

**WHATCOM COUNTY**

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**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:** October 27, 2017

**SUBJECT:** 2017 Critical Areas Ordinance (CAO) Update  
Committee of the Whole Workshop on November 8, 2017

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Another workshop on the 2017 Critical Areas Ordinance update will be held on November 8, 2017. The purpose of this workshop is to deal with a few issues that have recently arisen. Topics to be covered include:

- Article 2, Administrative Mechanisms
- Article 3, Geologically Hazardous Areas
- Article 4, Frequently Flooded Areas
- Article 6, Wetlands
- Article 7, Habitat Conservation Areas
- Article 8, Conservation Program on Agriculture Lands
- Article 9, Definitions

To prepare for this meeting, please review this memo and the 2017 BAS Report Addendum and draft code (both provided in the last packet for your October 24<sup>th</sup> workshop).

Additionally, while at your last workshop Council authorized introduction of the ordinance on November 8<sup>th</sup>, it appears that there may be too many potential changes in such a large body of documents for staff to make in just that afternoon. Depending on the outcome of the workshop, we will need to make the call that afternoon. If it cannot be introduced that evening, we will put it on the agenda for November 21 for introduction, with a public hearing and potential adoption on December 5<sup>th</sup> (which is the last meeting of the year).

## Remaining Issues

At your October 24<sup>th</sup> workshop, Council tabled for two weeks the following issues for the reasons provided:

- Definition of “ongoing ag” – Tabled to allow CM Brown time to confer with the ag community.
- CPAL Exemption Thresholds – Tabled to allow representatives of the ag community to work on some alternative language.
- Proposed changes to lahar language – Tabled to allow Seth Woolson, attorney for the Mount Baker Bibleway Camp, to submit some alternative language (see page 4).

Additionally, CM Brenner stated that she had several new issues and Council asked her to provide them to staff for analysis.

## Definition of “Ongoing Ag”

In workshop, Council provided direction to amend the definition of “ongoing agriculture.”

The existing definition is:

“Ongoing agriculture” means those activities conducted on lands defined in RCW [84.34.020\(2\)](#), and those activities involved in the production of crops and livestock, including, but not limited to, operation and maintenance of existing farm and stock ponds or drainage ditches, irrigation systems, changes between agricultural activities, and maintenance or repair of existing serviceable structures and facilities. Activities that bring an area into agricultural use are not part of an ongoing activity. An operation ceases to be ongoing when the area on which it was conducted has been converted to a nonagricultural use, or has lain idle for more than five consecutive years unless that idle land is registered in a federal or state soils conservation program. Forest practices are not included in this definition.

Council’s proposed definition reads:

“Ongoing agriculture” means agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facilities are no closer to the critical area than the original facilities; and maintaining agricultural lands under production or cultivation. An operation ceases to be ongoing when the area on which it was conducted has been converted to a nonagricultural use.

The primary differences between the two are that the Council version does not reference RCW [84.34.020\(2\)](#), nor does it have the provision that one loses this classification after a period of time (5 years). As you know, staff has recommended against amending this definition.

Our CPAL program has already been found to be GMA-compliant and is used as a model by the state for non-Voluntary Stewardship Program (VSP) counties. Even one of the remedies for a VSP county that doesn't complete their program is to:

Adopt development regulations previously adopted... by another local government for the purpose of protecting critical areas in areas used for agricultural activities. Regulations adopted under this subsection must be from a region with similar agricultural activities, geography, and geology and must: (i) Be from Clallam, Clark, King, or *Whatcom* counties.” (RCW 36.70A.735)

**Staff Recommendation:** Leave our current definition in place.

## CPAL Exemption Thresholds

In both the 10/24 workshop and in her written comments, CM Brenner has expressed that the exemption threshold for requiring a Conservation Farm Plan (CFP) should be 1 animal unit per 1 grazable acre.

Staff believes this is based on some data that the Whatcom Conservation District has provided (via email, attached) that shows that in *some cases some* property can handle up to 1 animal unit (or more) per acre, which some representatives of the ag community have used to promote the 1 au/ac exemption. However, what the data actually shows is that there is a range of properties in Whatcom County—based on soil types, hydrology, animal types, cover crop type, etc.—and that while some properties could support 1 au/ac with little to no management, many others may not. Thus Council chose to require CFPs from all people raising animals, but created the simple Type 1 CFP for hobby farmers.

**Staff Recommendation:** Staff recommends leaving our current CPAL program in place, with its current thresholds for Types 1, 2, and 3 CFPs. Raising the threshold for having to obtain a CFP to 1 au/ac would effectively eliminate Type 1 (hobby farm) CFPs. Additionally, our CPAL program has been found GMA compliant.

As for exemptions, staff suggests that Council could either leave the draft WCC 16.16.814 as is, or eliminate it altogether.

### 16.16.814 Exemptions.

The following are exempt from having to obtain a Conservation Farm Plan:

- A. Landowners who do not have critical areas on their property.
- B. Landowners who keep agricultural activities out of the standard critical areas and their buffers.
- C. Landowners who do not exceed a ratio of 1 animal unit per 3 grazable acres and manage their animals to avoid a direct discharge of sediment or fecal matter to surface waters. Indicators of

direct discharge can include de-vegetated riparian area, unfenced access to a stream, or animal confinement areas adjacent to surface waters. This is a ratio of animal units to grazable acres and may be used on parcels of any size.

- D. Youth agriculture education programs that promote the use of agriculture best management practices through the use of a checklist developed by the Whatcom County Conservation District in cooperation with Whatcom County.

This version added subsection (d), specifically addressing youth agriculture education programs by basically having them go through what amounts to getting a Type 1 CFP (both would rely on a similar self-completed checklist, with some education provided by the WCD). But additionally, it amended what the policy said, to say that the numbers of animal units to grazable acres *is* a ratio and may be used on parcels of any size, thus expanding the exemption (contrary to the reasons provided in the policy that it should not be a ratio). Council approved this language on 9/26/17.

