Meeting Notes: Wednesday, Feb. 21, 2024
Badger Mill Creek Stakeholder Group

Agenda, notes, and meeting materials at www.madsewer.org/bmc-plus/

Desired outcomes:

- Shared understanding of:
  - Desired uses for stakeholder organizations
  - Potential project categories supporting those desired uses
  - Updated meeting calendar
- Straw poll indications of desired uses and of priority project categories

Participants:

- Joleen Stinson, Dane County Parks Division
- Laura Hicklin (for Jeremy Balousek), Dane County Land & Water Resources Department
- Ben Schulte, City of Fitchburg
- Pat Bergen, Friends of Badger Mill Creek Environmental Corridor
- Brian Christian, Friends of Badger Mill Creek Environmental Corridor
- Greg Fries, City of Madison
- Kathy Lake, Madison Metropolitan Sewerage District
- Martye Griffin, Madison Metropolitan Sewerage District
- Topf Wells, Trout Unlimited Southern Wisconsin Chapter
- Luke Diaz, City of Verona
- Jamie Aulik, City of Verona
- Chris Barnes, Town of Verona
- David Rowe, WDNR
- Mike Sorge, WDNR
- Alison Lebwohl, Alison S. Lebwohl Consulting (facilitator)
- Mike Rupiper, EOR (facilitator)

Other Attendees:

- Amanda Wegner, Madison Metropolitan Sewerage District

Topic	*Decisions, information gathered, actions*
Welcome and check-in	*Large group check-in.* Mike Rupiper gave an overview of the current remaining project calendar (see attached). It was noted that the June meeting date is the 12th, not the 19th. Both Mike and Alison noted that the group is beginning to tighten its focus, and invited members to focus on their interests rather than their positions during this phase of the project to support the creation of an optimal porfolio of projects.

Desired uses and potential projects	Mike Rupiper presented a summary of the group's worksheets for Desired Uses (see attached) and Alison conducted a straw poll. It was noted by group members that:
	• "stormwater management" is a preferred term to "stormwater conveyance."
	• there is likely overlap in projects contributing to these Desired Uses.
	• While "stormwater management" is included in Desired Uses, it is included because it is a current use of the stream and stakeholder group members want to remain aware of project impacts on stormwater management – and the impact of stormwater management on Badger Mill Creek. Projects that improve stormwater management as a primary objective would not fall under this group's charge of strengthening the health and resilience of Badger Mill Creek and do not need to be considered by this group.
	
	STRAW POLL:
	• Statement: The group will focus its efforts on potential projects and information gaps related to these five Desired Uses identified by stakeholder group members:
	  ○ Nature-based recreation
	  ○ Scenic beauty
	  ○ Stormwater management
	  ○ Trout stream (Class II)
	  ○ Wildlife habitat
	• Results: 100% agreed (green & yellow)
	
	Mike Rupiper presented a summary of the group's worksheets for Attributes (see attached). It was noted that "peak flow capacity" is a preferred term to "flow capacity".
	
	Mike Rupiper presented a summary of the group's worksheets for Project Categories (see attached) and group members had an opportunity to modify and discuss the contents. The version agreed to by the group is attached below. Alison conducted a straw poll that asked stakeholder organizations to each distribute 100 points across the project categories. It was noted that the category "groundwater recharge" includes reducing withdrawals.
	
	STRAW POLL:
	• Question: Which Project Categories should the group focus its efforts on? (Divide 100 points across these Project Categories -- 100 points per organization)
	• Results: The following Project Categories accounted for 80% of points allocated (see attached for all categories and points)
	  ○ Baseflow augmentation (280 points/25%)
	  ○ Groundwater recharge (195 points/18%)

	○ Watershed management plan (125 points/11%) ○ Wetland restoration (115 points/10%) ○ Shoreland buffers (85 points/8%) ○ Bank restoration/stabilization (75 points/7%) Groundwater was identified as a key information gap. More information on this topic will be on the agenda for the group's April meeting. Representatives from CARPC and Upper Sugar River Watershed Association were unable to attend the meeting but shared their straw polling results with project facilitators afterwards. Their straw polling is reflected in the attached results.
Other noteworthy items	Dave Rowe and Mike Sorge clarified that Class II trout stream is a reproduction classification for fish management purposes which is sometimes, but not always, the same as a stream's fish and aquatic life classification for wastewater discharge permits.
Action items	Facilitators: • Type up and share notes with the group. • Incorporate decisions and discussions into charter and project planning as needed. • Send out a link for additional groups to sign up to give presentations. Stakeholder group participants: • Review these notes and email Alison & Mike with corrections. • **In order to maximize the value of our time together, all participants commit to doing advance work, including providing feedback through advance surveys.**

