

Mark Cross.

WQA - Query Results - Windows Internet Explorer provided by City of Bellevue

http://acps.ecy.wa.gov/wats06/QueryResults.aspx

WQA - Query Results

WASHINGTON STATE Department of Ecology

Water Quality Assessment for Washington (WQA)

WQA Home Query Form Query Results Help

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Query Results

Listing Detail	Category	WRIA	Water Body Name	Parameter	Medium	Map Link
12631	1	8	PINE LAKE CREEK	pH	Water	12631
12684	5	8	PINE LAKE CREEK	Dissolved Oxygen	Water	12684
13139	5	8	PINE LAKE CREEK	Fecal Coliform	Water	13139
13681	1	8	PINE LAKE CREEK	Ammonia-N	Water	13681

Number of records returned: 4

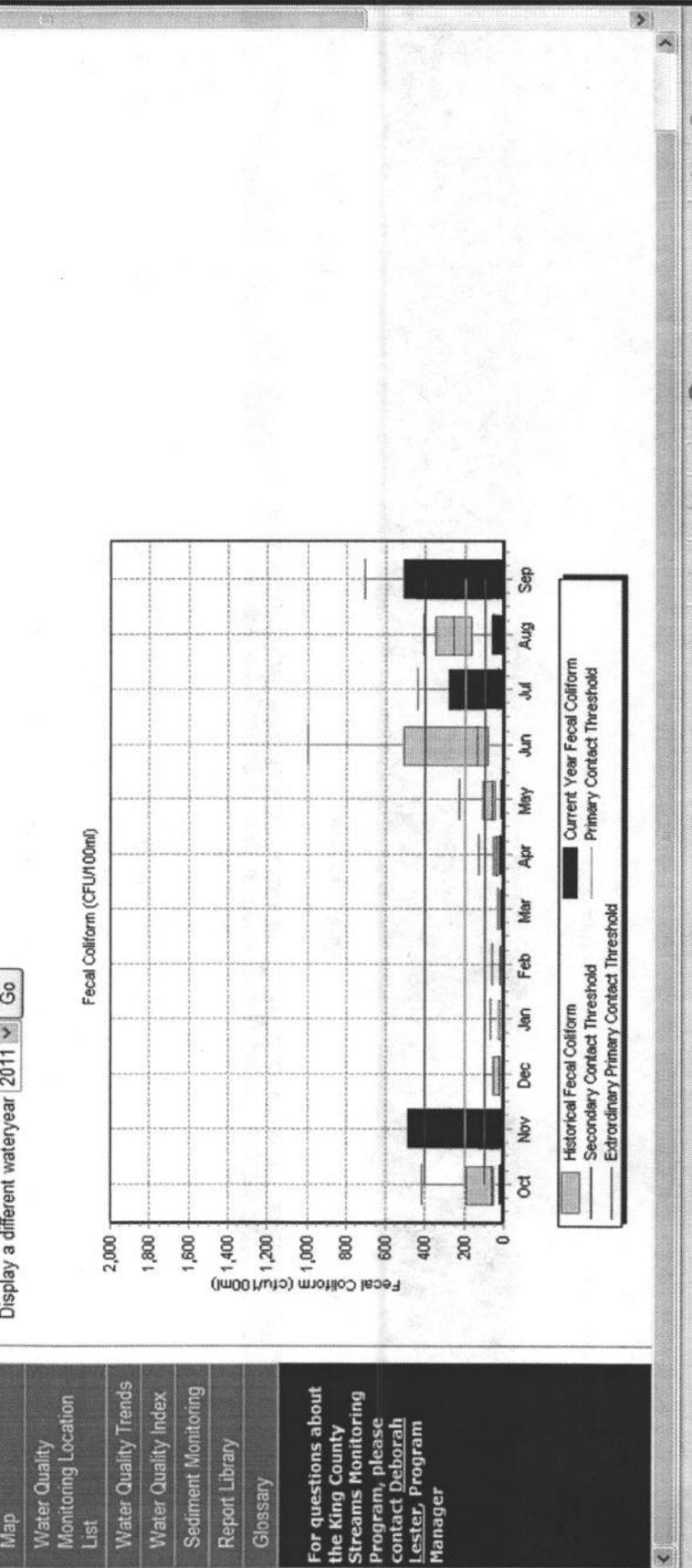
[Return to Query](#)

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Water Quality Assessment for Washington Version 1.00 | Data Disclaimer | Privacy Policy
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EXHIBIT NO. 14