## Lahar Language

Council received another letter (dated 10/30/17, attached) from Seth Woolson, representing the Mount Baker Bibleway Camp, providing alternative language to WCC 16.16.320(B) and 16.16.350(B):

### **16.16.320 Geologically Hazardous Areas – General Standards.**

In addition to the applicable general protective measures found in WWC 16.16.265, the following requirements shall apply to all activities in geologically hazardous areas:

- A. **Generally.** New developments shall be located and/or engineered and constructed to reduce risks to life, health, safety, and buildings, and not increase potential for landslides or erosion that could impact either other properties, public resources, or other critical areas. The County may impose conditions on development activity in a geologically hazardous area as needed to:
  1. Protect human life and safety; and
  2. Minimize the potential for property damage related to seismic events, erosion and/or landslides;
  3. Minimize the need for stream or river bank or coastal bluff stabilization in the future;
  4. Reduce public liabilities for damages associated with geologic hazards.
  5. Protect slope stability and minimize erosion, seismic, and/or landslide hazard risks;
  6. Maintain natural sediment and erosion processes that are integral to the health and sustainability of freshwater and marine ecosystems as well as minimizing impacts to stream, river, and coastal processes such as channel infill, channel migration, sediment transport, or flooding;
- B. **Impact Avoidance.** Impact avoidance measures shall include, but not be limited to, locating the use/development outside of the hazard area, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; implementing special engineering methods for construction, drainage, runoff management etc.; foregoing construction of accessory structures; preserving native vegetation; and other feasible protective measures as determined by an alternatives analysis. For some geologic hazards (except for lahar hazards) impact avoidance may mean no development will be permitted on a property. So long as an applicant complies with WCC 16.16.350(B), the County shall not be permitted to require impact avoidance measures that reduce the number, size, or scale of buildings, driveways, and other features; require the owner to forego construction of accessory structures; or prevent uses

otherwise allowed per the property's zoning district based solely on the property's location within a lahar hazard zone.

- C. **Location of Alterations.** New development shall be directed toward portions of a parcel or parcels under contiguous ownership that are not subject to, or at risk from, geological hazards (except for lahar hazards) and/or are outside any setback or buffer established by this Chapter.

...

#### 16.16.350 Standards – Volcanic Hazard Areas – Standards.

##### B. Lahar Hazard Zones.

1. Subject to WCC 16.16.320(A, B, and C) and WCC 16.16.265, the following uses are allowed in any volcanic hazard areas:
  - a. Single-family residences and duplexes.
  - b. Accessory structures not involving human occupancy.
  - c. Sewer collection facilities, communication facilities, and other utilities that are not likely to cause harm to people or the environment if inundated by a lahar. Underground utilities such as pipelines shall be allowed if demonstrated through a geotechnical analysis to be sufficiently buried as to not likely be damaged by scour caused by a lahar.
  - d. Agricultural and forestry uses not including human habitation.
2. Subject to WCC 16.16.320(A, B, and C) and WCC 16.16.265 (except subsection (D) when located wholly within a lahar hazard zone), the following uses ~~may shall~~ be allowed in volcanic hazard areas subject to the submittal and approval of a Volcanic Hazard Emergency Management Plan meeting the requirements of subsection (B)(3); however, this requirement may be waived for properties located in an area with an estimated lahar arrival time of more than 60 minutes. The County will maintain travel time projection maps to estimate lahar approach times.
  - a. Expansion of legal nonconforming uses meeting criteria of WCC 16.16.275 and WCC 20.83.
  - b. All other uses allowed per the property's zoning district.
3. Where required by subsection (B)(2), a Volcanic Hazard Emergency Management Plan shall be submitted for approval and meet the following requirements:
  - a. Is consistent with and integrated into a community emergency plan maintained by the Sheriff's Office of Emergency Management.
  - b. Includes an emergency evacuation plan.
  - c. Is required to be updated every 5 years.
  - d. Evacuation route maps must be posted on the premises.

**Staff Recommendation:** Regarding 16.16.320(B), staff understands Mr. Woolson's concern. However, if a property is located partially in a lahar hazard zone, it's prudent to at least examine whether new development could be sited in the less risky portions of a property. Staff recommends instead the following sentence for 16.16.320(B):

- B. **Impact Avoidance.** Impact avoidance measures shall include, but not be limited to, locating the use/development outside of the hazard area, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; implementing special engineering methods for construction, drainage, runoff management etc.; foregoing construction of accessory structures; preserving native vegetation; and other feasible protective measures as determined by an alternatives analysis. For some geologic hazards (except for lahar hazards) impact avoidance may mean no development will be permitted on a property. This section shall not apply to properties located wholly within a lahar hazard zone.

Regarding 16.16.350(B), staff recommends against Mr. Woolson’s proposal to replace “may” with “shall,” as there may be other code reasons to not allow a proposed development. “Shall” would mean we would have to approve something even if it didn’t meet other sections of the zoning code (e.g., setbacks, height limitations, conditional use permit requirements, etc.).

## **New Issues from CM Brenner**

CM Brenner stated that she had several issues and Council asked her to provide them to staff. Staff has addressed any new issues below. Per Council’s direction we have not addressed issues that Council has already considered.

## **Comments on the BAS Report**

### **ITEM 1 (Issue 201) (Brenner)**

In Section 4.1 CM Brenner questions the 5<sup>th</sup> bullet, which reads, “Uses that do not require human habitation when adverse impacts can be minimized or mitigated.”

**Staff Response:** This bulleted list is a synopsis of the Comprehensive Plan policies regarding geohazard areas. That particular language is in reference to Policy 10E-10. Any amendments to those policies would need to be done through a Comprehensive Plan amendment.

### **ITEM 2 (Issue 202) (Brenner)**

In Section 94.2, under 16.16.310.C.2 CM Brenner says “no” to an explanation of why we deal with seismic hazard areas in the CAO, specifically that “there are specific areas that may need to be avoided” (e.g., liquefaction areas or “areas located within 500 feet of Quaternary fault zones with surface offsets”).

**Staff Response:** Staff recommends leaving the language as is; it is only an explanation. While the code acknowledges and specifically relies on the International Building Code (IBC) or International Residential Code (IRC) to mitigate for seismic hazards, there may be additional requirements for these areas due to the higher hazard at those locations.

### **ITEM 3 (Issue 203) (Brenner)**

In Section 8.1 CM Brenner says “no” to bullet 2, “Using Best Available Science to evaluate and avoid impacts.”

**Staff Response:** Again, this is a synopsis of the Comprehensive Plan policies regarding wetlands. Any amendments to those policies would need to be done through a Comprehensive Plan amendment.

### **ITEM 4 (Issue 204) (Brenner)**

In Section 9.2, in the explanation of the proposed changes to 16.16.720(S) CM Brenner seems to want to be able to let the County remove beaver dams.

**Staff Response:** The CAO applies to everyone, including the County, and it allows for the removal of certain beaver dams pursuant to the state law. No change is needed.

