



Critical Areas Ordinance Update

KITSAP COUNTY CODE, TITLE 19

PLANNING COMMISSION WORK STUDY, JANUARY 17 2017

Why Update?



- ▶ Growth Management Act (GMA), periodic update to Comprehensive Plan and associated development regulations
- ▶ Last updated in 2005, limited amendments in 2007
- ▶ “Review and revise as necessary”, to comply with updates since 2005 to GMA, legislative changes, case law, and best available science, as well as internal inconsistencies
- ▶ Update due by June 2017

What?



- ▶ Wetlands (19.200)
- ▶ Fish and Wildlife Habitat Conservation Areas (19.300)- *New maps*
- ▶ Geologically Hazardous Areas (19.400)- *New maps*
- ▶ Frequently Flooded Areas (19.500)
- ▶ Critical Aquifer Recharge Areas (19.600)

- ▶ Special Reports (19.700)
- ▶ Appendices (19.800)



Frequently Flooded Areas



- ▶ Section references and relies upon Title 15 of Kitsap County code (Flood Hazard Areas)
- ▶ Added reference to Title 22 (Shoreline Master Program)
 - ▶ “...this section will give special consideration to anadromous fish habitat in combination with Chapter 19.300, Fish and Wildlife Habitat Conservation Areas and Title 22 Shoreline Master Program”.
- ▶ Title 15 recently updated (2015) to be in compliance with habitat requirements and new FEMA Floodplain maps
- ▶ Minor edits (basement definition, etc.) possible in conjunction with this CAO update

Critical Aquifer Recharge Areas



- ▶ WAC language added to emphasize importance of preventing groundwater contamination
- ▶ "address land use activities that pose a potential to *directly or indirectly* contaminate or threaten aquifer water quality *and quantity*."
- ▶ No map changes at this time. CARA maps are based on other data which are set by the health department and water purveyors, such as well-head protection zones. Recent groundwater studies may help inform changes to that data in the future, which would be used in updates to the CARA map.
- ▶ Policy added (per WAC) to acknowledge the importance of aquifer recharge to streams, lakes and wetlands that provide critical fish and wildlife habitat.

Wetlands



- ▶ 19.200.210 Wetland identification and functional rating
 - ▶ Definition to conform to RCW; organizational, non substantive
 - ▶ Wetland delineations no longer use the Washington State manual, but rather, the approved federal manual and regional supplement; changes made throughout to reflect this change
 - ▶ Wetland Rating System updated from 2004 to 2014; changes made throughout to reflect this change; includes point range changes for Categories of wetlands. [This is already in effect. Code change is mostly 'housekeeping'.]

Wetland Rating System (2014)



Category	2004 Scores (out of 100)	2014 Scores (out of 27)
I	70+	23+
II	51-69	20-22
III	30-50	16-19
IV	< 30	< 16

Why Changed?

Statistical analysis of data collected during use of the previous version indicated scoring function from 0-100 could not be supported by the science.

What Changed?

During field calibration using 111 of the original reference sites, the number of Category I and IV wetlands were found to be about the same. Category II wetlands accounted for 47% using the 2004 system, and 40% using the 2014 system. Category III wetlands accounted for 35% for 2004 and 44% for 2014.

Wetlands



- ▶ 19.200.215 Wetland review procedures
 - ▶ Special reports valid for five years, not three, to be consistent with other references and practices
 - ▶ Expedited approval vs. expedited review



Wetlands



▶ 19.200.220 Wetland buffer requirements

- ▶ Overall, little to no net change to buffers for each category based on BAS from the WA Department of Ecology *(2014 update to Appendix 8-C, Guidance on Buffers and Ratios for Western Washington...)*
- ▶ In four instances of rare and/or highly functional wetlands in high intensity land use settings, the buffer width increases; in three instances the buffer width decreases
- ▶ New table format- All in one, rather than jumping around between +/-; no "base buffer widths", but still based on wetland Category, intensity of the impacts, and the functions (habitat, water quality, hydrology) or special characteristics

