Lake Champlain Basin Program  
Steering Committee Meeting  
Wednesday September 19th 2012  
The Grand Isle Lake House, Grand Isle, VT  

**APPROVED** Minutes

**Members Present:** David Mears (Chair), Daniel LeBlanc, Ron Jackson, Real Pelletier, Buzz Hoerr, Roman Romansky, Mary Watzin, Laura DiPietro (for Chuck Ross), Breck Bowden, Catherine Brooks, Lynn Hamjian, James Ehlers, Vicky Drew, **On phone:** Roseanne Murphy, Mario Paula, Mark Hohengasser, Bob Stegemann, Christina Marts, Marilyn Stephenson **Staff:** Bill, Michaela, Ryan, Elizabeth, Kathy, Eric, Stephanie C., Meg, Colleen, Jim, Fred (on phone), Martin, Jeanne Voorhees, Clair Ryan, Philip Halteman, Emily Bird **Guests:** Kari Dolan, Tom Berry, David Borthwick-Leslie, Dr. Robin Gregory (Emory Univ.), Dr. Lance Gunderson (UBC)

**Meeting Begins:** David Mears, Chair

**Draft Meeting Agenda review:** no change

**Action Item:** Ron moved to approve the May 2012 Steering Committee minutes as presented, Buzz seconded the motion. The motion passed with unanimous approval.

**Public Comments:** No public comments

**Invited Speakers** - **Dr. Robin Gregory (Emory Univ.) & Dr. Lance Gunderson (UBC)** - Mary Watzin introduced the speakers and provided a biographical sketch of each. She also introduced Philip Halteman, a PhD student working on Adaptive Management program, who is an LCBP employee working on the adaptive management project and ecosystem indicators data assemblage and analysis. Philip gave update on *Structured Decision Making for Adaptive Management*. His Power Point presentation provided an update on progress made with indicator data collection and he explained a conceptual framework of decision-making that can be informed by that data. The process of Adaptive Management and good decision making by an entity like the Steering Committee can be imagined in two basic steps. 1) Use a structured decision process to develop a few very clear objectives, to evaluate them, to develop several realistic alternatives (and tradeoffs for each) and to choose the best alternative. 2) Use a program of experimentation and hypothesis testing to evaluate the effectiveness of the chosen alternatives based on outcomes. Adaptive management was described as a process to achieve or improve desired outcomes; it is well suited to large ecosystem issues and, although the process does not eliminate surprises, it allows managers to recognize success when it occurs, to uncover problems sooner and to make the most positive use of management experience. A structured decision making process enables resource managers to make optimal decisions when confronted with inadequate information. Finally, adaptive management provides a systematic way to acknowledge and account for uncertainty in choosing management alternatives.

In the discussion following Philip’s presentation, Dr. Robin Gregory opined that *Opportunities for Action* seemed very large for a management plan, and that a stronger linkage between actions
and objectives would be helpful. In the discussion with Steering Committee members, it emerged that the scope of *OFA*, as a comprehensive management plan, is much larger than a single critical issue, such as the goal of reducing phosphorus concentrations in the five sectors of Lake Champlain. Robin suggested that structured decision making is most applicable to smaller elements of the overall issues that are covered in OFA.

Dr. Gunderson discussed the issues of uncertainty applied to daily lives, with examples of daily decision making that involves uncertainty, and for which we intuitively apply the same principles of adaptive management. We have a limited amount of thoughts we can keep in our mind at one time, and so we can develop a structured decision process to help us deal with the uncertainty of any situation. For much larger issues, such as the water quality challenges for Lake Champlain, Lance recommended that an assessment step needs to happen first and that can be followed by an adaptive management process down the road. The ideal outcome of adaptive management is adaptive government, which would rely on an informed dialogue in which assessments, management actions, and related questions, can occur. Lance feels that that this path (adaptive management) would be a very good approach for the Steering Committee to pursue.

**Discussion:** The Steering Committee had an energized discussion about the ways in which this approach to decision making could be applied. Ron noted the challenge that many of the people around the table are interested in different issues with the lake, or work in different ways to improve it - that is the reason for so many objectives in OFA - everyone has a different approach to getting the job done. Breck asked if alternative management is more effective and efficient but also more costly? Lance did not feel it would be more costly, and Robin described the approach as likely to be cost effective. Mary noted that the initial motivation for adaptive management was to reduce phosphorus load, but she added that it also could be effectively applied in all the other objectives of the plan. Lance said that the same process in the assessments in the Everglades and in the Grand Canyon involved accumulation of indicator and monitoring data, and same questions as why things were not getting better. This led to a better understanding of what we can do better for Lake Champlain. Buzz noted that LCBP is a program and not a commission, and so we don’t regulate or make policy, and we do not have management authority *per se*. Laura sees LCBP a catalyst for the work we need to do. It was suggested that technical staff and the adaptive management subcommittee begin to pull a small key subset of objectives from OFA, and related tasks, and provide that to the TAC, who could provide the Executive Committee with some advice on the importance of each. Lynne mentioned that opportunity to have the scope of this exercise include OFA, the TMDL implementation plans, VT’s Ecosystem Restoration Plans and other similar plans, to weave them together and identify several key objectives and tasks.

