

**WHATCOM COUNTY COUNCIL AGENDA BILL**

NO. AB2016-276D

CLEARANCES	Initial	Date	Date Received in Council Office	Agenda Date	Assigned to:
Originator: Cliff Strong	CS	1/5/2017	<b>RECEIVED</b>  <b>JAN 17 2017</b>  <b>WHATCOM COUNTY COUNCIL</b>	1/24/2017	COTW
Division Head: Mark Personius	MP	1.12.17			
Dept. Head: Sam Ryan	SR	1-12-17			
Prosecutor: Royce Buckingham					
Purchasing/Budget:					
Executive: Jack Louws	TL	1.17.17			

**TITLE OF DOCUMENT:**

2016 Critical Areas Ordinance Update  
 • Article 4—Frequently Flooded Areas

**ATTACHMENTS:** (all current and past materials provided to the Council can be found at <http://www.whatcomcounty.us/2417/County-Council-Review>)

- A. Staff memo to Council dated 1/12/2017
- B. Proposed Amendments to Article 4 (Frequently Flooded Areas)

SEPA review required?    ( X ) Yes    ( ) NO	Should Clerk schedule a hearing?    ( ) Yes    ( X ) NO
SEPA review completed?    ( X ) Yes    ( ) NO	Requested Date:

**SUMMARY STATEMENT OR LEGAL NOTICE LANGUAGE:** (If this item is an ordinance or requires a public hearing, you must provide the language for use in the required public notice. Be specific and cite RCW or WCC as appropriate. Be clear in explaining the intent of the action.)

This is another workshop (in a series of many) on the proposed ordinance to amend Whatcom County Critical Areas Ordinance (CAO) (WCC 16.16) pursuant to RCW 36.70A.130(1). The Growth Management Act (RCW 360.70A) defines critical areas as wetlands, frequently flooded areas, fish and wildlife habitat conservation areas (including streams), geologically hazardous areas, and critical aquifer recharge areas. The purpose of this periodic update is to ensure that the CAO meets the GMA requirements, including consistency with the Whatcom County Comprehensive Plan, best available science, and state agency guidance updates. Numerous amendments are being proposed, though most of them pertain to correcting grammar, updating references to other documents or laws, clarifying and updating administrative procedures, etc. The County is also required to integrate the CAO provisions with its Shoreline Master Program (SMP). Whatcom County has done so by adopting the CAO by reference within the SMP (WCC 23.10.060(A)). This reference is also proposed to be amended.

**COMMITTEE ACTION:**

**COUNCIL ACTION:**

Related County Contract #:

Related File Numbers:

Ordinance or Resolution Number:

**Please Note:** Once adopted and signed, ordinances and resolutions are available for viewing and printing on the County's website at: [www.co.whatcom.wa.us/council](http://www.co.whatcom.wa.us/council).

**WHATCOM COUNTY**

Planning & Development Services  
5280 Northwest Drive  
Bellingham, WA 98226-9097  
360-676-6907, TTY 800-833-6384  
360-738-2525 Fax



**J.E. "Sam" Ryan**  
Director

**Memorandum**

TO: The Honorable County Council  
Jack Louws, County Executive

FROM: Cliff Strong, Senior Planner *CS*

THROUGH: Mark Personius, Asst. Director *MP*

DATE: January 12, 2017

SUBJECT: 2016 Critical Areas Ordinance Update  
County Council Review, Workshop 3, 24 January 2017

---

On January 24<sup>th</sup> the Council will continue its review of the 2016 Critical Areas Ordinance Update. Topics to be covered include:

- Review of Certain Proposed Amendments to:
  - Article 4 – Frequently Flooded Areas
  - Article 7 – Habitat Conservation Areas

To prepare for this meeting, please review Articles 4 and 7 of the draft code and read the Best Available Science Addendum regarding those two sections (in your previous meeting packet materials), in which I point out the more substantive recommended amendments.

