

Lake Champlain Basin Program  
Technical Advisory Committee Meeting  
Wednesday March 1<sup>st</sup>, 2017  
10:00 AM – 12:00 PM  
**\*Call-in Only\***

**TAC Meeting Summary**

Attendance:

Staff: Meg Modley, Matt Vaughan, Fred Dunlap

Online: Mike Winslow, Bob Brower, Kip Potter, Angela Shambaugh, Jenn Callahan, Breck Bowden, MaryJo Feuerbach, Eric Perkins, Ed Snizek, Jamie Shanley, Curt Gervich, Kevin Farrington, Neil Kamman, Andrew Schroth, Steve Kramer, Corina Parnapy, Kevin Behm

Presenter: Blaine Hastings (VT DEC)

**I. 10:00 AM Executive session: Enhanced BMP Grants ROD**

Breck: Motion to approve draft Enhanced BMP grants ROD. Seconded by Neil. All in favor.

**II. 10:45 AM Updates and Announcements**

Mike asked TAC members to send Matt any updates via email to distribute. Matt received no updates.

**III. Summary of Previous TAC meeting**

Breck: Motion to approve summary of February 1<sup>st</sup> TAC meeting as written. Seconded by Kip. All in favor.

**IV. LCBP updates, *Matt Vaughan presented for Eric Howe, LCBP***

- Opportunities for Action – Public meetings have all been held with the three CACs; a total of 25 people attended the meetings. The public comment period will remain open through March 6, 2017. Comments will be reviewed and incorporated, where necessary, into the Plan and the final plan will be reviewed with the Executive Committee during a meeting on March 15, 2017. From that point, the plan will be circulated for final review with the EPA Office of International and Tribal Affairs and then, pending their approval, circulated for signatures. An OFA release event will be planned for June 19, 2017, pending completion of the approval and signature process.
- Request for Proposals:
  - Local Implementation grants RFPs all have been closed and award decisions made for all categories. These projects are going through workplan approval process now to begin work in the next few months.
  - Saint Albans Innovative Ag BMP and (separate RFP) Large BMP implementation and planning grants: these RFPs were issued in November and closed January 5. TAC reviewed the draft ROD in February and it was approved by the Executive Committee on February 9. Award and decline letters were mailed to applicants on

February 22. We should be on track to have the Record of Decision for the large BMP implementation category prepared for March 15 Executive Committee agenda.

- Eric worked with David Mears (Vice-Dean at Vermont Law School and former VT DEC Commissioner), Trey Martin (former VT Secretary Administration), Julie Moore (new VT Secretary ANR) and David Deen (VT Legislature) to host a “Lake Champlain Leadership Learning Session” for the new Scott Administration staff and new State legislators at the VT State House last Thursday. The event was very well attended – over 50 people; very good feedback from participants. Several TAC members participated on the panel – thank you!
- Stephanie Castle’s last day with LCBP was February 17. A new position description has been posted and is open through March 3rd. We hope to have this position filled by early April.
- The Steering Committee met February 15-16 in Lake Placid, and approved a preliminary budget (pending the FY17 Federal Budget approval. The current Continuing Resolution is through April 28 so we likely won’t know what the LCBP FY17 appropriation will be until that time. LCBP Staff will run through the budget as it was approved by the Steering Committee during their April meeting (Eric may have another commitment that day).
- The Steering Committee charged TAC with the task of developing a clearer task description for the tile drainage research study, for a project cost of \$200,000. The TAC should prepare this description in time for the May 9 Steering Committee meeting.
- The Steering Committee approved the pre-proposal process for developing the technical budget, beginning with FY18. This process will begin in May 2017 with the Steering Committee and TAC will weigh in on priorities to identify in the call for preproposals in September 2017. For this year, we will need to think about timing of pre-proposals for work that could be funded in FY18 vs release of RFPs for Fy17-funded work. This has the potential to be very confusing to applicants.
- NYS DEC as agreed to serve as the new local sponsor for the USACE Champlain Canal barrier feasibility study.

