

March 5, 2013

House Committee on Consumer Protection and Government Efficiency

HB3172

Oregon State Capitol

900 Court Street NE, Room 453

Salem, OR 97301

Chairman Holvey and Committee Members,

Thank you for the opportunity to provide testimony in regards to House Bill 3172. I am the Watershed Monitoring Coordinator for Tenmile Lakes Basin Partnership (TLBP) in Lakeside, OR. My responsibilities include collecting, testing, and analyzing the water within the Tenmile Lakes Watershed as it relates to our TMDL. In this letter I hope to show the Committee a real world example of the problems that malfunctioning septic systems create in our lakes, briefly touch on the science behind these problems, and explain the consequences to our communities.

Both North and South Tenmile Lakes are water quality limited and listed on the 303(d) list for aquatic weeds and algae. Both of these factors are greatly influenced by the high levels of nitrogen (N) and phosphorus (P) that are found in the lakes. There are several sources for these high nutrient levels including forest and agricultural land runoff. These are the major contributors in the winter high water season, but in the summer the tributaries that feed into Tenmile Lakes dry up or become inconsequential and the malfunctioning septic systems become the primary problem.

With the input of nutrient rich water greatly diminished or gone in the summer, one would expect the nutrient levels to drop within the lakes. They should drop even faster as the temperatures warm up and the algae in the lakes begin to actively metabolize the nutrients. We see this in the spring as both N and P show a steady decline. Unfortunately, starting around the beginning of June and continuing throughout the summer season, we see the nutrient levels raise again. (See attachment #1) Since the nutrients in the upper watershed have no transport mechanism (rain) to bring them to the lakes, the only source for these extra nutrients is the activity around the lakes themselves. Summer is the tourist season on the lakes, and we get a large influx of vacation home owners that use their houses and let friends and family vacation there. With this increase in usage of these lakefront homes, comes the corresponding usage of their septic systems.

Many of the septic systems on the lakes are very old or non-existent. In 2006 and 2007, TLBP worked with the Coos County Health Dept to inspect pre-1974 septic systems on a voluntary basis. Twenty six homes were inspected and 80% were found to be in need of repair. (See attachment #2) There are over 700 lots on Tenmile Lakes and over 400 dwellings. Many of these homes have never done any kind of system upgrade since they were installed, and most homeowners simply ignore the problem entirely assuming that if they flush the toilet and it doesn't back up, then everything must be okay. Some of these "septic systems" are made up of nothing more than a 50 gal drum filled with rocks. The resulting sewage that permeates into the lakes is responsible for the spike in nutrients that we see in the summer. This spike fertilizes the lakes and creates the problems that are listed in our TMDL: Weeds and Algae.

Invasive species, especially the submergent weed, *Egeria densa*, uses this nutrient spike and has shown a dramatic ability to proliferate along the shorelines. In many areas it clogs up the arms of the lakes and makes boating difficult or impossible. This in turn lowers property values and places an economic hardship on the landowners. There are properties in some of these areas that have been on the market for years with no success.

Algae blooms are also tied directly to the nutrient levels in the lakes. The nutrients fertilize the water and blue-green algae proliferate under these conditions. (See attachment #3) Harmful algae blooms (HABs) can contain toxins that cause sickness or even death, especially for pets. They also look uninviting and lower the desirability of the lakes. When the HABs are large enough, or high toxin levels are present, the State Health Dept issues a Recreational Advisory and this has a huge impact on our local tourist economy and on the real estate values on and around the lakes. People also drink water from the lakes and this represents a very real health hazard unless properly treated.

TLBP has been fighting this battle for a long time. The evidence is very strong that the malfunctioning septic systems on the lakes are responsible for the higher nutrient levels in the summer and the corresponding health and economic impacts. It has been a frustrating effort to get the ODEQ to enforce their rules that require every house to have a properly functioning septic system. It amazes me that in the year 2013, we still have properties dumping untreated sewage into our lakes and waterways. I respect individual property rights, but included with that right comes the responsibility to make sure that the things that you're doing on your property aren't harming your neighbors. The septic systems that are non-existent or malfunctioning are a direct health concern to everyone on the lakes, and the economic impacts are far reaching.