**ARTICLE 4. FREQUENTLY FLOODED AREAS**

**16.16.400 Purpose.**

The purposes of this article are to:

- A. Reduce the risk to life and safety, public facilities, and public and private property that result from floods.
- B. Avoid and minimize impacts to fish and wildlife habitats that occur within frequently flooded areas.
- C. Protect and maintain the beneficial ecological functions and values (DOC80) of frequently flooded areas, including providing the necessary flow regime to form and maintain a full range of functional and accessible salmonid habitats both within and outside of frequently flooded areas.
- D. To ensure compliance with FEMA National Flood Insurance Program (NFIP) protection standards for critical habitats of species (CES81) listed under the Endangered Species Act.
- D.E. In conjunction with the provisions of WCC Title 17, establish review procedures that provide an integrated approach to managing floodplain development and maintaining the capacity of the floodplain or floodway to convey and store flood waters.

**16.16.410 Designation and mapping – Frequently flooded areas.**

- A. Frequently flooded areas are areas located along major rivers, streams, and coastal areas where the depth, velocity, intensity and frequency of flood water during major events present a risk to human life and property. Areas susceptible to these types of hazards are hereby designated as frequently flooded areas and subject to the provisions of this article.
- B. The approximate location and extent of frequently flooded areas are shown on the County’s critical area maps. These maps are to be used as a guide and do not provide a definitive critical area designation. The County shall update the maps as new hazard areas are identified and as new information becomes available. This article does not imply that land outside mapped frequently flooded areas or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of Whatcom County, any officer or employee thereof, or the Federal Insurance and Mitigation Administration (FIMA), for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.
- C. Frequently flooded areas shall include, but not be limited to:
  - 1. Areas subject to a ~~one percent~~ 1% recurrence interval of flood water inundation or a 100-year base flood as mapped on the current effective Federal Emergency Management Agency’s Flood Insurance Rate Maps (FIRM). This includes coastal high hazard areas as defined by this chapter and as identified and designated on the FIRM maps as Zone VE or V; provided, that tsunami hazard areas are designated as geologically hazardous areas and subject to the provisions of Article 3 of this chapter.
  - 2. Other flood hazard areas identified by the County Public Works Department based on review of historical data, high water marks, photographs of past flooding, or similar information from federal, state, county, or other valid sources when base flood elevation data from the Federal Insurance and Mitigation Administration has not been provided or is not accurate.

**16.16.420 Frequently flooded areas – General standards.**

- A. All development shall conform to the provisions of WCC Title 17, Flood Damage Prevention, and the applicable provisions of this chapter.
- B. Development within frequently flooded areas shall be allowed ~~pursuant only when it is consistent~~ with all of the following:

1. FEMA's National Flood Insurance Program (NFIP), including the protection standards for critical habitats for listed species, which shall be demonstrated through submittal of a habitat assessment, and if necessary, a mitigation plan prepared by a qualified professional, in accordance with the FEMA Regional Guidance for the Puget Sound Basin. The plan shall identify any federally listed species and associated habitats, and demonstrate that no harm will occur to such species or habitats as a result of development within frequently flooded areas; and, [CAC82]
2. ~~to~~ The mitigation sequence in WCC 16.16.260; and,
3. Article 7, Habitat Conservation Areas, of this chapter; and, [CAC83]
4. The applicable general protective measures found in WVC 16.16.265.

C. ~~The technical administrator shall have the authority to require mitigation for adverse impacts to floodplain~~ the ecological functions of Frequently Flooded Areas; provided, that such mitigation shall be consistent and compatible with the goal of protecting health and safety and minimizing risks to property.

#### 16.16.430 Review and report requirements.

A. When County critical area maps or other sources of credible information indicate that a site proposed for development is or may be located within a frequently flooded area, the County Public Works Department's River and Flood Division and/or the technical administrator shall have the authority to require a critical area assessment report.

A.B. The public works department shall have primary responsibility for reviewing and approving proposed developments for consistency with WCC Title 17; provided, that the technical administrator shall review development proposals for consistency with the standards provided in this chapter. Either may place conditions for approval and/or require mitigation in accordance with this chapter. [CAC84]

C. In addition to the requirements of WCC 16.16.225, critical areas assessment reports for frequently flooded areas shall:

1. meet the requirements of WCC 17.12.010 and 16.16.255. Address adverse impacts to ecological functions and processes, including riparian vegetation. Positive impacts may also be discussed.
2. The reports shall also include mitigation for adverse effects on Frequently Flooded Areas' floodplain ecological functions, where applicable.

