

Lake Champlain Basin Program
Technical Advisory Committee Meeting
Wednesday November 2nd, 2016
10:00 AM – 3:00 PM
LCBP Conference Room, Gordon Center House, Grand Isle, VT

Draft TAC Meeting Summary

I. 10:00 AM Updates and Announcements

- a. **Laura DiPietro, VAAFM:** Required Agricultural Practices (RAPs) are still moving forward. The tile drain subworkgroup is producing a report for the legislature and Agency secretaries by January 15. Draft report up for comment by Thanksgiving.
- b. **Jamie Shanley, USGS:** The International Joint Commission has funding to continue work on the Lake Champlain-Richelieu River flooding project. Anticipate more information on this after Thanksgiving. New IJC Study Group will begin meeting in January 2017. The Little River gage in Waterbury, VT is now online. Stevens Brook and Lake Bomoseen gages have been discontinued. The two gages on Mt. Mansfield have funding support for at least two more years.

II. Summary of Previous TAC Meeting

- a. Reviewed and approved minutes from the October 5th TAC meeting.
 - i. Martin Mimeault moved to approve as submitted. Mark Malchoff second. All in favor. No abstentions.

III. LCBP updates, *Eric Howe, LCBP*

- a. Updates on LCBP activities since the last meeting.
- b. Eric met with the Lake Champlain Research Consortium during their annual Board meeting in October. The LCRC includes SUNY Plattsburgh, UVM, St. Michael's College, Middlebury, Johnson/Lyndon State, Castleton University and Green Mountain College. The group discussed the prospects of a new Lake Champlain research symposium, which would be targeted to occur in January 2018 or November/December 2018.
- c. LCBP staff have been developing a "Lake Champlain Research Bibliography" that will be populated with manuscripts and publications focusing on Lake Champlain. Also will include a list of experts whom members of the media can contact when interested in developing a relevant story.
- d. Matt Vaughan will be the new LCBP Technical Coordinator. He starts on November 7. Matt holds an MS degree in Hydrologic Sciences from UC Davis, and is currently wrapping up his PhD with Breck Bowden and Andrew Schroth at UVM. His research focuses on the influence of land use/land cover on nutrient loading and storm dynamics.
- e. LCBP has released the two RFPs that were discussed at last month's meeting: Alternative and innovative projects to address phosphorus load reduction priorities in the St. Albans Bay watershed, with \$350,000 available, and Best Management Practices for Pollution Reduction: Implementation and Planning Grants, with \$490,000 available.
- f. LCBP and Watersheds United Vermont co-hosted the annual Vermont Watershed Group meeting this past Saturday. About 50 people from groups around VT and a few from NY participated in the event.

- g. LCBP/CVNHP hosted the annual Champlain Valley Heritage Summit on Sunday and Monday this week. About 50 people from Quebec, NY and VT participated in the event.

IV. Urban Stormwater Green Infrastructure Upgrade Guidance and Training Manual for NY, Andres Torizzo and Dana Allen, Watershed Consulting Associates

- a. Dana provided a brief overview of the project: This manual seeks to provide a supplement to the New York State Stormwater Design Management Manual in identifying specific environments that public municipalities manage, specific case studies and practice examples of green infrastructure for stormwater management that municipalities may be able to implement in the course of improvements to infrastructure (streets, parking lots, etc.). These practices are meant to be non-jurisdictional – that is, they would not necessarily be projects of a scope that would trigger stormwater permitting regulations, but are rather meant as smaller projects that could have a meaningful impact on the water quality in local streams, rivers, and lakes, as well as the overall health of Lake Champlain.
- b. The manual focuses on urban streets, rural roads, parking lots, and buildings. There is text in the Introduction describing how to use the manual. The manual provides a series of decision trees, with information cross-referenced to relevant NYS manuals. Subsequent chapters focus on four environments.
- c. Chapter 2 is on urban streets. They review what the urban street environment looks like and stormwater issues related to urban streets – sediment build up issues, phosphorus, catchments, pipes, and other constraints. They also focus on opportunities, eg. with wide streets, subsoil types, other opportunities to on-site treatment, and auxiliary benefits of streetscape GI practices. Case studies focus on Lake George’s Beach Road, sites in Syracuse and Northfield (VT) with streetscape bioretention.
 - i. Mike suggested renaming this section to better reflect the “village” rather than “urban” nature of those towns.
- d. Chapter 3: Rural Roads. This one has the same arrangement as Ch. 2 Urban Streets; Dana is still looking for examples for this chapter. RRAMP has some good examples, others might be from Catskills.
- e. Chapter 4: Parking lots and hardscapes. Examples included the WILD Center, Warren county projects, Lake Placid projects. Jenn C. pointed out that VTRANs leaning toward catch basins with sumps rather than hydrodynamic separators because catch basins are cheaper and equally effective.
 - i. Chapter 5: Municipal buildings. Examples included Rainwater harvesting into cistern with pumping system for subsurface irrigation, vehicle-washing cistern, and the Atrium garage in Syracuse – this is a cistern in a CSO area to reduce stormwater load during storm events, the Magnarelli Center in Syracuse green roof (built to NY specs), and a rain garden built by the Lake George Association
- f. Chapter 6. Operation and Maintenance
 - i. This chapter reviews who conducts inspections and/or O&M of the BMPs, the inspection process, provides checklists including what to take in the field, follow-up actions typical maintenance activities, and planning for maintenance.
 - ii. Suggestion provided from TAC to ensure that maintenance burden is captured in the decision trees
- g. Chapter 7 – Funding

- i. Introduction of funding sources, contacts to speak with regarding funding included Beth Gilles at LCLGRPC, Dave Reckahn at Essex SWCD, and to replace Stephanie Castle with Eric Howe for LCBP.
- h. Chapter 8 – Planning and Implementation
 - i. Overview of P/I process, including prerequisites, early process, planning and design, construction and installation, maintenance. Includes recommendations for processes, pooling resources
 - ii. Suggestion to move this section to before the O&M section.
- i. Appendix will contain more practice examples for each of the four main sections and general practices, including conservation measure, impervious cover reduction
- j. Feedback –parking lots should consider softscape options, such as overflow parking spaces designed to accommodate stormwater infiltration opportunities. Should also be a reference to use of native plants and list of species – reference the NY manual if possible.
- k. Dana will compile text into a single Word document to send to TAC; TAC will review for technical aspects by next Friday and send feedback to Stephanie Castle.

