

April 4, 2016

Proposal by Lake Cavanaugh Improvement Association regarding docks & setbacks for the Skagit County SMP Update

BACKGROUND OF LAKE CAVANAUGH:

1. Platted in 1940's. Approximately 500 lots are present on the lake. There are 420 existing docks.
2. Approximately 90% of lots developed with homes and cabins as of 2016; it is close to 100% on flat lots. Use on summer weekends is intense, both by residents and by those who access from the public boat ramp. Summer weekend population is higher than any other lake in Skagit County, and approaches that of Lake Stevens in Snohomish County. However, due to cold winters, use is seasonal with decreased winter use, mostly for fishing.
3. Average setback from the lake for buildings is under 50 ft.
4. Most existing properties have docks 25 – 110 ft long.
5. Lake level varies approximately 4 feet throughout the year, but fluctuations of up to 5 feet have been experienced:
 - a. High level in January & November – 1013 approx.
 - b. Low level May – Oct – 1009.4 approx.
 - c. Average water level from Jun – Oct is 1010.5
 - d. Ordinary High water is around 1011.
6. Fish stocked on lake by WSDFW include:
 - a. Kokanee (September)
 - b. Cutthroat Trout (June)
 - c. Other species found include Rainbow Trout, Bass and Sculpin.
 - d. No fish migrate to Lake Cavanaugh from the Pilchuck River. A fish blockage was installed in the early 1970's by WDFW to prevent eels and other invasive species from reaching the lake, and because of natural waterfalls.
7. No Stores, marinas, or public beaches are present on the lake. WDFW maintains a public boat launch at the east end of the lake.
8. Lake temperatures range from surface freezing in winter months (Dec – Feb) to approximately 80 degrees in summer months. The lake is over 100 feet deep at its deepest point.
9. The lake is approximate 3 miles long by 1 mile at its widest.

10. Water quality is exceptional with about 1/3 of property owners drawing water from the lake for drinking water.
 - a. Oxygen content:
 - i. 10 ft: 9.3 ppm (110% saturation);
 - ii. 55 ft: 5.0 ppm (47% saturation).
 - b. Acidity:
 - i. 10 ft - 7.0
 - ii. 55 ft -6.5
 - c. Visibility: 28 ft approx.
 - d. Fecal Coliform: 0 colonies (occasionally measure minor amounts)
11. Surrounding land uses are DNR and private working forests.
12. Weather patterns are unusual with shear winds coming from the east when winter weather is traveling from the west. Winds often exceed 100 mph. Winters are particularly violent as the lake level is high and winds are exceptional. Damage occurs every year to docks, buildings, and trees. Due to weather, most boats and boat lift covers, and swimming floats are removed by October until mid-May. Little activity occurs on the lake from November to April, except for fishing. Exposure of docks to winds varies greatly, with some lots in protected coves, and others exposed to full force of the winter shear winds.
13. Geology around the lake varies from steep cliffs to wide flat areas. Rock is present at surface in some areas and other areas require pile foundations of 42 feet to reach firm bedding.

PROPOSED SETBACKS:

1. Minimum setback of 50 feet, subject to an allowance of decks and patios up to a width of 10 feet within the setback area. Similar setbacks have been approved by the Department of Ecology for other residential lakes, such as Lake Stevens (50 feet with allowance of 10 feet for decks and patios), Lake Sammamish (50 feet), and Beaver and Pine lakes (45 feet). See Section 5.C.8 of the Lake Stevens SMP and section 25.07.020 of the Sammamish.

DOCK OBJECTIVES:

1. Locate to avoid prop wash of lake bottom.
2. Address structural requirements unique to the environment at the lake.
3. Allow for use of docks for recreation including access to lake for swimming, boating (average boat at the lake is 20-25 ft), water sports, and fishing.

4. Avoid placement of toxic products, tires, and exposed floats (Styrofoam) in water.
5. Allow for boat lifts to remove boats from lake during moorage (including covers that are tops only, not side covers, that are removed during the winter). Lifts to be minimum 9 ft waterside of summer shoreline.
6. Avoid Skirting on docks.
7. Avoid new enclosed boat Houses and enclosed covered moorage.
8. Encourage floating docks.
9. Introduce sunlight thru decking to allow safe use of docks for recreation. Surface to allow for children, boaters, and dogs to safely use surface. Products with 30%-40% daylight would allow cost-effective solution.

