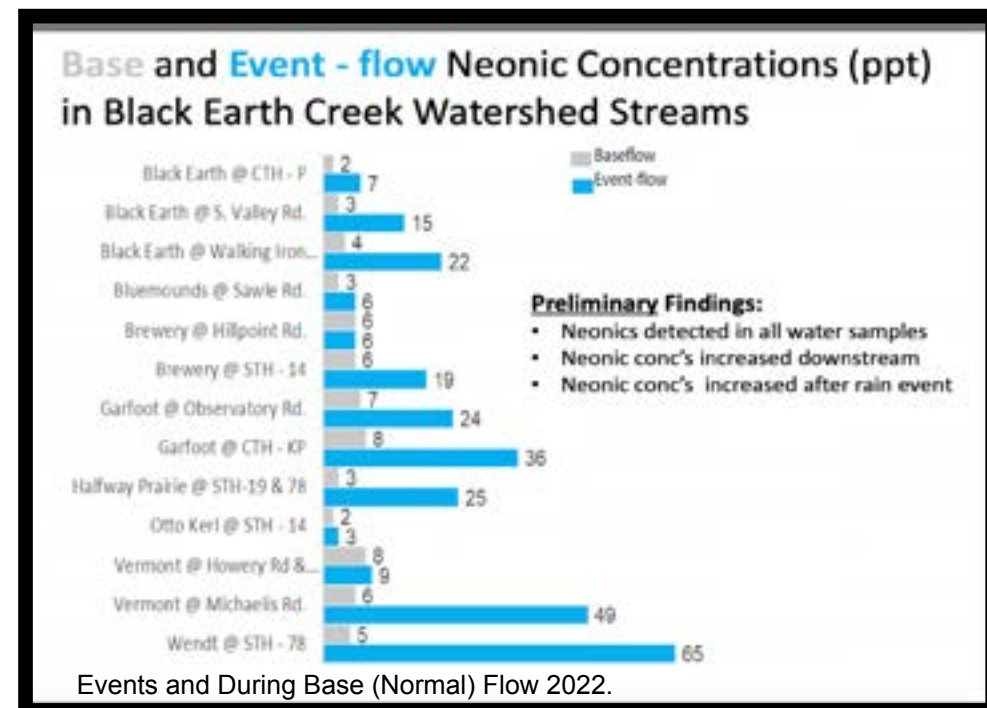
Contaminants in the Black Earth Creek Watershed

Andy Morton – BECWA

BECWA co-sponsored (with Gateway to the Drifless, Groundswell Conservancy, and Southern Wisconsin Trout Unlimited) an informational forum November 1, 2022 at the Wisconsin Heights High School, including presentations about potential contamination of Black Earth Creek (BEC). All talks presented at this forum can be viewed at becwa.org

This forum was motivated by news of detection in BEC of PFAS - “forever chemicals” used in non-stick cookware, fast food wrappers, firefighting foams, etc. Because health risks, (e.g., increased cholesterol levels, decreased immune response and decreased fertility in women) may increase when fish with high levels of PFAS/PFOS are consumed, in 2020 a fish consumption advisory was issued for BEC by the Wisconsin Department of Resources and Department of Health Services (DHS). According to Patrick Gorski (WDNR), a PFAS/PFOS based fish consumption advisory still exists for BEC, but at the lowest level (one meal per week). Based on sample results from WDNR monitoring in 2022 both of these toxic contaminants were below the surface water standards and the PFOS concentrations in particular were lower than what WDNR measured in 2020 at all sites. Revisions to BEC-specific fish consumption advisories can be found at <https://dnr.wisconsin.gov/topic/Fishing/consumption> (the WDNR Choose Wisely publication). A helpful resource for PFAS/PFOS results for surface water and fish consumption advisories statewide is the WDNR PFAS/PFOS Interactive Data Viewer, which is updated periodically: <https://dnr.wisconsin.gov/topic/PFAS/DataViewer>

A presentation by Michael Miller (WDNR) highlighted the presence of neonicotinoid pesticides (referred to as “neonics”) in streams, rivers, and lakes worldwide. Recent WDNR sampling (See graph below) has detected neonics in BEC and its tributaries at levels that can negatively affect aquatic life (<https://podcasts.apple.com/us/podcast/the-orvis-fly-fishing-podcast/id278930814?i=1000618161584>), specifically the aquatic invertebrates - the primary food for our highly regarded wild brown trout population. Concern is growing that toxic neonic pesticides could potentially contribute to observed losses in aquatic insect diversity worldwide (<https://www.patagonia.com/stories/dude-wheres-my-hatch/story-136295.html>).



Neonic WDNR Monitoring Results from the Black Earth Creek Watershed After Rain Events and During Base (Normal) Flow 2022.