Wetlands



Table 19.200.220(B) Widths of Buffers for Category IV Wetlands

Wetland Characteristics	Buffer widths by Impact of Land Use
Score for all 3 basic functions is less than 16 points	Low- 25' Moderate- 40' High- 50'

Table 19.200.220(C) Widths of Buffers for Category III Wetlands

Wetland Characteristics	Buffer widths by Impact of Land Use
Moderate level of function for habitat (5-7 points)	Low- 75' Moderate- 110' High- 150'
Score for habitat 3-4 points	Low- 40' Moderate- 60' High- 80'

Wetlands



Table 19.200.220(D) Width of Buffers for Category II Wetlands

Wetland Characteristic	Buffer Widths by Impact of Land Use	Other Measures Recommended for Protection
High level of function for habitat score (8-9 points)	Low- 150' Moderate- 225' (+25') High- 300' (+75')	Maintain connections to other habitat areas
Moderate level of function for habitat (5-7 points)	Low-75' Moderate- 110' High- 150'	
High level of function for water quality improvement (8-9 points) and low for habitat (less than 5 points)	Low- 50' Moderate- 75' High- 100'	No additional surface discharges of untreated runoff
Estuarine	Low- 75' Moderate- 110' High- 150'	
Interdunal (new)	Low- 75' Moderate- 110' High- 150'	
Not meeting above characteristics	Low- 50' Moderate- 75' High- 100'	

Wetlands



Table 19.200.220(E) Width of Buffers for Category I Wetlands

Wetland Characteristics	Buffer Widths by Impact of Land Use	Other Measures Recommended for Protection
Wetlands of High Conservation Value	Low- 125' Moderate- 190' High- 250'	No additional surface discharges to wetland or its tributaries
Bogs	Low- 125' Moderate- 190' High- 250'	No additional surface discharges to wetland or its tributaries; Restore degraded parts of buffer
Forested	Buffer width to be based on score for habitat functions or water quality functions	If forested wetland scores high for habitat (8-9 pts.), need to maintain connections to other habitat areas; Restore degraded parts of buffer
Estuarine	Low- 100' Moderate- 150' High- 200'	
Wetlands in Coastal Lagoons	Low- 100' Moderate- 150' (-50') High- 200' (-50')	
High level of function for habitat (8-9 points)	Low- 150' Moderate- 225' High- 300' (+50')	Maintain connections to other habitat areas; Restore degraded parts of buffer
Interdunal wetland with high level of function for habitat (8-9 points)	Low- 150' Moderate- 225' High- 300'	Maintain connections to other habitat areas; Restore degraded parts of buffer
Moderate level of function for habitat (5-7 points)	Low- 75' Moderate- 110' High- 150' (-50')	
High level of function for water quality improvement (8-9 points) and low for habitat (less than 5 points)	Low- 50' Moderate- 75' High- 100'	
Not meeting any of the above characteristics	Low- 50' Moderate- 75' High- 100'	

Wetlands



- ▶ 19.200.220 (continued)
 - ▶ Buffer averaging and administrative reductions: may be reduced by 25%, no longer 50%
 - ▶ Defined "significant trees"
 - ▶ New section under "administrative buffer reductions" with provisions for reducing buffers in high-intensity land use situations down to the recommendations for moderate-intensity (habitat connectivity; use of other recommendations in buffer tables and additional "examples" Table 19.200.220(F))
 - ▶ No refuse in buffers, for consistency with stream buffer protections
 - ▶ Removal of "Docks" and other shoreline references
 - ▶ Agriculture: not retroactive, but now includes expansion of agricultural uses; worked with KCD to ensure "farm conservation plans" are inclusive of soil, air, water, vegetation, wildlife and human impacts
 - ▶ Recommending moving Land Division and Land Use Permits section to Title 16
 - ▶ Trails and Trail-related facilities: changes to be consistent with SMP

