

TRANSMITTAL MEMO

TO: MISSISQUOI BASIN WATER QUALITY COUNCIL (BWQC)
FR: MISSISQUOI BASIN CLEAN WATER SERVICE PROVIDER (CWSP) STAFF
RE: MATERIALS FOR SPECIAL MEETING ON 3/23/23 MEETING
DA: 3/16/23

=====

Greetings, Missisquoi BWQC members. The special meeting scheduled to discuss prioritization of projects will take one week from today. The following notes provide some background material for the meeting. Please let me know if you have any questions. [Apologies to those of you involved with the Lamoille BWQC as well as the Missisquoi BWQC. Both are meeting on 3/23. The meeting agendas are very, very similar. And thus the transmittal memos and materials are also very, very similar.]

Seating of any new reps or alternates (organizational matters)

This is a standing agenda item. BWQC members will have the opportunity to recognize any new representatives or alternates, should that be needed.

Voting Process

In my role as CWSP staff, I feel it is important that BWQC members have some context for voting prior to the meeting. As shown in one of the pages attached to this memo, the CWSP proposes that:

- the BWQC would act on ID/Assessment projects apart from Design/Implementation projects;
- the BWQC would consider whether projects require separate votes (with the determination being a function of 1) whether funding is available for all projects in category and 2) whether any projects fly in face of reasonable cost effectiveness);
- the BWQC would then consider need for any co-benefit score adjustment; and finally,
- the BWQC would adopt motions/vote, as necessary.

Cost Effectiveness

The item for “Cost effectiveness” will provide time for NRPC (as CWSP) to provide its preliminary position/thoughts on what might be called a cost effectiveness threshold. The threshold (or target) is basically a cost (dollars per KG) beyond which project cost effectiveness might be deemed unacceptably low. Some numbers that could provide points of reference are included in the materials attached.

Prioritized project lists

BWQC voting on projects would occur as part of this agenda item. Please note the packet includes separate lists for ID/Assessment projects and for Design/Implementation projects. The lists are presented in rank order as determined by the current prioritization system. The packet also includes ‘contextual’ material concerning the amount of available funding as well as actual amounts of funding requested for the two categories of projects. Please note: It is possible the CWSP will recommend that all ID/Assessment project applications be funded and with limited discussion. Discussion of Design and Implementation project applications will be more involved.

Schedule for next Call for Applications

This item is included on the agenda to allow discussion of the timing of the next application round, in light of what we have learned so far in the first round.

Updates and Conclusion

As time allows, we will provide updates, and hope meeting participants will share any they have.

AGENDA

Missisquoi Basin Water Quality Council (BWQC)

Thursday, March 23, 2023

11:30 AM-1:30 PM

Virtual Meeting/Held Via Zoom* (computer/smartphone/tablet etc)

(<https://us02web.zoom.us/j/86738338224?pwd=bVB0dEJ1U2xlRytHTWo0K1BlalZVUT09> details below)

1. Welcome and Introduction
2. Review Zoom meeting protocol
3. Review/adjust and approve agenda
4. Approval of Minutes
5. Public comment not related to items on agenda
6. Seating of any new reps or alternate(s) (if required)
7. Voting process
8. Cost effectiveness "threshold"
9. Prioritized project list
10. Schedule for next Call for Application(s)
11. Updates
12. Conclusion

Missisquoi Basin Water Quality Council March 23 2023 Meeting

Topic: Missisquoi BWQC meetings

Join Zoom Meeting

<https://us02web.zoom.us/j/86738338224?pwd=bVB0dEJ1U2xlRytHTWo0K1BlalZVUT09>

Meeting ID: 867 3833 8224

Passcode: 086601

One tap mobile

+13017158592,,86738338224# US (Washington DC)

+13052241968,,86738338224# US

Dial by your location

+1 309 205 3325 US

+1 312 626 6799 US (Chicago)

+1 646 558 8656 US (New York)

Staffing provided by Northwest Regional Planning Commission (NRPC), the Basin 6 Clean Water Service Provider. NRPC's physical / mailing address is 75 Fairfield Street, St. Albans, Vermont 05482.

