From: Greg Krabbe [mailto:gkrabbe@comcast.net]  
Sent: Monday, December 03, 2012 1:08 PM  
To: Evan Maxim  
Subject: FW: PC ECA 4-15g

Evan, here is our response to 4-15g. Its positive, and we include an overview of our position. I sent it to Debbie (below) but she is out for several days and I wanted it available to the PC as soon as possible. If you would add it to the public record in her absence that would be great.

thanks.

Gfk
Debbie,

Here is our response to staff’s 4-15g matrix. Please submit this into the ECA, PC public record.

Thanks

gfk

Greg Krabbe
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Please be aware that email communication with Council Members or City staff is a public record and is subject to disclosure upon request.
GFK Consulting
Land Development Services

December 3, 2012

Commission Members,

Thank you for the attention you have given to our public comments, testimony and written submittals concerning the Erosion Hazards Near Sensitive Water Bodies (EHNSWB) Overlay. Because of the amount of information that has been provided, I am providing you this summary in support of our arguments to revise the EHNSWB and adopt a Pilot Program to allow development in the no-disturbance area.

The EHNSWB no-disturbance provisions are a remnant of an outdated King County plan adopted before current improved erosion control techniques were established and prior to federal Clean Water Act permit requirements for stormwater management during construction. This history is discussed in my May 17, 2012 Letter (Exhibit 123).

No other jurisdiction within the Lake Sammamish basin has adopted any regulations closely resembling the “no-disturbance” provisions in the EHNSWB, despite the fact that these jurisdictions have property draining to the lake with similar slopes and soils as those in the no-disturbance area. This is described in the Memo from Brent Carson dated October 4, 2012 and his attachment of excerpts from the King County Soils Survey and critical area regulations from Redmond, Bellevue and Issaquah (Exhibit 123).

Modern erosion control practices and enforcement are effective in reducing phosphorous transport and the risk of erosion control failures. My statistical breakdown of the Department of Ecology’s turbidity monitoring data demonstrates that the probability of an erosion control failure over the lifetime of a construction project is quite low (Exhibit 201). This value is even lower when looking at data collected during the summer months.

Expert limnologist Rob Zisette of Hererra provided data showing that phosphorous levels in Lake Sammamish have improved in the last few decades to levels better than the target values established in the Lake Sammamish management plan. These improvements occur as the Lake Sammamish drainage basin has been significantly urbanized, strongly inferring that modern stormwater management and erosion control at development sites has been effective in reducing phosphorus loading to the lake. (See Exhibit 145).
Issaquah Highlands (490 acres) and Talus (168 acres) are both examples of projects within close proximity to Lake Sammamish that were constructed on similar slopes and soils as those in the no-disturbance areas with no adverse effects on the lake.

Although the no-disturbance area may be located closer to Lake Sammamish than other areas of the basin that have urbanized, Mr. Zisette confirmed that proximity to the lake is not a factor in potential phosphorus transport, because phosphorus can be readily transported from all reaches of the basin through tributary streams and the streams themselves do not act to absorb phosphorus. See Exhibit 222 (attaching as Exhibit 3 the October 4, 2012 letter from Mr. Zisette).

I also presented maps showing that the no-disturbance area represents less than 0.5% of the total basin tributary to Lake Sammamish. (See Exhibit 192). Allowing limited and highly controlled development within this small portion of the basin will cause no undue risk to water quality in the lake.

Mr. Zisette applied existing models to determine potential phosphorus loadings to Lake Sammamish from uncontrolled construction sites during large storm events and concluded that even in the highly unlikely event of a complete failure of erosion control, the total phosphorus loadings would not result in a measurable change in lake water quality. (Exhibit 193). Despite the above facts, which could support elimination of the EHNSWB overlay and no-disturbance area regulations, we have recognized the City’s desire to proceed cautiously to reduce any risk from allowing development within the no-disturbance area. This cautious approach led to our working with planning staff to develop a Pilot Program with several key features including:

- Requiring tightlining discharges directly to the lake where available
- Imposing strict seasonal construction limitations and close monitoring
- Establishing specific construction phasing designed to limit exposed soils prior to installation of full erosion control measures.
- Mandating early construction of permanent water quality systems.
- Requiring “active” chemical and mechanical water quality treatment during clearing and grading.
- Controlling post development phosphorus releases in stormwater runoff.

See Exhibit 232 and 260 for details.
Staff expressed two concerns with our last proposal.

One concern related to an element in our proposal for allowing discharges via manmade conveyances for those property owners that could not directly discharge to the lake in a tightline system. That option was included in our proposal as a “placeholder” to address Mr. Osgood’s situation and those similarly situated. We understand that Mr. Osgood and his team submitted their own alternative proposal that staff has identified as Item 4-15f. Staff suggested that it would be simpler if we deleted from our proposal the manmade conveyance option so that Mr. Osgood’s proposal could be considered independent of our proposal. We informed staff last Friday that we would remove the option for discharges via manmade conveyances from our proposal so that Mr. Osgood’s proposal could be evaluated separately by staff and deliberated independently by the Planning Commission.

Staff’s second concern related to our prior recommendation (See Exhibit #260) to remove the limit on the number of subdivisions that could be developed under the pilot program if those developments could provide a direct discharge to the lake in a tightline system. To address this second concern by staff, we reached a compromise with staff to propose a limit of three long subdivisions with direct discharges to the lake using a tightline system, three long subdivisions without direct discharge via a tightline, and three short plats.

Our proposal, with these two changes, has been renumbered as Item 4-15g by staff. Staff has proposed a Positive overall effect on this proposal.

We have reviewed the Planning Commission Deliberation Draft – 11-30-12 included in the Planning Commission’s agenda package for December 6th. These draft code amendments incorporate Item 4-15g. We encourage your favorable consideration of these proposed code amendments. They will allow limited development within the no-disturbance area under strict controls that will assure continued protection of water quality in Lake Sammamish.

We note that the staff has not recommended code changes proposed by Mr. Osgood, having given Item 4-15f a proposed Negative overall evaluation. We support Mr. Osgood’s proposal and would encourage the Planning Commission to recommending code amendments as proposed by Mr. Osgood.
Any objections to the pilot program appear to be founded on a philosophical objection to allowing any development within the no-disturbance area because that development could pose a risk to the water quality of Lake Sammamish. We recognize that going from what has been essentially a moratorium on development to any level of development, no matter how well controlled, introduces some amount of risk to the lake’s water quality. However, the record we have established clearly demonstrates that this risk is exceptionally low and manageable.

Please feel free to contact me if you have any questions.

Sincerely,

[Signature]

Greg Krabbe, PE.