Wetlands



▶ 19.200.250 Wetland Mitigation Requirements

- ▶ Mitigation ratios: Reestablishment or Creation and Enhancement. BAS recommends DOUBLE the Enhancement ratio portion for some types of wetlands

Changes to Wetland Mitigation Ratios (1:1 Reestablishment or Creation (R/C) and Enhancement (E))		
Category	Current	Proposed
III	1:1 R/C and 2:1 E	1:1 R/C and 4:1E
II (except Estuarine)	1:1 R/C and 4:1 E	1:1 R/C and 8:1 E
I (Forested)	1:1 R/C and 10:1 E	1:1 R/C and 20:1E
I (Other)	1:1 R/C and 6:1 E	1:1 R/C and 12:1 E

- ▶ Criteria for Alternative Mitigation Plans (new section)

- ▶ QUESTIONS?

Fish and Wildlife Habitat Conservation Areas



▶ 19.300.305 Purpose

- ▶ New phrase in WAC - "maintain viable populations over the long term" of fish and wildlife species and habitats
- ▶ Added purpose: "Minimize and avoid human and wildlife conflicts through planning and implementation of wildlife corridors where feasible"

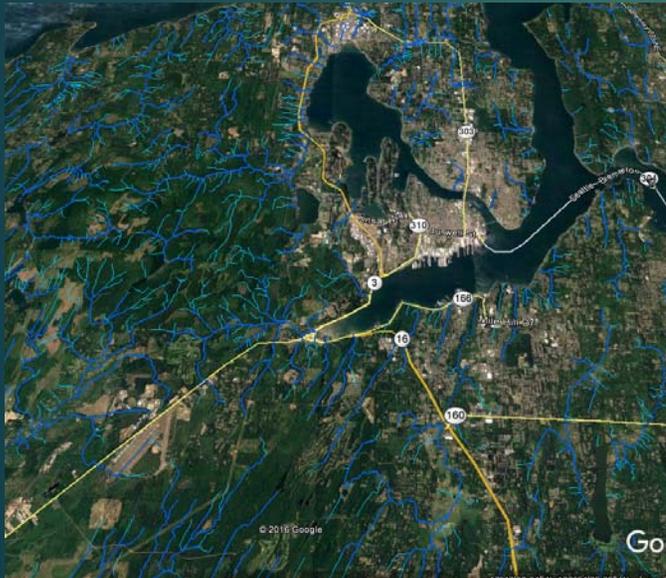
▶ 19.300.310

- ▶ New phrase in WAC- clarifies FWHC areas are "on both public and private lands"
- ▶ Clarify that "Type S waters are regulated through the Shoreline Master Program" and that "the WDNR stream maps should not be solely relied on" and use of field verification
- ▶ More specificity (from WAC) that WDFW's PHS database is to be used to identify Class 1 Wildlife Habitat Conservation Areas, and that WDFW Wildlife Areas (and County Heritage Parks) are included

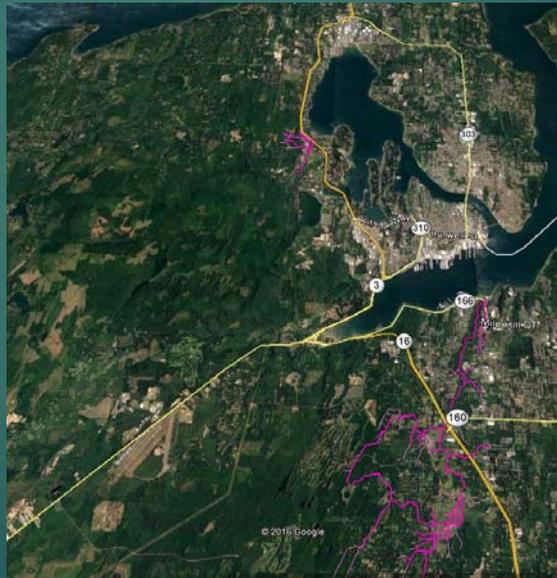
Fish and Wildlife Habitat Conservation Areas