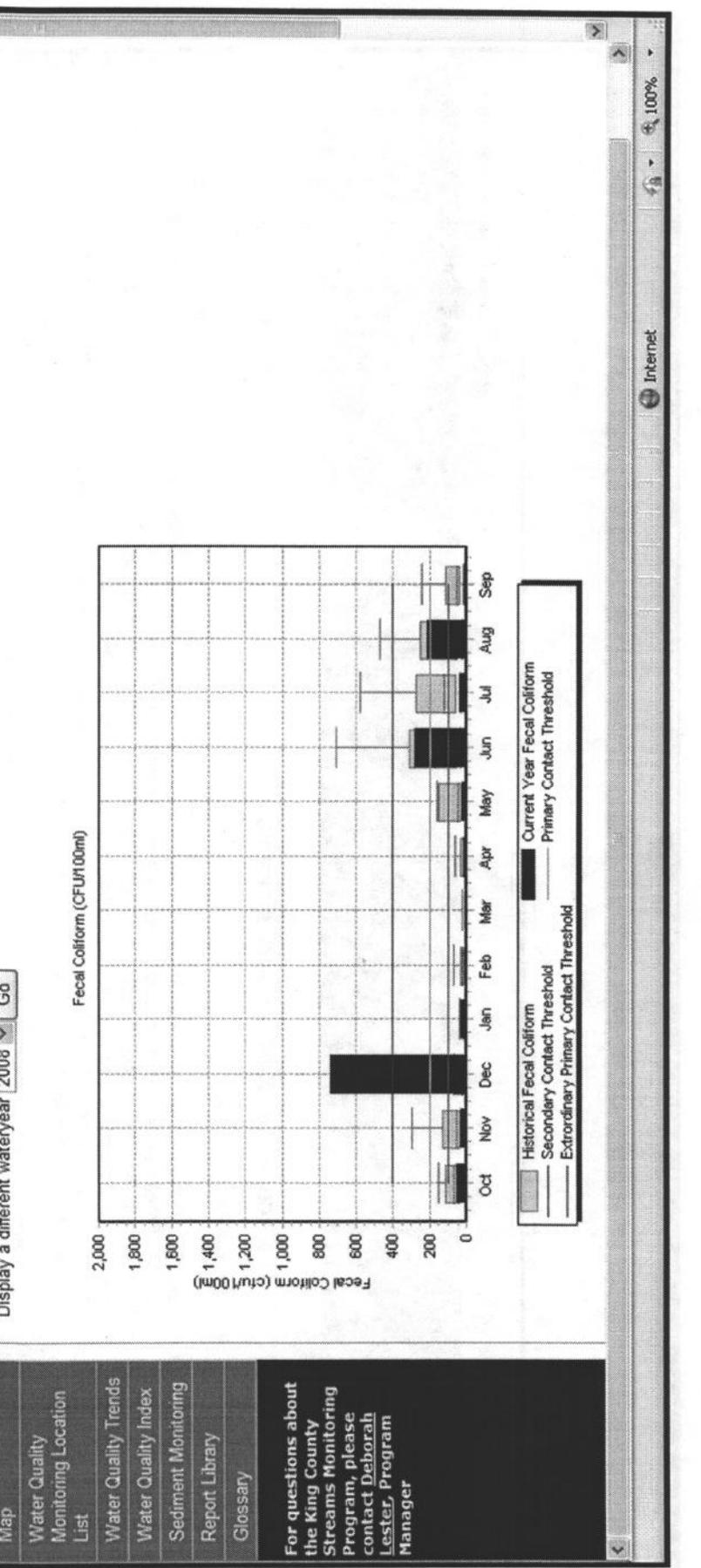
Display a different wateryear



Streams Water Quality Monitoring Data - Ebright Creek Site A685

Chart Info Conventional Nutrients Bacteria Precip

Display a different water year: 2008 Go



B-IBI scores for King County streams - Windows Internet Explorer provided by City of Bellevue

https://www.kingcounty.gov/environment/data-and-trends/monitoring-data/stream-bugs/stream-dta.aspx

Live Search

Page Safety Tools

STATE PRINT STREAM

to return monitoring data > stream bug monitoring > B-IBI scores



B-IBI scores for King County streams

- Monitoring data
- Puget Sound data
- Streams data
- Stream bug monitoring
- It's a stream bug's life
- Stream health indicators
- Monitoring location map
- Watershed visitor guide
- B-IBI scores**
- Taxonomy
- Bug-related websites
- Swimming beach data
- Major lakes data
- Lake buoy data
- Small lakes data
- Hydrologic information center
- Critical areas monitoring
- News archive
- Site map

To offer a suggestion or report an error on the Water and Land Resources' website, please contact **Fred Bentler**, webmaster.