## Comments on the Draft CAO dated 9/26/17

### Article 2, Administrative Mechanisms

#### ITEM 5 (Issue 205) (Brenner)

In 16.16.235 (Activities Allowed with Notification), subsections (B) 4 & 5, CM Brenner says “no” allowing the felling of hazard trees in critical areas (with a risk assessment being provided) and the clearing, pruning, and revegetation of buffer areas for view purposes (with certain conditions).

**Staff Response:** These are existing activities allowed with notification. Removing them from this category would then require that a critical areas assessment be performed when someone wants to do one or both of them. Staff recommends retaining them in this category.

#### ITEM 6 (Issue 206) (Brenner)

In 16.16.262 (Watershed-Based Management Plans), subsection (C)(1), CM Brenner suggests amending the language as follows:

The plan shall be reviewed by the technical administrator to ensure compliance with the purposes of this chapter, the Whatcom County Shoreline Management Program (WCC Title 23), and with the comprehensive plan, and to ensure accuracy of the data and effectiveness of proposed management strategies. In making this determination the technical administrator shall consult with the State Departments of Fish and Wildlife, Ecology, Natural Resources, and/or other local, state, and/or federal, and/or tribal agencies or experts.

**Staff Response:** Staff recommends retaining the existing language to consult with the Tribes, who have expertise in these matters.

#### ITEM 7 (Issue 207) (Brenner)

In 16.16.264 (In-Lieu Fees) CM Brenner suggests that the first sentence read, “To aid in the implementation of off-site mitigation, the County may shall develop an in-lieu fee program.”

**Staff Response:** Staff recommends leaving the word as “may.” Whether we develop such a program will be up to Council and whether they budget for such an endeavor. If they choose not to do so, but the code says we shall, then we may be found to be not implementing our code.

#### ITEM 8 (Issue 208) (Brenner)

In 16.16.264 (In-Lieu Fees) CM Brenner suggests amending subsection (4) to read, “Land acquisition and initial physical and biological improvements of the mitigation site must be completed within three five years of the credit sale.”

**Staff Response:** Staff recommends leaving the period at three years. This list of requirements comes straight from the Department of Ecology requirements for setting up an in-lieu fee program.

### ITEM 9 (Issue 209) (Brenner)

In 16.16.265 (Critical Areas Protective Measures), subsection (A)( Deterrent Devices), CM Brenner suggests amending the last sentence to read, “The signs shall be posted near primary access points and approximately every 200 feet along the critical area boundary unless the technical administrator determines that ~~more or~~ less frequent spacing is adequate considering the size and location of the site.”

**Staff Response:** Staff recommends leaving the wording as is. There may be times—due to geography, use intensity, or size and location of the site—that require closer spacing.

### ITEM 10 (Issue 210) (Brenner)

In 16.16.265 (Critical Areas Protective Measures), subsection (B)(Notice on Title), CM Brenner suggests amending the last sentence to read, “This requirement ~~may shall~~ be waived by the Technical Administrator for certain geologically hazardous areas if s/he finds that the risk is so low as to not warrant notification (e.g., old alluvial deposits).

**Staff Response:** Staff recommends leaving the word as “may.” Each situation will undoubtedly be different, and professional judgement will need to be used. A blanket “shall” would require a waiver, even where our County Geologist and the Technical Administrator believe it in the best interest of future owners to be notified of a hazard.

### ITEM 11 (Issue 211) (Brenner)

In 16.16.273 (Variances), subsection (C)(d), CM Brenner suggests amending the language as follows:

Any application for a variance that remains inactive for a period of 180 days shall expire and a new application and repayment of fees shall be required to reactivate the proposal; provided, that the technical administrator may grant a ~~single~~ 90-day extension for good cause. Delays such as those caused by public notice requirements, environmental (SEPA) review, litigation directly related to the proposal, or changes in government regulations shall not be considered as part of the inactive period.

**Staff Response:** Staff recommends leaving the word “single.” The courts and Growth Management Hearings Boards have consistently ruled against code provisions that allow extensions to be granted indefinitely.

## Article 3, Geologically Hazardous Areas

### ITEM 12 (Issue 212) (Brenner)

In 16.16.300 (Purpose), CM Brenner suggests replacing “reduce” with “minimize,” as follows:

The purpose of this Article is to ~~reduce-minimize~~ risks to human life and safety and ~~minimize~~ ~~reduce~~ the risk of damage to structures and property from geologic hazards, to allow for natural geologic processes supportive of forming and maintaining fish and wildlife habitat, and to regulate and inform land use and planning decisions. It is recognized that the elimination of all risk from geologic hazards is not feasible to achieve but the purpose of this Article is to ~~minimize~~ ~~reduce~~ the risk to acceptable levels.

**Staff Response:** Staff recommends sticking with “reduce.” To reduce something means to make it smaller (i.e., smaller risk); to minimize means to make it as small as possible. Doing that might mean requiring more or more costly mitigation.

**ITEM 13 (Issue 213) (Brenner)**

She also suggests the same thing in 16.16.320 (Geologically Hazardous Areas – General Standards), subsection (A).

**Staff Response:** Staff recommends sticking with “reduce.”

**ITEM 14 (Issue 214) (Brenner)**

In 16.16.320 (Geologically Hazardous Areas – General Standards), subsection (B) (Impact Avoidance), CM Brenner suggests amending it as follows:

Impact avoidance measures shall include, but not be limited to, locating the use/development outside of the hazard area, reducing the number, size or scale of buildings ~~and appurtenant, driveways and other~~ features; altering the configuration or layout of the proposed development; implementing special engineering methods for construction, drainage, runoff management etc.; ~~foregoing construction of accessory structures~~; preserving native vegetation; and other feasible protective measures as determined by an alternatives analysis. For some geologic hazards (except for lahar hazards) impact avoidance may mean no development will be permitted on a property.

**Staff Response:** Staff has no objections. “Buildings and appurtenant features” would include “accessory structures.”

**ITEM 15 (Issue 215) (Brenner)**

In 16.16.325 (Landslide Hazard Areas – Standards), subsection (A)(1), CM Brenner again suggests changing the wording to “minimize” as follows:

- A. **General Standards.** The following activities may be allowed in active landslide hazards areas when all reasonable measures have been taken to minimize risks and other adverse effects associated with landslide hazards, and when the amount and degree of the alteration are limited to the minimum needed to accomplish the project purpose:
  - 1. Developments that will ~~not increase~~ minimize the threat to the health or safety of people and will not increase potential for landslides on or off the site and meet the reasonable use standards as set forth in WCC 16.16.270.