NRPC will ensure public meeting sites are accessible to all people or provide an opportunity to request accommodations. Requests for free interpretive or translation services, assistive devices, or other requested accommodations, should be made to Amy Adams, NRPC Title VI Coordinator, at 802-524-5958 or aadams@nrpcvt.com. NRPC will accommodate requests made no later than 3 business days prior to the meeting for which services are requested, and will strive to accommodate all other requests. This support is provided in accordance with provisions of the Americans with Disabilities Act (ADA) of 1990.

Missisquoi Basin Water Quality Council (BWQC) Meeting
DRAFT MINUTES
Wednesday, March 1, 2023, 11:00-1:00 PM
Virtual Meeting/Held Via Zoom* (computer/smartphone/tablet etc.)
<https://youtu.be/dg3AnUS-po8>

**A VIDEO RECORDING OF THE MEETING IS AVAILABLE THROUGH THE NRPC
YOUTUBE CHANNEL.**
**THE WRITTEN MINUTES ARE A SYNOPSIS OF THE DISCUSSION AT THE
MEETING. MOTIONS ARE AS STATED. MINUTES WILL BE SUBJECT TO
CORRECTION BY THE COUNCIL. CHANGES, IF ANY, WILL BE RECORDED IN
THE MINUTES OF THE NEXT MEETING OF THE COUNCIL**

Council Members: Barry Lampke (Q), Sarah Downes (Q), Dan Seeley (Q), Lauren Weston (Q), Ellen Fox, Beth Torpey (Q), Tucker Malone (Q), Lindsey Wight (Q), David Allerton, Kent Henderson joined at 12pm (Q), (Q=toward quorum).

Staff: Dean Pierce, Dea Devlin

Guests: Karen Bates

Voting Members not present: Allaire Diamond (Alternate present), Edwin Ted Sedell

1. Welcome and Introduction

Lauren Weston opened the meeting as BWQC Chair at 11:02. Everyone on the call introduced themselves.

2. Review Zoom meeting protocol

Lauren Weston reviewed the Zoom norms.

3. Review/adjust and approve agenda

No adjustments offered to the agenda. Lindsey Wight moved to approve the agenda as presented, Beth Torpey seconded the motion. Motion carried.

4. Approval of Minutes

Lindsey Wight moved to approve the minutes from the last meeting with two adjustments: changing the date to January 4th, **2023** and correcting the attendance where Barry Lampke was marked as present when he was in fact not at the meeting. Sarah Downes seconded the motion. Barry Lampke abstained due to absence at last meeting. Motion carried with one abstention.

5. Public comment not related to items on agenda

No public comment was offered.

6. Seating of any new reps or alternates if required

Dean Pierce shared that there is a change in the representation for the Orleans Conservation District, but this will be addressed in a future meeting when that representative is present.

7. “How-to” relating to online Application form.

Dean Pierce explained that this meeting will be shorter because of the anticipated additional meeting surrounding prioritization that will follow the project application deadline happening next week. Dean Pierce also shared a new FAQ page that is online at: <https://www.nrpcvt.com/services-programs/water-resources/project-application-faq/>. Dean Pierce reviewed some requirements for completing the online application for projects.

8. Scheduling of next meeting (to prioritize projects)

Dean Pierce shared the results of the poll for scheduling out the next meeting, indicating that there was a larger response for a meeting time on March 22nd. The group settled on a special meeting of the Basin Water Quality Council on Thursday, March 23rd from 11:30-1:30pm.

9. Updates:

- a. Compensation of BWQC representatives and alternates.**
- b. Prequalification of partners and subcontractors.**
- c. DEC Guidance/ emerging Operations and Maintenance policy.**
- d. Public Engagement Policy and Committee.**

Dean Pierce shared updates that alternates can be compensated for attending meetings even in the event that they do not vote at said meeting.

Dean Pierce shared that the master agreement is under legal review for the prequalification of contractors and partners and that the DEC has communicated they will get it out as soon as possible.

Dean Pierce shared that the DEC has released some clarification on the CWIP funding policy. Dean Pierce shared there is a comment period released by the DEC for Chapter 6 which closes on March 16th. Dean Pierce shared that Operations and Maintenance is being given its own chapter.

Dean Pierce shared that the NRPC is still reviewing the Public Participation Policy internally and hopes that it can be discussed at the next regular meeting of the BWQC.

10. Conclusion

Beth Torpey moved to adjourn the meeting. Sarah Downes seconded the motion. Motion carried.

