

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



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

## Memorandum

TO: Whatcom County Council Natural Resources Committee

THROUGH: Mark Personius, Long Range Planning Manager

FROM: Peter Gill, Senior Planner

DATE: May 21, 2013

SUBJECT: Lake Whatcom Overlay District, File # PLN2011 - 00015

---

**OVERVIEW:** Staff will bring forward to the Natural Resources Committee on May 21, 2013 an update of our progress on the proposed WCC 20.51 Lake Whatcom Watershed Overlay District. The purpose of this meeting is to (1) summarize the cost estimates received by the engineering community on phosphorus neutral stormwater facilities on small lots, and (2) discuss potential code amendments for committee to consider prior to introduction of an ordinance.

**BACKGROUND:** Council has asked for an analysis of implementing the phosphorus neutral stormwater standards on small lots less than 10,000 ft<sup>2</sup>. This analysis includes the cost of designing and installing these systems on small lots remaining in the Lake Whatcom Watershed. In December 2012, Whatcom County staff visited parcels representative of the vacant lot inventory left in the Lake Whatcom watershed with staff from the City of Bellingham, Sudden Valley Community Association, and the Conservation District. Based on these site visits, County, City, and Conservation District engineering staff agreed on an approach to phosphorus neutral stormwater facility designs in this area that were presented to the Council Natural Resource Committee on April 9, 2013. This approach was refined and sent to engineering firms that volunteered to provide the County feedback on the designs and cost estimates. Engineers will be available at the meeting to answer questions about this review and the cost estimates found in your packet.

Council Natural Resource Committee reviewed updates to the proposed code on May 7, 2013. These changes, to reflect current NPDES standards, are now incorporated, where indicated, in the proposed code (Exhibit A). The Committee withheld their recommendation on changes remaining in Exhibit E.

In your packet you will find five attachments:

- Exhibit A – Proposed code (WCC 20.51) showing Planning Commission recommended and Council changes from 5/7/2013
- Exhibit B – Changes to remove Lake Whatcom stormwater and land use regulations from existing code in WCC 20.71 - Water Resource Protection Overlay District, 20.80.630 – NPDES standards, 20.80.635 - Stormwater Special Districts, and 20.80.735 - Water Resource Special Management Areas
- Exhibit C – Definitions
- Exhibit D – Summary of Phosphorus Neutral Stormwater BMP Cost Estimates
- Exhibit E – Potential Amendments for Committee Consideration

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

**Chapter 20.51**

**LAKE WHATCOM WATERSHED OVERLAY DISTRICT**

**20.51.010 Purpose.**

The Lake Whatcom Watershed Overlay District is intended to manage and treat stormwater runoff and establish more stringent standards on clearing activities ~~and reduce the phosphorus loading into Lake Whatcom,~~ in order to preserve and protect a unique and important water resource, Lake Whatcom. This district is designed to protect the long-term viability of Lake Whatcom as a drinking water source, and to comply with the requirements set forth by the Washington State Department of Ecology through the pending Lake Whatcom Total Maximum Daily Load (TMDL) by limiting the phosphorus loading into Lake Whatcom that results from land disturbing or conversion projects, ~~and work, or activities and reduces phosphorus loading from existing sources, to that of native vegetation (as defined by the Washington State Department of Ecology Stormwater Management Manual for Western Washington (WSDOE SWMMWW)).~~

**Comment [w1]:** PC recommendation from March 22, 2012

**Comment [w2]:** PC recommendation from March 22, 2012

**Comment [w3]:** PC recommendation from May 10, 2012

**Comment [w4]:** PC approved changes from March 22, 2012.

**Comment [w5]:** Staff proposal

**20.51.030 Area and Applicability.**

(1) The Lake Whatcom Watershed Overlay District is an overlay zone that covers the entire geographic area of the Lake Whatcom watershed within Whatcom County's jurisdiction, and applies to all land disturbing or conversion projects, work or activities within the overlay zone.

(2) In the event that the provisions of this chapter conflict with the provisions of the Shoreline Management Program (WCC Title 23), Chapter 16.16 WCC, Critical Areas, the Whatcom County Development Standards, the provisions of the underlying zoning district or other applicable county policies or regulations, then the most restrictive shall apply; provided, that the minimum setback provisions established in WCC 20.51.340 shall prevail. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

**20.51.040 Conformance.**

**Comment [w6]:** Staff proposal

The provisions of this chapter overlay other permit and approval requirements of the Whatcom County Code. All use and development shall conform to all relevant requirements and standards of:

- (1) Whatcom County Code, Title 20, Zoning, except as modified by this chapter;
- (2) The International Building and Fire Codes;
- (3) Whatcom County Critical Area Ordinance 16.16;
- (4) Flood Damage Prevention, Title 17;
- (5) Subdivision, Title 21, except as modified by this chapter;

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1 (6) Whatcom County Development Standards - Stormwater, Chapter 2, except as
- 2 modified by this chapter;
- 3 (7) Whatcom County Development Standards, Stormwater Special Districts, Chapter 2-
- 4 Section 221, except as modified by this chapter;
- 5 (8) Whatcom County Code, Title 23, Shoreline Management Program;
- 6 (9) Whatcom County Code, Title 24 Health Code; and
- 7 All other applicable official controls

**20.51.050 Permitted Uses.**

**Comment [w7]:** Taken from original code section WCC 20.71.

8 All permitted uses in the underlying zone districts are permitted except as expressly

9 prohibited, made conditional, or further conditioned by this chapter.