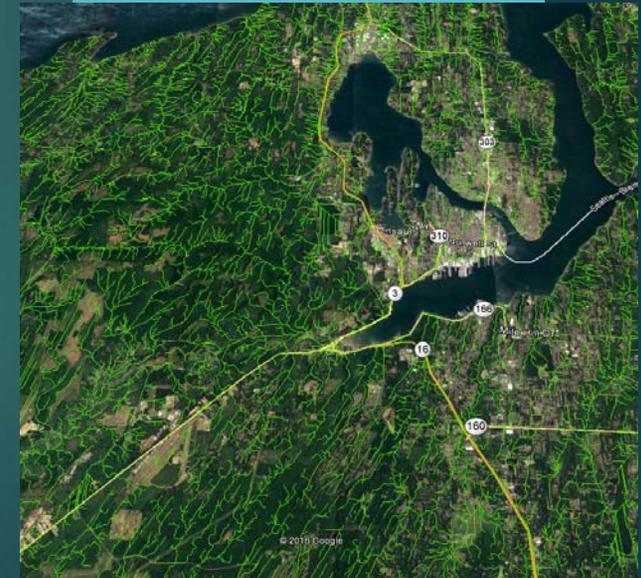
Stream Mapping: A preliminary tool for determining that a site may have this critical area