Impacts of Phosphorus Compliance Decision on Badger Mill Creek

Lindsay Foy – Upper Sugar River Watershed Association



In May 2023, facing a deadline to comply with water quality requirements to reduce phosphorus, Madison Metropolitan Sewerage District's (MMSD) commissioners approved discontinuing their discharge to Badger Mill Creek (BMC). Eliminating effluent entering a stream would usually benefit its overall health. However, in this case, the treated wastewater makes up ~30-50% of the flow of BMC, which complicates the relationship between the creek and the sewage effluent.

The history of sewage discharge into BMC has generally been considered a story of conservation success. Thirty years ago MMSD invested in infrastructure to begin treating Verona's wastewater

by returning a portion of the treated effluent to BMC to avoid transferring water sourced from the Sugar River watershed to the Yahara River watershed via Badfish Creek. Since then, BMC has become a quality trout stream due to increased flow, stable temperature and oxygenation of the water from MMSD. Over time, community organizations, state and local agencies have made additional investments to improve habitat and recreational opportunities of BMC, thereby supporting the development of a cool-water community with trout as the centerpiece. Fast forward to May 2023 when MMSD decided to send all effluent to the Badfish Creek outfall after rejecting other options such as treatment plant improvements, nutrient trading and adaptive management. This solution has lower risks and costs for MMSD, although elevated phosphorus will still need to be addressed through the existing Yahara WINS adaptive management partnership.

But where does that leave BMC and the Sugar River watershed? Fisheries experts at the Wisconsin Department of Natural Resources say eliminating the treated wastewater will indeed hurt BMC's ability to support trout. The challenge now is to determine what can be done to sustain the health and resiliency of the stream before the date (undetermined) when the water will be shut off. As a starting point, MMSD has pledged up to \$1 million for stream improvements and plans to convene a group of stakeholders by September 2023 to set priorities for projects and implementation. But it will take a more comprehensive, long-term effort to sustain BMC as the stream people have come to know and support.

News Brief

Annual Trout Days Celebration

On May 6, 2023 BECWA participated in the [Annual Trout Days Celebration 2023—Zander Park in Cross Plains](#) as part of the Trout Unlimited Fly Casting Clinic. According to Tom Thrall- Southern Wisconsin Chapter of Trout Unlimited: “The Southern Wisconsin Chapter of Trout Unlimited is happy to partner with BECWA to make the Trout Days event a success. Moreover, we are glad to promote watershed conservation efforts to restore and protect Black Earth Creek.”

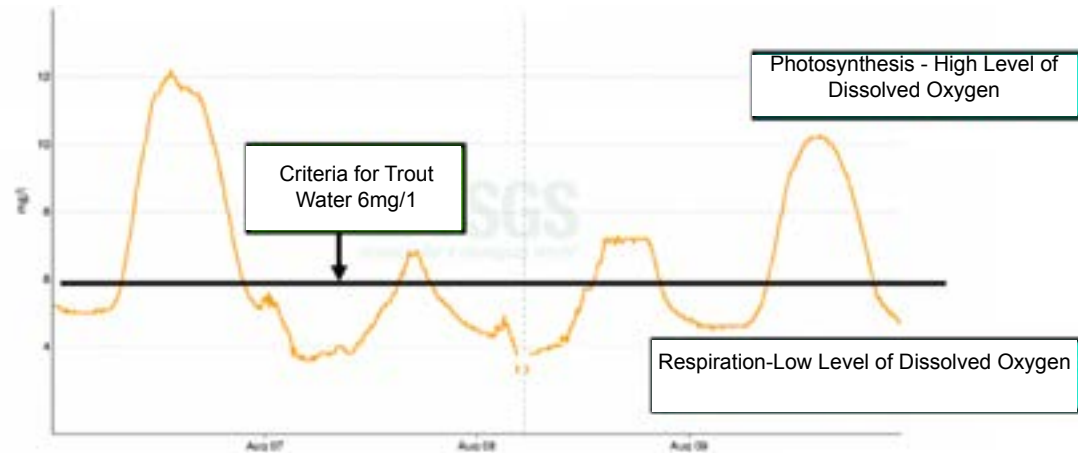
Plan to Continue USGS Monitoring Stations on Black Earth Creek

Andy Morton – BECWA

A sustainable funding arrangement is being developed by the Green Infrastructure Steering Committee to continue monitoring the three USGS water quantity/quantity stations on Black Earth Creek near Cross Plains and adding water quality monitoring to the existing station near Black Earth. This committee, led by CARPC (Capitol Area Regional Planning Commission), includes representatives from Dane County, WDNR, towns, villages, and non-profit organizations in the watershed. These monitoring stations provide important information in real time that can be used to address flooding and water quality issues in the watershed.