**V. Presentation of Workplan for McKenzie Brook Watershed Project, Blaine Hastings (VT DEC)**

Past water quality monitoring show that streams in the McKenzie Brook watershed area chronically exceed water quality standards. Last year was dry so they couldn't get many good samples. VT DEC submitted workplan last summer - included semi-annual progress report and final report, and flow and nutrient load estimates for monitored streams.

When Blaine presented new workplan last fall, TAC raised some questions and concerns. This was partly because Blaine’s team discovered limited options for flow gauging and many challenges for estimating ungauged flows and nutrient loads. They committed to discuss and look into this further.

Blaine’s team decided to set gauges on the West branch of dead creek in Bridport and East creek on the north fork. Advantages for gauging these sites outweigh the loss of gauging directly in the study area. They plan to compensate by gauging precipitation in

the study area to estimate ungauged flows. This should help reduce uncertainty in results. This affected timeline and they couldn't deploy before winter.

Updated hydrologic monitoring plan: For ungauged stream flows, wanted simple, feasibility without long-term datasets, produce continuous daily streamflows. They chose a parsimonious watershed model: this is a continuous daily water balance based on curve number methods. It was originally developed for agricultural watersheds. It has a subsurface moisture accounting method to track decrease in baseflow. It is relatively straightforward and only requires four adjustable parameters to be calibrated.

Locations for precipitation gauging are to be determined, but can be flexible. Some would be outfitted with snowfall measurement capabilities. They will rely on USGS protocols for stream and precipitation gauging.

Water quality sampling will be done in 7 locations. They plan to measure temperature, total phosphorus, total dissolved phosphorus, total nitrogen, and turbidity. This will be coordinated by Ethan Swift. They hope to begin sampling by the end of april through and continue through mid-November.

Neil reviewed the workplan and thinks that it looks good. Neil emphasizes that the water quality sampling will be collaborated with Addison county river watch and Middlebury College. He thinks that this is a great partnership opportunity. There is a good amount of match from DEC outside of Basin Program funding.

Kip: Wondering about modeling ungauged streams. Will you collect discharge measurements at ungauged sites? Blaine: Yes. Kip: How will you adjust the 4 model parameters? Blaine: Adjust parameters based on gauged streams, then take discharge measurements in ungauged streams for validation.

Breck: Plan looks very good. Watersheds shown purple in the workplan - these don't have good places to measure discharge? Blaine: That's correct. Stony Creek is dry most of the summer. Wards Creek is lake affected, so the drainage area above lake effect is low. Breck: perhaps we can get a summer intern to help get discharge measurements to validate flows in ungauged streams. Concerned that an instantaneous measurement of discharge will have a lot of variance compared to model.

Neil: Best plan might be to get some data and then work together on the modeling work to see what will work.

Jamie: Do you think there are enough precipitation gauges to handle heterogeneity? Blaine: We will have 12 tipping bucket gauges, which is quite dense to characterize the variability. Currently the closest might be in Middlebury. Added error bars will be a good idea to estimate uncertainty. Jamie: Instantaneous vs. daily could be big. Would be good to just put some transducers in "ungauged" streams as a qualitative comparison. Blaine: agreed.

Eric Perkins: Congratulations on doing a great job on incorporating feedback from TAC subgroup on this project. They had a previous discussion about ungauged watersheds. Reminder that although the gauged watersheds are outside the target area, they address the same goals that are within the target areas, since there will be a lot of BMPs implemented there. There is a lot of value to this project even within the watersheds that will be directly monitored.

Breck: Motion to authorize Matt to approve workplan with DEC, pending revisions as suggested by TAC. TAC can submit comments or revisions to Matt by Friday.

Second: Kevin Behm

All approve. Abstain: Neil and Angela.

Matt will send out workplan to TAC, they will submit feedback and revisions by Friday.

**VI. 12:00 PM Adjourn**