


## Fwd: Save Badger Mill Creek

Tanya Sime <tanyas@capitalarearpc.org>

Sat 7/6/2024 7:34 AM

To: Nick Bower <nickb@capitalarearpc.org>

 1 attachments (809 KB)

Solutions for Badger Mill Creek and Badfish Creek.docx;

Get [Outlook for iOS](#)

---

**From:** pat bergen <bergen\_pat@yahoo.com>

**Sent:** Friday, July 5, 2024 10:45:06 AM

**To:** Tanya Sime <tanyas@capitalarearpc.org>

**Subject:** Save Badger Mill Creek

## **Solutions for Badger Mill Creek and Bad Fish Creek**

Pat Bergen – Stakeholder Representative, Friends of Badger Mill Creek  
Environmental Corridor, Ice Age Trail member, Dane County Parks Certified Land  
Steward, City of Verona Parks Volunteer

**Please do not approve the shut off of our return water to Badger Mill Creek.**

Friends of Badger Mill Creek Environmental Corridor definition of Health and Resilience

A **Class 2 trout stream** with robust natural reproduction (as characterized by WDNR) **from County Old PB to the Sugar River**, as a baseline standard, able to withstand short term disturbances and long-term changes, with **water quality and quantity** throughout the year able to support and maintain BMC's aquatic, riparian and **watershed ecosystem status, animal ecological communities**, comparable to current conditions, for the enjoyment of **natural and scenic beauty by the people**.

Madison Metropolitan Sewer District (MMSD) has promised to “do no harm to the Badger Mill Creek.”

WDNR - Department fishery staff have told MMSD staff that permanently eliminating the affluent stream to the badger Mill Creek will likely have deleterious impacts to the brown trout population and brown trout natural reproduction and recruitment. Historical data shows the increase in flow and stabilization of temperature have been beneficial to the trout population and its abundance in the Badger Mill Creek. The effluent stream mimics a groundwater spring that contributes warmer stable water in the winter and colder water in the summer.”

**We cannot allow Badger Mill Creek, a Class 2 Trout Stream, to be converted into a street sewer.**

If MMSD is allowed to shut off our water, the predominate source of water at the headwater would be from Badger Mill Creek Pond, a street sewer pond, that joins the **Upper Badger Mill Creek**.

If Badger Mill Creek Pond is the only initial source of water for the **Upper Badger Mill Creek**, the temperature of the very thin stream water layer will rise dramatically as the sun's rays heat the brown clay bottom underneath, with very

little shade, and will take the already much warmer pond water, and multiply it with the sun's effect which will impact the quality of water to sustain Brown Trout.

Our return water, and Badger Mill Creek Pond water, each have unique characteristics. The mixing of our return water with Badger Mill Creek Pond water has symbiotically produced beneficial water for our Nature Area, for animals and people, using otherwise waste water. Using "grey" water for a good purpose.

The **Stakeholder Group**, *(which has been limited to only discussions assuming that our return water will be turned off)*, has identified baseflow augmentation and groundwater recharge, to replace the possible loss of our return water from MMSD, as our primary focus. In our opinion, **we have been unable to find any significant, steady, and reliable sources of replacement water for our return water from MMSD**

**Bad Fish Creek already has a fish eating advisory** for MERCURY and PCB. 10% more detoured phosphorus and chloride water from BMC will leave more legacy phosphorous and chloride in the creek. MMSD has no plans to improve the treatment of phosphorus in Bad Fish Creek, and will apply for a chloride variance in 2025, again, with no improved treatment in sight.

per WDNR – to choose the option of sending all water down Bad fish Creek, "MMSD will need to provide more documentation to demonstrate that the addition of Badger Mill Creek discharge to the Bad Fish Creek will not result in a lowering of water quality in either Badger Mill Creek or Badfish Creek."

**It is now time to talk about solutions keeping our return water flowing.**

Perhaps a mix of multiple ideas can be used to meet compliance.

