

WQAC Meeting
LRPC Conference Room
June 9, 2009 1:00-4:00pm

Meeting Notes

Attendees:

Jeff Schloss	Dean Anson	Steve Landry
Pat Tarpey	Paul Currier	Kimon Koulet
Erica Anderson		

Discussion:

The committee began with an overview of the updated watershed map that includes the river basin as well as lakeshed. Copies of the match spreadsheet were distributed so everyone can keep track of their time and mileage. An electronic copy will also be re-sent.

Jeff and Pat led the discussion on the water quality monitoring plan and gap analysis. The plan includes tiers of monitoring that can be implemented based on municipal and/or grant funding. Pat is going to start the monitoring in the upcoming weeks. It was noted the water monitoring map needs to be revised with the correct locations. Pat will send the correct shapefile to LRPC.

There are currently 8 assessment units in Winnepesaukee. We will work with DES and UNH to determine if and/or how the AUs should be redrawn .

Water Quality Goal:

DES has established standards for Phosphorus and Chlorophyll-*a* (*Lake Winni is oligotrophic and high quality – in blue*):

	Median WQ	Remaining AC
Tier 2 (High Quality Waters):	0.0 – 7.2 ug/L	>0
Tier 1:	7.2 – 8 ug/L	-0.8 to 0
Impaired:	>8.0 ug/L	<-0.8

Pat gave an overview of the water quality modeling she has completed to determine the median P and chl-*a* in each of the three bays. The initial results are in attached spreadsheet and points of discussion are as follows:

- The T-test was good for the 6 sites in Paugus so they were combined.
- It was determined through discussion that the Meredith and Sanders Bay sites should be combined.
- The methodology only differentiates between tributaries and in-lake samples. It doesn't differentiate between embayed and deep lake.
- All samples were taken from the upper limnetic. A median can be determined from 5 discrete data points – either different locations or different days at the same site.
- Historical data (older than 10 years) was not used to determine the medians.

- PSU data has been added to the equation for median P (Meredith Bay).
- Near-shore data with land use factored in will assist prioritize BMP choices and locations.

Another point of discussion was whether the assimilative capacity models were necessary for this project to predict P loading. Jeff mentioned that we at least need to run the chl-*a* to P loading model if the P window is to remain closed. Otherwise we need land use loading from models. The determination will be made to run the models by UNH and DES.

STEPL

The STEPL models were run for each subwatershed. It provides a snapshot of the current watershed with the assumption there are no BMPS being implemented. A few notes on the STEPL results and inputs are below:

- STEPL tells us what P load is entering the lake.
- Tributary data will calibrate STEPL to NH and local area.

Questions for STEPL:

- Lakeport USGS site should be used for rainfall/local weather
- Define what we are using for septic systems – default or assumptions based on town information.
- What is assumption for P loading per year per capita for septic systems? (Steve will check with Andy and email answer.)
- What is the septic setback from streams default in STEPL? Was this changed?
- Speak with Ag extension for updated livestock – even if anecdotal. (Don Richard (NRCS GIS guru) may have information. Pat has his contact information)

Steering Committee

The steering committee meeting is being planned for August or September. The meeting agenda will include a discussion of water quality data and outreach activities to determine hot spots and highlights of the lake and watershed. Both these discussions would assist the process moving forward when brought to the broader stakeholder group (Winni-wide watershed) and public.

Future Actions:

- LRPC will schedule a steering/stakeholder committee meeting in August/September.
- Erica and Steve will draft a presentation and send it to the WQAC for input/revisions.
- Pat will send LRPC updated shapefile of WQ data points. LRPC will finalize the map. A table will be created that can be cross-referenced with the WQ data IDs and points on the map.
- LRPC will continue refining the STEPL model based on available data.
- LRPC, UNH and DES will incorporate the assessment units into the WQ data map.
- Pat will finalize the median P and chl-*a* for each subwatershed.
- DES will run the Dillon-Rigler and/or Vollenweider models if determined they should be run.
- **WQAC members will complete match sheets and submit to Erica by July 24.**