Lake Saint Clair Water Levels Community Meeting Lacey Community Center August 15, 2013 5:30 – 7:00 pm

Meeting Questions with Answers

Shoreline Permits - Responses from Mike Kain, Planning Manager

1. Who came up with the concept that docks are a bad thing for the lake?

Docks do shade the lake bottom and damage fish habitat. That is a biological finding. Even so, the Shoreline Master Program allows docks so long as they meet specified size and location standards designed to minimize environmental damage.

2. What if the bulkhead needs a new foundation? The old one is being undercut

A shoreline exemption permit and a critical area review permit are required to repair an existing bulkhead or install a new bulkhead. The current fee is \$1,110. The two permits are combined in one application. Typically the review by the County takes 30 to 60 days. No public hearing is required.

3. Can the fees for Shoreline Permits be waived?

Fees are set by the Board of County Commissioners. Only the Board can decide to waive fees. To date, staff is unaware of any fees that have been waived by the Board.

4. What is the primary concern from high lake levels and wakes—damage to property or septic systems?

Damage to septic systems and property erosion both contribute pollutants into the lake.

5. What is the primary impact from high boat speeds—shoreline erosion or damages to bulkheads?

Boats create high energy waves that erode property and undercut existing bulkheads.

6. What does the County consider property damage when deciding whether to permit bulkhead repairs or construction?

Bulkhead repairs are permitted on a legally existing bulkhead with approval of a shoreline exemption permit and a critical area review permit. New bulkheads can only be approved if the residence or a residential appurtenance is threatened. That means that a structure is in danger of receiving adverse impacts caused by current, flood, wake or wave action within three years. If that finding can be made by a geologist, a shoreline exemption permit can be granted by the County. Per WAC 173-27-040, residential appurtenances include garage, deck, water line, septic system and drainfield. To be eligible for protection, the structure must have been installed legally. Bulkheads to protect a lawn, landscaping, or patio are not permitted.

7. Did the County select the 69.5' level to protect structures or property?

That level was selected in an effort to reduce erosion from high energy boat wakes.

Shoreline Permits (cont.)

8. Will the County waive permit fees for bulkhead repairs on LSC? See #3 above.

9. What is the process to repair bulkheads constructed before 1970?

See #2 above. The vesting year is 1976.

10. Water levels too high to plant for "soft armoring". What can you plant that will grow underwater to protect shoreline without a bulkhead?

Although soft armoring must be primarily live vegetation, it can include geotextile and some rocks and logs to help deflect the wave energy. Soft armoring would be considered "landscaping" and not a bulkhead if designed properly. This means it could be placed without showing that a residence or residential appurtenance is threatened. A landscaping project would also require a shoreline exemption permit with a current fee of \$1,110. Additionally, planting of trees and shrubs with hand tools and minimal soil disturbance can be done at anytime with no permit required. Excavation is the trigger for a permit. Native plants are recommended because they generally will not require fertilizers and herbicides.

11. We would support "permit" help to strengthen shore line and or bulkheads.

Staff can present to the Board the idea of a blanket approval of one or more landscaping designs that can be reviewed at a reduced fee for individual property owners.

12. Bulkhead repair should be allowed without large fees and restrictions. People should have the right to protect all of their property, not just the residence.

The Shoreline Master Program does not permit a bulkhead just to protect a lawn. Code amendments would be required to change that restriction.

13. Is it possible to develop several soft engineering and/or bulkhead designs that could be approved without lengthy review?

See #11. Yes this concept is possible for landscaping, but would not work well for bulkheads because only those few, if any, properties with a threatened residence or residential appurtenance on Lake St. Clair could be approved for a new bulkhead. Additionally, the bulkhead design would have to be specific to alleviate that individual threat.

14. Let's deal with more important issues like creosote bulkheads! I have 3 near me.

If the existing bulkheads are legal, we would encourage the property owners to seek a permit to replace them. If the bulkheads are not legal, the County would take compliance action if we are given the addresses.

Shoreline Permits (cont.)