To continue the return of treated water to Badger Mill Creek, we encourage the WDNR and MMSD working together to find a way to use **adaptive management** in Sugar River watershed.

The process will most likely require creating a TMDL for upper Sugar River.

If the measurement of compliance can be moved downstream from the convergence of the BMC and Sugar River, we may be able to obtain the needed farmland for the reduction of phosphorus.

Perhaps a mix of available farm land can be obtained by using farms, both to the north and south, to meet compliance.

The Upper Sugar River Watershed has been a huge source of development for the west side of Madison and Town of Verona. That growth will continue in the future.

Dane County has recently acquired the Durst Farm (625 acres) along the Sugar River and will create a watershed park with wetlands. This land is expensive, and required the resources of Dane County to complete. Many of the property purchases in the Sugar River corridor are recent acquisitions from the county, according to the release. These include 156 acres for the Sugar River Wildlife Area Rhiner Unit, 60 acres for the Sugar River Wildlife Area Davidson Unit, 102 acres of Public Hunting Easement next to Davidson, 378 acres for the Falk Wells Sugar River Wildlife Area and 95 acres for the Conservation Easement next to Falk Wells.

[https://www.veronapress.com/news/parisi-announces-largest-conservation-purchase-in-county-history/article\\_8d53d8d4-412c-11ee-97c9-33dd02042a85.html](https://www.veronapress.com/news/parisi-announces-largest-conservation-purchase-in-county-history/article_8d53d8d4-412c-11ee-97c9-33dd02042a85.html)

Fortunately, there is the already established Upper Sugar River Farmers group employing ecological farming practices now, that may be available to spring board the project.

[https://uppersugar.org/Farmers\\_for\\_the\\_Upper\\_Sugar\\_River](https://uppersugar.org/Farmers_for_the_Upper_Sugar_River)

Employ **Ecological Water Requirements** (EWRs) which refers to the flow regimen (quantity and timing of flows) as well as the water levels and water quality required to sustain water-dependent ecosystems. Supporting ecological water requirements is a key component of *environmental water planning*, which is

where the department manages water to enable economic and social uses while protecting environmental values. Understanding the requirements of species to complete their life cycle (or life history requirements) is one of the central components of determining EWRs. In its simplest form this means protecting habitat - both ensuring that habitat of sufficient quality exists and that species have access to it at the right time.

Long Run - Create a plan to fund a **state-of-the-art treatment plant** for all phosphorus, and possibly future mitigation of nitrogen and chloride (if required).

Coordinating phosphorus treatment integrated with the new waste treatment building should provide economies of scale, saving money in the long run.

**Perhaps we could form a new stakeholder group to work with MMSD, to acquire funding for plant and equipment from governmental sources to treat All phosphorus, and possibly chloride and nitrogen.**

Some say let's just make BMC be the same as it was 30 years ago. We cannot go back in time. The growth of homes and people in West Madison's BMC watershed area over the past 30 years has been gigantic. Stream water from the Madison section of Badger Mill Creek has been replaced with street sewer water stored in Badger Mill Creek Pond. Badger Mill Creek Pond will cost taxpayers \$10.5 million to clean legacy phosphorus from the clay lined bottom that has accumulated. Madison just spent \$17 million dollars to upgrade culverts to carry more water, quicker, to Badger Mill Creek Pond. Town of Verona and City of Fitchburg have grown 60%, and Verona has doubled in size. Future growth is imminent.

Some say let's just turn the water off and see what happens. We have pictures of what happens (see below) with our water shut off, and it is not pretty!