DNR: current map; includes Stream Type

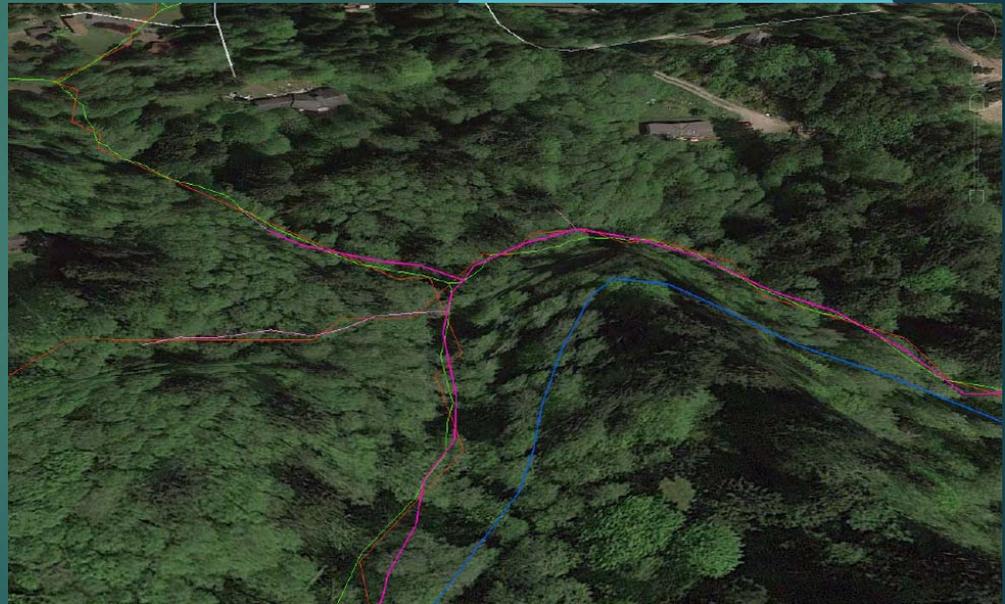


Wild Fish Conservancy: Field mapped / Typed select watersheds

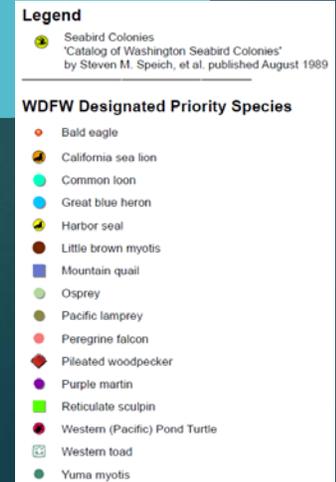
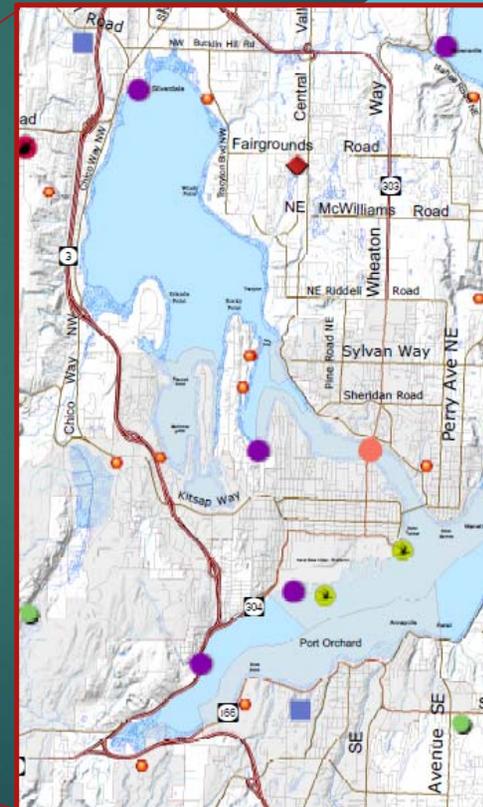
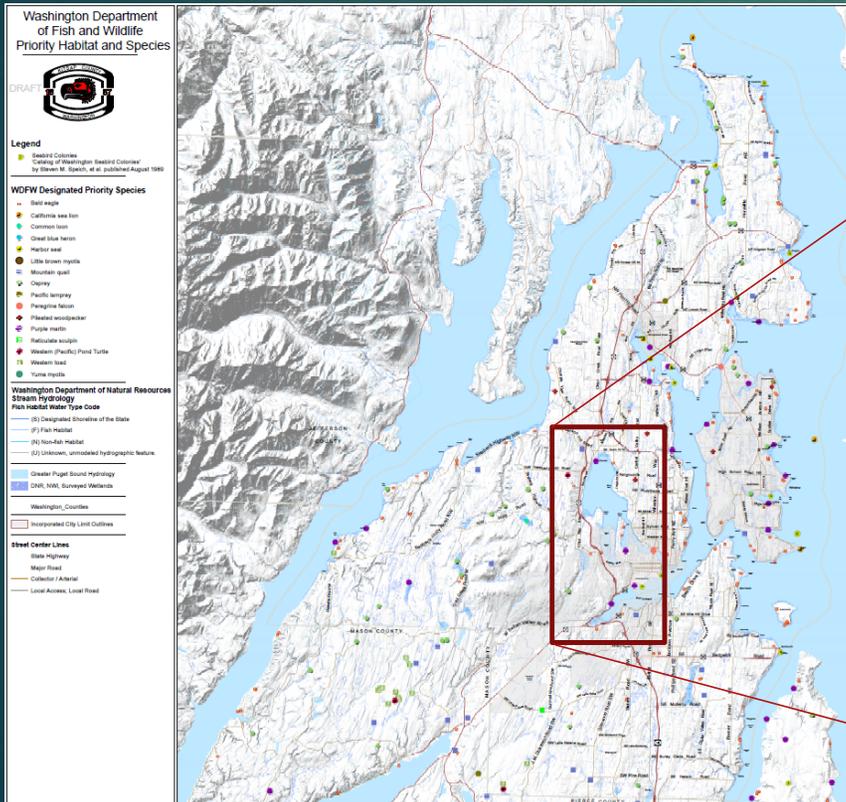


UW Model: LiDAR- based model of probable locations; NOT Typed

Fish and Wildlife Habitat Conservation Areas



Fish and Wildlife Habitat Conservation Areas



Fish and Wildlife Habitat Conservation Areas



- ▶ 19.300.315 Development Standards
 - ▶ Remove Type S streams, shorelines and lakes over 20 acres from buffer tables and text
 - ▶ Similar to wetlands, buffer reduction up to 25%, not 50%
 - ▶ Clarifies that buffers for geologically hazardous areas may still apply, especially for streams in ravines and channel migration zones
 - ▶ Language changed throughout stating that for Bald Eagles, Habitat Management Plans must not only comply with the federal Bald and Golden Eagle Protection Act, and not WDFW