- 15. If you can't get a permit to repair or build a bulkhead unless your house is threatened, does the County just want homeowners to wait under the shoreline erodes back to the house?
 - Landscaping with soft armoring material would slow the erosion. Under current codes, a bulkhead could not be approved until the residence or residential appurtenance is threatened.
- 16. Opposed to further regulation on LSC. Will the County stop issuing more shoreline regulations?
 - The County revises the various shoreline codes when necessary to protect the shoreline environment. Any new environmental protection codes must be based on new science. Additionally, some code amendments to protect the environment are mandated by the State. Therefore, it is not possible to say that additional shoreline regulations will not be implemented in the future.
- 17. Why can't the County give shoreline owners more flexibility to repair/fix bulkheads?
 - The County must ensure compliance with existing codes. Typically, the codes do not permit a great amount of flexibility. Also see #11 and #13 above.
- 18. The County prevents the property owner from protecting his property from erosion. Whose property is it? The owner's or the States?
 - The property is owned by the individual. However, pursuant to County, State and Federal laws, individual property owners are not permitted to take actions that would damage their neighbors or the environment. Biological science has shown that bulkheads damage habitat for fish and other water dependent species.
- 19. Can the shoreline designations and coding for most of the inhabited areas of the lake be changed to Urban instead of Rural? Would this change the ability to protect shoreline property?
 - The designation can be changed by the Board of County Commissioners; however, an urban designation would not change the regulations pertaining to bulkheads.
- 20. If only residences can be protected, many expensive and valuable additions to property will be destroyed by wave action: Landscaping, Docks, Bulkheads, Walkways, Garages and Boat Houses. These all convey value to the individual parcels, and if damaged will lower property values.
 - The shoreline rules have been in effect since 1976. Any project built along the shoreline, whether with permit or not, is built at the property owner's risk. Only threatened residences and residential appurtenances may be protected with a bulkhead.

<u>Water Use and McAllister Wellfield</u> - Response from Nadine Romero, County Hydrogeologist

Most of the McAllister Well Field questions below pertain to findings in hydrogeologic studies, modeling and reports. The county hydrogeologist would have to spend time obtaining reports from the City of Olympia, interviewing City engineers and reading those documents to answer these questions, specifically. <u>Estimated work hours: 32 hours</u> to gather some insight for public here. Cannot be completed until December 2013 or January 2014.

- 1. How does the new McAllister Springs wellfield impact LSC water level?
- 2. In the past, how many gallons of water did McAllister Springs discharge?
- 3. When did the City (Olympia) stop pumping from McAllister Springs?
- 4. When did the City (Olympia) start pumping from the new well field?
- 5. Has the discharge from McAllister Springs changed?
- 6. Does the operation of the McAllister Springs well field affect lake level and will the change in well operations affect LSC water level?
- 7. Will the new well field affect our drinking water wells?
- 8. Will the McAllister well field change LSC water levels?
- 9. Is a portion of the water to be pumped from the new wellfield coming from LSC?
- 10. Where is the "offset" coming from to compensate from the new Olympia well field?
- 11. How will we know whether or when there is an "overdraft" of groundwater from the Olympia well field affecting LSC?
- 12. The LSC community did not receive notification from the Cities about the new well field.
- 13. Can the well field be pumped enough to affect LSC water levels?

The full water right is not supposed to impact the hydraulic head in the lake significantly (not more than an inch or two as a rough guess). But, if more pumpage above the water right occurs and water is not re-infiltrated locally such as a basin --an impact is likely.

14. Is LSC connected (hydraulically) to/with McAllister Springs?

Yes.

15. What is the worst case scenario for lake levels?

The county has created a small analytical hydrologic model which thus far has been able to predict lake levels in the short term. We could potentially use this model with current lake level and a theoretical heavy La Nina Year to see what lake levels can be achieved the following summer. It is highly recommended by the county hydrogeologist to keep using this small model to further study/predict for community Lake St. Clair water levels.

Hydrology and hydrogeology (cont.)

16. What is the prediction for the worst case scenario for lake levels?

Same as above.

17. What is the prediction for lake levels next year?

Same as above.

18. How many years has Eaton Creek flows been measured?

We have about 5 or 6 years of good record and field measured flows.

19. What has been the effect on Eaton Creek stream flow of the former dairy's water withdrawals?

We do not know this and would have to examine existing flow data to see if any affects. Estimated time: 24 hours of stream flow computations, hydrograph analysis.

20. Olympia purchased the dairy's water rights. What is the impact of that decision on Eaton Creek flows from retiring those water rights?

We do not know this would have to be investigated further.

21. What is the impact of development on flows in Eaton Creek and Lake Saint Clair (LSC)

We do not know this would have to be investigated further. This may need to be a numerical model to define this other than hydrologic analyses above.

22. Does development, like the new jail, with its increased stormwater runoff increase groundwater recharge?

If stormwater runoff doesn't go straight to stream discharge and infiltrates into ground water then the ground water table would rise in the short term/long term depending upon how quickly ground water discharges to nearby streams. Ground water eventually feeds streamflows.

23. Are there other lakes in the County with high water levels from high groundwater?

Yes, Black Lake and we have not studied other lakes, specifically – only baseflow measurements in streams and several ground water basins.

