

# GFK Consulting

Land Development Services

May 7, 2013

City of Sammamish

Re: ECA review

Honorable Mayor and City Council,

Tonight I would like to comment on the Washington Dept. of Ecology's April 23<sup>rd</sup> letter reviewing the proposed Critical Areas Ordinance, specifically that section dealing with the Pilot Program that would allow development within the no-disturbance area.

Overall, Ecology's recent letter supports the pilot program and commends the proposal for its cautious approach.

Ecology's letter identifies several requirements from the NPDES program and the King County Drainage Manual that must be included. We agree and support those elements.

Our one criticism of Ecology's Letter concerns its recommendations that all pilot projects designate between 25% and 35% of their gross area as NGPE to support groundwater and stream baseflow. While, in general, all can agree that supporting wetland and stream baseflow is a good thing, in those cases where properties along the east side of Lake Sammamish do not drain to wetlands or streams, and any infiltrated water might possibly contribute to slope stability issues, a mandatory 35% NGPE designation may not be ideal. Instead, we suggest that an appropriate % NGPE be determined on a case by case basis for each site.

I would also like to point out that AMEC's most recent inter-jurisdictional comparison report does not include a review of the DOE's April 23<sup>rd</sup> letter, only the older DOE letter that was issued prior to the draft code that is now under review.

To their credit, AMEC does confirm what we have been saying all along; that no peer city has ever adopted a draconian "no-disturbance" regulation like King County did in 1994 along east Lake Sammamish. However, their assertion that "...the geology, topography and land use patterns of the Issaquah Creek basin are substantially different of those of the East Lake Sammamish Basin..." is not borne out by the mapping available. Attached are Soils Conservation Service maps of the soil types and slopes for both areas; soil types, slopes and land use in the hillside areas are very similar.

We appreciate your continued work on the ECA review. Please contact me if you have any questions.

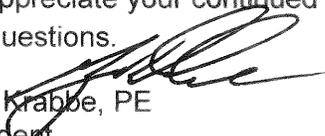
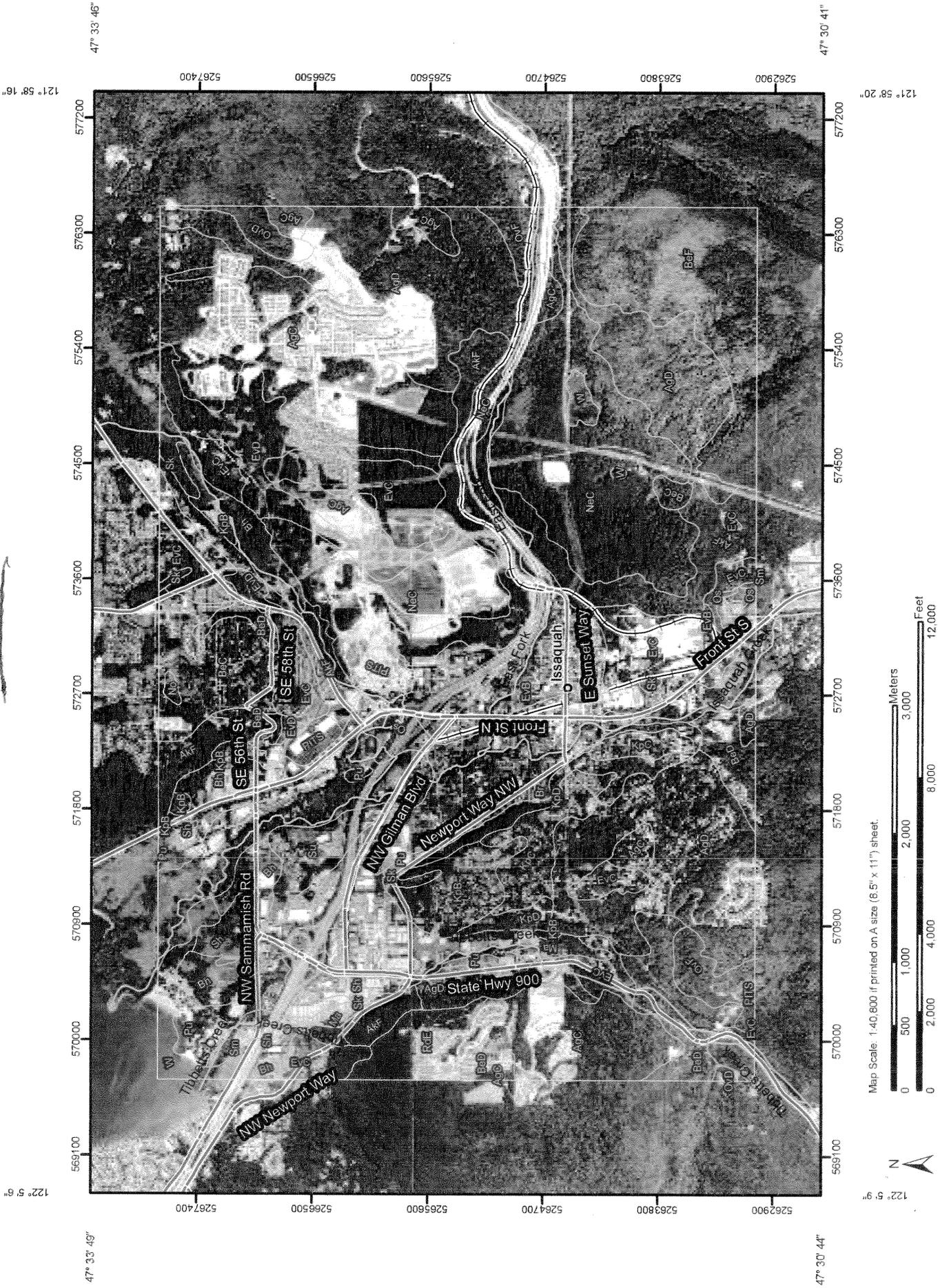
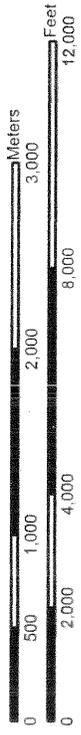
  
