



A Letter from Bill

By Bill Joplin, President, LMD Steering Committee

Long Lake property owners, including local and state governments, have voted for more than 20 years to pay an assessment for the purpose of sustaining an environmentally responsible, safe source of fun and sport.

The LMD budget for 2010 has been completed and includes no rate increases and continues our ability to use the variety of lake management options that have helped clear up our lake over the past several years.

During 2010, the Steering Committee will carry out the processes and public meetings to seek re-establishment of the LMD beginning in 2011.

Current challenges

New water rights and wells proposed by the cities of Lacey, Olympia and Yelm will have an impact on lake levels. Our concerns include those listed in Mr. Karman's article on page 4. We have written letters to several organizations and met with the City of Lacey to seek appropriate and decisive action should lake levels fall to a level that property damage is likely to occur (such as undermining bulkheads). Lower lake levels, in conjunction with the increased population and use of Long Lake, will intensify the potential for damage, and may further degrade water quality by increasing the frequency and quantity of algal blooms in the lakes. We ask that you help by notifying the government contacts listed in this newsletter to express your concerns and urge them to continue to work with our Lake Management District to create an appropriate mitigation strategy. We will continue to pursue solutions with the City of Lacey and the Department of Ecology.

Lily mats have resulted from the treatment of white waterlilies. As these plants die, their tubers fill with gases and float to the top along with the muck that surrounds them. The treatment over the past four years was done in a manner to minimize the emerging mats; however that strategy in many cases did not prevent the emergence of the mats. We have directed the removal of these mats. Fortunately, we were able to clean up nearly all of the problem areas this year, with funding anticipated for next year to finish any remaining problems. Please read the article in the next column for additional details.

Successful timing of weed treatment will improve the effectiveness of our efforts. We are pursuing changes to the Thurston County procedures that dictate timing of our treatments. The products being used will be more effective if treatment can occur earlier, as the plants are emerging. The changes are intended to create effective treatment much earlier than experienced in 2009. Page 5 of this newsletter contains more information about our goals.

I hope you find this newsletter informative, and we wish you a very healthy and enjoyable holiday season. Your comments are appreciated (r_joplin@msn.com).

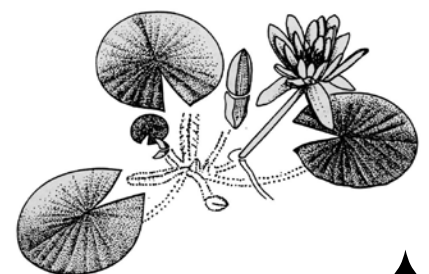
Managing Waterlily Mats

By Yvonne Shevalier and Jerry Bennett, LMD Steering Committee

Our Integrated Aquatic Plant Management Plan (IAVMP) includes a mandate to eradicate all non-native invasive species. Fragrant waterlily is a state-listed noxious weed, and is the target of a four-year program to remove it from Long Lake. This year's control work began in July with Rodeo (glyphosate) treatments on floating leaves, followed by harvesting the dead rhizome mats that bob to the water's surface.

The visible mats on the surface of Long Lake are composed of the dead and decaying waterlily rhizomes or roots. They are held together by muck — accumulated organic matter from the last thousand years. These floating "mud" mats develop as part of the plant's normal lifecycle, and need to be managed.

The LMD hired a contractor to develop a way to separate the mud from the rhizomes. It's likely that you've seen this harvester — a large boat with rotating drums and conveyor belt, working from one end of the lake to the other. This year, the contractor harvested 20.9 acres of nuisance plant material, and spent more than 18 days removing the mats. The Long Lake Management District Steering Committee is evaluating the overall fragrant waterlily removal program in preparation for the upcoming 2010 season, the final year of the program.



Water Levels to Be Lowered In Long, Pattison & Hicks Lakes

By Doug Karman, Vice President, LMD Steering Committee

Some of you may be aware the cities of Lacey, Olympia and Yelm are in the process of acquiring new ground water rights to accommodate growth in their jurisdictions.

The Department of Ecology (Ecology) has required the cities to develop mitigation plans to lessen negative impacts to rivers and lakes in the project area. The City of Lacey (Lacey) intends to mitigate impacts to Woodland Creek, and although they predict a 1-inch drop in water levels (20.6 million gallons) in Long, Pattison and Hicks lakes over the next 30 years, they consider this impact to be non-significant and therefore impacts to lakes are not being addressed.

The LMD Steering Committee (Committee) believes that mitigation must also be developed for the lakes, since water quality and lakefront properties could be affected by lower water levels during drier years. We have repeatedly expressed our opinion to Lacey and Ecology officials, but have not convinced them to change or revisit their position on mitigating potential impacts to the lakes.

This article contains additional background on the Woodland Creek study and decision. If you share our concerns, you can write letters and e-mails to Lacey and Ecology, asking that changes in lake water levels be mitigated. There is still time for citizens to act before Ecology grants the permits for increased ground water use. Contact information is provided at the end of this article.

During their planning process, the cities used computer models to predict the impacts of increased ground water withdrawals.

The Woodland Creek model indicates that the water level of the three lakes would be lowered by one inch over the next 30 years. If the model is wrong, the impact could be even greater.

We have met with Lacey and raised the following issues in our discussions:

1. Completeness of the model:

The Woodland Creek watershed is a rain-fed system. Although Lacey's model is very sensitive to rainfall amounts, it is impossible to predict yearly rainfall amounts, let alone long-term fluctuations. Logically, if the aquifers receive more or less water from rainfall, our lake levels will fluctuate as well. Based on experience, the water level variation may take place one or two years after the climate event.

2. Climate change: According to climate change scientists, we can expect more extreme weather conditions. They suggest that we may experience heavier rain events, longer dry spells, colder winters, and warmer summer conditions in the Pacific Northwest. During heavy rain storms, water tends to run off the land rather than slowly seeping into the aquifers that feed our lakes. If our aquifers are not sufficiently replenished, we may experience even lower water levels than predicted in the model.

3. Lake impact excluded: The model does not take into account the impact on lake waterfront property when water levels are low.



As the water level goes down, waves eat away at the base of bulkheads, and may cause them to eventually fall over.

Permitting, repairing and rebuilding failed bulkheads will be expensive for lakeside residents. Of equal concern is degradation of water quality as lake levels drop. Shallower water will be warmer, increasing blue-green algal blooms and nuisance-level vegetation in the lakes, and lowering dissolved oxygen in the water. Long Lake is used heavily by the boating and fishing public; degraded water quality will diminish swimming and boating opportunities on the lake.

4. More water being removed:

In the short term, Lacey has proposed pumping .45 gallons per minute from an existing well in Lacey's Long Lake Park. Water would be pumped from May through October, and added to Woodland Creek, downstream of the lakes. While this will augment stream flows in the creek, it would likely further reduce water in the aquifer that feeds the three lakes.

Eventually, reclaimed waste water pumped from the LOTT treatment plant will be used to supplement stream flow in Woodland Creek. This water cannot be added directly to the creek, but would be pumped into infiltration ponds downstream from Long Lake, which would provide the additional treatment needed before the water reached the creek.

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