PROPOSED DOCK RECOMMENDATIONS:

1. Docks, piers and floats should minimize adverse impact to shorelines ecological functions or processes and minimize impacts to navigation of adjacent properties. However, the size of over-water structures will vary, and should be no greater than that required for safety and practicality for the primary use. Swimming, boating, mooring boats, and other recreational uses are permitted, and considered necessary uses.
2. Dock lengths established at maximum of 50 ft; or longer if necessary due to shallow water depth for boat mooring; and also longer if equal to the average of docks within 300 ft of subject property. Similar provisions exist within the Lake Stevens SMP.
3. Dock widths shall be:
 - 15 feet from ordinary high water mark – 6 feet maximum width
 - Beyond 15 feet - fixed (non-floating portions) – 12 feet maximum width
 - Beyond 15 feet -floating portion used for access to boats – 16 feet maximum width.

Widths may be increased by up to 50% with an administrative variance if:
1) conditions require additional width for stabilization due to individual environmental conditions such as exposure to wind and waves; or 2) if distance between pilings is increased; or 3) if light-permitting grating on dock surface is increased.

4. Create incentive for shared docks by allowing 25% increase in length and 50% increase in width if located on a property line and shared with at least 2 property owners.
5. Establish docks to provide at least 4 feet of water depth for June water elevations (when lake is at 1010). This may require dock lengths in excess of the existing average within 300 ft. Administrative variance may be used to extend dock by up to 50% with notification and comments by adjacent property owners.
6. Over water portion of docks to provide at least 30% daylight on at least 50% of the dock surface. Outer 25 ft of dock is encouraged to be floating with grated surface as described above.
7. No artificial lighting is allowed on docks other than navigational markers and minimum amount needed to locate dock at night. Focus lighting on deck surface to minimize illumination of surrounding area. Minimize glare and incorporate cut-off shields, as appropriate. Reflectors are encouraged.
8. No toxic treated wood to be utilized for portions of dock in the water. No tires or exposed Styrofoam to be utilized in dock construction (encapsulated foams may be utilized).
9. No skirting is allowed on docks below 1 ft from the decking surface.
10. Pilings shall be installed at maximum spacing practical for the specific location.
11. Floating or suspended watercraft lifts should be located a minimum of 9 feet from the summer shoreline.
12. No dock shall be used for a residence.
13. Floats. The maximum width and length and diameter of floats (including trampolines) not attached to docks (anchored) shall be 16 feet each, without any permit or showing of need. Such detached recreational floats shall only be allowed from May 1 – October 30. Detached floats will be removed or attached to the shore for remainder of year.

FOR MAINTENANCE/REMODEL/REPLACEMENT:

1. During maintenance, repairs shall be made without the use of toxic materials. If more than 50% of decking is replaced, decking shall be updated to current requirements. Repairs may be made with in-kind materials as existing with exception that toxic materials and un-encapsulated foam floats described

above shall not be utilized. New, expanded and replacement docks must comply with new standards.

INAPPLICABLE PROPOSALS:

Due to unique conditions of Lake Cavanaugh, including development, use, wind, and geology, the following parts of the draft county proposal on docks are not applicable to Lake Cavanaugh:

Delete: “(B) Individual recreational floats are only allowed if the applicant can demonstrate that all other reasonable community or joint-use options have been investigated and found infeasible.” It is unclear what this means, but trampoline floats are common on the lake for recreation, not for mooring boats. They are not popular because other uses are “infeasible”, but because they are uniquely enjoyable for water recreation.

Delete: “A need must be demonstrated for expansion of existing docks. . . “ 14.26.630(4)” This is unclear because it does not state what would constitute need. Would water recreation be a need? It would be sufficient that expansions, replacements, and new docks meet the proposed standards, as stated in this proposal.

Delete: “7. “In locations where grasses are present near shoreline, . . .” This is too vague – how much grass, how near to the lake, etc. The maximum size rules proposed by the LCIA above are sufficient to address this concern.