V. FY17 Budget process – *Eric Howe & Mike Winslow*

- a. Mike Winslow led the group through brief discussions of each of the conceptual ideas submitted for funding consideration in this budget process.
- b. See attached table for a complete list of projects submitted.
- c. Suggested modifications to submitted projects:
 - i. 2a: several budget options submitted. TAC agreed to leave all on the table for now.
 - ii. 2b: changed title to: Feasibility of real-time monitoring of Lake Champlain: A pilot study and increased budget to \$150,000
 - iii. 4c: combine with 4b Technical toolbox?
 - iv. 4e: TAC agreed to remove from consideration as this concept is currently eligible for support under the innovative BMP RFP that is now open.
 - v. 4k: Make project applicable basin-wide. Clarify phosphorus measurements such as water extractable phosphorus, phosphorus saturation measure. Does adding glyphosate affect amount of phosphorus coming off the soil? Project should focus on characteristics that can be managed. Eg. what are the management implications that we can learn from the project?
 - vi. 4L: Project should clarify what impact tile drainage has on runoff hydrology and P loss
 - vii. 4m – rephrase to question what impact does tile drainage have on runoff hydrology and phosphorus loss?
 - viii. 4n – no adjustments
 - ix. 4o – consider merging with 4b Technology toolbox
 - x. 4p merge with 4d.
 - xi. 4q merge with 4b
 - xii. 4r – no adjustments. Can clarify whether funding supports Phase II projects from this year’s projects or new work.
 - xiii. 4s – no adjustments
 - xiv. 5d - Second workshop could occur independent of first; LCBP can help coordinate second (DOH) staff with current operating budget. First workshop can be incorporated into research symposium in 2018. Eric Howe will work on integrating this into LCR symposium. Project can be withdrawn from consideration.
 - xv. 6a – consider merging with 6e.
 - xvi. 6c – no adjustments
 - xvii. 6b – project would support analysis of 2-3 culverts? Budget sufficient? Yes

- xviii. 4u – mapping tiles – builds off DEC funded project with Stone Environmental to determine what methodology is most appropriate to map tiles. This project would implement that recommendation. LCBP funds would be to allow contractor to set scope of project.
 - xix. 4t – covers any materials removed from the streets by the sweepers. Recent research indicates that removal of leaf litter can be a large contribution. Also would provide data on winter loadings from streets. Could potentially adapt existing models to conditions in the LCB.
 - xx. 4u - Budget estimate may be more accurate post-January when feasibility report is complete.
 - xxi. 4v – no adjustments
 - xxii. 4w – task description should be re-written to clarify that the project should focus on one watershed, such as the Winooski, to develop methodology and then a separate project would support application of method to rest of basin.
 - xxiii. Next month TAC will need to review: 4i and 4j, remaining 1-pagers relevant to Chapters 5, 6, and 7 (Toxics, fish & wildlife, and AIS).
 - xxiv. Eric Howe asked about interest in a 1-pager for support for riparian plantings. TAC was interested and suggested Eric reference a tool TNC has been developing to use to prioritize riparian corridors. Would require coordination with Chris Smith at USFWS identify current efforts where LCBP support could fill gaps with CREP and other programs.
- d. TAC also discussed support for an expanded edge of field analysis. Julie Moore reviewed this project and the need for additional funds to support a more in-depth analysis of the edge of field monitoring data than what is currently supported. Mike W suggested that TAC consider voting on this as a “yes or no” project in December. Waiting until December would not impact the project schedule. Julie will add an annual loading element to description and resubmit to Eric.

VI. 3:00 PM Adjourn

VII. Attendance:

TAC: Mike Winslow (VT EPSCoR; TAC Chair), Jamie Shanley (USGS), Eric Young (Miner Institute), James Juras (Essex Jct Water Quality), Mark Malchoff (LCSG), Bernie Pientka (VT FWD), Kevin Behm (Addison Co RPC), Kip Potter (NRCS-VT), Ed Snizek (NY APA), Laura DiPietro (VAAF), Fred Dunlap (NYSDEC), John Kanoza (Clinton Co. DOH), Jenn Callahan (VTRANS), Tim Clear (for Neil Kamman, VTDEC), Martin Mimeault (QC MDDELCC), Bill Ardren (USFWS), Bob Brower (NYS DAM). Phone: Mario Paula (EPA R2), Dennis Deweese (NRCS-NY), Angela Shambaugh (VTDEC)

LCBP Staff: Eric Howe, Bethany Sargent (LCBP/VTANR)

Guests: Andrew Schroth (UVM), Andres Torrizo (Watershed Consulting Assoc.), Dana Allen (Watershed Consulting Assoc.), Kari Dolan (VTDEC), David Borthwick-Leslie (public) Phone: Julie Moore (Stone Environmental), Jason Sorenson (USGS), Jim Pease (VTDEC), Judy Sefchick Edwards (USFWS), Ken Sturm (USFWS), Jim Duncan (UVM/VT Monitoring Cooperative)