

Lake Champlain Basin Program
Technical Advisory Committee Meeting
Wednesday September 7th, 2016
10:00 AM – 3:45 PM
LCBP Conference Room, Gordon Center House, Grand Isle, VT

TAC Meeting Summary

I. 9:30 Executive Session- Draft Request for Proposal Review

II. 10:00 AM Updates and Announcements

Angela Shambaugh, VT DEC: TMDL update: Vermont Phase I implementation meetings were carried out in August and VTANR is headed down the road to release the Final Plan.

Kip Potter, VTNRCS: One application for Edge of Field phosphorus removal in Orleans County on Mud Creek. NRCS-VT is ready to submit proposal for a new initiative for National Water Quality Initiative Projects for high priority HUC 12 watersheds. Proposal will go in for East Creek and Hungerford Brook. 2018 implementation support expected if funded.

Neil Kamman, VT DEC: DEC Watershed Management staff working on Treasurer's Report for funding required to carry out the Plan. Public meetings expected in October to review the report. Tactical Basin Plans for Missisquoi and Lamoille Basins are underway and includes the Phase II TMDL into HUC 12 SWAT models. Neil requested Phase II plans be placed on an upcoming TAC agenda. The South Lake gaging project is moving forward internally within VTDEC in partnership with Agency of Ag and NRCS. ANR finished taking comments on WQ standards including on the new classification of surface waters (class B1 – high value) comment period closes today.

Mike Winslow, Lake Champlain Committee – LCC and Arrowwood Environmental discovered water chestnut in Alice Lake in Chazy, NY and in St. Albans Bay marshes. 109 rosettes removed from Alice Lake, St. Albans removed 1000 plants, still about 600 left but hard to get there.

Jamie Shanley, USGS: Support for Champlain gages looks good; the paired watershed study on Mansfield will be supported between USFS and LCBP. Dropped the gage on Bomoseen; new gage added on Little River upstream of the reservoir for Green Mountain Power. Keith Robinson noted that there will be more work on Champlain flooding and emergency preparedness through the IJC.

John Kanoza, Clinton Co DOH: Working with Plattsburgh on Cumberland Bay on coliform testing, fecal, microbial source tracking, etc to ID specific sources.

Mark Malchoff, LC SeaGrant/LCRI: Profiler buoy added to Lake Champlain to provide near-real time data. PI on the project is Eric Leibensperger at SUNY Plattsburgh. Located east of Garden Island.

III. Summary of Previous TAC Meeting

- a. Breck moved to approve the June meeting minutes, Neil seconded, all in favor. No abstentions.

IV. LCBP updates, *Eric Howe, LCBP*

Bill Howland retired on June 22; Eric was hired to replace him and started in the Director role in mid-July. We are in the process of hiring a new Technical Coordinator; hope to have someone in place by end of October. Mike Winslow may be able to participate in the

interviews. Stephanie Castle had her baby and is doing well. She will be back from leave in November.

Jim Brangan (LCBP Heritage & Recreation Coordinator) provided an update on the 100th anniversary of the park service and LCBP has a special commemorative passport and once completed you receive a park coin. Each site speaks to the CVNHP. Elizabeth Lee (LCBP E&O staff) helped design the Clinton County Historical Society to create a guide to Valcour Island. Also published an agricultural guide called the “Wheel of Gardening” to let folks know about how to plan for your garden. Also working with regional stakeholder groups to come up with ideas for 2017 budget work plan.

An Americorps member will serve with LCBP starting in a few weeks for 11 months working on BMP nutrient reduction tracking through our project and program. The LCBP Boat Launch Steward program wrapped up this past weekend. Asian clam rapid response task force recommendation for Lake Bomoseen will come out this week. LCBP facilitated and hosted the VT TMDL Implementation Plan public meetings last month. Eric is working on revising the Conflict of Interest guidelines to bring them into alignment with EPA COI guidelines. Laura Medalie completed her report and it will be forwarded to TAC as well as the Malone and McBroom project Flood Resilience modules project. Stone Environmental completed the tile drainage literature review and this will be circulated to Ag-focused TAC members for their input. Cornell Ag Engineering contract has been in negotiation; its project is now 6 months behind schedule, but hope to have that moving forward in the next few weeks.

