From: <u>Topf Wells</u>

To: <u>Downing</u>, J Patrick Forward

Cc: <u>Upper Sugar River Watershed Assoc; John Sayles; Marty Cieslik; Bare, Mike</u>

Subject: Re: Badger Mill Creek Res before Exec Comm on A;pril 20th

Date: Saturday, April 22, 2023 8:49:55 PM

Pat, MMSD has not communicated well on this issue but here's my educated guess as to their reasoning.

Currently, MMSD has a variance for the PH laden effluent it discharges to Badfish Creek in the Yahara watershed. It has the variance because it is funding the WINS/Clean Lakes phosphorus reduction (adaptive management) in the Upper Yahara watershed. MMSD funds a number of practices designed to reduce phosphorus runoff, mostly off agricultural lands in that watershed. Under the DNR program in which MMSD is participating, it has 20 years to reduce the phosphorus entering the waters of that watershed, mostly Lake Mendota, in the amount that it would otherwise reduce with treatment at the plant. The principle underlying the program is that such reductions will result in greater water quality improvements and public benefits than improving the discharge to Badger Mill Creek. If MMSD receives permission to divert the waters it sends to Badger Mill Creek to Badfish, it will promise to reduce more phosphorus through its Upper Yahara Watershed program.

One part of MMSD's justification will be reducing more phosphorus in the Upper Yahara watershed. The District has not voiced a second justification, which I think is quite important in MMSD's plans. Shutting off the water to Badger Mill instantly saves MMSD energy. Returning water to BMC requires pumps, which require energy. MMSD's Chief Engineer is committed to reducing the District's use of energy. Yet another justification is simplification and reduction of expense in MMSD's management of effluent. Once the District shuts the water off to BMC it no longer has any responsibility for the health of that stream. For example, it would not have to worry about possible future requirements to reduce chloride in discharges to BMC.

Several comments:

I'm most concerned about the energy savings. MMSD wants to save energy and/or generate more of its own energy because of climate change, a wholly laudable goal. However, stopping the water to BMC renders that stream more vulnerable to the heat waves and droughts that climate change will cause. MMSD can take a big step to protect an important natural resource, BMC, by continuing to pump that water to the creek. In contrast, the energy that MMSD saves by stopping the pumps really does not make a significant difference in fighting climate change. In addition, MMSD has other options to save energy or internally generate more energy.

Lost in this discussion is the millions and millions of dollars MMSD saved in the adaptive management program in the Upper Yahara. They were able to delay extremely expensive equipment and operational costs by funding runoff practices instead of huge changes at the treatment plant. Even if the District misses its 20 year goal, it receives credit for those phosphorus reductions if it has to remove phosphorus at the plant.

One note of caution: some of the details of the adaptive management program in the Upper Yahara watershed might need clarification. MMSD might have to reduce more phosphorus in non-point practices than it would at the plant. Wade might know some of those details.

Hope this helps,

Topf Wells

On Sat, Apr 22, 2023 at 8:04 PM Pat Downing < downhome@tds.net > wrote:

Hi Again,

Alright, the Badger Mill Creek Res. was approved by the Executive Committee, however Chair Miles asked this question that I could not answer. How does MMSD justify sending the Verona PH laden H2O into the Yahara watershed? Can anyone tell me?

Regards,

Pat

From: Pat Downing

Sent: Monday, April 17, 2023 4:05 PM

To: Wade Moder; Topf Wells; John Sayles; Marty Cieslik

Cc: Mike Bare

Subject: Badger Mill Creek Res before Exec Comm on A;pril 20th

Hi All,

The attached draft resolution about Badger Mill Creek is on the Executive Committee agenda this Thursday @ 5:30pm.

Your in person or virtual comments + materials would be helpful. See the PROCESS TO PROVIDE PUBLIC COMMENT area on the agenda for how to do that.

My Regards,

Pat

Key Dates:

4/20 Executive Committee meeting

4/27 EANR meeting

5/4 County Board meeting

5/8 MMSD comments due

5/11 MMSD public hearing

5/25 MMSD decision