

**CITY OF NOOKSACK  
2016 CRITICAL AREAS REGULATIONS UPDATES**

**16.08.020 Purpose.** The Growth Management Act mandates local governments to assure the conservation of Natural Resource Lands and requires local governments to adopt development regulations precluding land uses or development that is incompatible with Critical Areas. The purpose of this Chapter is to provide a set of development regulations to accomplish this directive on the basis of the following goals:

- A. To maintain and enhance natural resource-based industries, to encourage the conservation of productive forest lands and agricultural lands, and to discourage land uses which are incompatible with these goals.
- B. To recognize the beneficial uses, functions and values of wetlands by pursuing a policy of no net loss of wetland acreage and functions and the long-term goal to increase the quantity and quality of wetlands.
- C. To recognize the value of critical recharge areas for aquifers and protect the quantity and quality of the ground water resource.
- D. To recognize and respond to the need for flood control and flood resistant building practices within frequently flooded areas.
- E. To protect the public health and safety through the use of land use regulations in areas which due to geological hazards are either not suited or have probable significant limitations to building siting, road construction or disturbance.
- F. To protect the habitat of those areas providing critical habitat for threatened, endangered or sensitive wildlife species.
- G. To protect the functions and values of critical areas based on the best available science.

**16.08.030 Definitions.**

- A. "ADMINISTRATOR": The Mayor or the mayor's designee, either by contract or City employee.
- B. "BUFFER": A vegetated area bordering a wetland, lake, ~~or~~ stream or other critical area that provides separation from the adjacent or surrounding area to help minimize disturbances resultant from human activity and protects the ~~wetland~~ critical area from adverse impacts to its functions and values.
- C. "COMPENSATION": Replacement by creation, enhancement or restoration of a wetland equivalent in size, function and value to the one being altered or lost from development.

- D. “CONTIGUOUS”: Immediately adjacent to, included within or directly linked hydrologically with a stream.
- E. “CREATION”: Bringing a wetland into existence at a site in which a wetland did not formerly exist.
- F. “CRITICAL AREAS”: The following areas and ecosystems identified and classified pursuant to state law and regulation, including RCW 36.70A.050 and Chapter 365-190 WAC:
1. areas with critical recharging effect on aquifers used for potable water,
  2. fish and wildlife habitat conservation areas;
  3. frequently flooded areas,
  4. geologically hazardous areas, and
  5. wetlands.
- G. “CRITICAL FACILITY”: A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
- H. “DEVELOPMENT SITE”: The entire lot, series of lots or parcels on which a development is located or is proposed to be located, including all contiguous undeveloped lots or parcels which are under common ownership with the developed lots.
- I. “EXISTING AND ONGOING AGRICULTURAL ACTIVITIES”: Those existing and ongoing activities involved in the production of crops and livestock, including agricultural activities and the operation, maintenance and repair of existing structures and facilities related to those agricultural activities. Those activities that bring an area into agricultural use are not considered existing and ongoing agricultural activities.
- J. “FUNCTIONS”: The beneficial roles wetlands may serve, including storage, conveyance, and attenuation of floodwaters and storm waters; groundwater recharge and discharge; protection of water quality and reduction of sediment and erosion; production of waterfowl, game, and non-game birds, mammals, and other living resources; protection of habitat for rare, threatened and endangered species; food chain support for a broad range of wildlife and fisheries; educational, historical, and archaeological value protection; and scenic, aesthetic and recreational amenities.
- K. “LAKE”: A naturally created body of standing open water that persists throughout the year.
- L. “LOW IMPACT”: Activities that might occur within wetlands and streams and their associated buffers which would have minimal adverse impact on their functions and values, physical setting and overall benefits. Such uses include, but are not limited to, pedestrian trails, interpretive signs and scientific research which creates little disturbance.