Mario noted that we have done a lot of assessments over the years. Critical source area data and the TMDL process have given us a lot of data that we can use. Robin noted that there seems to be a lot of available information and the need is to organize the data and decide how to use it effectively in making decisions that will accomplish the goals. James felt that the available information and management tools are not the problem, compared to the lack of resolve to make hard management decisions. James described the challenge of different jurisdictions dealing with different parts of the problems, such that the states likely have different views on how to address issues. Ron noted the changing demographics, population growth, land use changes, and the increase in stressors that cause the problems. Bob said the available information versus
affordable action issue is very important. Wastewater treatment operations have improved but they also need to be upgraded to keep up with demands. Christina Marts felt this program provides a useful discussion framework for coordination of information and efforts among the groups involved.

David noted that the Steering Committee seems to share a concern about losing the confidence of the public if more progress is not made. He agreed that a clearer set of priorities in the management plan would be helpful. He summarized the sense of the Steering Committee that the adaptive management process is a good system to use. And, he noted, it would be an appropriate testimony to the tremendous efforts of Mary Watzin in advancing adaptive management, for the Steering Committee to decide today to pursue this adaptive management process to go forward. (It is Mary’s last meeting as a long-time Steering Committee member). Mary thanked David for his comments, and the Steering Committee members for their appreciation of her work on this project. She noted that LCBP needs to recognize we have done a lot of work, but there are still a lot of uncertainties and we need to move forward using the tools and people we have in the Basin to help us design the best approach to stewardship through adaptive management. The sense of the Steering Committee was to incorporate a structured decision making process into the adaptive management approach that should be developed for Lake Champlain.

Updates from Jurisdictions:
NYDEC Fred conveyed that NYSDEC has developed a partnership with TNC conserving 156 acres including over 2,000 feet Lake shoreline; monitoring for spiny water flea in the LaChute River has been added to the long term monitoring program. The organism has not yet been detected in Lake Champlain. International Paper Company and VT Gas are investigating the potential for a pipeline that would cross the Lake to provide fuel to the paper mill.
QUEBEC – Daniel provided a handout with update news. There is a new Prime Minister of Quebec, Pauline Marois. The change in government will not likely change the nature of the relationships with VT and NY. Missisquoi watershed waste water phosphorus concentration target is being adjusted from 0.8 to 0.3 ug/l by 2014 – 2015.
VTDEC David provided a handout of update news. Also, David described some of the provisions of VT Act 138, which prioritized many unfunded tasks concerning non-point source pollution and flood resiliency. VT ANR is working closely with VTrans on the future funding of the Better Back Roads program and new regulations that require changes in that program.
Federal partners – Jeanne described the MOU partners have developed and that was due to be signed by today. The signing will be later, as further legal review is necessary. The MOU is an agreement of federal agencies to work together to coordinate efforts to help with implementation of OFA. While this is an important partnership commitment, it does not have financial implications necessarily. Lynne reported on EPA’s convening a meeting of LCBP staff and the TAC Chair together with the STAC of Long Island Sound program to share operational ideas - a good opportunity to learn from each other.

Reports from Advisory Committee Chairs:
TAC –Breck provided a handout of recent TAC activities.
VT CAC – The committee will meet before the next Steering Committee meeting.
QC CAC – Real provided a handout of recent activities and reported on the recent problems of low water in Missisquoi Bay, together with high water temperatures and the large bluegreen
algae blooms near St Armand. He also described a very severe fish kill that happened recently, resulting on a great deal of fish washed up on the beaches.

**E&O –** Buzz provided a handout of recent activities. The *Don’t P* materials are under revision; the new website for LCBP is being developed and website content is being upgraded; a number of new E&O grants are now underway; there were 18 school programs delivered by LCBP staff this week alone in Clinton County; the CBEI teacher training is again in progress.

**HAPAC –** A handout describing task areas of interest to-date was provided.

**Legislative Update:**
Tom reported that Congress will recess this week until the elections, without approving a new Farm Bill or extending the old bill. The Senate passed a good farm bill, but there has been no support in the House. The Congress has passed a 6 month *Continuing Resolution* to fund government through the end of March 2013.

**Manager’s Report:**
The discovery of spiny water flea has focused a lot of attention on the Champlain Canal. While the discovery was very bad news, it did also prompt a resumption of discussions with the Canal Corporation and the US Army Corps of Engineers regarding the need for a feasibility study for a hydrologic barrier on the Champlain Canal. Meg and Bill recently had a meeting in Albany with the NYS CC and the USACoE to review the need for the feasibility study and to identify Section 542 support to get the task underway. LCBP is prepared to provide matching funds (up to $200,000) if needed to leverage some action as soon as possible. Bill thanked all who worked hard on the *State of the Lake 2012* publication and those who came to the release event. The 2011 Flood Report is developing and is based on information provided at the flood conference and related data supplied by partner agencies. The Table of Contents was handed out for Steering Committee discussion.