B-IBI scores for King County streams

General introduction

King County's Benthic Index of Biotic Integrity (B-IBI) is composed of ten metrics that measure different aspects of stream biology, including taxonomic richness and composition, tolerance and intolerance, habit, reproductive strategy, feeding ecology, and population structure. Each metric describes some aspect of the community that responds to degradation. The raw value of each metric is calculated, and from the raw value, a score of 1, 3, or 5 is assigned to the metric. The ten metric scores are then added to produce the overall B-IBI score that range from 10 to 50.

- Learn about the ten metrics tested and developed for the Pacific Northwest.

Also, the Puget Sound stream benthos website was developed by a group of agencies interested in monitoring the health of streams in the Pacific Northwest. The City of Seattle, King County, Pierce County, and Snohomish County worked collaboratively to create a database system that allows sharing of benthic macroinvertebrate data among many organizations and provides tools for calculating metrics and indices. The site is used to store and analyze data from ongoing macroinvertebrate sampling programs.

Monitoring reports

[B-IBI scores for streams around King County from 1984 through 2001](#) (Microsoft Word format)

[Sampling and Analysis Plan \(SAP\) for new macroinvertebrate studies: Greater Lake Washington and Green-Duwamish River Watersheds Wadeable Freshwater Streams Benthic Macroinvertebrate Sampling and Analysis Plan.](#)

[2002 Report: Benthic Macroinvertebrate Study of the Greater Lake Washington and Green-Duwamish River Watersheds Year 2002 Data Analysis and 2002 Appendices.](#)

[2003 Report: Benthic Macroinvertebrate Study of the Greater Lake Washington and Green-Duwamish River Watersheds Year 2003 Data Analysis, including appendices.](#)

Related information

- Animals, plants and habitat
- Environmental indicators and performance measures
- DNRPP publications
- Streams data

Related agencies

- Department of Natural Resources and Parks
- Water and Land Resources Division

Internet 100%

http://pugetsoundstreambenthos.org/Biotic-Integrity-Scores.aspx?i=sammamish&oo=1&Stream-Area=E%20Lake%20Sammamish? Web Slice Gallery

Free Hotmail Can U.S. Go 'Green' Even W... Ohm's Law Calculator

Biotic Integrity Table - Puget Sound Stream Benthos

Puget Sound Stream Benthos

Home | Analysis | Monitoring Projects | Login | About Us | Site Map

Analysis: Benthic Index of Biotic Integrity

Area: E Lake Sammamish Subbasin Project: All Projects Site Code, City or County: sammamish

More Options Plot on Map Tabulate Tabulate Trend Chart Trend Show Samples Download... Show Criteria

Row	Stream	Quantity Averages										Score Averages					View or Event Scores											
		Taxa Richness	Ephemeroptera Richness	Plecoptera Richness	Trichoptera Richness	EPT Richness	Clinger Richness	Long-Lived Richness	Intolerant Richness	Dominance Percent	Predator Percent	Tolerant Percent	Organisms	Overall Score	Taxa Richness	Ephemeroptera Richness		Plecoptera Richness	Trichoptera Richness	Clinger Richness	Long-Lived Richness	Intolerant Richness	Dominance Percent	Predator Percent	Tolerant Percent			
1	Ebright Creek	22.0	2.0	4.0	6.0	12.0	9.0	4.0	1.0	79.6%	9.5%	33.2%	506.0	24.0	3.0	1.0	3.0	3.0	3.0	3.0	3.0	1.0	3.0	1.0	3.0	1.0	3.0	1 Site
2	Eden/George D...	19.0	4.0	4.0	2.0	10.0	8.0	2.0	1.0	77.2%	1.9%	13.4%	540.0	20.0	3.0	1.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1 Site
3	Pine Lake Creek	23.0	3.0	4.0	5.0	12.0	11.0	1.0	1.0	60.8%	6.5%	5.1%	554.0	24.0	3.0	1.0	3.0	3.0	3.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1 Site

3 Stream scores generated from 3 visits with 73 sample taxa on Wednesday, February 15, 2012 12:54:21 PM. (0.03 seconds)

Sort by Location, Year

Legend Excellent/Good - Good Good/Fair - Fair Fair/Poor - Poor Poor/Very Poor - Very Poor