The goal of the Steering Committee is to spread costs among multiple entities so that no one group has to bear an excessive financial burden. With the large public/private investment in restoring and protecting Black Earth Creek, monitoring key water quality attributes is important (see graph). The steering committee feels maintaining these stations into the future is a wise course of action and good investment. We hope to have this plan completed in fall 2023. See becwa.org for links to the websites providing monitoring information. BECWA would gratefully accept donations to fund this important plan.

Black Earth Creek Below Treatment Plant -
USGS Station - 0540679
August 6, 2022 - August 9, 2022
Dissolved Oxygen, water, unfiltered, mg/L



Period in August when Dissolved Oxygen was below WDNR Criteria for Classified Trout Waters-Source: USGS (provisional data)

News Brief

Final Resolution on Cardinal-Hickory Creek Transmission Line Still Uncertain

Chuck Tenneson – Driftless Area Land Conservancy

Crews continue construction activities on the 102-mile Cardinal-Hickory Creek high capacity transmission line running from Middleton to Dubuque County, Iowa. Opponents of the project (Driftless Area Land Conservancy, Wisconsin Wildlife Federation, National Wildlife Refuge Association and Defenders of Wildlife) filed suit to prevent the project from crossing the Upper Mississippi River National Wildlife and Fish Refuge. Recently, the three-judge panel for the 7th Circuit Court of Appeals found it was premature to make a ruling because the U.S. Fish and Wildlife Service had not yet made a final decision concerning the crossing. Plaintiffs argue that the Court's decision does not authorize transmission line companies to continue plans to cross the national wildlife refuge, but merely delays addressing fundamental environmental law violations recognized by the District Court. The plaintiffs continue to work with their legal team to determine the best next steps.

Streambank Restoration of Black Earth Creek in Mazomanie

Johnny Armstrong – BECWA

It has been five years since a major flood decimated Mazomanie, Black Earth, Cross Plains and surrounding communities in Dane County. In 2018 the area received 12 inches of rain within 24 hours. The Black Earth Creek swelled creating a flash flood submerging much of Mazomanie. The event led to a disaster declaration by the Governor, and according to Mark Geisler, Director of Public Works, the Village of Mazomanie received a grant for \$1.1 million from the Department of Administration in fall 2022 for restoration and repair of the badly damaged streambanks of Black Earth Creek within the Village limits.

The project began in November of 2022 and was successfully completed as projected by April 2023, under budget with a total cost of \$890,000. The 1.3-mile-long project extends the full length of the village and involved resloping areas of the streambanks and debris removal. Some areas received riprap in heavily eroded outside corners. Future plans include some minor reseeding that could not be completed due to the extremely dry spring. Additionally, there are currently discussions about how to use this project to capture phosphorus reduction credits.

Before and after photos

Photo Credit: Johnny Armstrong



David Lucey, BECWA Treasurer, Retires

Barbara Borns and Steve Born – BECWA

Dave Lucey, a longtime resident of the Town of Berry joined the Board of Directors of BECWA and became our Treasurer in fall 2003. For the past 20 years he has ably handled our treasury, kept track of memberships, maintained our bank balances and monitored our post office box. Dave taught at the Waunakee Middle School for over 32 years. In retirement he has donated hundreds of hours of his time and labor—not only on our BECWA board, but also helping clear and groom the landscapes at Walking Iron Park, Festge Park, and Indian Lake.

He has taken a keen interest in supporting propagation of bluebirds by building and maintaining houses. These efforts resulted in a recent honor: "Bluebird Restoration Association of Wisconsin— 2022 Facilitator of the Year Award." (Pictured on the right with his award!)

BECWA is grateful for Dave's long and important contributions to keeping us financially solvent. He is a true example of an outstanding citizen and watershed steward.





Black Earth Creek
Watershed
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PO Box 164
Cross Plains, WI 53528

Pam Bosben Retires from the Garfoot Public Library

Barbara Borns – BECWA

Pam Bosben, the head librarian at the Garfoot Public Library for 40 years, retired at the end of June 2023. In addition to undertaking the construction of the new library, weathering a terrible storm that removed much of a temporary roof, Pam also led the Library's response to the COVID pandemic. She served several years on the BECWA Board and was generous in allowing us to store our archives and schedule many board and public meetings at the library. She has lived for many years along Black Earth Creek and knows the area well. This quote from Pam is an inspiration for all of us who love Black Earth Creek.



“This vital, meandering swirl of water and life was a playground, a school, a science experiment, and a site for meditative moments that only nature can provide. For many who reside in the Black Earth Creek watershed, the creek is a constant in their lives. A lively stream to mosey by on a long walk, a thundering behemoth when torrential rains come, and a thread of nature not found in every small burg. To have had the privilege of being one of the many whose quality of life was enhanced by this stream and watershed is a gift I will carry as I move on. To have had the opportunity to serve on the BECWA board was an honor. I learned so much from the good people who continue to preserve and defend this essential and vital watershed.”