Watershed Consulting Associates will have the NY urban stormwater guidance document ready for review soon. It is an interim update piece. Carl Pellegrino from EPA Region 2 is coordinating shoreline surveys that will start at the end of this month for oil spill recovery planning purposes on the NY side of the lake. EPA Region 1 will be conducting similar surveys on the NY shoreline in spring 2017. The LCBP Toxins workgroup will meet in September to look at contaminants in fish tissue. The LCBP Steering Committee will review of OFA and FY17 budget at next meeting in Quebec on Sept 14th. A 30-day public comment period will occur with public meetings in each jurisdiction plus review by EPA and the International Office of Tribal Affairs.

USFWS hired Andrew Milliken out of the Hadley Office starting in October in Essex Junction to replace Dave Tilton.

V. Workplan Review, Wastewater Treatment Facility Asset Management, *Carrie Dooley and Tom Binsfeld, MJ Engineering*

- a. Carrie and Tom presented the workplan for the project “Technical Assistance in Wastewater Treatment Facility Asset Management” for TAC feedback.
- b. MJ Engineering has been selected to provide technical assistance in development and implementation of asset management plans (AMPs) and training for up to thirteen (13) small and medium-sized WWTFs in Vermont and New York. The objective of this project is to provide municipalities, wastewater treatment governing boards and plant operators with the necessary tools for effective asset management. With proper operational maintenance, and financial guidance, meeting the goal of long-term sustainability of the sewer infrastructure systems can be accomplished. Improvements in the operation and maintenance of the sewer infrastructure systems will also decrease the risk of pollution to the lake.

- c. TAC encouraged MJ Engineering to include several organizations to expand outreach to the Water Environment Federation and Rural Water organizations in NY and VT, and inspectors from NYS and VT DEC. They also should compare inspection reports to the self-certification reports for each of the WWTFs selected for the project, consider Board involvement in screening criteria, and document to the LCBP different from reports to the facilities.
- d. Jim Jutras moved to approve the workplan with revisions incorporated, Breck seconded. All in favor, no abstentions.

VI. Workplan Review, NY Rural Roads Best Management Practices Project, *Fred Dunlap, NYS DEC*

- a. Fred reviewed CWICNY's Rural Roads BMP Project Workplan.
- b. Financial assistance will be provided to municipal highway departments in New York to assess roadway deficiencies contributing sediments/pollutants to surface waters, develop site inventories and prioritizations, and develop cost estimates for corrective actions. Demonstration sites will be selected for remediation/retrofits to reduce pollutant loadings. A tour/conference will be hosted for federal and state highway officials, legislative representatives, Cornell local roads, major drainage basin coordinators, and other partners/stakeholders to evaluate statewide interest in a sustainable program.
- c. TAC recommended that CWICNY representatives review the VT Better Back Roads evaluation report. Match amount likely is much better than demonstrated in current budget; would be good to include a more appropriate amount if possible. More details regarding the budget in the text would be helpful.
- d. John Kanoza moved to approve the work plan, seconded by Neil K. All in favor. Fred Dunlap abstained.

VII. FY16 Budget Review, *Mike Winslow, TAC Chair* and *Eric Howe, LCBP*

- a. FY16 Budget overview – the process & outcome of the FY15 budget

Eric passed around a handout with the ranked list of the 60 projects from FY15 process. Projects to be supported included LTMP, Lake Champlain boat launch stewards, water chestnut management, blue green algae monitoring, enhanced grant awards for pollution prevention (\$50-125K projects) and planning grants up to \$10k to help municipalities develop projects, edge of field monitoring for phosphorus loss, state of VT monitoring of cyanotoxins in drinking water, alternative P reductions in St Albans and Missisquoi watersheds, agronomist support, water quality monitoring in McKenzie Brook, continued support for the VT Ag BMP tracking database, and stream gages on Mt. Mansfield. All of these projects will be funded through either GLFC or EPA budgets and we hope to get started on that work in the next month or so (Oct. 1st).

Education and outreach programs will have their annual small grants program, Champlain Basin Educators Initiative (CBEI), a new riparian buffer outreach campaign in Quebec in the Missisquoi Bay watershed, snow and ice training for DPW crews in NY, floodplain and river outreach modules, ECHO partnership for exhibits associated with the LCBP State of the Lake, purchasing river flumes for watershed groups, and a video series production.