- M. “LOW IMPACT DEVELOPMENT”: Designs and techniques that are intended to reduce the potential impacts from stormwater runoff on a development site. These include the following: amended soils, curvilinear street design, sidewalks on only one side of a street, grass-lined swales, planting of trees, reduced pavement widths, permeable pavement in parking lots and driveways, and collection and re-use of on-site stormwater.
- N. “MITIGATION”: The use of any combination or all of the following actions (listed in order of priority):
1. Avoiding impacts to Critical Areas by not taking a certain action or parts of an action;
  2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
  3. Rectifying the impact by repairing, rehabilitating, or restoring the affected Critical Area;
  4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the development proposal;
  5. Compensation for the impact by replacing or enhancing Critical Areas, or providing substitute resource; and
  6. Monitoring the impact and taking appropriate corrective measures.
- O. “ORDINARY HIGH WATER MARK”: The mark on streams which will be found by examining the beds and bank and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland in respect to vegetation.
- P. “PRIORITY HABITATS”: Areas defined from time to time by the Washington Department of Fish and Wildlife with one or more of the following attributed: comparatively high wildlife density, high or significant wildlife species richness, significant wildlife breeding habitat, significant wildlife seasonal ranges, significant movement corridors for wildlife, and wildlife habitat of limited availability and/or high vulnerability.
- Q. “PRIORITY SPECIES”: Plant and animal species of concern due to their population status and sensitivity to habitat alteration. Priority species include those endangered, threatened, or protected species identified from time to time by the Washington Department of Fish and Wildlife Priority Habitats and Species Program and game species.
- R. “RESTORATION”: Improving, enhancing and reestablishing a once viable and now degraded wetland to a state in which its stability, functions and values approach its unaltered state.
- S. “SEISMIC HAZARD AREAS”: Areas subject to severe risk of earthquake damage as a result of seismic induced settlement or soil liquefaction.
- T. “STREAM”: An area where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is indicated by hydraulically sorted sediments or the

removal of vegetative litter or loosely rooted vegetation by the action of moving water. Stream channels or beds show clear evidence of the passage of water and include, but are not limited to, bedrock channels, gravel beds, and silt beds, and defined channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial water courses unless they are used by salmonids or used to convey streams naturally occurring prior to construction.

- U. “WETLANDS”: Areas inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that, under normal circumstances, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street or highway. However, wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.
  
- V. “WETLANDS BIOLOGIST”: Qualified professional or technical wetlands consultant or scientist who is either a certified Professional Wetland Scientist or who has, at a minimum: (1) a Bachelor’s degree in hydrology, soil science, botany, ecology, or related field; and (2) at least two years of full-time work experience as a wetlands professional, including delineating wetlands using the state or federal manuals, preparing wetland reports, conducting function assessments, and developing and implementing mitigation plans.

**16.08.040 General Requirements.**

- A. Applicability. [The provisions set forth in this Chapter shall apply to all land and water areas within the corporate limits of the city of Nooksack lying outside the jurisdiction of the Nooksack Shoreline Management Master Program.](#) Any activity that includes clearing of vegetation, alteration of drainage or other land disturbing activity and all development proposals, whether public or private, shall comply with the requirements and purposes of this Chapter. The Administrator shall have the authority to determine that the requirements of this Chapter have been met. For the purposes of this Chapter, development proposals include proposals which require any of the following:

Building permit; land clearing, grading or filling permit; shoreline substantial development permit; shoreline variance; shoreline conditional use permit; conditional use permit; variance; zoning amendment; preliminary development plan for a development contract district; subdivision; short subdivision; any other land use approvals required by the City of Nooksack Municipal Code.

- B. Special Studies Required. When an applicant submits an application for any development proposal, or where approval is required by this Chapter, the applicant shall indicate whether any Critical Area or any required buffer for a Critical Area is located on or adjacent to the

site or has the potential to be adversely impacted by the proposed activity. The applicant shall identify the Critical Area(s). The applicant shall address how the regulations incorporated in this Chapter are being met. In the case of wetlands, fish and wildlife habitat areas and geologically hazardous areas, a map shall be provided that indicates the location of the Critical Area and any required buffer in relationship to the proposed development. The application shall also include the classification of the critical area. The Administrator may request that information submitted regarding Critical Areas be prepared by a qualified biologist, ecologist or similarly qualified expert in the Critical Area(s) affected.