Voting Process

Prioritization notes

- From Rule

§ 39-403. Clean Water Projects. (a) With direction from the BWQC and in consultation with the applicable basin plan, the CWSP shall oversee identification and prioritization of clean water projects in accordance with the requirements of 10 V.S.A., Chapter 37, Subchapter 5, this Rule, and guidance.

(e) Clean Water Project Selection. Based upon project priorities identified under § 39-403(d), the BWQC shall consider the preliminary scoring and ranking of all proposed clean water projects as drafted by the CWSP for both project development or implementation categories and make any adjustments to the cobenefits scoring as needed. The BWQC shall vote to advance clean water projects for both development and construction to fulfill pollution reduction goals. Individual clean water projects should not be voted for advancement outside of this selection process unless to address an urgent water quality concern with the concurrence of the Secretary.

Proposed approach until Guidance finalized

- Act on ID/Assessment projects apart from Design/Implementation projects
- Consider whether projects require separate votes, as function of:
 - Is funding available for all projects in category?
 - Do any projects fly in face of reasonable cost effectiveness?
- Consider need for any co-benefit score adjustment
- Adopt motions/vote as necessary

Cost Effectiveness “Threshold”

Or acceptable minimum?

Things to consider

- CWSPs and BWQCs *must* consider cost effectiveness when selecting projects for funding.
- Key metric is cost per KG of Phosphorus reduced
- Cost data we have now is not great (few COVID era projects; predated requirements like cultural review).
- DEC doesn't expect true thresholds until CWSPs and BWQCs have better data (gained from project rounds).

More things to consider

- The average 'cost per KG reduction' is the basis for CWSP contracts with DEC.
- For the three basins in northwest Vermont, the numbers look like this:

Basin	P Target in KG	Project Funds Avail	Avg Cost Per KG
5	41.9	\$ 548,539	\$ 13,092
6	145.3	\$ 1,657,731	\$ 11,409
7	39.8	\$ 546,830	\$ 13,739

Different project types have different costs

Table 3. Clean water project categories' estimated design/engineering (if applicable) and construction costs per total phosphorus load reduction (kg/yr) averaged to estimate "cost rate" per non-regulatory target land use sector.

Non-regulatory target land use sector	Clean water project categories representing costs of implementing non-regulatory targets	Estimated design/engineering (if applicable) and construction cost per total phosphorus load reduction (\$/kg/yr)
Streams*	Floodplain/stream restoration†	\$16,647
	River corridor easement	\$10,041
	Riparian buffer restoration‡	\$5,116
	STREAMS SECTOR AVERAGE COST RATE	\$10,601
Developed	Stormwater best management practices (BMPs)	\$46,026
	Non-regulatory road BMPs	\$3,153
	Riparian buffer restoration‡	\$5,116
	Lake shoreline restoration§	\$8,333
	Lake shoreland runoff treatment	\$16,482
	DEVELOPED SECTOR AVERAGE COST RATE	\$15,822
Farm field††	Riparian buffer restoration‡	\$5,116
	Lake shoreline restoration§	\$8,333
	FARM FIELD SECTOR AVERAGE COST RATE	\$6,725
Forest††	Non-regulatory forest road BMPs	\$15,245
	Riparian buffer restoration‡	\$5,116
	Lake shoreline restoration§	\$8,333
	FOREST SECTOR AVERAGE COST RATE	\$9,565

Prioritized Project Lists

Context

Basin	P Target KG	Project Funds Avail for year (7/1/22-6/30/23)	ID/ Assessment baseline (7%)	ID/ Assessment requested	Design/ Implementation allocation	Design/ Implementation request
6	145.3	\$ 1,657,731	\$ 116,041	\$ 15,702	\$ 1,541,690	\$1,027,020