**Staff Response:** Staff recommends sticking with “not increase,” which is a lesser standard than “minimize.”

**ITEM 16 (Issue 216) (Brenner)**

In 16.16.325 (Landslide Hazard Areas – Standards), subsection (C)(3), CM Brenner suggests ~~deleting~~ “or improve,” as follows:

The setback shall include consideration of vegetation on the potential landslide area and in areas above and below the potential landslide area. The technical administrator shall have the authority to require vegetation or other measures to protect ~~or improve~~ slope stability and shall have the authority to require a mitigation plan developed in accordance with 16.16.260, and a conservation easement in accordance with WCC 16.16.265(C) to ensure appropriate vegetation improvements are installed, maintained, and preserved.

**Staff Response:** Staff recommends leaving the existing “or improve,” as there may be times when improving a slope’s stability would allow for a development that would otherwise need to be denied.

### ITEM 17 (Issue 217) (Brenner)

In 16.16.345 (Alluvial Fan Hazard Areas – Standards), CM Brenner suggests the following edits:

The following activities may be allowed in alluvial fan hazard areas when all reasonable measures have been taken to minimize risks and other adverse effects associated with alluvial fan hazards, when the amount and degree of alteration are limited to the minimum needed to accomplish the project purpose, and when the applicable general protective measures found in WWC 16.16.265 have been applied:

- A. Developments that will ~~have no~~ minimize the threat to the health or safety of people and will not increase the risks of alluvial fan hazards ~~on or~~ off the site and meet the reasonable use standards as set forth in WCC [16.16.270](#).
- B. Roads, utilities, bridges, and other infrastructure that are located and designed to minimize adverse impacts on critical areas and avoid the need for channel dredging or diking or other maintenance activities that have the potential to substantially degrade river and stream functions.
- C. Permanent residential structures and commercial developments shall be allowed in alluvial fan hazard areas only if the fan has undergone a County-approved study to assess potential hazards, determine risks, and identify mitigation measures and is deemed suitable for development. The technical administrator shall make this determination based on a detailed assessment by a qualified professional that identifies the risks associated with a 500-year return period debris flow or the maximum credible event that could impact the alluvial fan.
- D. Accessory structures not involving human occupancy shall be allowed as long as the structure will not increase the alluvial fan hazards ~~on or~~ off the site.

**Staff Response:** Staff has no objection to changing “have no” to “minimize the” in subsection (A).

Staff recommends leaving the “on or” language in subsections (A) and (D) as is. It’s hard if not impossible to minimize alluvial fan (or erosion) risks off-site if not minimizing them on-site. Furthermore, Whatcom County has spent a lot of money in the Jones Creek and Canyon Creek areas trying to remedy past practices of allowing inappropriate development on those alluvial fans.

(Note: CM Brenner makes this suggestion in 16.16.355(A)(1) and 16.16.375(B) as well.)

## Article 4, Frequently Flooded Areas

### ITEM 18 (Issue 218) (Brenner)

In 16.16.420 (Frequently Flooded Areas – General Standards), CM Brenner suggests the following edits:

#### 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 only when it is consistent with all of the following:
  - a. FEMA’s National Flood Insurance Program (NFIP), ~~including the protection standards for critical habitats for listed species~~;
  - b. The mitigation sequence in WCC [16.16.260](#);
  - c. Article 7, Habitat Conservation Areas, of this chapter;

- d. The applicable general protective measures found in WWC 16.16.265.
- C. The technical administrator shall have the authority to require ~~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 and mitigate for adverse impacts to 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.

**Staff Response:** Staff recommends leaving the language as is so as to comply with NOAA Fisheries Service's Biological Opinion (BiOp) on FEMA's National Flood Insurance Program (NFIP). Council chose this method of complying with the BiOp in 2011.

### ITEM 19 (Issue 219) (Brenner)

In 16.16.430 (Review and Report Requirements), subsections (C) & (F), CM Brenner suggests the following edits:

- C. In addition to the requirements of WCC 16.16.225, critical areas assessment reports for frequently flooded areas shall:
1. 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 ~~(inclusive of mitigation) will~~ minimize impacts within frequently flooded areas.
  2. Address adverse impacts to ecological functions and processes, including riparian vegetation. Positive impacts may also be discussed.
  3. Include mitigation for adverse effects on Frequently Flooded Areas' ecological functions, where applicable.
- 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 they will minimize~~ risks to life, property, or ecological functions ~~will occur~~.

**Staff Response:** Staff recommends leaving the language as is so as to comply with the BiOp, which under the Endangered Species Act, requires that listed species are not harmed, not that impacts are minimized.

### Article 6, Wetlands

#### ITEM 20 (Issue 220) (Brenner)

In 16.16.430 (Review and Report Requirements), but in subsection (F), CM Brenner suggests the following edits:

In 16.16.640 (Wetland Buffer Reduction), subsection D, CM Brenner suggests the following edit:

- D. The applicant implements all reasonable measures to ~~reduce~~ minimize the adverse effects of adjacent land uses and ensure no net loss of buffer functions and values. Such measures may include, but are not limited to, the following:

...

**Staff Response:** Staff has no objection to this amendment.

## Article 7, Habitat Conservation Areas

### ITEM 21 (Issue 221) (Brenner)

In 16.16.700 (Purpose), subsection D, CM Brenner suggests the following edit:

- A. Maintain the natural geographic distribution, connectivity, and quality of fish and wildlife habitat and ~~ensure no net~~minimize loss of ~~such important~~ habitats, including cumulative impacts.

**Staff Response:** Staff recommends sticking with “ensure no net,” as this is what we are required to do under the GMA.

### ITEM 22 (Issue 222) (Brenner)

In 16.16.710 (Habitat Conservation Areas – Designation, Mapping, and Classification), subsection (C)(1)(b), CM Brenner suggests the following edit:

- b. Ditches or other artificial water courses are considered streams for the purposes of this Chapter. when:
  - (i) Used to convey natural streams existing prior to human alteration; and/or ,
  - (ii) The waterway is used by anadromous or resident salmonid or other resident fish populations; ~~erand.~~
  - (iii) Flows directly into shellfish habitat conservation areas.

**Staff Response:** Staff recommends sticking with “or” as these are the same criteria used by WDFW in regulating streams v. ditches, and regardless of our language WDFW would still consider them streams.