Fish and Wildlife Habitat Conservation Areas



- ▶ Stream Crossings: reference 2013 Water Crossing Design Guidelines (WDFW)
- ▶ Bridges: piers or abutments in floodway if to provide mid-span footings for increased floodplain connectivity; new structures adequate length to not require armor at footings
- ▶ Pesticides/Herbicides- coordinated with licensed applicator
- ▶ As with Wetlands, recommend moving Land Divisions and Land Use Permits to Title 16, same Agriculture changes, same Trials changes
- ▶ Order of preference for placing new utility corridors
- ▶ Bank Stabilization: replaced shoreline-specific words like "bluff" with appropriate freshwater words like "bank" or "channel"
- ▶ Remove old armor or anchor materials when culverts are replaced

Geologically Hazardous Areas

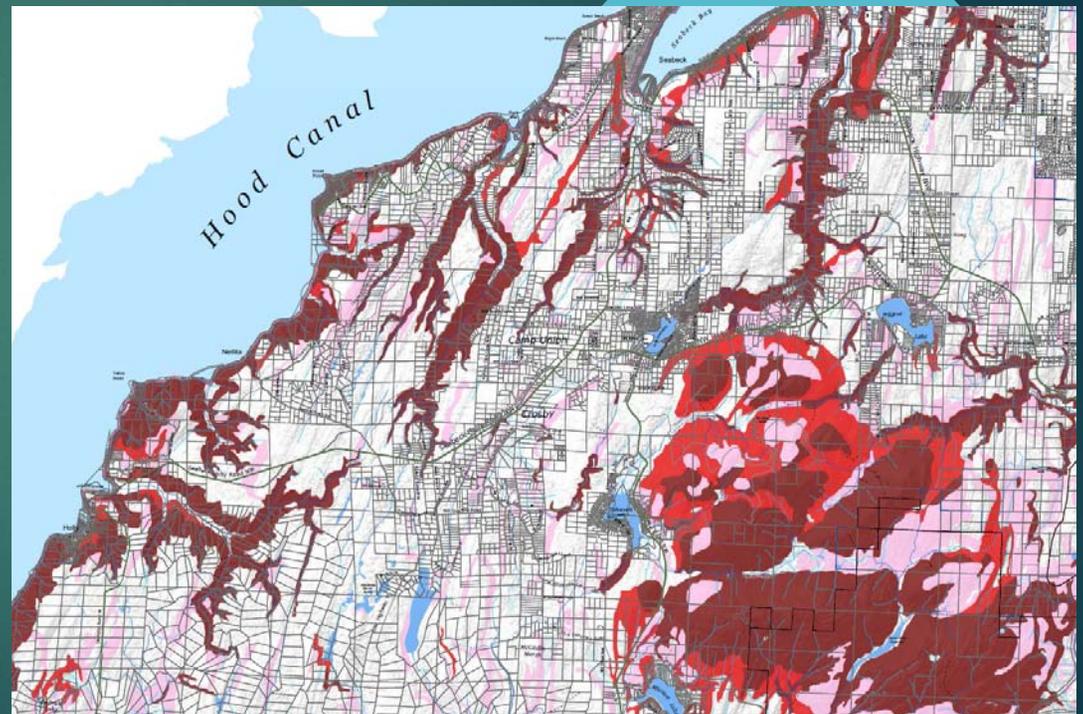


- ▶ Only section of CAO that is proposed as a re-write
 - ▶ To better align with the updated WAC
 - ▶ To re-organize into a logical flow based on the WAC changes
 - ▶ To fit in revised reporting options
- ▶ Three categories:
 - ▶ Erosion
 - ▶ Landslide
 - ▶ Seismic
- ▶ Each category includes:
 - ▶ How Moderate and High Hazard areas were determined on the County map- **NEW**
 - ▶ Procedures for determining whether the hazard is present on or adjacent to a site
 - ▶ Department review to determine if geological assessment required
 - ▶ Letter, Evaluation, OR Report
 - ▶ Buffer Requirements (leans heavily on geologist recommendations)