#### **16.08.050 Maps and Inventories.**

- A. The distribution of Critical Areas in the City of Nooksack and its urban growth area is displayed on a series of maps. These maps shall be used to alert the public and City officials of the potential presence of Critical Areas on-site or off-site of a development proposal. These maps shall remain on file and available to the public at the City Clerk's office.
- B. The Critical Areas Maps shall be used as a source of generalized information and shall not be used to determine the absolute presence, absence or boundaries of a Critical Area. In case of mapping error and recognizing that Critical Areas are affected by dynamic environmental processes, the actual presence and location of Critical Areas, as determined by qualified professional and technical scientists, subject to confirmation by the Administrator, shall govern the treatment of a proposed development site. The Critical Areas Maps shall be used as a source of generalized information and shall not be used to determine the absolute presence, absence or boundaries of a Critical Area. The exact location, type and extent of Critical Areas shall be determined by a qualified consultant on a site-specific basis, subject to confirmation by the Administrator. Any lands depicted by the maps as clearly occupying one or more Critical Areas shall not be declared outside such Critical Area(s) except upon competent evidence adduced by the applicant. The Administrator may require the applicant to have a detailed study prepared by a qualified consultant to determine whether a proposed development or activity has the potential to affect any Critical Area(s).

#### **16.08.060 Development Restrictions.**

- A. Undevelopable Critical Areas. The following Critical Areas shall remain undeveloped except as otherwise provided in Section 16.08.080.
  - 1. Category I Wetlands. Category I wetlands shall remain undeveloped. The edge of the wetland and the outside edge of its buffer shall be determined and field marked by a professional wetland biologist or similarly qualified professional;
  - 2. Floodways in Frequently Flooded Areas. Development is prohibited within floodways consistent with prohibitions in the Federal Emergency Management Administration Flood Insurance Program and Chapter 15.10 of the Nooksack Municipal Code.
- B. Developable Critical Areas. Other Critical Areas may be developed pursuant to Section 16.08.071 – .075. The applicant shall clearly and convincingly demonstrate to the satisfaction of the Administrator that the proposal incorporates measures protecting the

public health, safety, and welfare, as well as the functions and values of potentially affected critical areas.

**16.08.070 Standards.** The standards established in Sections 16.08.071, .072, .073, .074, and .075 of this Chapter shall govern development and other regulated activities potentially affecting critical areas or their buffers.

**16.08.071 Wetlands.**

- A. If a wetland is located on or contiguous to the site of a development proposal, all activities on the site shall be in compliance with this Section and Chapter 16.04 Shorelines Management Program.
- B. Designation. Wetlands shall be ~~designated identified and delineated~~ according to the [Corps of Engineers Wetlands Delineation Manual \(Environmental Laboratory 1987\) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region \(Version 2.0, 2010 or as revised based on the Washington State Wetlands Identification and Delineation Manual \(Washington State Department of Ecology, March 1997, Ecology Publication #96-94\) or most recent update. This manual is consistent with the U.S. Corps of Engineers Wetlands Delineation Manual \(January 1987\).](#)
- C. Classification. Wetlands shall be **classified** (rated) as Category I, Category II, Category III, or Category IV based upon Washington State Department of Ecology's *Wetlands Rating System for Western Washington* (~~2004~~[2014](#)) or most recent update.
- D. Buffers. Buffers are upland areas adjacent to wetlands that are intended to provide sufficient separation between the aquatic feature and the surrounding areas to protect them from disturbance from human activities. Buffers also provide vital upland habitat for wildlife species that require wetlands as part of their life cycle. All buffers shall be measured horizontally from the wetland edge or ordinary high water mark where appropriate; [provided that wetland buffers shall not extend into or beyond substantially improved surfaces, such as lawfully established structures or impervious surfaces.](#)
  - 1. Standard buffers.  
The following standard buffers are required and are assumed to be comprised of a relatively intact native vegetation community that is adequate to protect the functions and values of the wetland at the time of the proposed activity:

Moderate Level of Function for Wildlife Habitat (wetlands with habitat function score of <del>20 or greater</del> <a href="#">5 to 7</a> on the wetland rating form)	Low Level of Function for Wildlife Habitat (wetlands with habitat function score of <del>19</del> <a href="#">4</a> or less on the wetland rating form)
Category 1: 150 feet Category 2: 125 feet Category 3: 100 feet Category 4: 50 feet	Category 1: 100 feet Category 2: 75 feet Category 3: 50 feet Category 4: 25 feet