### ITEM 23 (Issue 223) (Brenner)

In 16.16.710 (Habitat Conservation Areas – Designation, Mapping, and Classification), subsections (2), (3), and (5), CM Brenner suggests the following edits:

2. Areas in which federally listed species are found, ~~or~~ have a primary association with, ~~er~~ ~~contain suitable habitat for said listed species,~~ as listed in the US Fish & Wildlife’s Threatened & Endangered Species List or Critical Habitat List (<http://ecos.fws.gov/ecp/>), as amended.
3. Areas in which state listed priority species are found, ~~or~~ have a primary association with, ~~er~~ ~~contain suitable habitat for said listed species,~~ as listed Washington Department of Fish and Wildlife’s Priority Habitats and Species list (<http://wdfw.wa.gov/mapping/phs/> or <http://wdfw.wa.gov/conservation/phs/list/>), as amended.
5. Areas in which state listed rare plant species are found, ~~or contain suitable habitat for said listed species,~~ as listed in the Department of Natural Resources’ Natural Heritage Program (<http://www1.dnr.wa.gov/nhp/refdesk/plants.html>), as amended.

**Staff Response:** Staff recommends retaining the Planning Commission recommended language, as these are the same criteria used by WDFW and USFWS.

### ITEM 24 (Issue 224) (Brenner)

In 16.16.720 (Habitat Conservation Areas – General Standards), subsection (J)(4), CM Brenner suggests the following edit:

4. Private trails shall not exceed 5-4 feet in width, and public trails shall not exceed 10 feet in width, and shall be made of pervious material or on an elevated structure where feasible. Trails may include limited viewing platforms that shall not exceed 12-8 feet in width and shall be made of pervious materials where feasible.

**Staff Response:** Staff has no issue with these edits, as the ADA only requires a clear tread width of 36 inches (3 feet) (though does require a passing lane at least every 1000' where trail width is less than 60" (5 feet)).

#### **ITEM 25 (Issue 225) (Brenner)**

In 16.16.760 (Habitat Conservation Areas – Mitigation Standards), subsection (B)(4) , CM Brenner suggests the following edit:

4. Mitigation shall be provided on-site whenever feasible. Off-site mitigation in a location that will provide a greater ecological benefit to the species and/or habitats affected and have a greater likelihood of success may be accepted at the discretion of the Technical Administrator. Mitigation shall occur as close to the impact site as possible. As mitigation is moved further away from the impacted habitat the Technical Administrator may increase the amount of mitigation required. If offsite mitigation is proposed, the applicant must demonstrate through an alternatives/ mitigation sequencing analysis (WWC 16.16.260) that the mitigation will have greater equal ecological benefit.

**Staff Response:** Staff recommends sticking with “greater” in this instance. For one, the 2<sup>nd</sup> sentence already says it must have a greater benefit (though that too could be amended if Council agrees with CM Brenner). But more importantly, our (and the Department of Ecology’s) regulatory system is set up to encourage impacts to an area be mitigated in that area (i.e., on-site) so as to continue to protect the functions and values of the critical areas in that specific area. We allow offsite mitigation only when a bigger ecological benefit can be achieved.

### **Article 8, Conservation Program on Agriculture Lands**

#### **ITEM 26 (Issue 226) (Brenner)**

In 16.16.814 (Exemptions), subsection (3), CM Brenner suggests that the exemption threshold for having to obtain a farm plan be 1 animal unit/1 acre rather than the current 1 au/3 ac.

**Staff Response:** This issue is addressed above under the heading “CPAL Exemption Thresholds.”

#### **ITEM 27 (Issue 227) (Brenner)**

In 16.16.820 (Classification and Applicability), subsection (D), CM Brenner asks why row and berry crops or orchards do not qualify for Type 1 Conservation Farm Plans (CFP).

**Staff Response:** Farms with row and berry crops or orchards do not qualify for Type 1 CFPs because they typically use more fertilizers, pesticides, herbicides and other chemicals that require more expertise in developing and implementing BMPs than the simpler self-developed “hobby farm” Type 1 CFPs.

#### **ITEM 28 (Issue 228) (Brenner)**

In 16.16.830 (Conservation Farm Plans – General Standards), subsection (B)(4), CM Brenner asks why a farm plan cannot recommend or authorize the conversion of land to agricultural use.

**Staff Response:** By state law and upheld by Growth Management Hearings Board decisions and court cases, all new agriculture must comply with the standard requirements of the CAO. Converting land to ag use is by definition new ag. The CPAL program only applies to ongoing (“grandfathered”) agriculture.

**ITEM 29 (Issue 229) (Brenner)**

In 16.16.850 (Preparation and Approval of Conservation Farm Plans), subsection (A), CM Brenner suggests that the Whatcom Conservation District be authorized to approve Conservation Farm Plans, rather than the County (i.e., the Technical Administrator).

**Staff Response:** Staff recommends against. The County cannot nor should not abrogate to another entity its authority or responsibility to determine compliance with its codes. Nevertheless, we do rely on the WCD and their expertise in determining compliance.

**ITEM 30 (Issue 230) (Brenner)**

In 16.16.870 (Limited Public Disclosure), subsection (C), CM Brenner says “no” to the requirement that PDS make available a list of which farms have approved Conservation Farm Plans and their date of approval.

**Staff Response:** This is a requirement that Council added.

**Article 9, Definitions**

**ITEM 31 (Issue 231) (Brenner)**

For “clearing,” CM Brenner suggests the following edit:

“Clearing” means destruction-removal of vegetation by manual, mechanical, or chemical methods resulting in exposed soils.

**Staff Response:** Staff recommends leaving the word “destruction.” The amendment to this definition was proposed to match that of Title 20 (we’re in the process of trying to standardize our codes). The existing CAO definition uses the word “removal,” but goes on to specify that that term can mean any number of means of destroying vegetation.

“Clearing” means the removal of vegetation or plant cover by manual, chemical, or mechanical means. Clearing includes, but is not limited to, actions such as cutting, felling, thinning, flooding, killing, poisoning, girdling, uprooting, or burning.

Using the word removal without that clarification could lead to an instance where someone destroys a bunch of vegetation, but leaves it onsite, thereby not strictly “removing” it.

**ITEM 32 (Issue 232) (Brenner)**

For “feasible,” CM Brenner suggests the following edit:

“Fish and wildlife habitat conservation areas” are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the

likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company.

**Staff Response:** Staff recommends leaving the word "may," as this definition comes straight from WAC 365-190-030.

### **ITEM 33 (Issue 233) (Brenner)**

For "feasible," CM Brenner suggests the following edit:

"Geologically hazardous areas" means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not less suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

**Staff Response:** Staff recommends leaving the word "not," as this definition comes straight from RCW 36.70A.030(9).

### **ITEM 34 (Issue 234) (Brenner)**

For "overnight accommodations," which talks about allowing more than 10 persons to sleep overnight, CM Brenner asks, "what about less than 10?"

