

Lake Champlain Basin Program
Technical Advisory Committee Meeting
Wednesday December 7th, 2016
10:00 AM – 2:45 PM
LCBP Conference Room, Gordon Center House, Grand Isle, VT

TAC Meeting Summary

Members: Mike Winslow, Martin Mimeault, Kevin Behm, Jamie Shanley, Breck Bowden, Kip Potter, Bernie Pientka, Bill Ardren, Kevin Farrington, Ed Snizek, Laura DiPietro, Fred Dunlap, Jenn Callahan, Neil Kamman, Eric Perkins, Angela Shambaugh, Bethany Sargent, Bob Brower, Andrew Schroth, James Jutras, Mark Malchoff, Mario Paula (phone), Dennis DeWeese (phone)

LCBP Staff: Matt Vaughan, Eric Howe, Meg Modley, Stephanie Castle, Ryan Mitchell

I. 9:30 AM Executive Session: Record of Decision (ROD) Review

Neil moved to approve the ROD, second from Laura, all in favor, Breck and Angela abstained.

Kevin moved to recommend reallocation of local implementation grant funds to support the Stone Environmental edge of field project, seconded by Kip. Unanimous approval, no abstentions.

II. 10:00 AM Updates and Announcements

Laura (VAAFMM) – RAPS (Required Agricultural Practices) passed and they went into effect on Dec 5th.

Neil (VT DEC) – Two phase 2 tactical basin plans are ready for public comment (Lamoille and Missisquoi), new WQ standards rule approved by LCAR, new class 1 wetlands that are proposed including the Sandbar wetlands, treasurers report is being proposed to make up the \$68M annual gap for 20 years for clean water fund. FEMA approval of structures and crossings 5 years after Irene, so stream alterations rules will go in front of state soon and will be open for public comment.

Martin (MDDELCC) – Flow station for Rock River will be operated until 2021 and will be funded for the action plan for climate change. BGA new project from Canada government and it is a project called ATRAP was given to University of Montreal for the next 5 years. First task is a diagnostic tool kit for drinking water. Marc Simoneau (MDDELCC) will do a report for the spring for the lake monitoring through 2015. Good news in the Rock River. We will have a task force group somewhere to share the information.

Lamprey treatments – LaPlatte was treated and Stonebridge were treated. Missisquoi was suspended

III. 10:05 AM Summary of Previous TAC Meeting

a. TAC Reviewed the minutes from the November 2nd TAC meeting.

Martin moved, Angela seconded to approve meeting summary, unanimous approval, no abstentions.

IV. 10:10 AM LCBP updates, Eric Howe, LCBP

a. Updates on LCBP activities since the last meeting.

Eric welcomed Matt Vaughan as new Technical Coordinator, back from a two day facilitation training. Eric and Meg were happy to have Steph and Matt back since November 7th. Matt has been working on high frequency optical WQ sensors to study local systems for his PhD. Very interested in how sensors can document loading. LCBP has continued to work on OFA and hope to wrap that up. RACC project issued a press release about findings of the project and info on the BREE project. The EPSCoR modeling identified a broader range of possible climate change outcomes (and resulting phosphorus loading scenarios) than were used in the TMDL analysis, and this was interpreted in the press as a critique of the TMDL. EPA provided a statement to the press in response. LCBP staff retreat for GI and RR staff on public speaking with Lee Dowling. Follow up one on one sessions are being scheduled. Reviewed workplans for the year and the staff played Curt Gervich's EPA supported toxins strategy decision game. Also working on the FY17 budget preparations for SC recommendations. Senator Leahy has decided to serve as vice chair of Senate appropriations committee so hopeful for future of LCBP budget. The IJC Task Force is moving forward with flooding and etc. Bill wrote a letter of support for the QC Ministry of Environment for their environmental international work and for their work on Lake Memphramagog. The award was given to the Montreal library.

V. 10:15 AM Continue FY17 budget process, Mike Winslow & Matt Vaughan

5b and 5c –If these ideas get traction they can be lumped together. Analysis of the samples is more complex and may need more tissue file and sampling will cost more. Could be closer to \$400 per sample instead of \$200 for sample used in this analysis. So we need to revise the numbers and resubmit. There is an economy of scale for fish collection between the two of about \$15k. PFOA was found in the Salmon River so there are some local concerns in NY. Jamie and Neil ask for revisions.