- 2. Increased buffer.  
If the standard buffer is not comprised of a relatively intact native vegetation community or if the wetland has a high level of function for wildlife habitat (habitat function score of ~~29-8 or 9~~[29-8 or 9](#) points ~~or greater~~ on the wetland rating form), the

required buffer shall be increased by the Administrator to the extent necessary to protect the functions and value of the potentially affected wetland or the Applicant may choose to enhance the standard buffer area through the planting of native vegetation sufficient to meet the above standard. Any such buffer enhancement shall be undertaken at the expense of the Applicant and shall be based on a mitigation plan prepared by a qualified biologist consistent with subsection (F), below

3. Reduced buffer.

(a) Buffer Reduction based on Mitigation. Where mitigation is provided, standard buffers may be reduced, provided that the standard buffer is not reduced by more than ~~40-25~~ percent for Category 2 wetlands, and ~~60-25~~ percent for Category 3 and Category 4 wetlands. Reduction of the standard buffer of a Category 1 wetland is prohibited. Buffer reductions shall only be permitted when all impacts to wetlands and their required buffers are compensated at the expense of the developer through implementation of a mitigation plan prepared by a qualified wetland biologist consistent with subsection 16.08.071(F), below. Filling of any wetland, except a Category 4 wetland, or reduction of a wetland buffer below the percentages stated above, shall require approval of a variance or a reasonable use exception.

(b) Buffer Reduction based on Buffer Averaging. Standard buffers may be reduced through the use of buffer averaging provided that the total buffer area is not reduced below the area that would result from use of the standard buffer, and provided, further, that the standard buffer is not reduced by more than ~~40-25~~ percent, and the use of buffer averaging will improve the overall protection of the wetland. Reduction of the standard buffer of a Category 1 wetland is prohibited.

E. Requirements.

1. Category 1: Regulated activity shall only be permitted outside a Category 1 wetland and its standard buffer; all other activity, except that necessary for the public access, utilities, education or research purposes, is declared incompatible with the wetland.
2. Category 2: Regulated activity shall only be permitted outside a Category 2 wetland and its standard buffer; all other activity, except that necessary for the public access, utilities, education or research purposes, is declared incompatible with the wetland. Reduction of the standard buffer adjacent to a Category 2 wetland shall be permitted only where consistent with subsection (D)(3), above, and only when all impacts are compensated at the expense of the developer through implementation of a mitigation plan prepared by a qualified wetland biologist consistent with the requirements set forth in subsection (F), below .
3. Category 3: Regulated activities shall only be permitted outside a Category 3 wetland and its standard buffer. Buffer reductions consistent with subsection (D)(3), above, are only permitted if all impacts are compensated at the expense of the developer through implementation of a mitigation plan prepared by a qualified wetland biologist consistent with the requirements set forth in subsection (F), below.
4. Category 4: Development activities may be permitted within a Category 4 wetland or standard buffer consistent with Section 16.08.071(D)(3), above, so long as the function of the wetland is replaced at the expense of the developer pursuant to an

approved mitigation plan prepared by a qualified wetlands biologist consistent with subsection (F), below. Replacement of function shall include measures such as storm water retention and water quality treatment. No mitigation for habitat is required where the habitat value of the wetland is found to be minimal.

F. Mitigation Requirements.

1. Mitigation Plan. Where preparation of a mitigation plan is required, said plan shall be prepared by a qualified wetland biologist consistent with the Department of Ecology guidance document, *Guidance on Wetland Mitigation in Washington State*, and shall be approved by the Administrator. The mitigation plan shall be prepared based on the best available science and shall address the following:
  - (a) The characteristics of the wetland;
  - (b) The characteristics of the watershed contributing to the wetland;
  - (c) The functions and values of the wetland to be protected by the buffer;
  - (d) The characteristics of the buffer;
  - (e) The intensity of the proposed adjacent land use;
  - (f) The functions that the standard buffer is supposed to provide at the specific location;
  - (g) Proposed measures to reduce the adverse effects of adjacent land uses, such as lighting and noise restrictions, buffer fencing and signage, conservation easements, use of integrated pest management and limitations on application of pesticides, and use of low impact development techniques; and
  - (h) The anticipated effectiveness of the proposed mitigation measures to protect the functions and values of the affected wetland and wetland buffer; and
  - (i) Proposed monitoring requirements to ensure the effectiveness of the proposed mitigation.
  
