

Comprehensive Planning Committee 4/24/14

Present: Don Newell, Emily Newell, Tom Aversa, Jim Perry, Sydney Tabor, Ken Murch, Steve Kahl (guest), Sara Trunzo (scribe).

A. Review of upcoming tasks/needs for the committee:

- May 1 – review policies list
- May 8 – Land Use Ordinance education session....hope to have Land Use committee members / planning board members be on hand...materials will be forthcoming
 - The purpose of this is to increase Comp. Plan Committee's understanding of districts, what works, what hasn't, etc.
- May 8 - **Date inventory drafts due to Chia and Lori [ACTION ITEM]**
- May 15 – Meeting topic TBA or continuation of previous week's work
- May 21 - Design survey / focus groups / outreach mechanism to get feedback on suggested policies

B. Discussion on Lake Water Quality with guest Steve Kahl

Steve is the [Director of Sustainability](#) at Unity College, has expertise in storm water management, lake water quality, energy, and a wide variety of environmental and sustainability issues. He is also:

- A founder [Maine Lake Monitoring Program](#)
- President [Maine Lake Society](#)
- A creator of the [LakeSmart program](#)

He's excited to have college and town working together in whatever ways that make sense.

Overview of Key Problems

Steve's (and other) research suggests lakes are likely to be high phosphorus if: shallow, near ag runoff, near or within wetlands. Blue-green algal blooms prefer nitrogen, potentially from septic systems, agricultural and other runoff.

Committee members also mentioned issues with flushing and sediment.

2004 DEP reports that majority of properties on UP/LW have poor or no buffer strip. Buffer strips are vegetated barriers, including forest, between the lake and any development. They prevent erosion, runoff, pollution, etc. and may contain a variety of native plants, such as blueberries. (Mown lawn is not considered a buffer.)

Other issues mentioned include: treatment/fertilization of lawns or gardens in shoreline zone, faulty or insufficient septic systems, codes / enforcement / zoning (this includes: not adopting the highest state standards, inability to enforce existing codes, differing standards from town to town), and general knowledge and understanding of best practices for shoreline living.

Additionally, the group discussed the potential negative economic impacts of poor lake water quality as both an issue to address and a possible leverage point.

Possible Strategies / Questions by Topic

Sediment issues could be remediated with a Solarbee device, which consists of a slowly spinning turbine that keeps lake water moving to keep water oxygenated to help flush sediments. (1 device can treat approx. 40 acres of water.) UP / LW may be well suited to this option due to the lack of depth, known flushing problems, and potential for Solarbee to be part of a larger educational demonstration with local orgs, college, etc.

Septics

Lake front properties have to have sewer inspected with change of ownership.

Ordinance committee is looking for ways to make lakefront properties much more sound with placement of septic systems.

Is there a way to increase the required set-back?

Property owners need incentives to adopt best practices. LW lake association has \$500 incentive for using good practices with installment of a new septic system. (Is this enough? Are there ways to enhance this or spread the word?)

Are there opportunities to concentrate development in such a way that camps can share an appropriately sized, well-placed septic system? Opportunities for cost-sharing of new septic systems between private landowners? (Example: Some older camps share septic. What is/should be the set-back required for multi family septic?)

How do washing machines around the lake impact water quality?

Is there a possibility to sewer around lake Winnecook? (To avoid further addition of septic systems in shoreline area? Funding at EPA for such actions if pursued by town? For example, through the [319 grant program](#)? What kind of match would be required?)

Lack of Buffer Strips and Runoff

Lake Smart program (voluntary property owner-based initiative, click link above FMI) could encourage addition of buffers. Incentives include sign and certificate for properties that are "lake smart" which aim to create positive peer pressure around lake.

This is meant to address the dispersed nature of the problem: "Lake water quality issues are often a 'death by a thousand cuts.'" (i.e. Every individual property does a little damage that adds up to a negative net result.)