D. The technical administrator shall have the authority to modify the requirements of Subsection C when s/he determines that any portion of these requirements is unnecessary given the scope and/or scale of the proposed development. [P/C85]

E. The technical administrator shall have the authority to modify these requirements when he/she determines that any portion of these requirements is unnecessary given the scope and/or scale of the proposed development. The technical administrator also shall have the authority to require additional information to that required in Subsection C that discloses and describes the effects of proposed development on Frequently Flooded Area floodplain functions, including, but not limited to impacts on: storage and conveyance of flood water; channel migration [CS86]; reducing peak flows and flow velocities; reducing sediment scour and displacing displacement of rearing juvenile fish; maintaining sediment quality in streams; reducing shear stress and bank erosion; improving water quality; providing wildlife habitat; maintaining fish access; and cycling nutrients cycling or providing other hyporheic functions that link surface and groundwater systems. The reports shall also include mitigation for adverse effects on floodplain ecological functions.

D.F. Critical areas assessment report requirements may be waived for single-family developments and structures accessory to agricultural uses when the technical administrator and the public works department determine that no adverse impacts or risks to life, property, or ecological functions will occur.

# PROPOSED FINDINGS OF FACT

(AS ADOPTED BY THE PLANNING COMMISSION)

# Whatcom County Critical Areas Ordinance Update 2016

---

## *Proposed Findings of Fact (as adopted by the Planning Commission)*

WHEREAS, the adopted Whatcom County Comprehensive Plan supports the protection of environmentally critical areas through the adoption of development regulations; and

WHEREAS, the State Growth Management Act (GMA) includes adopted goals and requirements to guide the development and adoption of comprehensive plans and development regulations including requirements to designate and protect environmentally critical areas; and

WHEREAS; the County has considered those adopted goals, policies, and requirements in development of the proposed Whatcom County Code Amendments related to critical areas, and, has considered other state requirements, law, rules, guidelines, and agency comments; and

WHEREAS, the County researched and assessed the experience of other jurisdictions in regard to standards and requirements for regulating critical areas, undertook a Best Available Science (BAS) review and public process in accordance with the requirements of the GMA, developed Whatcom County Code amendment drafts, prepared environmental documents in accordance with the requirements of the State Environmental Policy Act (SEPA), and held meetings and hearings throughout the code development process; and

WHEREAS, the County has been provided feedback on draft work products and guidance from members of the public, County staff, the Washington State Department of Fish and Wildlife, the Washington State Department of Ecology, the Washington State Department of Commerce, the Lummi Nation, the Nooksack Indian Tribe, other stakeholders and experts, the Whatcom Planning Commission, and elected and appointed officials during the development of the recommended code amendments; and

WHEREAS, in developing this ordinance, the County has followed the GMA's requirements, including to provide "early and continuous public involvement" through a variety of mechanisms described in the public record; and

WHEREAS, the County has followed the State guidelines for the BAS process required by RCW 36.70A.172 and WAC 365-195-900 through 925, employing a variety of mechanisms described in the public record; and

WHEREAS, a notice of intent to adopt the proposed code amendments was sent to the State of Washington Department of Commerce and to other State agencies on February 2, 2016, for a 60-day review and comment period in accordance with State law; and

WHEREAS, an environmental review has been conducted in accordance with the requirements of State Environmental Policy Act (SEPA), and a SEPA threshold determination was issued, and published on March 17, 2016, in the Bellingham Herald; and

WHEREAS, the Planning Commission held a total of 7 public meetings to consider the proposed amendments, which included two public hearings, one on May 12 and one on June 9, 2016, with deliberations throughout these meetings; and

WHEREAS, the Planning Commission has provided a recommendation to the County Council related to the proposed amendments; and

WHEREAS, the County Council held X study sessions on the proposed amendments on X, 2016, and a public hearing on X, 2016 and continued public hearing on X, 2016; and

WHEREAS, the County Council has considered the recommendation of the County Planning Commission and the public comments received; and

WHEREAS, the County Council has reviewed and considered a variety of information sources including Best Available Science materials, informational documents in the public record, and public testimony submitted verbally and in writing to the Planning Commission and to the County Council; and

WHEREAS, the County Council desires the proposed amendments to be effective throughout the County including within shoreline jurisdiction, a subsequent Shoreline Master Program amendment should be prepared for submittal to the State Department of Ecology for approval; and