Remaining Meeting Schedule / Topics

Date & Time	Location	Main Tasks / Planned Topics
Wed., Feb. 21, 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #6* • Discussion of Desired Uses, Attributes, and Project Categories • Ranking / Prioritizing Project Categories
Wed., Mar. 20 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #7* • Presentations from Friends of Badger Mill Creek, City of Madison and Trout Unlimited • Develop initial list of potential projects for priority Project Categories • Develop initial list of key project information needed, eg, cost, impact, co-benefits
Wed., Apr. 17, 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #8* • USRWA Habitat Survey Results • Groundwater information • Expand and refine list of potential projects and key project information
May or June 2024	TBD	*Community Meeting* • Potentially in conjunction with USRWA meeting
Wed., May 15, 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #9* • Field trip • Refine list of potential projects and identifying key project information for those projects
Wed., June 12, 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #10* • Develop initial portfolio of recommended projects
Wed., July 17, 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #11* • Refine portfolio of recommended projects (straw poll)
Wed., Aug. 14, 2024 10 -11:30 AM	Verona Public Library	*Facilitated Stakeholder Meeting #12* • Vote on final portfolio of recommended projects to present to the District Commission
Thurs., Sept. 12, 2024 8 a.m.		*Present final recommendations to the District Commission*

Summary of Desired Uses by Organization

Desired Uses	WDNR	City of Madison	Dane Co.	CARPC	City of Fitchburg	Friends of BMC	MMSD	SWTU	USRWA	Town of Verona	City of Verona
Nature-based recreation			X	X	X	X		X	X	X	
Scenic beauty			X			X	X	X			
Stormwater management / flood protection		X	X	X	X		X			X	
Trout stream (Class II)	X	X				X		X			X
Wildlife habitat			X	X		X	X	X	X		

Pre-meeting survey results from Dec

Q3. Please rank the relative importance of the following potential uses of BMC to you and the organization you represent:

Summary of Attributes by Desire Uses

Attributes	Nature-based recreation	Scenic beauty	Stormwater management / flood protection	Trout stream (Class II)	Wildlife habitat
Baseflow (sufficient to support existing flora & fauna)		X		X	X
Cold water temperature				X	
Floodplain connection			X	X	X
Peak flow capacity (water quantity)	X		X		
Habitat				X	X
Ice Age Trail	X				
Native vegetation	X	X			X
Non-eroding / stable banks	X	X	X	X	
Springs				X	
Trout (reproduction / recruitment)	X			X	
Water quality	X		X	X	X
Wading birds (herons, egrets, kingfishers)	X	X			X
Wetlands (quality)	X	X			X

Summary of Potential Project Categories by Desired Uses

Project Categories	Nature-based recreation	Scenic beauty	Stormwater management / flood protection	Trout stream (Class II)	Wildlife habitat
Dredging (of accumulated sediment)	X		X		
Baseflow augmentation	X			X	X
Groundwater recharge (infiltration, conservation, reduce withdrawals)				X	
Bank restoration / stabilization		X	X	X	
Invasive species removal		X			X
Remove channel obstructions	X		X		
Watershed management plan					
Wetland restoration		X	X		X
Fish habitat (In stream riffle and pool projects)				X	
Trail and Parks projects (cooperative projects with Ice Age Trail Alliance/ Dane County Parks, including maintenance)	X				
Shoreland buffers (native buffer installation, riparian buffer purchase program)		X			X
Community access (boardwalks, piers, wildlife view areas to provide visibility and access)	X				
Education and Outreach (signage, etc…)	?		?	?	?

