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PLANNING DEPARTMENT

Creating Solutions for Our Future

Scott Clark
Director

MEMORANDUM

TO: Thurston County Planning Commission

FROM: Andrew Deffobis, Associate Planner

DATE: August 17, 2011

SUBJECT: Critical Areas Ordinance (CAO) Update – Supporting Documents for Proposed Frequently Flooded Areas (24.20 TCC) and Fish and Wildlife Habitat Conservation Areas (24.25 TCC)

At the August 3, 2011 Planning Commission meeting, the Planning Department distributed a draft chapter addressing frequently flooded areas under the CAO, which is proposed Chapter 24.20 TCC. The draft chapter covers development regulations for floodways, 100-year floodplains, high ground water hazard areas, channel migration hazard areas, and coastal high hazard areas.

Some supporting materials have been prepared for proposed Chapter 24.20 and also proposed Chapter 24.25 TCC (Fish and Wildlife Habitat Conservation Areas). Attached are:

- A draft comparison table that highlights differences between the current and proposed CAO provisions pertaining to frequently flooded areas
- Digital collection of documents considered a partial list of best available science (BAS) and other information used in the creation of draft Chapter 24.20 TCC
- A draft comparison table that highlights differences in freshwater riparian habitat areas (i.e. stream buffers) between a number of jurisdictions in western Washington

In the near future, a final supporting document will be provided for proposed Chapter 24.20 TCC, a jurisdictional comparison of regulatory standards for frequently flooded areas, and a best available science summary.



Note: Document based on staff review of county and city Critical Areas Ordinances. Full standards found in each jurisdiction's official code.

Jurisdiction	Category 1	Category 2	Category 3	Category 4	Category 5
Thurston County (1994)	100	100	100	50	25
Thurston County (proposed)	250 (Type S)	250 (Type F > 20 ft wide)	200 (Type F < 20 ft wide)	100-200 (Type N_p & N_s)	100-200 (Type N_p & N_s)
Lewis County (2008)*	150 (Type S)	150 (Type F > 10 ft wide)	100 (Type F < 10 ft wide)	75 (Type N _p)	75 (Type N _s)
Mason County (2006)	150 (Type S)	150 (Type F)	200 (Type SP [anadromous fish])	100 (Type N _p)	75 (Type N _s)
Grays Harbor County (2010)	150 (Type S) major development; 35-75 for minor development	150/65 major/minor (Type F > 5 ft wide)	100/60 major/minor (Type F < 5 ft wide)	60 (Type N _p)	50 (Type N _s)
Pierce County (2005)	100 (Type S1 – marine)	150 (Type F1)	115 (Type N1)	65 (Type N2)	35 (Type N3)
King County** (2004)	115-165 (Type S)	115-165 (Type F)	65 (Type N)	25 (Type O)	N/A
Whatcom County (2005)	150 (Type S)	100 (Type F)	50 (Type N)	N/A	N/A
Jefferson County (2008-10)	150 (Type S)	150 (Type F)	75 (Type N _p)	75 (Type N _s w/grade greater than 20%)	50 (Type N _s w/grade less than 20%)
City of Olympia*** (2005-2006)	250 (Type 1)	250 (Type 2)	200 (Type 3)	150 (Type 4)	150 (Type 5)
City of Lacey (~2007)	250 (Type 1)	250 (Type 2)	200 [5-20 ft wide]/150 [other] (Type 3)	200 (Type 4)	150 (Type 5)
City of Tumwater (2005)	250 (Type 1)	250 (Type 2)	200 [5-20 ft wide]/100 [other] (Type 3)	50 (Type 4)	50 (Type 5)
City of Yelm**** (2005)					150 (Type 5)
City of Tenino (2007)	150 (Type S)	100 (Type F)	100 (Type F)	50 (Type N _p)	35 (Type N _s)

* Lewis County has alternative standards for single family home applications on parcels of five acres or greater (LCC 17.35A.680(2)).

** King County has different buffers for UGA and rural county.

*** Widths are for streams in ravines 10 or fewer feet deep. For ravines deeper than 10 feet, vegetation must be kept within ravine and fifty feet from the top of the slope.

**** City of Yelm only establishes riparian areas for Yelm Creek and Thompson Creek.

Washington Department of Natural Resources Stream Typing

Water Type	Description
Type "S" = Shoreline (formerly type 1)	Streams and waterbodies that are designated "shorelines of the state" as defined in chapter 90.58.030 RCW.
Type "F" = Fish (formerly type 2 or 3)	Streams and waterbodies that are known to be used by fish, or meet the physical criteria to be potentially used by fish. Fish streams may or may not have flowing water all year; they may be perennial or seasonal.
Type "Np" = Non-Fish Perennial (formerly type 4)	Streams that have flow year round, but do not meet the physical criteria of a Type F stream. This also includes streams that have been proven not to contain fish using methods described in <u>Forest Practices Board Manual Section 13</u> .
Type "Ns" = Non-Fish Seasonal (formerly type 5)	Streams that do not have surface flow during at least some portion of the year, and do not meet the physical criteria of a Type F stream.