WHEREAS, based upon the foregoing process, the County Council has made the following Findings of Facts and Conclusions:

### **General Critical Areas Findings**

1. The Growth Management Act requires critical areas to be designated and protected and to include and be informed by BAS when developing critical areas regulations. [RCW 36.70A]
2. Critical areas include wetlands, fish and wildlife habitat conservation areas, geologically hazardous areas, critical aquifer recharge areas, and frequently flooded areas.
3. The Whatcom County has within its borders a variety of environmentally sensitive areas that require protection of important functions and values.
4. Unregulated development may result in cumulative impacts to those functions and values of critical areas that contribute to and are necessary for a healthy natural environment and perceived quality of life.
5. The unregulated development of residences, businesses, shopping areas and other structures, and the clearing of land for accommodation of livestock and for such development all have the potential of adversely and significantly impacting the functions and values of critical areas.
6. The unregulated development of resource lands or areas susceptible to natural hazards may lead to inefficient use of limited public resources, jeopardize environmental resource functions and values, subject persons and property to unsafe conditions, and affect the perceived quality of life.
7. It is more costly to remedy the loss of critical area functions and values than to conserve and protect them from loss or degradation.
8. In determining what critical areas are to be afforded a particular degree of protection, Whatcom County has evaluated a wide range of the best science available with respect to the critical areas to make informed decisions that meet the intent of the Growth Management Act and that are also reflective of local needs.
9. The sources of this best available science that were evaluated and included in this ordinance are contained in Exhibit B: *Whatcom County Critical Areas Ordinance 2016 Update – Best Available Science Review: Addendum to the 2005 BAS Report.*

10. Protection standards for one critical area often provide protection for one or more other critical areas.
11. Critical areas may also be protected by other actions by the County, such as stormwater management standards, clearing and grading regulations, critical area restoration, and public education; and from other regulations, such as the Forest Practices Act, the Shoreline Management Act, the State Environmental Policy Act, and others.
12. The U.S. Constitution prohibits the taking of private property without just compensation.
13. The proposed regulations for critical areas are ~~sufficient and appropriate to protect the functions and values of those areas~~ consistent with the Whatcom Comprehensive Plan ~~and Growth Management Act~~.
14. The amendments hereafter set forth address requirements related to development in and near environmentally critical areas including environmentally critical areas buffers, performance standards, mitigation requirements, exemptions and exceptions.
15. The amendments serve to further implement the Comprehensive Plan, and provide protection for critical areas that is consistent with BAS and with providing options and development flexibility, and are in the public interest.
16. The critical areas regulations continue to allow for reasonable use of property to ensure that such regulations do not infringe on constitutional private property rights.
17. The public record demonstrates that the amendments were developed through a review of the BAS literature available to the County for review and consideration.
18. The County has followed the GMA's requirements for public involvement and for including and considering BAS in modification of the regulations for critical areas.
19. The public testimony provided to the County included both support for the proposed amendments and suggestions for modifications.
20. Based on the review of the testimony and public record, the amendments attached to this ordinance reflect the County's requirement to protect critical areas and to consider the planning goals of the GMA, while recognizing public and private interests.

## Wetlands

21. Wetlands and streams are environmentally sensitive and have numerous natural functions and values. These functions include: wildlife and fisheries habitat; water quality protection; flood protection; shoreline stabilization; stream flow; and ground water recharge and discharge. In many situations, these functions cannot be adequately replicated or replaced.
22. The scientific literature supports in the inclusion of protective buffers from wetlands to provide sediment control and nutrient inputs to wetlands, and to protect important wetland functions.
23. Wetlands are identified according to the U.S. Army Corps of Engineers' *Wetlands Delineation Manual*, 1987 Edition, and the *Western Mountains, Valleys, and Coast Region supplement* (Version 2.0) 2010, and rated according to the *Washington State Wetland Rating System for Western Washington*, revised 2014, prepared by the Washington State Department of Ecology (Ecology).



24. The scientific literature supports the inclusion of protective buffers of relatively intact native vegetation from wetlands to adequately protect wetland functions and values.
25. Appropriate wetland mitigation ratios—ratios of areas of wetland replacement and enhancement to that altered or destroyed—are established in *Wetland Mitigation Replacement Ratios: Defining Equivalency*, published by Ecology, 1992, and *Wetlands in Washington State - Volume 2: Guidance for Protecting and Managing Wetlands*, Ecology Publication 05-06-008, April 2005.