5e- SeaGrant is funding an investigator at SUNY Plattsburgh to do several surveys of phytoplankton, WWT effluent and a few other places. There is likely some technology to address this situation.

6d- maybe withdraw, will try for a research conference on Lake Champlain and this may be a focus of that project. Will be part of LCRC meeting.

6f- no questions

7b- Rapid response funding – would like to tie AIS prevention and RR fund, proposal next year to include a portion of RR in each BLS program

7c – good discussion

7d – double check the amount for maintenance, targeted for VT side of the lake

7e- WC amount reduced

REVISED projects:

2b- needs further costing estimates. Delete the individual costs and make sure it's not underfunding. The wet chemical analyzers are not recommended by Breck. It would have to be something optical that is not ISCO based. There are other instruments out there that might be usable and Matt's work might be useful for this purpose. Someone in the EPA lab in Chelmsford that is working on this that Perkins may know to help.

4b and o – (4p nutrient trading project is no longer under consideration) – the two proposals for matrix of co-benefits for P reduction BMPs and VTANR was for cost benefit of the BMP benefits so coordination for these two projects.

4k – same proposal and details have been added and the cost is now \$90k. Added parameters for analysis and methods and cost increase.

4L – new stand-alone project instead of tied to edge of field work. More holistic and looking at surface run off and tile and quantify the entire hydrological components.

4m- dropped the translation meeting because there was other funds for this. There is a geomorphic assessment for the Rock River already and there is a need for an update. Slight change in description but no changes to the cost. TNC is working on prioritization for work that might be referenced.

6a-e combined the projects and maybe the cost should be revised. There is a soon to be established working group within the agency for TE species and Bernie is working on a darter evaluation program that will be starting this summer. Put in at \$150k TAC will vote on whether the concept is good and SC may adjust.

6b- Ausable River effectiveness of restored AO passage. Same cost just put in priority organisms passage. Population dynamics in the rivers are variable; need multiple years of data.

4x - NEW groundwater protection for \$150k to assess role of ground water as a P input to LC or some other inland lake in the basin. Much interest around the table in learning more about this project.

6g- NEW riparian corridor plantings \$200k. LCBP would support plantings in riparian corridors. Put out an RFP to work in a specific subwatershed to develop and apply a riparian corridor planning tool. Phase 1a riparian conservation tools workshop so that partners can understand how to select priority areas and phase 2 is planting trees.

TAC follow up. We need to get a follow up of all the descriptions in a PDF, we will use the survey monkey tool as we did last year. We will rate them on impact, tech feasibility, good use of funds and likelihood of success. All revisions have to be in on the budget task proposal by Monday 12/12. Matt and Meg will send out the survey monkey by the 14th and get in voting by the 21st.

Did not previously review:

4i – climate change and how it will influence infrastructure. Designed to previous standards and our design storm has now doubled so what is the risk to our infrastructure and what will it cost to update our systems. This is meant to be a tabletop exercise. How often will this facility be compromised. Also look at what new stormwater manual says for anything moving forward. We have a lot of installed infrastructure that may need to be evaluated. Targeted watershed of the basin to test and a number of BMPs should be reviewed

4j –WITHDRAWN

TAC DISCUSSION of BUDGET TASK PRIORITIZE:

TAC discussed an idea for creating a funding contingency fund to help the projects that may need additional funding. Tech team working on a new RFP pre-proposal process.

VI. 12:00 PM Lunch

VII. 12:45 PM Continue FY17 budget discussion

Jim: Supports 4m,n,o- like the expansion. Want to prioritize high P areas. 4o combined with 4b.

Mike: Support Cyano monitoring, enhanced grant program, Cumberland bay microbial sourcing and spiny water flea impacts.

Kip: Supports tile drainage research to know where outlets are to support current work. Also supports 4r (alternative ag P remediation).

Angela: Supports spiny water flea impact assessments as well. Could have linkage to decreased secchi measurements. Also, feasibility of real-time monitoring should be supported (2b).