2. Mitigation Sequence. When a regulated activity is proposed within a wetland or its required buffer, the Applicant shall demonstrate that all reasonable efforts have been taken to avoid, minimize and/or compensate for potential impacts in the following priority order:
  - (a) Avoiding the adverse impact altogether by not taking certain actions;
  - (b) Minimizing adverse impacts by limiting the degree or magnitude of the action or taking affirmative steps to avoid or reduce adverse effects;
  - (c) Rectifying the adverse impact by repairing, rehabilitating or restoring the affected environment;
  - (d) Reducing or eliminating the adverse impact over time through preservation and maintenance operations during the life of the action;
  - (e) Mitigating for the adverse impact by replacing, enhancing, or providing substitute resources or environments and
  - (f) Monitoring both the impacted area and the mitigation project over time and taking appropriate corrective action.
  
3. Compensatory Mitigation Ratios. Compensatory mitigation through creation, restoration and/or enhancement shall be provided based on the following ratios of impacted area to mitigation area, which shall serve as guidelines for use by qualified

wetland biologists and the Administrator in preparing and reviewing proposed mitigation:

Mitigation Ratio		
Wetland Category	Creation or Restoration	Enhancement
Category 1	6:1	12:1
Category 2	3:1	9:1
Category 3	2:1	6:1
Category 4	<del>1.25</del> 1.5:1	3:1

**16.08.073 Fish and Wildlife Habitat Conservation Areas.**

A. CLASSIFICATION. Fish and wildlife habitat conservation areas are those areas conserved for management and maintenance of fish and wildlife habitat. These areas may include other critical areas such as wetlands and their associated buffers. Fish and wildlife habitat include:

1. Lands containing priority habitats and species which include plant and animal species listed on the state or federal lists of threatened or endangered species.
2. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish or wildlife habitat. Naturally occurring ponds do not include ponds deliberately designed and created from a dry site, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds (of less than three (3) years duration) and landscape amenities. However, naturally occurring ponds may include those artificial ponds created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority.
3. Waters of the State. Waters of the state are defined in Title 222 WAC, the forest practices rules and regulations. Said waters shall be classified as established in WAC 222-16-030.
4. Lakes, ponds, streams, and rivers planted with game fish. This includes game fish planted in these bodies under the auspices of federal, state, local, or tribal program or which supports priority fish species as identified by the Department of Wildlife.
5. State natural area preserves and natural resource conservation areas.

The foregoing notwithstanding, fish and wildlife habitat conservation areas shall not include drainage ditches, irrigation canals and other similar artificial features that are within the boundaries of and maintained by a drainage improvement district, irrigation district or other similar agency.

B. STANDARDS. Alternation of fish and wildlife habitat conservation areas may reduce the likelihood that the species will survive or reproduce. Activities allowed in fish and wildlife habitat conservation areas shall be consistent with the species located there and all applicable state and federal regulations regarding that species. Development in these areas shall be in accordance with the requirements of any overlapping critical areas classification.

- C. Development proposals having the potential to adversely impact a fish and wildlife habitat conservation area shall be required to submit a detailed study identifying the functions and values of the potentially impacted habitat(s), the potential impacts resulting from the proposed development, and any mitigation necessary to maintain the functions and values of the habitat. Any such detailed study shall be prepared by a qualified specialist, such as a fish or wildlife biologist and shall be based on the best available science.

The following standards shall apply:

- |    |  |   |
|----|--|---|
| 1. | Sumas River                            | 150-foot standard buffer  |
| 2. | Breckenridge Creek                     | 150-foot standard buffer  |
| 3. | Non fish-bearing steams - perennial    | 50-foot standard buffer   |
| 4. | Non fish-bearing steams - intermittent | 25-foot standard buffer   |
| 5. | Wetlands                               | As provided in Section 16.08.071  |
| 6. | Bald eagle habitat                     | Consistent with the Washington State Bald Eagle Protection Rules (WAC 232-12-292) |

Riparian buffers shall be measured from the ordinary high water mark; [provided that buffers shall not extend into or beyond substantially improved surfaces, such as lawfully established structures or impervious surfaces.](#)

- D. **Buffer Reductions.** Development activities may be permitted within the standard buffer provided the detailed study demonstrates to the satisfaction of the Administrator that the proposal, including any proposed mitigation, will maintain the functions and values of the potentially impacted habitat, and provided, further, that the standard buffer is not reduced by more than 40 percent. The standard buffer may also be reduced up to 40 percent through buffer averaging; provided, that the total buffer area is not reduced below the area that would result from use of the standard buffer and provided further that the standard buffer may not be reduced in areas adjacent to highly functioning fish and wildlife habitat.