Greg Krabbe, PE  
President

EXHIBIT NO. CC 52

Soil Map—King County Area, Washington  
(Issaquah Soil Map)



Map Scale: 1:40,000 if printed on A size (8.5" x 11") sheet.



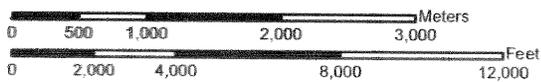
## Map Unit Legend

King County Area, Washington (WA633)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgC	Alderwood gravelly sandy loam, 6 to 15 percent slopes	885.6	11.2%
AgD	Alderwood gravelly sandy loam, 15 to 30 percent slopes	1,183.7	15.0%
AkF	Alderwood and Kitsap soils, very steep	513.0	6.5%
BeC	Beausite gravelly sandy loam, 6 to 15 percent slopes	218.2	2.8%
BeD	Beausite gravelly sandy loam, 15 to 30 percent slopes	241.8	3.1%
BeF	Beausite gravelly sandy loam, 40 to 75 percent slopes	395.7	5.0%
Bh	Bellingham silt loam	348.4	4.4%
Br	Briscot silt loam	310.5	3.9%
EvB	Everett gravelly sandy loam, 0 to 5 percent slopes	343.4	4.4%
EvC	Everett gravelly sandy loam, 5 to 15 percent slopes	607.8	7.7%
EvD	Everett gravelly sandy loam, 15 to 30 percent slopes	272.0	3.5%
KpB	Kitsap silt loam, 2 to 8 percent slopes	142.9	1.8%
KpC	Kitsap silt loam, 8 to 15 percent slopes	134.3	1.7%
KpD	Kitsap silt loam, 15 to 30 percent slopes	122.0	1.5%
Ma	Mixed alluvial land	39.9	0.5%
NeC	Neilton very gravelly loamy sand, 2 to 15 percent slopes	820.0	10.4%
No	Norma sandy loam	5.5	0.1%
Os	Oridia silt loam	46.0	0.6%
OvD	Ovall gravelly loam, 15 to 25 percent slopes	43.3	0.5%
OvF	Ovall gravelly loam, 40 to 75 percent slopes	93.6	1.2%
PITS	Pits	79.5	1.0%
Pu	Puget silty clay loam	151.8	1.9%
RdE	Ragnar-Indianola association, moderately steep	105.7	1.3%
Sh	Sammamish silt loam	589.5	7.5%
Sk	Seattle muck	35.9	0.5%
Sm	Shalcar muck	11.5	0.1%
Su	Sultan silt loam	85.1	1.1%
W	Water	46.6	0.6%
<b>Totals for Area of Interest</b>		<b>7,873.1</b>	<b>100.0%</b>