Although I am disappointed that the proposed amendments have no enforcement provisions that would require a septic system to be fully repaired before a sale would be permitted, I still urge the committee to approve these amendments. This could be the first step to actually making some improvements in our water quality. I would also urge the Legislature to take the next step and require every property to have their septic system inspected every 5-7 years. That is the only way to reach every property and insure that we are not allowing these failed septic systems to continue to endanger our health and local economy by polluting our lakes and streams.

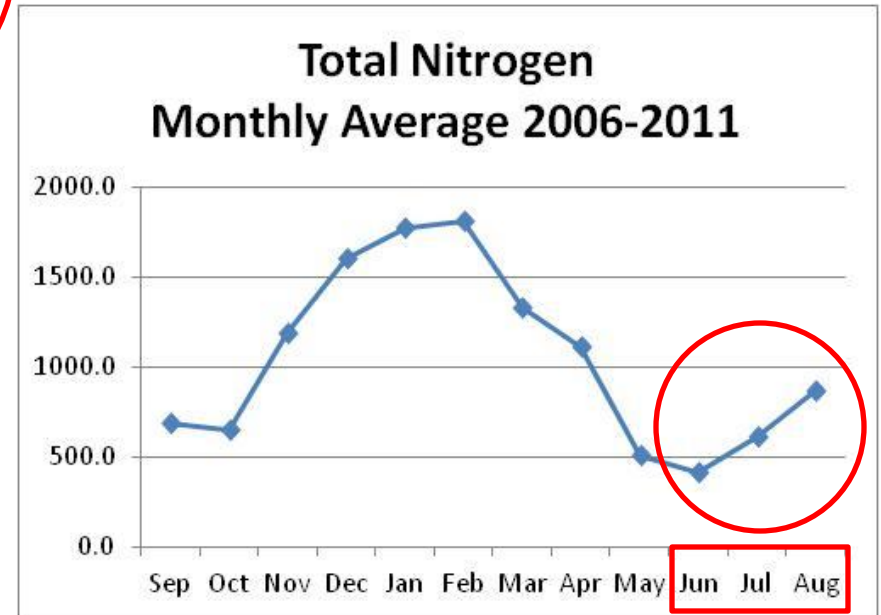
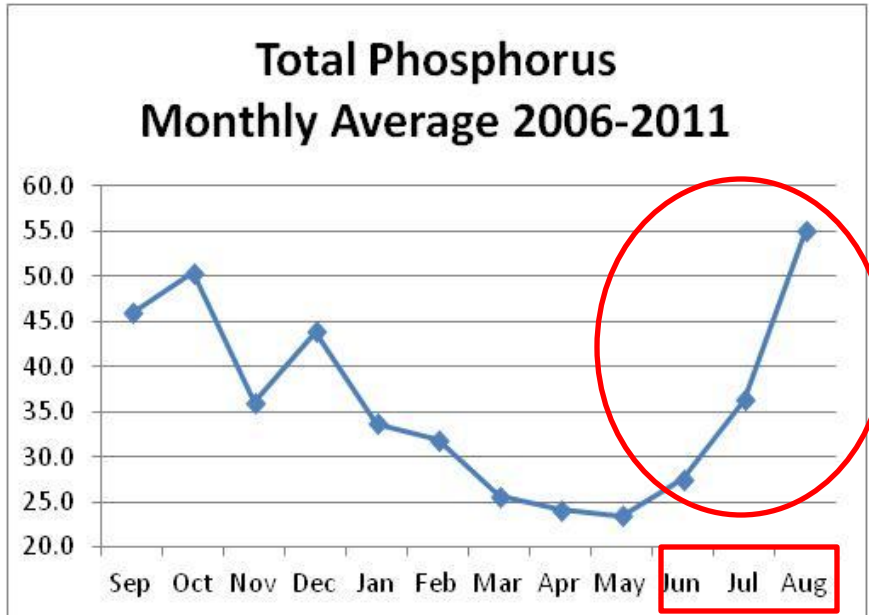
I appreciate the opportunity to add my comments to this process and would be happy to work with the Committee in the future in my capacity as Tenmile Lakes' Watershed Monitoring Coordinator.