The proposals submitted for enhanced grants and the alternative practices in St. Albans Bay RFPs will come through TAC for review. ECHO Culture for Clean Water (all of VT) has a return on investment subgroup. LCBP might host this concept within our framework (subcommittee of the TAC). Breck reviewed concept – private funding from All Souls Interfaith Gathering, modeled after the Farm to Table initiative. Large group started to get together in 2015 formed five subgroups, one of which is communication, another is return on investment which is currently focused on reducing phosphorus loading. Their idea is to develop an innovation hub that would facilitate the identification of new technologies to reduce P. The group could put in a proposal for seed funding to get something started (e.g. 1-pager for LCBP budget). Breck views this along the same lines as the monitoring programs as it is something that will need continual funding. Other

sources of funding are necessary. The TAC FY17 budget process will follow the same format as in previous years. May shift to a different process for the FY18 budget cycle.

b. FY17 Budget initial discussion

Jason Stockwell and Ellen Marsden have GLFC funding to recruit a grad student to work on development of a food web model. Eric Perkins noted that there was a phytoplankton and zooplankton project with Suzanne Levine, and there is a need for this work in the lake. It would be useful if the project could identify gaps for funding that might be appropriate for LCBP support.

Neil suggested that it might be time for more in-lake monitoring, particularly at deep water sites that would provide better data at these locations for modeling efforts. It might be time to explore moving to more continuous-data collection monitoring program. Peter Isles had continuous-monitoring sensors in Missisquoi Bay (YSI donated a buoy to VT) and EPSCoR used it to collect high density nutrient data, weather data, redox data etc. Data were collected over three years which included a high, low, and average water year just by chance.

This type of system might be useful as a bridge between grab samples and help explain dynamics of what is happening in certain lake sections in-between the discrete sample collections, such as St. Albans Bay, and more work in Missisquoi Bay. It may be time for a workshop for the LTMP to evaluate the program and talk about how we can improve it, streamline it, etc. It also is time for another Lake Champlain Research Conference since we have not had one since 2010.

Kip wants to talk about cow manure – a large number of farmers working towards reduced or no till programs and there is a growing controversy over how to handle the manure under those programs. NRCS requires that manure is injected. Some literature suggests that injection could force it into the aquifers. We need sound science to support this management strategies around manure management, for tile systems and reduced tillage. Still need to support research for phosphorus loading from developed lands, particularly with respect to disproportionate amount of P contribution from developed land and efficacies of BMPs in developed watersheds.

There was some discussion of the microbial tracking of bacteria in Plattsburgh Bay, and how this concept might be useful to other parts of the Lake. There also was some discussion about exploring utility of eDNA and uses of this technology in the Basin, either for early detection of AIS, or perhaps detection of protected species. TAC should consider supporting an enhanced or large BMP implementation grant category again, and/or a grant program targeting innovative grants for high priority watersheds. Finally the PFOA issue is still going on and is elevating importance of contaminants in water. This might be worth exploring, particularly from the aspect of sportfish contamination of PFOA and similar contaminants.

VIII. 2:00 PM RACC Wrap-Up/Introduction to BREE, Carol Adair, Andrew Schroth, Asim Zia and Chris Koliba, UVM

- a. Carol, Andrew, Asim and Chris reviewed some of the big-picture conclusions of the *Regional Adaptation to Climate Change (RACC)* project at EPSCoR/UVM, and introduced some of the new research directions for the upcoming EPSCoR project, *Basin Resilience to Extreme Events*.

IX. 3:45 PM Adjourn

X. Attendance:

TAC: Mike Winslow (TAC Chair; Lake Champlain Committee), Jamie Shanley (USGS), Angela Shambaugh (VTDEC), Bernie Pientka (VT FWD), Kip Potter NRCS-VT), Eric Young (Miner Institute), Ed Snizek (APA), John Kanoza (Clinton Co DOH), Fred Dunlap (NYSDEC), Jenn Callahan (VTRANS), Bob Brower (NYS DAM), Neil Kamman (VTDEC), Kevin Behm (Addison Co. RPC), Jim Jutrus (Essex Jct Water Dept), Breck Bowden (UVM),

Mark Malchoff (LC SeaGrant), MaryJo Feuerbach (EPA R1), Mario Paula (EPA R2), Kevin Farrington (City of Plattsburgh)

LCBP Staff: Eric Howe, Meg Modley

Guests: Eric Perkins (EPA R1), David B-L, Dave Reckahn (Essex SWCC), UVM BREE: Andrew Schroth, Carol Adair, Chris Koliba, Asim Zia.