# Custom Soil Resource Report Soil Map (East Lake Sammamish map)



Map Scale: 1:54,100 if printed on A size (8.5" x 11") sheet.



122° 7' 52"

47° 33' 33"

## Map Unit Legend (East Lake Sammamish map)

King County Area, Washington (WA633)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgC	Alderwood gravelly sandy loam, 6 to 15 percent slopes	1,948.0	26.0%
AgD	Alderwood gravelly sandy loam, 15 to 30 percent slopes	654.1	8.7%
AkF	Alderwood and Kitsap soils, very steep	986.0	13.2%
Bh	Bellingham silt loam	45.5	0.6%
Br	Briscot silt loam	50.4	0.7%
EvB	Everett gravelly sandy loam, 0 to 5 percent slopes	31.1	0.4%
EvC	Everett gravelly sandy loam, 5 to 15 percent slopes	132.3	1.8%
EvD	Everett gravelly sandy loam, 15 to 30 percent slopes	9.8	0.1%
InC	Indianola loamy fine sand, 4 to 15 percent slopes	23.1	0.3%
KpB	Kitsap silt loam, 2 to 8 percent slopes	288.3	3.9%
KpC	Kitsap silt loam, 8 to 15 percent slopes	18.4	0.2%
KpD	Kitsap silt loam, 15 to 30 percent slopes	68.2	0.9%
Ma	Mixed alluvial land	63.7	0.9%
No	Norma sandy loam	23.7	0.3%
Or	Orcas peat	4.7	0.1%
Pu	Puget silty clay loam	2.6	0.0%
RaD	Ragnar fine sandy loam, 15 to 25 percent slopes	21.0	0.3%
RdC	Ragnar-Indianola association, sloping	66.3	0.9%
RdE	Ragnar-Indianola association, moderately steep	18.9	0.3%
Sk	Seattle muck	106.6	1.4%
Sm	Shalcar muck	7.8	0.1%
So	Snohomish silt loam	4.9	0.1%
Su	Sultan silt loam	15.5	0.2%
W	Water	2,889.9	38.6%
<b>Totals for Area of Interest</b>		<b>7,481.1</b>	<b>100.0%</b>

## MAP LEGEND

	Area of Interest (AOI)		Very Stony Spot
	Soils		Wet Spot
	Soil Map Units		Other
	Special Point Features	<b>Special Line Features</b>	
	Blowout		Gully
	Borrow Pit		Short Steep Slope
	Clay Spot		Other
	Closed Depression	<b>Political Features</b>	
	Gravel Pit		Cities
	Gravelly Spot	<b>Water Features</b>	
	Landfill		Streams and Canals
	Lava Flow	<b>Transportation</b>	
	Marsh or swamp		Rails
	Mine or Quarry		Interstate Highways
	Miscellaneous Water		US Routes
	Perennial Water		Major Roads
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		
	Spoil Area		
	Stony Spot		

## MAP INFORMATION

Map Scale: 1:40,800 if printed on A size (8.5" x 11") sheet.  
 The soil surveys that comprise your AOI were mapped at 1:24,000.  
 Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: King County Area, Washington  
 Survey Area Data: Version 7, Jul 2, 2012  
 Date(s) aerial images were photographed: 7/24/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.