ID AND ASSESSMENT PROJECTS—CWSP RANKING

Applicant Organization	Project ID from WPD	Description of Project	Project Phase	Project Cost (Proposed Phase)	Total Project Costs	RANK
Missisquoi River Basin Association (MRBA)	1924	Facilitate public participation in multi-sector project development in North Troy on reaches 23 and 25 in the Upper Missisquoi. Projects being pursued include River Corridor Easements, scoping for a land management plan to provide expanded public trail access and recreational use, potential wetland restoration, development of a conservation tree nursery, and floodplain restoration with riparian buffers to increase buffer width.	Assessment ID or Development	5995	2000000	1
Franklin County Natural Resources Conservation District	11350	Franklin County NRCD, along with a subcontract with Franklin Watershed Committee, will coordinate with landowners, managers, and other stakeholders to develop previously identified floodplain restoration and buffer planting projects in the Lake Carmi watershed. Potential project sites include Marsh Brook, Prouty Brook, and small tributary to Lake Carmi off of Sandy Bay Rd. Project activities include coordination with landowners, site visits with interested landowners and DEC staff, basin planner consultation, identifying potential barriers, leverage points, site constraints, and next steps for projects, and reporting. We expect to report on four projects total: two on Marsh Brook, one on Prouty Brook, and one on a small tributary near Sandy Bay Road. This project addresses one other project already existing in Watershed Project Database: WPD ID 11074 (Education/outreach re revegetation of drainage channel @ Sandy Bay Road access area, Lake Carmi).	Assessment ID or Development	6060	18180	2
Missisquoi River Basin Association (MRBA)	1657	Engagement and coordination with stakeholders, the dam owner, adjacent landowners and project designers to remove the failing dam at Sleeper Pond/Mud Creek. This work will include site visits and ongoing communication with stakeholders.	Assessment ID or Development	3647	0	3

DESIGN AND IMPLEMENTATION PROJECTS—CWSP RANKING

Applicant Organization	Project ID from WPD	Description of Project	Project Phase	Annual P Reducti on KG	Total Project Costs	KG/\$10K Overall	co-benefit score (out of 15)	RANK
Missisquoi River Basin Association	11352	Following geomorphic assessment, and preliminary design and final design, floodplain restoration and soft stabilization plans recommend green infrastructure including an engineered log jam, live stakes and fascines to stabilize the bank while providing channel access to the floodplain increasing the sediment and nutrient retention potential in reach M02 on the western side of the Trout River channel, North of Longley Bridge Road in Montgomery.	Implementation	14.63	305354	0.2395580	7.5	1
Friends of Northern Lake Champlain	11054	The concept design proposes to replace the failing sea wall with encapsulated soil lifts. Two small rain gardens near the entrance to the boat ramp are proposed to treat stormwater runoff from the parking area as well. In addition to the structural practices, a swale and culvert on the southern side of Shipyard Road across from the beach are proposed to properly manage this runoff and direct it to the stream rather than over the road.	Final Design	1.97	22000	0.5406592	10	2
Orleans County NRC	11323	This proposed, shovel-ready culvert replacement project is located on an unnamed tributary to Taft Brook in the Upper Missisquoi River basin featuring prime coldwater habitat and thermal refugia for brook trout. There are three culverts all within 0.5 miles of one another, they are located on Corrow Basin Road, Balance Rd, and Taft Brook Rd. The 3 existing culverts are undersized, improperly graded and perched, creating impassable barriers for migratory fish. The structures also contribute to water quality issues by interfering with upstream sediment transport and by generating significant erosion of sediment into the brook. Localized flooding has also been a repeated problem at the stream crossing sites.	Implementation	4.9	359500	0.0722181	10	3
Town of Montgomery	11360	The project replaces an existing corrugated metal culvert (6'X60') on Black Falls Road, a gravel road in Montgomery, VT. The structure conveys the largest tributary of Black Falls Brook, a second-order alpine headwater stream in the larger Trout River subwatershed. The existing structure is geomorphically incompatible with its setting. This is evidenced by significant debris and sediment accumulating upstream, which is indicative of water being unable to pass through the structure at an appropriate speed during high flows. The downstream end of the structure also presents signs of significant erosion, with ~30-foot-high bare sediment gullies and multiple landslides along the stream's left bank. 100% design is complete for this project and the replacement structure is a 16'X8.5'X70' precast concrete box culvert. The project restores the stream to its least erosive condition and mitigates reach-scale geomorphic instability. The project also restores access to 2.5 miles of high-quality habitat for brook trout upstream of the structure. In earlier phases of the project, Staci Pomeroy, DEC River Scientist noted that the sediment/nutrient pollutant reduction potential for this project can be described qualitatively as 1) moving reach scale sediment condition toward equilibrium; 2) reducing aggradation upstream and incision downstream; and 3) improving performance in flood conditions and reducing scouring.	Implementation	3.23	810000	0.0202508	2.5	4

Design/Implementation P Reduction progress

Basin	Annual P Reduction in applications	Annual target	Start up allowance
6	24.73	145.3	29.1