

GFK Consulting

Land Development Services

EXHIBIT NO. 165.

July 12, 2012

City of Sammamish Planning Commission and Staff,

In this ECA update process it has been stated that while it may be technically possible to develop a site without impacting downstream resources through the implementation of robust TESCOP measures, the risks are still too great to consider. Subsequently the PC has requested some quantification of these risks. We are not sure how the City intends to respond, but I have been asked by my clients to provide a risk assessment scenario to be provided to the PC and City staff.

Looking at the problem, I have arrived at the following to be considered:

- Quantifying the risk
- Outlining policies to limit the risk to acceptable levels.

To do this, we will present the following:

1. Quantify risk
 - a. A presentation of NPDES permit and monitoring data that demonstrates the of actual erosion control effectiveness in a quantifiable way. We have data points approaching 500,000 monitored permit days in western Washington counties and Initial review of this data show real insight into on the ground effectiveness of current erosion practices, and the dramatic effects of seasonal rainfall.
 - b. Estimate the total area that is viable for development within the overlay area. We have acquired high accuracy topographic mapping for the Erosion Overlay area and a cursory review indicates that while the total area of the overlay is several thousand acres, the area available for development may be in the low 100's of acres. We believe that this is an important factor when considering the total scope of the risk being considered.
 - c. Using actual measured Phosphorus levels within erosion runoff from sites in western Washington, it is possible to create a simple model of a hypothetical site with failed erosion control measures and estimate the phosphorus loading for a given area and rainfall event. This estimate can then be compared to the measured Phosphorus loading within Lake Sammamish to help quantify how a given site might impact the Lake.

2. Outline measures to limit risk to acceptable levels.
 - a. Seasonal limitations
 - b. Area limitations; how much acreage per season can be safely graded?
 - c. Enhanced TESC measures

It was our intent to have this presentation ready for you this evening, but the sheer volume of data and work, and the loss of the 4th of July holiday week made that impossible. In addition, I am not sure it can be done within a 7 minute speaking window. With this in mind, we would like the Commission to consider when an appropriate time and place would be for our presentation.

Greg Krabbe, PE
President, GFK Consulting Inc.

Questions about process

1. When will this information be presented to the PC, and will the public have a chance to review and comment on it in advance of the deliberations to which it is input?
2. Will the PC revisit the testimony that introduced the amendment, or will the Staff's much-abbreviated versions plus Staff's input be the sole basis for the deliberations?
3. Will there be an opportunity for dialogue between the PC and the party who offered the amendment to provide clarification and work out any bugs?
4. Will the PC accept alternate draft text from the public for those amendments that made the cut?

Friends of Pine Lake

July EXHIBIT NO. 2

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To the Sammamish Planning Commission:

The Plateau environment is unique to the City of Sammamish, no other city sits atop a plateau with slopes dropping down precipitously to the Lake. The Lake is also surrounded by very densely developed shorelines even though these areas are subject to naturally dynamic processes. The parkway is the only defense homes around the lake have from tumbling outwash and debris that will surely end up on the parkway and the lake if these undisturbed areas begin to be cleared and developed, leading to greater public works costs.

There are views being expressed that suggest that water quality has improved or at least is stabilizing in Lake Sammamish, in spite of increased development. The data presented was data furnished by King County through their monitoring and the work of several limnologists.

Limnologist Eugene Welch, has reviewed these claims, and has rebutted the comments in his June 11th letter, as he is currently working on updating this information with staff from King County. While technical, it is important the Commissioners carefully read his letter.

Comments have been presented about erosion controls being so state-of-the-art there are no longer geologic threats to development. Lost in this debate is the fact that the steep slopes of the Plateau are for the most part in a forested/vegetated condition with a forest duff layer of about 1-2 ft. These conditions are the main reason the slopes are as stable as they have remained and why water through these

areas travels at a slower rate; the water is intercepted by trees & vegetation, the duff layer and evaporation. The city currently has difficulties in the sloped areas that have been densely developed and denuded of their vegetation. Once destabilized, these slopes begin to have failures that are no longer easy to control.