**Staff Response:** Staff recommends deleting this definition, as it refers to a phrase that was used in earlier draft versions of the volcanic (lahar) hazard zone regulations. Council has developed their own regulations that no longer use this phrase so it can be deleted.

### **ITEM 35 (Issue 235) (Brenner)**

Under "qualified professional," the definition states that for performing a tree risk assessment one needs to be a certified arborist or certified tree professional with a current ISA Tree Risk Assessment Qualification, and CM Brenner asks whether a forester would qualify.

**Staff Response:** Yes, a forester would qualify as long as they are a certified tree professional with a current ISA Tree Risk Assessment Qualification.

# Emails from Whatcom Conservation District re: Conservation Farm Plan Thresholds

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**From:** George Boggs <GBoggs@whatcomcd.org>  
**Sent:** Tuesday, October 03, 2017 3:58 PM  
**To:** Cliff Strong  
**Cc:** Corina Cheever  
**Subject:** RE: NRCS Standard

Thanks for the clarification Cliff.

As I recall, the 1 au/grazable acre that made it into the code was a Council policy call. While the District provided information that an acre of pasture could support/utilize more animal units (as per Corina's & Kristen's analysis), that Council didn't feel comfortable including it in the standard farm plan option. This was a simplified pathway which did not require much any expertise as the landowner could do on their own. Landowners were not limited to 1 au/acre. If they wanted a greater density then they had to go the "custom" plan pathway. This afforded more complex protection alternatives. A custom plan could only be prepared by a qualified professional. That professional would complete the assessment with a more knowledgeable eye and expertise in adopting practices that adequately protected groundwater. Pasture management and nutrient management specifications would serve to protect groundwater.

I hope this history helps.

Cheers

Geo

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**From:** Cliff Strong [mailto:CStrong@co.whatcom.wa.us]  
**Sent:** Tuesday, October 03, 2017 3:32 PM  
**To:** George Boggs <GBoggs@whatcomcd.org>  
**Cc:** Corina Cheever <CCheever@whatcomcd.org>  
**Subject:** RE: NRCS Standard

I agree with everything you've said, George. The question came up as part of the youth program exemption issue. We had suggested that Council just adopt one of our policies, which exempts the "dust" you mentioned, as follows:

(From my memo I gave them)

At your 9/12/17 workshop staff had suggested codifying PDS Policy PL1-85-004Z CPAL – Animal Threshold, Resource Priority as a way to address those with few animals. Council indicated that this wasn't exactly what you were looking for in terms of exempting youth agricultural clubs. Nonetheless, it may still be a good idea to codify that policy, to read (amended since the last version):

### 16.16.814 Exemptions.

The following are exempt from having to obtain a Conservation Farm Plan:

- A. Landowners who do not have critical areas on their property.
- B. Landowners who keep agricultural activities out of the standard critical areas and their buffers.
- C. Landowners who do not exceed a ratio of 1 animal unit per 3 grazable acres and manage their animals to avoid a direct discharge of sediment or fecal matter to surface waters. Indicators of direct discharge can include de-vegetated riparian area, unfenced access to a stream, or animal confinement areas adjacent to surface waters. This is a ratio of animal units to grazable acres and may be used on parcels of any size.
- D. Youth agriculture education programs that promote the use of agriculture best management practices through the use of a checklist developed by the Whatcom County Conservation District in cooperation with Whatcom County.

Staff also recommends adding the following definition to 16.16.900 Definitions:

"Grazable acres" means both pasture and hayland as described in the Whatcom County Standard Farm Conservation Planning Workbook.

Some questions about exempting kids' clubs arose, such as:

1. What if the kids have more than 1 animal unit? Or what if they have less than 3 acres on which to raise their animals?

**Response:** This has been addressed in the revised language above.

2. What should the upper limit on the number of exempted animals be?

**Response:** Council did not provide any direction this question. However, staff suggests 6 animal units as proposed in the revised language above.

3. What if someone just says their animals are their kids' 4H (or other club's) project to get out of having to comply with the code?

**Response:** There was general talk of having the kids have to read some educational materials and sign something attesting that it's a club project and promising to use BMPs, to which staff responded that that basically sounds like preparing a Type I Conservation Farm Plan (3 pages, self-filled, and free through the Whatcom Conservation District or Planning and Development Services).

4. Why would we exempt a certain class of people (kids in clubs) but not others with a small amount of animals? That doesn't seem fair.

**Response:** Adopting the proposed 16.16.814 section above would treat all people in the same situation similarly.

Council then asked the ag representatives in the room to come up with some proposed language.

By the time of the meeting the ag reps hadn't come up with language, so they approved the above language. However, some of them thought we should allow more animals per acre in this exemption, and wanted to know where the 1 au/grazable acre came from. I could have sworn you'd said it was the standard used, where nutrients are balanced.

Thanks,

Cliff Strong  
Senior Planner  
Whatcom County Planning & Development Services

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**From:** George Boggs [<mailto:GBoggs@whatcomcd.org>]  
**Sent:** Tuesday, October 03, 2017 2:41 PM  
**To:** Cliff Strong  
**Cc:** Corina Cheever  
**Subject:** RE: NRCS Standard

Hi Cliff,

We are not trying to make this hard for you.

First, don't use the table for low productivity/high organics soil. The situations are few and far between and likely temporary. The easy fix is to renovate the pasture and engage in pasture management. It is an exceptional situation around which I would not craft an exemption.

Second, when you ask for a "threshold, below which one wouldn't have to prepare a Conservation Farm Plan" we need to remember that there are other critical areas to be protected. Stocking rates, nutrient and pasture management protect CARAs. Other practices, like setbacks, protect riparian and wetland areas.

Third, I don't believe we truly understand what types of operations you are thinking about. If this is the youth program exemption? If so, I am personally challenged to limit any of them on the basis of excess nutrients. Compared to all the livestock in Whatcom County, they are budget dust.

Finally, the County has exercised limited jurisdiction i.e. only requiring a farm plan when a permit is sought or County Inspectors actually see an animal(s) from the road where there it is clearly in a CAO. Regardless of who is keeping the animals (youth or adults) then an exemption should not shield them from observing standard buffers or developing and following the standard farm plan. In other words, it seems improvident to require more than one is willing to insist upon.