Hydrology and hydrogeology (cont.)

24. Are lakes with surface outlets able to drain better than LSC?

Most county lakes are a type of "land-locked" lake system some with outlets and some without outlets, but well above sea-level. Lake St Clair is a different type of lake – it is in low elevation (sea-level) "esker" glacial deposits (coarse loose gravels/sands) which holds an extensive amount of ground water regionally and which discharges into the Puget Sound at sea-level (if the ground water is not intercepted/collected/pumped from the Springs). The hydrology of this 'trough' is complex as it interfaces with the hydraulic head of the Puget Sound waters and the discharging esker deposits – it is like a slow moving discharging underground river a more thorough hydrogeologic analyses with 'hydraulic head' data is needed to understand response times and elevational rise of this system – surface outlets may have no affect.

25. What is the condition of the water level on Summit Lake? Does Kennedy Creek drain it better than LSC?

Again, it is higher and above sea-level and I have not studied this lake-stream system.

- 26. What is the geotechnical solution to manage LSC water levels and what are the possibilities? Additional hydrologic analysis is needed to determine this and how ground water discharges through the system and time responses.
- 27. Could a spillover be constructed for a surface water outlet to LSC? Same as above.
- 28. There apparently was a test many years ago @ the north end of the lake. Dye was put into the lake and showed up on the other side of 510 in the pond. Could this be used as an outlet to control the lake level?

We would need to obtain a copy of report/study to determine findings, ground water elevations/lake levels/response times.

Boat Speeds and Regulations - Responses from Janie Civille Aquatic Resource Specialist

Other lakes and speed limits

1. Are there boat speed restrictions on other lakes?

Yes. The majority of lakes in Thurston County have a maximum 5 mph speed limit.

2. What other lakes have speed restrictions?

In Thurston County five public lakes, Summit, Long, Lawrence, Saint Clair, and Black are open to boating speeds over 5 mph when boats are more than 200 feet from the shoreline. Lakes within city limits and privately owned lakes may also allow speeds over 5 mph.

3. What do these speed limits protect?

Speed limits were set by the Board of County Commissioners to protect public safety and property values.

4. What is the process to close public access to lakes, as was done on Long Lake?

Public boating access to Long Lake, like Lake Saint Clair, is through launches owned by the Washington State Department of Fish and Wildlife (WDFW.) WDFW has sole discretion to decide when to open or close the launch gates. Long Lake's boat launch was closed 6 months of the year until recently, it is now open year-round. The previous seasonal closure was due to a six-month fishing season, and was not related to water levels, speed limits, or boating uses.

Restricting Use of Wake Boats

- 5. Has the BOCC considered limiting or banning the operation of wake boats?
- 6. Wake boats cause 3'-4' high waves that damage bulkheads, why can't these boats be banned when the water level is high?
- 7. Why can't wake boating be prohibited while water skiing is allowed to continue without restrictions?
- 8. Please consider a boat classification on the lake. Oversized boats and boats with "bladders" are producing white caps and are spilling over my bulkhead.
- 9. Ban Deep Hull wakeboard boat that overload boat with passengers for large wakes and boat "surfing" they generate 3' to 4' ocean size waves. (doesn't matter if they are 200' out).

The County has received requests to restrict the use of wake boats on Lake Saint Clair in writing and during public hearings held in 2012. These boats are purposely designed to produce waves for wake boarding and surfing, at speeds much lower than those required for water skiing. The County recognizes that wake boats are a popular recreational use of lakes, and seeks to allow the most access while protecting public safety and private property. It is difficult to enforce exclusion of different boat types.

Boat Speeds and Regulations (cont.)

10. I am a homeowner on the "fast" water sport side of the lake. I bought my property in 1997 knowing that jet skis, fast boats, etc. would be used in "my section." The problem now is that technology has allowed the boats to produce bigger, faster wakes – those wakes are causing the erosion and destruction. By eliminating the "bladder" boats, the other boat traffic would be okay and not cause issues.

The County recognizes that the recreational uses of the lake are important to all residents and property owners on Lake Saint Clair. It is hoped that lowering the speed limit for all boats during times of extraordinary high water levels will protect property values and provide a safe venue for boating recreation.

Support for current restrictions (Res No. 14388): requests for additional restrictions

- 11. I do not want water skiing or jet skiing restricted beyond the current restrictions.
- 12. This resolution (14388) should remain as stated. No further restrictions on current boat usage or speed limits are necessary. (3 signatures)
- 13. Lower the water level to 65 before allow above 5 mph
- 14. Move the start away further out for the speed to increase if is too close to shore.