As development begins, the first thing to be cleared is the forest duff layer (the sponge), leaving the slopes naked and unable to absorb any water. It is at this time that miscalculations have dire consequences. Engineered slope stabilization may work for a few years, but their effectiveness over time diminishes. Lastly, the development is impervious and releases water immediately down-slope. Best Available Science does not support increasing development on the steep slopes of the city.

Simply put, the zoning/overlays that are tied to special stormwater regulations and the Critical Areas codes along with transfer of development rights are a carefully crafted balance of regulations to protect property owners and the lake from the impacts of development along the steep slopes of the Plateau. They are all interwoven so that if one part is removed, or weakened it will have the impact of unraveling the entire system.

Under King County, the Overlays were found in the zoning code, stormwater code and critical areas codes. The associated folio maps were found in each code chapter thereby maintaining the link to the zoning, stormwater and critical areas codes for the Overlays. The 2005 update began to break these links by eliminating the separate Overlay chapters and changed the maps that were to be used. Now it is being proposed that the Overlays be separated from the stormwater regulations. The clarity that existed in this code is being

undermined and the linkage between all the codes and maps is getting lost. We would encourage the Commission to return to the way the Overlay code was organized previously to bring back the clarity and the linkage that should be maintained to make the Overlays effective.

In the long term ignoring these interrelated issues will likely have a severe impact on the city and its citizens. Furthermore many property owners and groups who are currently opposing or passive on these matters, may ironically find themselves reversing course and blame the city for lack of forethought when the consequences start to directly affect their property, their tax dollars or both.

The city of Sammamish and its natural resources are a part of a much larger, and regional environment. Land use decisions don't only impact a given property, but collectively have large impacts on resources that many rely on. Sammamish is part of the important Pacific flyway for migrating birds. As the 6th largest lake in Washington state, with a length of 7 miles, a width of 1½ miles, and a surface area of 4,897 acres, Lake Sammamish is a resource of statewide significance. The city is unique in having several high value wetlands, many of them very old bog wetlands that have formed over 1000's of years. And we are still fortunate to have natural runs of salmon in a couple of the remaining streams they can reach, despite the impediments of culverts, bulkheads, roads, and increased sedimentation they encounter. I urge the Commissioners to think expansively and recognize the value and importance of the natural infrastructure that surrounds us and supports us as you study and review the code updates to the Critical Areas Ordinance.

Erica Tiliacos

President, Friends of Pine Lake

Draft Proposal to Change Density Calculation Methodology on R-1 Zoned Properties in City of Sammamish

Current Regulations: All Environmentally Critical Areas (ECA) acreage must be deducted from a potential development site when calculating the net allowable density. This is the case for all zoned properties in the City and this methodology is the most restrictive of any jurisdiction in the region.

Additionally, for R-1 properties, 50% of the site must be set aside for permanent open space.

These two regulations in combination significantly limit the use on properties zoned R-1.

Proposed Change to Density Calculations: Amend SMC 21A.25.080 to exempt R-1 zoned properties from the requirement to deduct ECA acreage when calculating allowable density.

Arguments against changing the current methodology: The City of Sammamish Comprehensive Plan and Capital Facilities Plan were developed based on the existing density calculation methodology, and City staff have stated that a Comprehensive Plan amendment would be likely be required.

Rationale for changing the current methodology: According to the 2007 King County Buildable Lands Report, Sammamish had (in 2006) approximately 1,107 gross acres zoned R-1 that were either vacant or had redevelopment potential. Included on these lands were approximately 640 acres of environmentally critical areas.

If all 640 acres of ECAs were included in the density calculations, the maximum potential for "unplanned" residential development would be 640. However, according to the King County Buildable Lands Report, other reductions for Rights of Way (18%), Public Purpose (16%) and Market Factor (15%) would likely reduce the number of "unplanned" residential units to approximately 327.

An additional 327 residential units in the City of Sammamish would seem reasonable and not require a Comprehensive Plan amendment.

R-1 zoned lands in Sammamish already have the burden of setting aside 50% of their site for open space, a requirement that no other residential properties in the City must bear. This, combined with the new ECA regulations will more than adequately protect the valuable natural resources on these properties. Allowing these properties to achieve their fair development potential is a good step towards balancing property rights and environmental protection.

Thank you for your consideration.

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EXHIBIT NO. 168.