Thank you,

Richard Litts
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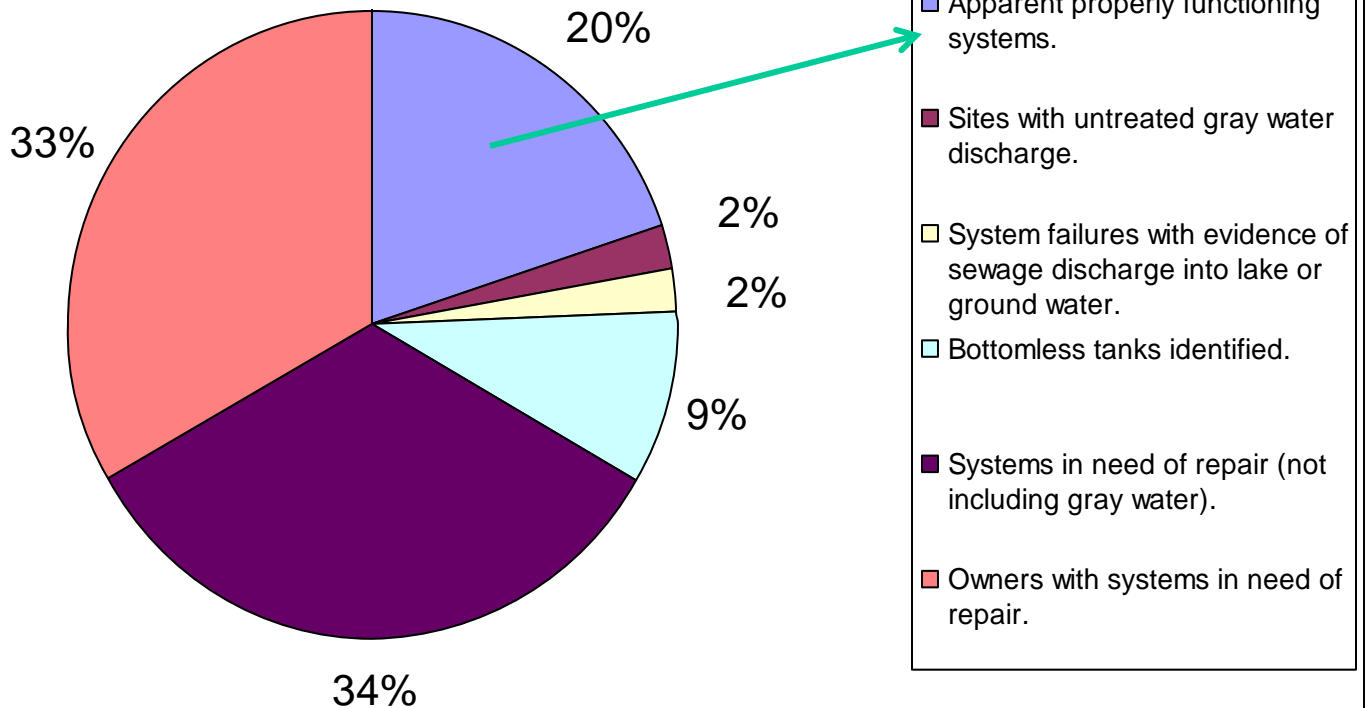
Attachments (3 pages)

Tenmile Lakes 6-Year Average Nutrient Levels 2006-2011



With stream inputs gone and algae metabolizing the nutrients, the graphs should be going down in the summer. Septic inputs create the summertime highs and subsequent Algae problems.

Results of Tenmile Lakes Septic Survey Pre-1974 Septic Systems



Algae bloom Tenmile Lake 2011