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Water Quality > Washington State's Water Quality Assessment and 303(d) List > 2012 Freshwater Water Quality Assessment and 303(d) List

Proposed 2012 Freshwater Assessment and 303(d) List for Washington State

Ecology's 2012 Freshwater Water Quality Assessment (WQA) will cover all freshwater data collected by May 1, 2011. The result will be the 2012 candidate 303(d) list for freshwater, which Ecology will submit to the Environmental Protection Agency (EPA) for approval. The next candidate 303(d) list for marine waters is planned for 2014, as we implement an alternating schedule of marine- and fresh-water quality assessments.

Guiding Documents & Revisions to Washington State's Assessment Policy 1-11

The 2012 freshwater assessment will be based on the most recent state water quality standards approved by EPA (Chapter 175 201A WAC, 2006 version, and Chapter 173-204 WAC) and the state's assessment policies:

- Program Policy 1-11, Chapter 1, Assessment of Water Quality for the Clean Water Act Sections 303(d) and 305(b) Integrated Report.
- Program Policy 1-11, Chapter 2, Ensuring Credible Data for Water Quality Management.

Policy 1-11 is currently under revision. Following public review, these revisions will be finalized and used to guide the freshwater water quality assessment. Information about these Policy 1-11 revisions are available on Ecology's web site at <http://www.ecy.wa.gov/programs/wq/303d/policy1-11Rev.html>.

Changes in the Map Presentation of River & Stream Data

To promote national consistency in measurement and reporting, EPA recommended that states use the National Hydrography Dataset (NHD) for segmentation of waterbodies. Starting with the 2012 Water Quality Assessment for fresh waters, Ecology is moving to a segmentation system based on the NHD at the 1:24,000 scale. Differences to previous assessment results are a natural outcome of changing segment sizes.

February 16, 2012

Good evening Commissioners

My name is Gregory Kipp

My address is 3011-211th Ave NE, Sammamish 98074

I am here tonight to request that as part of the Environmentally Critical Areas review, the Planning Commission consider changing how critical area acreage is factored into the allowable number of buildable lots one can achieve on their property.

Currently in the City of Sammamish, all critical area acreage, including buffers, is subtracted from a parcel's total acreage when calculating the number of residential lots allowed on that parcel. For example:

A 10 acre parcel zoned R-1, which has 3 acres of critical areas & buffers, is allowed to develop only 7 residential lots, rather than 10 as the underlying zoning would suggest.

This is especially concerning to R-1 property owners as they already have to set aside 50% of their parcel for permanent open space as part of any residential development.

A review of the density calculation regulations from among several jurisdictions on the Eastside suggests that the City of Sammamish's regulations are the most restrictive. Some jurisdictions allow full credit for the parcel's entire acreage, regardless of critical areas acreage. One jurisdiction allows up to 100% credit for critical area buffers (not the actual critical area itself), while another allows up to 80% credit for critical areas and buffers. And one jurisdiction's density regulations subtract for only wetlands & streams, not for steep slopes or other critical areas.

However, no other local jurisdiction that I checked required that all critical areas and buffers be subtracted from the allowable density.