### **Critical Aquifer Recharge Areas**

26. WAC 365-190-080 defines wellhead protection areas, sole source aquifers, special protection areas, and other areas that are susceptible or vulnerable to ground water contamination as areas with a critical recharging effect on aquifers used for potable water (also referred to as critical aquifer recharge areas).
27. Potable water is an essential life-sustaining element.
28. Much of the County's drinking water in rural areas comes from groundwater supplies.
29. Once groundwater is contaminated it is difficult, costly, and sometimes impossible to clean up.
30. Preventing groundwater contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm to people.
31. Guidance Document for Establishment of Critical Aquifer Recharge Area Ordinances, by Ecology, 2000, includes scientific recommendations for protecting ground water, including limiting certain uses and the intensity of development in critical aquifer recharge areas.

### **Frequently Flooded Areas**

32. Flood hazard areas are subject to periodic inundation that results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
33. These flood losses are caused by development in areas prone to inundation that increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.
34. Floodplain and stream connectivity are major elements in maintaining healthy riparian habitat and off-channel habitats for the survival of fish species and conveyance of floodwaters. If river, floodplains, and other systems are not viewed holistically as biological, geomorphological units, this can lead to serious degradation of habitat and increase flood hazards, which in turn can contribute to listing of various fish species as threatened or endangered and result in extraordinary public expenditures for flood protection and relief.
35. Frequently flooded areas, including the 100-year floodplain and the floodway, are commonly mapped on flood insurance maps, often known as Flood Insurance Rate Maps, or FIRMs.

## Geologically Hazardous Areas

36. Geologically hazardous areas are subject to periodic geological events that result in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
37. Geologic hazards may be exacerbated by development and human activity in sensitive areas, and impacts resulting from geologic hazards may be reduced by limiting development and human activity within or adjacent to the geologic hazard.
38. Some geologic hazards may be intensified during periods of consistent or heavy rainfall that results in ground saturation or surface water drainage flows.

## Fish and Wildlife Habitat Conservation Areas

39. Fish and wildlife habitat conservation areas perform many important physical and biological functions that benefit Whatcom County and its residents, including but not limited to: maintaining species diversity and genetic diversity; providing opportunities for food, cover, nesting, breeding and movement for fish and wildlife; serving as areas for recreation, education and scientific study and aesthetic appreciation; helping to maintain air and water quality; controlling erosion; and providing neighborhood separation and visual diversity within urban areas.
40. Wetlands and streams are environmentally sensitive and have numerous natural functions and values. These functions include: wildlife and fisheries habitat; water quality protection; flood protection; shoreline stabilization; stream flow; and ground water recharge and discharge. In many situations these functions cannot be adequately replicated or replaced.
41. The scientific literature supports the inclusion of protective buffers from streams to provide sediment control, nutrient inputs to downstream waters, large woody debris, and other functions important to riparian areas.
42. The Washington Department of Fish and Wildlife (WDFW) has prepared management recommendations for the preservation of priority habitat and species, which are based on the best available science, and include, in some instances, recommended protective buffer distances.
43. Kelp and eelgrass beds have been identified and mapped by the Washington State Department of Natural Resources (DNR) in some areas. Herring and smelt spawning times and locations are outlined in WAC 220-110-240 through 220-110-260. Locations for both may be found by referring to *Critical Spawning Habitat for Herring, Surf Smelt, Sand Lance and Rock Sole in Puget Sound, Washington: A Guide for Local Governments and Interested Citizens*, 2002, and the *Puget Sound Environmental Atlas*, Volumes 1 and 2.
44. Salmonid and anadromous fish may be more impacted by development and human activity during some times than others. Such times are referred to as "fish windows," which have been documented by WDFW.
45. DNR has classified watercourses according to two stream-typing systems based on channel width, fish use, and perennial or intermittent status.

46. WAC 365-190-080(5) grants [the jurisdiction] the flexibility to make decisions in the context of local circumstances, and specifically excuses local jurisdictions from being required to protect "all individuals of all species at all time."