**FY13 Budget Development**
**Budget Process Review**
**Annual OFA Implementation Review Summary by Chapter**
**Implementation GAPs and Recommendations**
**Steering Committee Discussion of FY2013 LCBP Goals**
**Advisory Committee Budget Development SUMMARY Guidance**

Bill presented a review of the budget development process, and a Power Point program that summarized the status of performance in OFA implementation. Eric reviewed specific tasks that have been accomplished or are underway. A status update on 583 tasks in the plan show that 249 are active, 8 have been completed and 326 have received no activity. LCBP is assigned 249 implementation tasks in OFA and, of these, 97 are active, 2 are complete and 139 have received no activity. Staff provided handouts to summarize LCBP tasks and related expenses since 2009.

Breck shared a handout showing ‘discrete’ (one shot’) tasks and ‘annual continuing’ tasks and shared the TAC’s views of the highest priority issues among them. He asked for Steering Committee guidance on what TAC should be focused on during the next year. There are many perennial tasks (Stream Gauging, BGA, Water Chestnut management, long term monitoring) – things we do every year that are costly, and which reduce the balance left for budgeting new and
needed tasks. AIS issues, floods, urban sources, Missisquoi Bay, partnership opportunities with RACC and other climate change initiatives, all can leverage and build on the Adaptive Management Progress; it is important for TAC to receive guidance on where to focus in preparing potential budget tasks.

Bill provided a Powerpoint handout that had been requested by the Executive Committee, identifying specific high priority gaps in plan implementation, as a departure point for discussion. The discussion included the following points:

1. David felt that LCBP should not need to continue to fund the stream gauges after 2013, and noted that he hoped to help identify other funding sources;
2. Bill noted that he estimated the TAC should prepare about $2,500,000 in technical task descriptions for Steering and Executive Committee consideration. This would result in many choices for the Committee in preparing the draft budget.
3. Vicky and Laura spoke of the value of including tasks that partial LCBP support would leverage additional funding from other agencies - perhaps LCBP would be providing the required non-agency match. As an example, Laura said CSA development for Otter Creek may have state funding but might get more funding if there are matching funds from LCBP. David noted that the CSA project was done and there is a push to do the same work in areas other than Franklin County but there are match requirements to leverage those dollars.
4. Bill noted that the decision to consider how LCBP funds can leverage additional funds is an Executive or Steering Committee choice - and that LCBP leveraging always has been considered added effectiveness in spending decisions.
5. Mary encouraged committee members to turn that logic around and to first identify what needs to be done and then look at funding or projects that could be used to accomplish the goal. It is important to not be leveraged off-target - but rather to stay on task.
6. Tom followed up on Mary’s comment, suggesting the Steering Committee look at how important expanding BMP implementation in CSAs is compared to other projects.
7. James suggested reviewing whether it is better to focus on implementation in Franklin County rather than increasing CSA study areas and then finding out that we don’t know how to make implementation work well.
8. David Borthwick-Leslie asked if the edge of field projects are getting toward the effectiveness of BMP implementation in Franklin county? Laura noted that any practice that is implemented has been approved by NRCS as effective, and she described the AGO project in progress.
9. Mary felt strongly that it would not be helpful to expand edge of field studies with resources that could otherwise reduce pollution directly, because there is too much variation in soils to get results that apply widely. Instead, she encouraged the committee to take results we already have and make the best decisions we can now make to move forward. Basically, she felt there will never be enough conclusive, and management simply needs to use existing information and move forward.
10. Mary said going back to the adaptive management process can help us frame what is best to do in problem watersheds and which things will get us to the targets we want to attain. We started on path where are the critical gaps?
11. James noted that it is rare for an implementation projects not to be done due to lack of information; rather it is more often not accomplished due to political issues.

12. David noted several task concepts are being developed jointly by VT and NY that are focused on task implementation - they will be provided to the TAC for review.

13. David asked if group agreed to move ahead on adaptive management, and the committee reaffirmed support for this approach.

14. Breck summed up aspects of the dialogue that pertained to TAC’s need for guidance, including
   - how is implementation actually now making a difference in phosphorus concentration?
   - what do we need to do to continue on the adaptive management process?
   - what are the other implementation needs that are most important in the immediate future?
   The committee discussed these aspects of TAC’s work further.

**Executive Session - Committee Nominations Review**

*James moved to enter executive session for consideration of committee appointment nominations. Ron seconded the motion. The motion passed with unanimous approval.*

The committee entered Executive Session for discussion of nominations.
The committee returned to open session at the direction of the chair.

**ACTION ITEM: Committee Appointments** - *James moved to approve all 3 nominations reviewed for TAC membership during Executive Session. Buzz seconded the motion. The motion passed with unanimous approval.*

**Other Business:** Mary thanked committee for good work and will miss working with all, but will be back some time for a visit. All present thanked Mary for her excellent work for the LCBP over so many years.

**Adjourn** 3:28 pm 😊