Geologically Hazardous Areas- Erosion

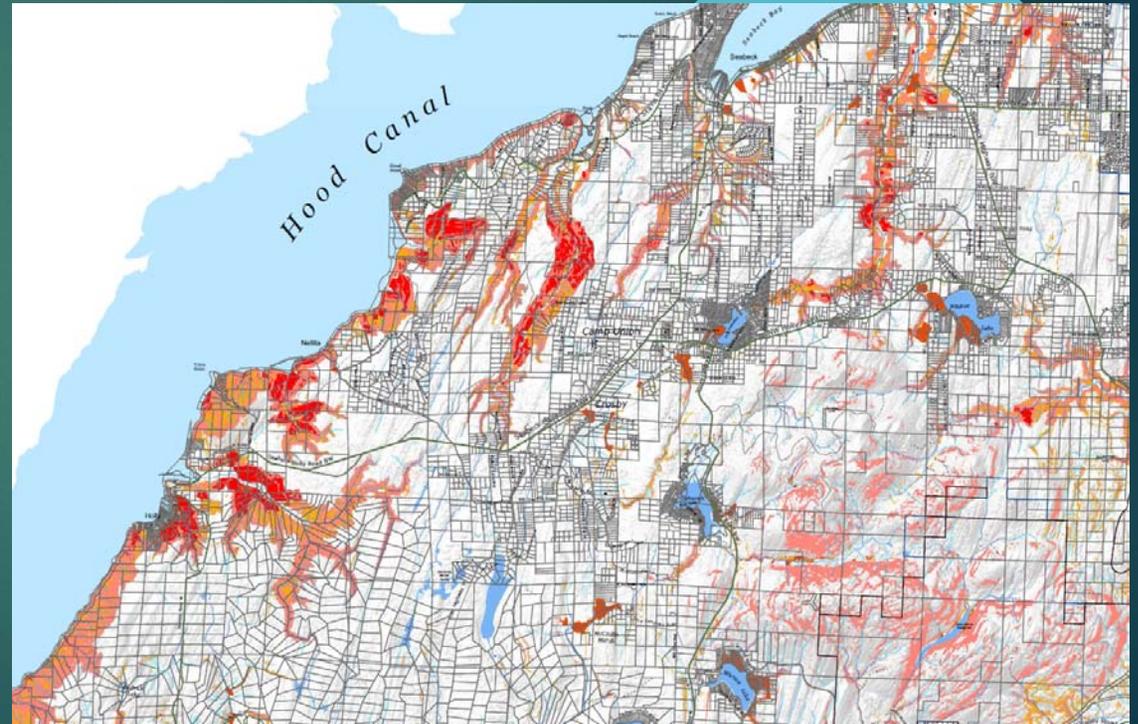
- ▶ Areas likely to become unstable, such as bluffs, steep slopes, and areas with unconsolidated soils. These include coastal erosion-prone areas and channel migration zones, and may be inclusive of landslides.