**To detour our Badger Mill Creek return water to Bad Fish Creek would be bad for both Badger Mill Creek and Bad Fish Creek.**

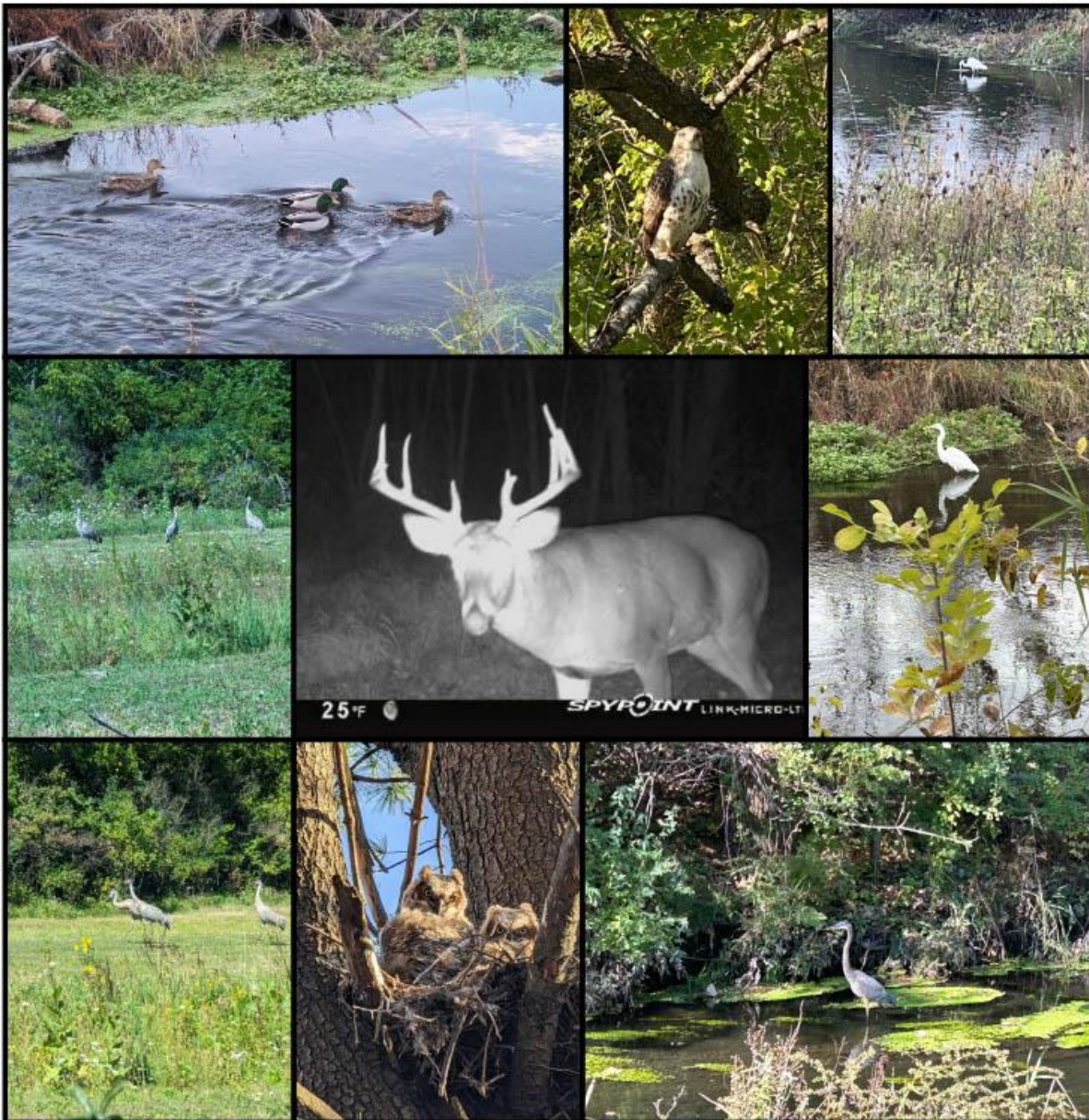
Let's work together to formulate a long-term solution.

**We NEED to solve the problem.** **The real question is, "What will our quality of water be for us, and our children, for the next 30 to 50 years?"**

# Badger Mill Creek Healthy and Resilient



# Animals Depend on Badger Mill Creek



# Badger Mill Creek Unhealthy Water Levels