Cheers

George J. Boggs, JD

Executive Director  
Whatcom Conservation District  
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**From:** Corina Cheever  
**Sent:** Tuesday, October 03, 2017 2:12 PM  
**To:** Cliff Strong <[CStrong@co.whatcom.wa.us](mailto:CStrong@co.whatcom.wa.us)>

**Cc:** George Boggs <[GBoggs@whatcomcd.org](mailto:GBoggs@whatcomcd.org)>

**Subject:** RE: NRCS Standard

I am going to start with the first 3 questions:

What does it mean to be a low v. high Nutrient Retention Scenario? Nutrient retention is referring to how the manure is stored prior to application, assuming collection when animals are not pastured in the winter months. Low nutrient retention would be a manure pile that is subject to run off and leaching (uncovered stock pile) and a high nutrient retention is manure which has been composted.

And what's a low v. high productivity pasture? A low productivity pasture would probably be a field with poorer soils and/or less management which is not applying nutrients to meet the crop needs, so around 2 tons of forage production per year. A high productivity pasture tends to be a field with higher quality soils or a site where the landowner is actively managing pastures to maintain 3 inches of forage minimum and applying nutrients/fertilizers to meet the crop needs. 5 tons/acre is really pushing the productivity of a pasture.

Are these just based on soil type? No, the nutrient balance we do for each farm field is based on many factors including animal type, soil type, percent of time the animal spends on the pasture, how the manure is stored when the animal is off the pasture, the productivity of the pasture, and other factors.

And one last scenario in which the situation was manipulated to solve for 3 acres per horse, you have a combination of factors that although we can type in, would be very unlikely in real life. So here you have a situation of a high organic soil with high soil mineralization (Nitrogen available in the soil), application of composted manures and a low productivity pasture. In this scenario, your 1 horse would be producing 273% (3x the N needed) of Nitrogen needed for the pasture, so you would need more than 1 acre. But again, this is a very unlikely situation.

**For a low productivity pasture (2 tons/acre), high organics soil**

<b>Animal Type</b>	<b>% Nutrient Need Supplied By Animal Low Nutrient Retention Scenario</b>	<b>% Nutrient Need Supplied By Animal High Nutrient Retention Scenario</b>
Horse	N – 133%, P – 121%, K – 29%	N – 273%, P – 139%, K – 34%
Beef (Medium Breed)	N – 155%, P – 211%, K – 73%	N – 378%, P – 242%, K – 85%

Does this answer your first three questions and help you understand how we are creating these scenarios to try and represent a more complex nutrient balance question?

Thanks,

Corina Cheever  
Whatcom CD  
360.526.2381 x104

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**From:** Cliff Strong [<mailto:CStrong@co.whatcom.wa.us>]

**Sent:** Tuesday, October 03, 2017 1:37 PM

**To:** Corina Cheever <[CCheever@whatcomcd.org](mailto:CCheever@whatcomcd.org)>

**Cc:** George Boggs <[GBoggs@whatcomcd.org](mailto:GBoggs@whatcomcd.org)>

**Subject:** RE: NRCS Standard

Hey Corina, thanks. Just a few questions.

- What does it mean to be a low v. high Nutrient Retention Scenario?
- And what's a low v. high productivity pasture?
- Are these just based on soil type?

We're basically trying to come up with a ratio of AU/grazable acre that could be used as a threshold, below which one wouldn't have to prepare a Conservation Farm Plan. What would the WCD recommend that ratio be?

Thanks,

Cliff Strong  
Senior Planner  
Whatcom County Planning & Development Services

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**From:** Corina Cheever [<mailto:CCheever@whatcomcd.org>]  
**Sent:** Tuesday, October 03, 2017 1:29 PM  
**To:** Cliff Strong  
**Cc:** George Boggs  
**Subject:** RE: NRCS Standard

Hi Cliff,

I am also not sure where the 1AU/3 grazable acres was documented, but back in June, we used an NRCS grazing tool to calculate some different pasture scenarios that might be of help to you. These scenarios provide nutrient balance minimum and maximum estimates based on a 1000lb horse verse a 1000lb beef cow. (1000lb = 1 Animal Unit) Manures from different animals have different nutrient values. We chose a horse and beef cow because those animals are most representative of what is being pastured in Whatcom County. Pastures are also not uniform across the county, so we duplicated the scenarios for a range of soil types and management levels.

**For a low productivity pasture (2 tons/acre):**

Animal Type	% Nutrient Need Supplied By Animal Low Nutrient Retention Scenario	% Nutrient Need Supplied By Animal High Nutrient Retention Scenario
Horse	N – 30%, P – 121%, K – 29%	N – 61%, P – 139%, K – 34%
Beef (Medium Breed)	N – 35%, P – 211%, K – 73%	N – 84%, P – 242%, K – 85%

**For a high productivity pasture (5 tons/acre):**

Animal Type	% Nutrient Need Supplied By Animal Low Nutrient Retention Scenario	% Nutrient Need Supplied By Animal High Nutrient Retention Scenario
Horse	N – 12%, P – 49%, K – 12%	N – 24%, P – 56%, K – 14%
Beef (Medium Breed)	N – 14%, P – 84%, K – 29%	N – 34%, P – 97%, K – 34%

\*N-nitrogen P-phosphorus and K-Potassium

\*Nutrient retention is referring to how the manure is stored prior to application, assuming collection when animals are not pastured in the winter months.

What these tables show is the amount of nutrients provided per 1000lb of horse or beef per acre. In Whatcom County, our NRCS standard is to assess each field for its susceptibility of phosphorus runoff or leaching. The majority of these assessments across the county come back low, especially for smaller non-commercial farms so we do nutrient balance based on balancing for Nitrogen.

So taking the first example of a 1AU horse on a low productivity pasture, that horse manure is providing only 30% of the nitrogen needs of the forage crop. So in this scenario, you could have roughly 3 horses per grazable acre and still balance for Nitrogen needs of the low productivity pasture.

I am not sure if this is the kind of help you were looking for, but please email or call if you have more questions. I would be happy to talk through more of these scenarios or the NRCS nutrient balance tool we use.

Corina Cheever  
Natural Resource Specialist  
**Whatcom Conservation District**  
360-526-2381 ext. 104  
[www.whatcomcd.org](http://www.whatcomcd.org)

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**From:** George Boggs  
**Sent:** Monday, October 02, 2017 4:35 PM  
**To:** Cliff Strong <[CStrong@co.whatcom.wa.us](mailto:CStrong@co.whatcom.wa.us)>  
**Cc:** Corina Cheever <[CCheever@whatcomcd.org](mailto:CCheever@whatcomcd.org)>  
**Subject:** FW: NRCS Standard

Hi Cliff,

I've been swamped. Corina is back from training. I am asking her to help. I don't know where the 1:3 ratio came from. In the last CAO update it was 1:1 for grazable acres the standard farm.