Treatment / Fertilization in Shoreline Zone

Some communities have phosphorous ban on waterfront. 50-100 foot ban in many communities. Because our soils rarely need phosphorous and liming is only happening on lawns (which ideally are not immediately against shore) there is the potential adopt a simplified standard: do not spread *anything* in shore land zone.

Codes / Enforcement / Zoning

Need to be sure we are at least meeting state rules. Towns can adopt a more rigorous standards than state. Ex: Maine zoning: 100ft; Maine resource zoning: 250ft. Could adopt Maine resource zoning.

Joint code enforcement for Unity, Burnham, Troy- as towns not just on waterfront issues. Both a problem and an opportunity. Good communication is needed to execute this type of multi-town effort. May need a resource such as a website for the lake to show regulations different in each town. Ex: [Winnepesaukee Gateway](#).

Codes are more readily and rigorously enforced if backed up by select board.

Discussion:

We need to have high aspirations. (Ex: "Water quality is unacceptable and needs to be dramatically improved.") However, we also need to have a plan that will be voted in enthusiastically. (Ex: a plan that does not alarm, alienate, or commit to too much spending.)

Comp. Plan can state/mandate that lake water will not degrade further in quality. (Will provide policy and strategy to do so.) Comp. Plan can assign town managers to take action necessary to meet goals.

Citizen efforts or code enforcement staff can support proper zoning and shoreline practices. Examples: Highland Lakes retired police officer became volunteer lake monitor. Code enforcement officer in Lincoln completed annual photo-documentation to record shore land zoning violations. (And mapped changes- so no property owner could claim "it's always been that way.")

Negative Economic Impacts

Poor water quality impacts economics of whole town b/c if poor water quality leads to lower property values in lakefront, tax burden will move inland (to non-lakefront properties).

Tax assessment happened 10yrs ago, but prices might have been unusually high on lakefront. This assessment, with degrading water quality, may cause a bubble in property values.

Discussion:

China Lake has made huge investments to improve lake without huge results and citizens are (reportedly) dissatisfied.

Will Unity citizens be concerned about the cost of improving water quality? How can we demonstrate / increase understanding of overall economic impacts of water quality? How can water quality improvement be cast as an investment?

Agricultural Runoff

Farms need to be using good management practices and be in compliance with applicable codes. How can we support this?

Streamfront properties should be considered part of the shoreline zone and be under the same standards as lakefront properties.

Knowledge and Understanding of Best Practices for Shoreline Living

Engage existing parties / partners in unified effort to improve UP / LW. This could include: Unity College, Friends of Lake Winnecook, Unity Barn Raisers, Sebasticook Regional Land Trust, etc.

UC and FOLW especially primed for potential ongoing, science-based approach that might recommend policy. Benefits include use of staff expertise, student volunteers, existing organizational networks.

Informational materials needed. Example: DEP flier "Living with Your Lake" could be helpful education as properties turnover. Possible intervention / info sharing point in real estate.

Discussion:

There is a need for an organized effort. Can this be a citizen effort? Can Town of Unity provide leadership with partners? Is there a need/opportunity to staff this effort? Are there alternate ways to find a project manager? (Examples: [Cobbesssee Lake Watershed District](#), [Damariscotta Lake Watershed Association](#), etc.)

Other Topics Addressed Briefly

Settlement ponds, sludge management may need to be addressed soon and should be on town's radar.

What is appropriate timeline and goal setting approach?

Suggestion: Get Sechhi disk reading from 5-6 (based on 2004 study) to about 10.

Once a strategy is developed, what are some action steps?

- Committee or task force assigned by Select Board
- Identify ways to help that people can minimize their property's impact on water quality at a low cost
- Engage partners on specific programs. (Ex: UC grow shoreline plants for LakeSmart or other buffer installation program at Half Moon Gardens. FOLW partner with Town of Unity to support/encourage other Burnham and Troy to participate in key efforts. Etc.)
- Survey lakefront property owners to better understand needs, barriers, and potential leverage points. (2002 survey is available, UC students conducting a similar survey now)