More specific project examples that could fall under different project categories depending on the details:

Fitchrona Rd/Goose Lake water level control	X		X	Maybe	
Low flow release structure from City Madison Nesbitt Road basin				Maybe	

Project Categories	CARPC	Dane County	Fitchburg (City)	Friends of BMC	Madison (City)	MMSD	Trout Unlimited	Upper Sugar River	Verona (City)	Verona (Town)	WI DNR	TOTAL	%
Dredging						20						20	2%
Baseflow augmentation			20	50	50	20	80		5	55		280	25%
Groundwater recharge (infiltration, conservation)	15		20	10	50	20			5	5	70	195	18%
Bank restoration / stabilization	10	25	10				10			10	10	75	7%
Invasive species removal	10											10	1%
Remove channel obstructions			5	10		20				15		50	5%
Watershed management plan	20	25	20	10				50				125	11%
Wetland restoration	20	25	10	10		20			15	5	10	115	10%
Fish habitat (In stream riffle and pool projects)				10			10		15	5	10	50	5%
Trail and Parks projects (cooperative projects with Ice Age Trail Alliance/ Dane County Parks, including maintenance)	10		10					25				45	4%
Shoreland buffers (native buffer installation, riparian buffer purchase program)	15		5						60	5		85	8%
Community access (boardwalks, piers, wildlife view areas to provide visibility and access)		25										25	2%
Education and Outreach (signage, etc…)								25				25	2%
	100	100	100	100	100	100	100	100	100	100	100		

Summary of Information Gaps

Groundwater

- More information about groundwater (WDNR)
- Can we modify groundwater withdrawals to protect / improve / enhance baseflows? (WDNR)
- What are the negative impacts of pumping groundwater to supplement flow (Dane Co.)
- Could controlled surface water flows be supplemented with groundwater to achieve more consistent flows and dilute warmer/less "clean" surface waters. Concerns over using drinking water to supplement creek? (City of Fitchburg)
- Another question is based on the groundwater and stormwater models and data and predictions of groundwater and stormwater levels, is the current water sources (groundwater and stormwater) sufficient to maintain a healthy stream of those sources are managed correctly (protecting groundwater inlets, tributaries etc; managing stormwater so it benefits the stream water inputs. (MMSD)
- Would be great if we could have more groundwater information to know the quantity and quality and where it is to ascertain if a groundwater pump system could be installed that could provide a controlled supplantation of flow to BMC when it is needed, and at the same time the system would also have some type of additional water that would recharge or replace the groundwater that was pumped. That excess water could be from the storage of the stormwater or infiltration of the stormwater that comes through the goose lake area? (MMSD)
- Need to know a good deal more about soil types and water table in the area where we would recharge and refill the shallow aquifer. (City of Madison)

Flow

- Causes of low flow in BMC (WDNR)
- What kind of sustained flows could realistically be provided from controlled discharge of surface waters? (City of Fitchburg)
- Feasibility study of low flow weir or release structure (Town of Verona)
- How is the stream expected to perform in a natural state, what is the expected hydrology and water quantity for a stream with the watershed attributes it resides in (MMSD)
- Determine 50 and 100 year impact related to decreased base flow, maintaining base flow and increasing base flow during drought and flooding events (USRWA)

Costs

- Long-term operation and maintenance costs and who is responsible (Dane Co.)
- A comprehensive study including modeling of the feasibility and costs and benefits of restoring connectivity of historic and new tributaries and wetlands. This could possibly be a 2025 project for UW Madison Water Resources Mgmt Workshop (USRWA)
- Feasibility and costs and benefits study (USRWA)

Water Quality

- Is the water quality/temperature conducive to achieving other goals of this group? (e.g. trout stream) (City of Fitchburg)
- What is the expected water quality for a stream of this size and type in a watershed of this size and type. (MMSD)

Community Input

- Community wide survey to ascertain support for such projects (Town of Verona)
- Landscape architects could be engaged in a community visioning process (USRWA)

Other

- A bank survey would be needed (and may already exist). (City of Madison)

- Have there been any studies done related to insects or macroinvertebrates? (CARPC)
- Wetlands (City of Fitchburg)
- Permitting requirements (MMSD)
- As the stream is returned to its natural state with no artificial inputs or sources of water, an instream flow study that looks at what the natural hydrograph is and the flora and fauna in the stream and what the hydrograph and water quality elements are needed for the success of those species and ensuring that the stream can perform the way it needs and support those species in all seasons. (MMSD)
- Would be great if we could have a consulting firm prepare alternatives to the goose lake stormwater pond project that would help BMC and the stormwater issue. For example alternatives that look at using the excess water in the high storm events in another way – e.g. slow stormwater release, groundwater supplementation, or other? The goal of the alternatives analysis would be to see what options there would be to store and use the excess water when BMC needs it the most (MMSD)
- Natural Resource inventory (Town of Verona)
- Ice Age Trail and Dane County long range plans (Town of Verona)