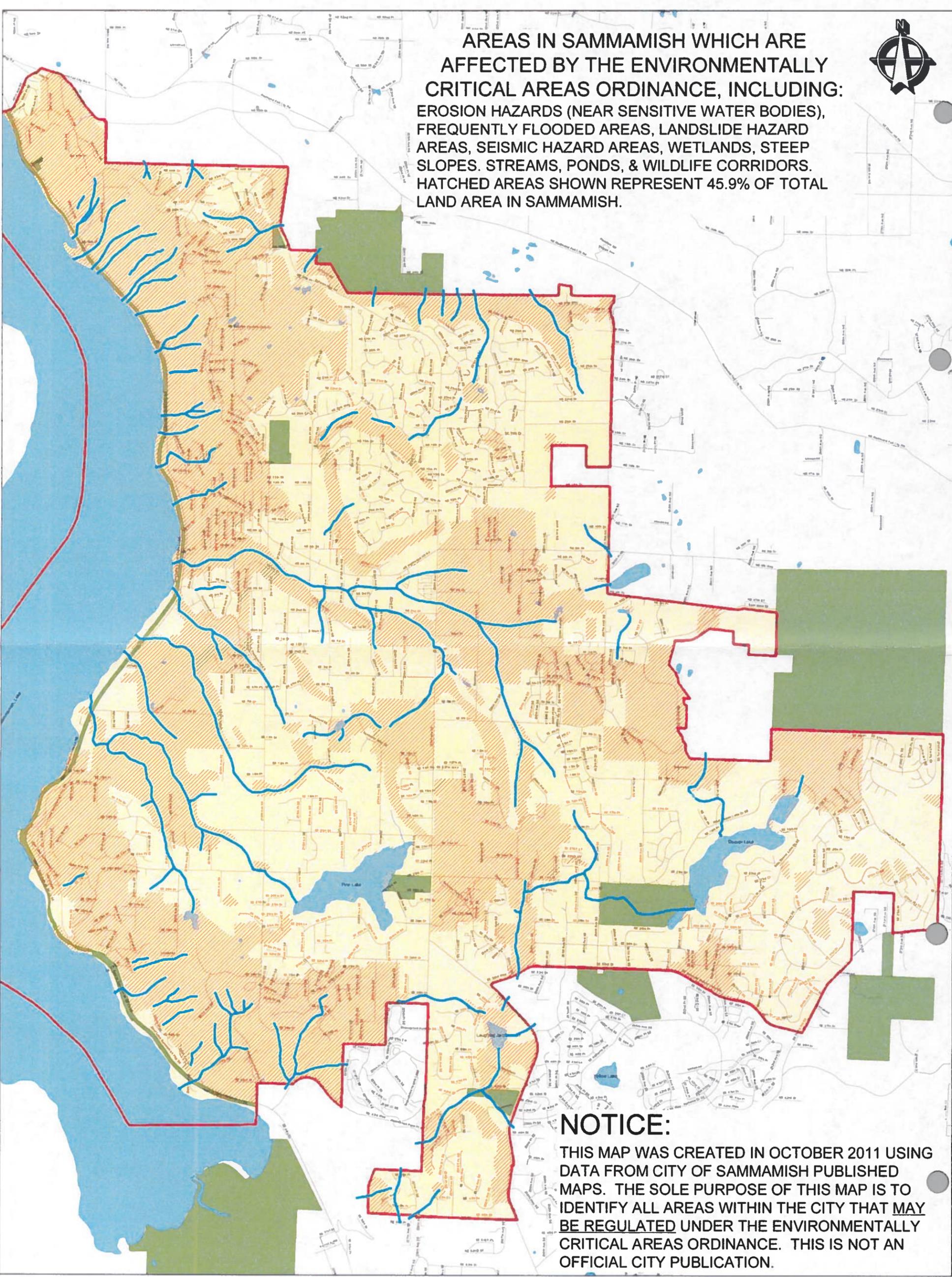
The specific Sammamish Municipal Code (SMC) citation that governs this issue is SMC 21A.25.

I would welcome the opportunity to work with any of the City's staff, the City's ECA consultant, AMEC Environment & Infrastructure, Inc, and/or Planning Commission members to develop a more fair method of calculating allowable density, while at the same time protecting the valuable environmentally critical areas in Sammamish.

Thank you for your time and consideration.

EXHIBIT NO. 15.

AREAS IN SAMMAMISH WHICH ARE AFFECTED BY THE ENVIRONMENTALLY CRITICAL AREAS ORDINANCE, INCLUDING: EROSION HAZARDS (NEAR SENSITIVE WATER BODIES), FREQUENTLY FLOODED AREAS, LANDSLIDE HAZARD AREAS, SEISMIC HAZARD AREAS, WETLANDS, STEEP SLOPES. STREAMS, PONDS, & WILDLIFE CORRIDORS. HATCHED AREAS SHOWN REPRESENT 45.9% OF TOTAL LAND AREA IN SAMMAMISH.



NOTICE:

THIS MAP WAS CREATED IN OCTOBER 2011 USING DATA FROM CITY OF SAMMAMISH PUBLISHED MAPS. THE SOLE PURPOSE OF THIS MAP IS TO IDENTIFY ALL AREAS WITHIN THE CITY THAT MAY BE REGULATED UNDER THE ENVIRONMENTALLY CRITICAL AREAS ORDINANCE. THIS IS NOT AN OFFICIAL CITY PUBLICATION.

The materials for the February 16, 2012 Planning Commission include a DRAFT titled, "Planning Commission – Success Statement." The DRAFT proposes a list of standards identified by the Planning Commission for use in determining the success of the update of the Sammamish Environmentally Critical Areas (ECA) code. One standard is that "Proposed amendments to ECA regulations shall be based upon a specific policy goal." Another is that "The focus of the update shall primarily be those items identified on the list of 'Known Topics.'"