County Code 16.04 sets a maximum speed limit of 5 mph when boats travel within 200 feet of the shore. Resolution No. 14843 further lowered speeds in the 200 foot zone to those producing "no wakes" when the water level is above 69.5 feet as read at the Peninsula Drive bridge. The 69.5 foot level was established following similar high water emergency restrictions in 2000, subsequent surveys of lakefront properties, and multiple public hearings in 2012.

Opposition to existing regulations on the lake

15. The wording at the launch changed. We always were allowed to go over 5 mph till a half hour before sunset. I would like to have the wording changed because 8 pm is too early to close the lake down.

Thurston County Code 16.04 has been revised multiple times since 1943, when a speed limit of 5 mph was set on all lakes in the County. Speeds over 5 mph were then permitted on five lakes between 11 am and 3 pm in 1958. The current Code was revised in 2000 to state that higher speeds would be allowed between 11am and 8 pm, or sunset, whichever is earlier. These changes have been made to accommodate lake residents, recreational uses of the lakes and development of new types of motors and boats as they have become available to the boating public.

16. Opposed to further regulation on LSC. Will the County stop issuing more boat speed regulations?

The County is responsible for revising codes and regulations when they find that protections for private property and public safety need to be set in place.

Boat Speeds and Regulations (cont.)

- 17. I am strongly opposed to additional regulation on boats on the lake. The homeowners purchase their homes or property knowing it was open to boaters. You can't buy a house next to the mushroom farm expect it not to smell like a mushroom farm.
 - As boating and recreational technologies advance, it will be important to review appropriate uses of public waters to ensure that all property owners and users of the lake are protected and allowed to enjoy the lake at the highest level possible.
- 18. Strong oppose speed restrictions and any additional regulations on Lake St Clair. We bought on that lake to enjoy water sports and plan to continue enjoying our investment.
 - The County is committed to ensuring that all residents, property owners and the public will be able to enjoy water sports and protect property investments.
- 19. Highly opposed to any more boating regulations. I grew up skiing on Lake St. Clair and would like to continue and we want our kids be able to do the same. I would never build a house on any lake where you can't ski or go above 5 mph.
 - The current restrictions are intended to be in place only when lake water levels exceed those shown to be damaging to property and safety, they do not permanently lower the speed limits on the lake.
- 20. Before placing any further restrictions, consider all residents of the lake. We moved onto the lake specifically for water sports and activities, including skiing. Also-consider changing the 69.5 to a higher number. This # restricts the days per year we are able to enjoy the lake in the ways we like to. I'm not saying to a level that would cause harm to property owners...but we have skied in years past...at levels higher than 69.5 without home owners raising a pubic fuss. Thanks again.
 - The County will be considering whether to extend the high water level restrictions, which are only in place during times that property, bulkheads, landscaping, out buildings and residences are threatened or damaged by waves on the lake generated by high boating speeds.
- 21. We moved our family into this county and onto this lake to enjoy lake/water activities & lifestyles. We are against further boating restrictions on Lake St. Clair.
 - The County recognizes the value of the lake for recreation, and the importance of property values in this discussion. During extreme high water levels, it will be necessary to protect all property owners while allowing the most use possible of the lake and boats.

Boat Speeds and Regulations (cont.)

22. I hope that when you folks go back to your office and have a conversation about restricting boat types and uses on our lake, that you consider who the taxpayers are. Specifically, I am suggesting that if you plan to restrict further the uses for our lake, is the county prepared to consider revising our property values (i.e. property taxes reduction)? Because through regulation you will be reducing the value of our property.

The question of diminishing property values is one that may be linked to perception of the consumer, over actual Accessed value. The County is mindful that boaters and property owners all have interests that need to be protected.

23. Nine years ago my husband and I moved from Tacoma onto Lake St. Clair because it was and is a ski lake. Nearly 5 years ago we had a child with significant health needs and at the point we made a conscious decision to stay on Lake St. Clair and raise our child with an active lifestyle in an active community. As a family we enjoy skiing, our 5 year old has recently learned to ski. Also wake boarding, kayaking, and paddle boarding. One of my many frustrations with altering the ability to ski on Lake St. Clair is the huge change in lifestyle and health promotion for our family as well as a massive drop in property values.

The intention of the temporary speed restrictions during times of high water levels is to protect the value of the lake, your property, and the ability of your family to continue enjoying the recreational opportunity the lake provides. The property values of parcels. See above.

24. Please end all lake restrictions.

It is important to keep in mind that the speed restrictions are in place only when water levels exceed 69.5 feet.