Geo

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**From:** Cliff Strong [<mailto:CStrong@co.whatcom.wa.us>]  
**Sent:** Wednesday, September 27, 2017 9:05 AM  
**To:** George Boggs <[GBoggs@whatcomcd.org](mailto:GBoggs@whatcomcd.org)>  
**Subject:** NRCS Standard

Hey George, yesterday the Council asked that I provide them with the documentation that shows that the nutrient balance is maintained at the standard of 1 animal unit/3 grazable acres. Could you point me in the right direction?

Thanks,

Cliff Strong  
Senior Planner  
Whatcom County Planning & Development Services

October 30, 2017

**VIA U.S. MAIL AND EMAIL**

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**RE: CAO Update – Volcanic Hazard Zone Regulations – Mt. Baker Bibleway  
Camp Comments on Final Draft CAO**

Dear Councilmembers:

I write, again, on behalf of the Mt. Baker Bibleway Camp (the “Camp”). I greatly appreciate that you took the time during your October 24, 2017 Committee of the Whole meeting to discuss my previous suggested changes to the proposed WCC 16.16.350 so that I could communicate the changes I intended by my prior revisions and to understand the concerns you had with my wording. As promised, below are proposed revisions to the Critical Areas Ordinance that meet the Camp’s concerns and, I hope, likewise meets some Councilmembers’ concerns with my prior suggested revisions.

The Camp proposes the following revisions to the current CAO draft ordinance:

**16.16.320 Geologically Hazardous Areas – General Standards.**

In addition to the applicable general protective measures found in WWC 16.16.265, the following requirements shall apply to all activities in geologically hazardous areas:

- A. **Generally.** New developments shall be located and/or engineered and constructed to reduce risks to life, health, safety, and buildings, and not increase potential for landslides or erosion that could impact either other properties, public resources, or other critical areas. The County may impose conditions on development activity in a geologically hazardous area as needed to:
1. Protect human life and safety; and
  2. Minimize the potential for property damage related to seismic events, erosion and/or landslides;
  3. Minimize the need for stream or river bank or coastal bluff stabilization in the future;
  4. Reduce public liabilities for damages associated with geologic hazards;
  5. Protect slope stability and minimize erosion, seismic, and/or landslide hazard risks;
  6. Maintain natural sediment and erosion processes that are integral to the health and sustainability of freshwater and marine ecosystems as well as minimizing impacts to stream, river, and coastal processes such as channel infill, channel migration, sediment transport, or flooding;
- B. **Impact Avoidance.** Impact avoidance measures shall include, but not be limited to, locating the use/development outside of the hazard area, reducing the number, size or scale of buildings, driveways and other features; altering the configuration or layout of the proposed development; implementing special engineering methods for construction, drainage, runoff management etc.; foregoing construction of accessory structures; preserving native vegetation; and other feasible protective measures as determined by an alternatives analysis. For some geologic hazards (except for lahar hazards) impact avoidance may mean no development will be permitted on a property. So long as an applicant complies with WCC 16.16.350(B), the County shall not be permitted to require impact avoidance measures that reduce the number, size, or scale of buildings, driveways and other features; require the owner to forego construction of accessory structures; or prevent uses otherwise allowed per the property's zoning district based solely on the property's location within a lahar hazard zone.
- C. **Location of Alterations.** New development shall be directed toward portions of a parcel or parcels under contiguous ownership that are not subject to, or at risk from, geological hazards (except for lahar hazards) and/or are outside any setback or buffer established by this Chapter.

AND

**16.16.350 Volcanic Hazard Areas – Standards**

**B. Lahar Hazard Zones.**

1. Subject to WCC 16.16.320(A, B, and C) and WCC 16.16.265, the following uses are allowed in any volcanic hazard areas:
  - a. Single-family residences and duplexes.
  - b. Accessory structures not involving human occupancy.
  - c. Sewer collection facilities, communication facilities, and other utilities that are not likely to cause harm to people or the environment if inundated by a lahar. Underground utilities such as pipelines shall be allowed if demonstrated through a geotechnical analysis to be sufficiently buried as to not likely be damaged by scour caused by a lahar.
  - d. Agricultural and forestry uses not including human habitation.
  
2. Subject to WCC 16.16.320(A, B, and C) and WCC 16.16.265, the following uses **may shall** be allowed in volcanic hazard areas subject to the submittal and approval of a Volcanic Hazard Emergency Management Plan meeting the requirements of subsection (B)(3); however, this requirement may be waived for properties located in an area with an estimated lahar arrival time of more than 60 minutes. The County will maintain travel time projection maps to estimate lahar approach times.
  - a. Expansion of legal nonconforming uses meeting criteria of WCC 16.16.270 and WCC 20.83.
  - b. All other uses allowed per the property's zoning district.
  
3. Where required by subsection (B)(2), a Volcanic Hazard Emergency Management Plan shall be submitted for approval and meet the following requirements:
  - a. Is consistent with and integrated into a community emergency plan maintained by the Sheriff's Office of Emergency Management.
  - b. Includes an emergency evacuation plan.
  - c. Is required to be updated every 5 years.
  - d. Evacuation route maps must be posted on the premises.

The above suggested revisions to WCC 16.16.320(B) would clarify that an applicant's right to construct buildings on their property would not be restricted or minimized by virtue of being located within a lahar hazard zone so long as they complied with WCC 16.16.350, i.e. obtained the required emergency plan. This addresses the Camp's concern that it be able to utilize its property for the zoned uses while at the same time keeps in place all of the County Council's desired notice on title, indemnification, evacuation planning, and evacuation notice provisions firmly in place.

Please contact me at your earliest convenience if you would like to discuss this suggested language.

Sincerely,

CHMELIK SITKIN & DAVIS P.S.



Seth A. Woolson

SAW/srs

cc: Client  
Cliff Strong  
Mark Personious  
Tyler Schroeder (tschroed@co.whatcom.wa.us)  
Jack Louws (jlouws@co.whatcom.wa.us)

F:\CLIENTS A-H\Bible Believers\Baker Bibleway Camp\Critical Areas Ordinance Update\LR\_County\_CAO Update Comments\_10.27.17.doc