**Thurston County Planning Department
Comparison Tables for Current and Proposed CAO**

Chapter 24.20 – Frequently Flooded Areas

New Title 24	Chapter 17.15 & 14.38	Notes
24.20.005	17.15.900, 14.38.010	
24.20.010	14.38.030(A)	The proposal applies to channel migration hazards, which are not regulated under current code. However channel migration hazard areas may be classified as a geologic hazard area in the existing critical areas ordinance if steep slopes are present.
24.20.015	17.15.860, 17.15.870, 14.38.020(5)	Proposed language specifies that base flood elevation (BFE) is at the outer edge of hazard area, and must be verified in the field.
24.20.020	17.15.865-17.15.880 and Table 9.5	Proposal creates specific "No Development Zone (NDZ)"; area extends 50 horizontal feet outward from edge of hazard. Proposal includes all development; current language makes exceptions for public utilities and additions/accessory structures. Proposal provides for reduced NDZ where land rises 2 feet above BFE before extending 50 horizontal feet from the edge of the hazard area.
24.20.025	17.15.865-17.15.880 and Table 9.5	New section; refers back to Chapter 14.38 for all new construction in the restricted development zone (RDZ).
24.20.030	17.15.865-17.15.880 Table 9.5 & 14.38.020(18)	Proposed language provides standards for high ground water hazard area delineation. Current language references County mapping and groundwater studies as sources of information.
24.20.035	17.15.865-17.15.880 and Table 9.5	New section; references to draft administrative provisions (24.05 TCC) and amendments language (24.91 TCC)
24.20.040	14.38.090	Proposed language references 14.38, which adopts FEMA's map correction procedures by reference.
24.20.045		New section
24.20.050		New section
24.20.055		New section
24.20.060	14.38.050(E)	Proposed language requires 3 foot elevation above BFE; current language requires elevation to BFE. Proposal also references 14.38.

New Title 24	Chapter 17.15 & 14.38	Notes
24.20.065	14.38.050(F) and 17.15 Table 5	Proposal prohibits new development in floodway. Current language allows it if studies demonstrate no rise in flood water levels will result; development is also subject to all provisions of 14.38. Letters (C), (D) and (E) in proposal are new language.
24.20.070	17.15.925, 17.15.930 and Chapters 14.38 & Title 19 Shorelines	
Table 24.20-1	17.15 Table 5	Land uses listed in proposed table may not all be covered in current table, and vice versa.
24.20.080	17.15.930, 14.38.030, 14.38.050	Mostly new language. Proposal expands general language concerning all activities in frequently flooded areas.
24.20.090	17.15.930 & Table 5	New section
24.20.100	17.15.865, 17.15.930 & Table 9.5, 14.38.050(A)(5); 050(E); 050(F)	Proposal expands criteria for high ground water flood hazard areas and adds criteria for channel migration hazards. Proposal does not allow fill in floodway; 14.38 allows fill if demonstrated not to raise flood levels.
24.20.110		New section
24.20.120	17.15.930 Tables 5, 7 & 9.5	New section
24.20.130	17.15.865, 17.15.930, 17.15 Table 5, 14.38.050, & Article IV of the health code.	14.38 requires new sewage systems be located to minimize floodwater damage/infiltration. For single family homes, 17.15 allows septic systems in 100-year floodplain; not in floodway or high groundwater hazard area. Proposed language prohibits new on-site septic systems in floodplain, floodway, high ground water and coastal high hazard areas, and channel migration zones (subject to 24.50 TCC).
24.20.140	17.15.865, 17.15.930(K), & Table 9.5	
24.20.150	17.15.865, 17.15 Tables 5 & 9.5	Proposal prohibits stormwater retention, treatment and conveyance in floodways and coastal high hazard areas. Current language prohibits private stormwater retention/detention facilities in floodway.
24.20.160	17.15 Table 9.5, 17.15.865, & 17.15.930(CC)	Proposal addresses hazard trees; references 14.38.
24.20.165		Proposed section under construction.
24.20.170	17.15.865, 17.15.930, & 17.15 Tables 5 & 9.5	

New Title 24	Chapter 17.15 & 14.38	Notes
24.20.180	17.15 Tables 5 & 9.5	Current CAO addresses single family wells; prohibits them in floodway only. The proposal excludes all wells from floodways, floodplains, high ground water and coastal high hazard areas, and the high ground water no development zone.

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