The Citizens for Sammamish (CFS) Environmental Subgroup strongly agrees that the specific policy goals must be a primary standard to guide the ECA review process throughout, and ultimately to determine those changes to be made to the Sammamish ECA regulations. Accordingly, the Subgroup has prepared for consideration by the Sammamish Planning Commission the following preliminary chart to identify specific policy goals proposed by CFS in connection with each of the "Known Topics." The draft chart is subject to update and revision for additional topic areas that may arise as the update process proceeds.

Known Topics	Goals
<p>Terms and definitions in state statute (RCW) and regulations (WAC) and local code, and clarification of state law requirements (bookends)</p>	<ul style="list-style-type: none"> • The ECA code and definitions should be consistent with state and federal laws and regulations.
<p>Amendments arising from the updated Best Available Science (BAS) review and/or from changes in statute or case law, or the Sammamish Comprehensive Plan as a guiding document</p>	<ul style="list-style-type: none"> • The ECA code should be based upon BAS derived from suburban environments (similar to Sammamish). • Unless dimensions are specifically prescribed by BAS or law, the ECA code should include setback and buffer dimensions that are appropriate for the site-specific environmental benefit achieved. • The ECA code should ensure that BAS is applied in a reasonable manner to develop and refine regulations that are proportionate to the functions and values of critical areas. • The ECA code should protect private property rights, consistent with the public interest. • The ECA code should provide a means of evaluating the function and value of regulated critical areas and balance the rights of property owners. • The ECA code should ensure that environmental policy adequately distinguishes between already developed neighborhoods and undeveloped land. • The ECA code should ensure that forest practices, and environmental science derived from non-urban settings, are applied in the manner and to the degree appropriate for our urban environments.

<p>Restrictions on development in Erosion Hazard Near Sensitive Water Bodies (EHNSWB) overlay area</p>	<ul style="list-style-type: none"> • The ECA code should ensure that overlay maps are accurate and current.
<p>Restrictions on development in Wetland Management Area overlay area</p>	<ul style="list-style-type: none"> • The ECA code should ensure that overlay maps are accurate and current.
<p>Restrictions on development in Landslide Hazard area</p>	<ul style="list-style-type: none"> • The ECA code should ensure that land use practices in geologically hazardous areas do not cause or exacerbate natural processes which endanger lives, property, or resources. • The ECA code should designate geological characteristics for which development should be prohibited, conditioned, or otherwise controlled because of danger from geological hazards.
<p>Mitigation requirements and options for development on sites with wetlands with low functions and values</p>	<ul style="list-style-type: none"> • The ECA code should provide a means of exempting critical areas (wetlands) that offer little or limited ecological function.
<p>Mitigation requirements and options for development on sites with streams with low functions and values</p>	<ul style="list-style-type: none"> • The ECA code should provide a means of exempting critical areas (streams) that offer little or limited ecological function. • The ECA code should conserve and protect functions and values of stream corridors to provide for natural functions and protect hydrologic connections between features.
<p>Review of existing and potential areas of flexibility and options for applicants</p>	<ul style="list-style-type: none"> • The ECA code should provide recourse, short of a quasi-legal hearing or lawsuit, for resolving issues between city and applicants (i.e., ombudsman). • The ECA code should ensure that grandfathering provisions are appropriate, adequate, and clear cut. • The ECA code should be sufficiently explicit and comprehensive to preclude inconsistent and arbitrary application. • The ECA code should ensure that BAS is applied in a reasonable manner to develop and refine regulations that are proportionate to the functions and values of critical areas. • The ECA code should enable citizens to work with the City to develop and reach reasonable solutions within the regulations.

<p>Standards for human-altered or created features (e.g. ditches, altered and urbanized streams, constructed ponds, ponds historically created in wetlands)</p>	<ul style="list-style-type: none"> • The ECA code should distinguish natural hydrology from man-made sources of drainage and only regulate natural hydrology as environmentally critical. • The ECA code should ensure that storm water is properly managed to protect critical areas. (http://www.commerce.wa.gov/uploads/CA_Handbook.pdf)
<p>Standards for new trails and other public development in stream or wetland buffers</p>	
<p>Clarification and housekeeping changes – non-substantive procedural and technical language</p>	<ul style="list-style-type: none"> • The ECA code should ensure that ECA code is explicit, consistent, and unambiguous.