Geologically Hazardous Areas- Landslides

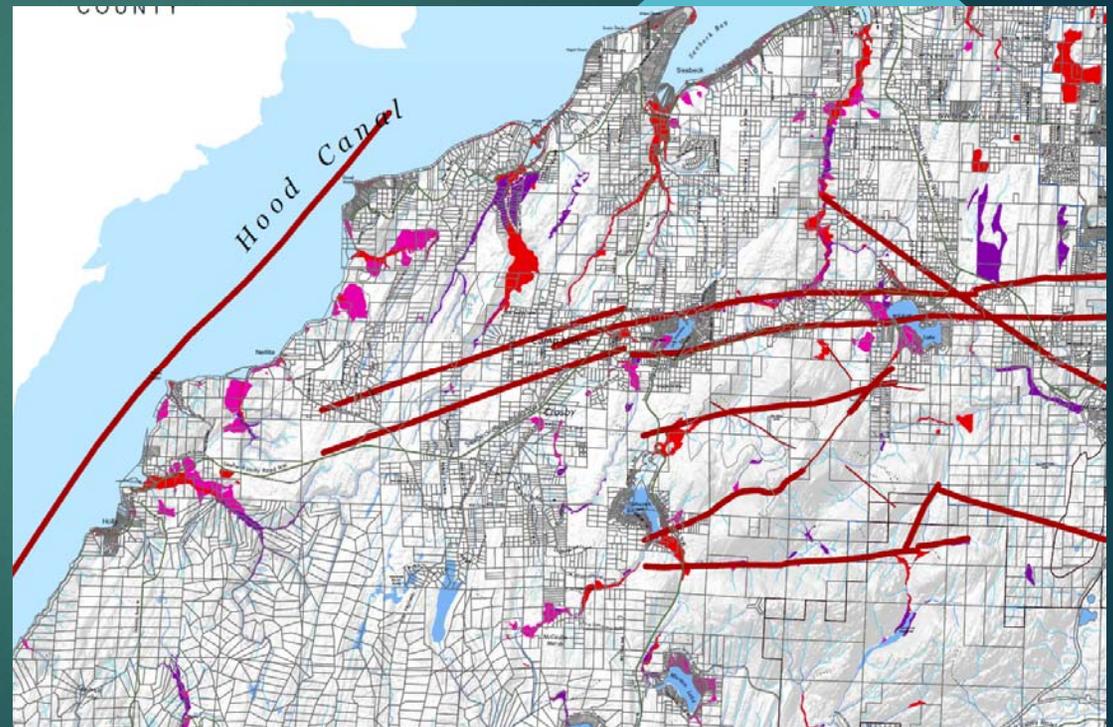


- ▶ Include those areas at risk of mass movement due to a combination of geologic, topographic, and hydrologic factors. These areas are subject to landslides based on a combination of factors, including bedrock, soil, slope (gradient), slope aspect, structure, hydrology, and other factors.
- ▶ Landslide hazards are further classified as either shallow or deep-seated.



Geologically Hazardous Areas- Seismic

- ▶ Areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement or subsidence, soil liquefaction, surface faulting, or tsunami.



Special Reports

- ▶ Wetland Delineation Report
- ▶ Wetland Mitigation Report
- ▶ Habitat Management Plan
- ▶ Geotechnical Report and Geological Report
- ▶ Hydrogeological Report



Appendices



- ▶ A- Washington State Wetlands Rating System Categories
 - ▶ Same changes to reflect 2014 Rating System as in 19.200
- ▶ B- Washington State Department of Natural Resources Stream Typing System
- ▶ C- Kitsap County's GIS Database of Critical Areas Information
 - ▶ Updated name of WDFW PHS database
 - ▶ Added UW Stream Location Model and Geohazards mapping
- ▶ D- Site Development Figures
 - ▶ Will Update with new figures
- ▶ E- Kitsap County Critical Area and Buffer Notice
 - ▶ Updated
- ▶ F- Critical Area Decision Types (Table)
 - ▶ Updated to reflect buffer averaging change
- ▶ G- Checklist and Sample Outline for a Delineation Report (NEW)
- ▶ H- Mitigation Plan Checklist
- ▶ Removed: Wetland Buffer Alteration General Authorization Form (duplicative, not used)

Schedule



- ▶ January- Planning Commission Work Study
- ▶ February- Public Draft Released / Outreach
- ▶ March- Planning Commission Hearing
- ▶ April- Planning Commission Findings / BoCC Work Study
- ▶ May- Final Draft Released / BoCC Hearing(s) / Final Public Comment
- ▶ June- Adoption

QUESTIONS?