Kevin: 4b-o co-benefits. Extends social and economic benefit of the work we are doing.

Breck: Agrees with Kevin. If selected, would like to look beyond VT borders. 4c municipal assistance project is a need.

Mark: 5e- microplastics are a problem. Interested in pre-production plastics- where did they come from, etc.

Martin: Supports 4b-o, 4r, 7c (BLS program).

Jamie: Votes for enhanced monitoring using sensors. Need updated technology- should invest in that. Also interested in groundwater -4x

Ed: Need to keep funding water chestnut because if we don't, we lose ground. It's happened before.

Neil: Likes the QC/VT work- riparian work, geomorphic assessments, etc.

Bob: 6g- riparian planting program is nice because it's boots on the ground

Eric Perkins: 4g seems valuable. 4r looks strong. 4u tile mapping is needed. Stream corridor assessment (VT/QC) is a good use of funds.

Good support for 4x-groundwater project- not a lot of knowledge currently exists. Good to include ageing. Jamie mentioned similar project in Chesapeake with N. Age tracing is expensive.

Breck wonders if budget is too low.

Projects not to consider:

Mike is not sure about 4c. Good use of LCBP funds? Should be state's job. Laura agrees.

Mike also not sure about 4g- a lot of investment without a lot of return. Breck says there would be co-benefits to a project like this.

Kevin Behm: There are a lot of projects the states could/should be funding. Potentially LCBP funds could just be used to boost what's there. Don't discount these projects.

Eric H. looking for feedback on 6c. Neil says UVM has aggressive program to look at future climate, not past climate. Might not be competitive against that. Mike says it's too esoteric for LCBP.

Neil: If 2b is not funded, a workshop should be put together to get people talking

Process:

Bernie: Concerned that people who submitted proposals are giving support for them.

Ed: High ranking projects from last year. Then the medium projects were re-ranked and it was contentious. Concerned about process this year. Mike will check his notes and discuss with Eric/Matt.

VIII. 1:30 PM Downscaling of EPA TMDL SWAT model, Neil Kamman, VT DEC

Neil described the tactical basin planning process: 15 planning basins/5 planners. Creates 5 year implementation plans, reclassifies based on land use change, id's municipal regulation areas, and focuses on TMDL allocations. Attempting to create 9-point plans (sub-geographic components of TMDL are based on tactical basin plans). HUC12 downscaling is best available in EPA SWAT. Therefore, with contractor support DEC created a HRU-scaledatabase that links it to SWAT model, broken down at the catchment scale (between HUC14 and HUC16).. Most precise now available, and a good planning tool. Breaks down necessary P reductions by land used at the geographic scale most relevant to the regulatory programs in question). New tool available called Clean Water Roadmap. Analyzes BMPs that could be implemented to reach P reductions. Also a tracking database has been built. Can begin to track current work towards meeting TMDL goals in each catchment. Public-facing database of work completed. Lamoille basin alone has 1,000+ projects.

IX. 2:15 PM High-resolution agricultural planning efforts, Kip Potter, NRCS VT

NRCS worked with state partners to develop priority ranking for HUC 12 watershed in Lake Champlain basin for most critical are for P reduction. 2015 4 watersheds were selected for assistance: Rock River, Pike River, St. Albans, and Mckenzie Brook; 2017 East Creek and Hungerford added. Using targeted watershed approach using a resource assessment and implementation plan for each watershed which are viewed as part of DEC's Tactical Basin Plans. Lots of outreach to farmers to sign up for assistance. Developed crop and hay land maps, erosion and runoff risk maps, riparian buffer gaps and ditch network (180 miles of ditches in St. Albans which are both field and roadside). Second part of the plan is to develop BMP scenario tool to estimate different BMP p reduction. Local workgroups then came up with project goals for P reduction over a period of time based on estimates and cost estimates. Farmers are not signing onto the buffer and filter strips as much. St. Albans bay achieved 32% of the goal above the 20% target but Pike and Rock achieved closer to 9% when 20% was the target. McKenzie was close to on target.

X. 2:45 PM Adjourn