- E. **Mitigation Requirements.** Where mitigation is proposed or required, the Applicant shall submit a mitigation plan prepared by a qualified specialist. Said plan shall be based on the best available science and shall address the following:

1. The characteristics of the habitat, including vegetation, soils and species presence;
2. The characteristics of the watershed in which the habitat is located;
3. The functions and values of the habitat to be protected by the buffer;
4. The characteristics of the buffer;
5. The intensity of the proposed adjacent land use;
6. The functions that the standard buffer is supposed to provide at the specific location;
7. Proposed measures to reduce the adverse effects of adjacent land uses, such as lighting and noise restrictions, buffer fencing and signage, conservation easements, use of integrated pest management and limitations on application of pesticides, and use of low impact development techniques; and
8. The proposed mitigation measures, including type, location and timing, and the anticipated effectiveness of proposed measures to protect the functions and values of the affected habitat and habitat buffer; and

9. Proposed monitoring requirements to ensure the effectiveness of proposed mitigation – generally a minimum of five years for small to moderate projects and ten years for larger projects.

F. Habitats and Species of Local Importance.

No habitats or species of local importance have been identified or designated within the City. Specific proposals for identifying and designating habitats and species of local importance shall be submitted and reviewed as proposed amendments to Chapter 16.08 and shall be processed consistent with City policies and procedures for annual review of all such proposed amendments to the City’s development regulations.

**16.08.074 Frequently Flooded Areas.**

- A. CLASSIFICATION. Classification for frequently flooded areas shall be consistent with the 100-year floodplain designation of the Federal Emergency Management Agency and the National Flood Insurance Program plus those additional areas that were inundated by flood waters in the November 1990 floods.

- B. STANDARDS. Activities allowed in frequently flooded areas shall be consistent with the following regulations.

1. All development shall meet the provisions of ~~the Chapter 15.10, National Flood Insurance Program,~~ and other provisions of the Nooksack City Municipal Code.
2. New single family construction may be allowed, provided the applicant records with the Whatcom County Auditor’s office the following notice on all documents:

“The structures on this property are located in an area which may be subject to inundation by floodwaters. For further information regarding this hazard, please contact the Federal Emergency Management Administration or the Whatcom County Emergency Services office.”

- C. No fill shall be permitted except where a detailed drainage report and/or flood modeling report prepared by a qualified engineer demonstrates that the proposed fill and all proposed mitigation, including proposed drainage improvements, will not adversely impact adjacent, neighboring and/or potentially impacted properties, and will not create a hazard or pose a threat to public health or safety, ~~and will not result in a net increase in the 100-year flood elevation at any location potentially affected by the proposed fill of more than one-tenth (1/10) of one foot.~~
- D. The placement or storage of chemicals, petroleum products or by-products, fertilizers, insecticides, pesticides, lime, cement or other material that, when inundated will constitute a hazard to life, health, and safety, or adversely affect the quality of surface waters, is prohibited within the federally defined floodway.

**16.08.075 Geologically Hazardous Areas.**

- A. CLASSIFICATION. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake or other geological events. Geologically hazardous areas include erosion hazard areas, landslide areas, steep slopes and seismic hazard areas. The only geologically hazardous areas within Nooksack or the Nooksack urban growth area are soils with a known risk for seismic hazard, steep slopes with a slope gradient of thirty-five (35) percent or greater and a vertical relief of ten (10) feet from top to toe, and areas with a potential risk for flooding as a result of volcanic activity.
- B. STANDARDS. Standards for development in seismic hazard areas shall be in accordance with the provisions in the Nooksack Municipal Code, including conformance with state and international building codes adopted by the City. Standards for development within fifty (50) feet of the top or toe of a steep slope shall include the submission of a special study prepared by a qualified geologist or geotechnical engineer demonstrating how the proposed development, including any proposed mitigation, will reduce risks posed by the hazard to within acceptable levels. Standards for development in areas at risk due to volcanic activity is as specified in the Frequently Flooded section of this ordinancechapter.