11 **.051** Private noncommercial greenhouses less than 250 square feet. (Ord. 2009-009 Exh.

12 A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003;

13 Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021

14 § 1, 2001; Ord. 99-086, 1999).

**20.51.060 Accessory uses.**

**Comment [w8]:** Taken from original code section WCC 20.71.

16 All accessory uses in the underlying zone districts are permitted except as expressly

17 prohibited or made conditional, or further conditioned by this chapter. (Ord. 2009-009 Exh.

18 A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003;

19 Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021

20 § 1, 2001; Ord. 99-086, 1999).

**20.51.070 Conditional Uses.**

**Comment [w9]:** Taken from original code section WCC 20.71.

22 All conditional uses in the underlying zone districts shall remain conditional uses unless

23 expressly prohibited, made conditional, or further conditioned by this chapter. In addition,

24 the following uses shall only be conditionally permitted:

25 **.071** On-site storage facilities for hazardous wastes associated with outright permitted uses

26 or approved conditional uses, other than cottage industries as defined in WCC [20.51.095](#),

27 subject to the most current siting criteria under Chapter [173-303](#) WAC within the Rural,

28 Rural Forestry, Commercial Forestry, Neighborhood Commercial and Resort Commercial

29 Zone Districts only.

30 **.072** Retail or wholesale plant nurseries or greenhouses for storage, propagation and

31 culture of plants, provided:

32 (1) Greenhouses shall not be larger than 1,000 square feet.

33 (2) Greenhouses and cultivated ground shall not be located within 250 feet of Lake

34 Whatcom, ~~Lake Samish, Lake Padden~~ or streams subject to the Shoreline Management

35 Program; 200 feet from fish-bearing streams; or 150 feet from other streams and their

36 tributaries that flow into Lake Whatcom, ~~Lake Samish, and Lake Padden~~.

**Comment [w10]:** Staff proposal to remove other watershed references.

**Comment [w11]:** Current staff proposal to remove other watershed references.

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

1 (3) A monitoring program has been established to ensure that chemical and pesticide  
2 quantities in stormwater runoff do not exceed state water quality standards. Complete  
3 control of drainage from the operation shall be in effect. Such runoff will be tested for  
4 pollutants bimonthly by a licensed water quality testing agency. All requirements will be met  
5 at the owner's expense.

6 (4) No person shall apply a commercial fertilizer, either liquid or granular, that is labeled as  
7 containing more than zero percent phosphorous or other compound containing  
8 phosphorous, such as phosphate; provided, that such fertilizers may be used for  
9 establishment of new vegetation in the first growing season.

10 **.073** Type I solid waste handling facilities, except:

11 (1) Moderate risk waste facilities; and

12 (2) Facilities in the Recreation and Open Space District. (Ord. 2009-009 Exh. A, 2009; Ord.  
13 2005-085 § 1, 2005; Ord. 2004-014 § 2, 2004; Ord. 2004-007 § 1, 2004; Ord. 2003-049  
14 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord.  
15 2001-021 § 1, 2001; Ord. 99-086, 1999).

16 **20.51.080 Prohibited Uses.**

**Comment [w12]:** Taken from original code section WCC 20.71.

17 In addition to the uses prohibited in the underlying zone districts, the following uses are  
18 prohibited, except as per Chapter [20.83](#) WCC:

19 **.081** Dry cleaning establishments.

20 **.082** Gas stations, service stations, combustion engine repair garages and automotive  
21 wrecking yards.

22 **.083** Sod farming.

23 **.084** Aquaculture and mariculture projects.

24 **.085** Operation of fur farms.

25 **.086** Confinement feeding operations.

26 **.087** Asphalt and concrete batch plants.

27 **.088** Gravel bar scalping projects within the jurisdiction of the Shoreline Management  
28 Program.

29 **.089** Utilization of sewage sludge on land.

30 **.090** On-site treatment facilities for hazardous wastes.

31 **.091** Type I solid waste handling facilities, except those specified in WCC [20.51.073](#).

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1 | **.092** Type II, ~~and~~ Type III, and Type IV solid waste handling facilities.
- 2 | **.093** Golf courses.
- 3 | **.094** Cemeteries.
- 4 | **.095** Cottage industries that would require on-site hazardous waste storage facilities.
- 5 | **.096** Surface mining outside of designated Mineral Resource Lands (MRL) Special Districts;
- 6 | provided, that surface mining, rock crushing, washing and sorting subject to the Forest
- 7 | Practices Act (Chapter 76.09 RCW) are permitted.
- 8 | **.097** Major passenger intermodal terminals.
- 9 | **.098** Freight railroad switching yards and terminals.
- 10 | **.099** Agriculture, including animal husbandry, horticulture, viticulture, floriculture, and the
- 11 | cultivation of crops.
- 12 | **.100** Animal hospitals and accessory kennels and stables.
- 13 | **.101** Commercial kennels and stables. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1,
- 14 | 2005; Ord. 2004-014 § 2, 2004; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord.
- 15 | 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1,
- 16 | 2001; Ord. 99-086, 1999).

**Comment [w13]:** Staff proposal. Health Department recommendation to include composting facilities. Already included in other sections of Title 20.

- 17 | **20.51.300 Open space ~~and impervious surfaces.~~**
- 18 | **.301** Open space requirements shall be as follows:
- 19 | ~~(1) For uses in the TC and NC Zones, at least 25 percent of the parcel shall be reserved as~~
- 20 | ~~open space.~~
- 21 | ~~(2) For uses in the RC Zone, at least 40 percent of the parcel shall be reserved as open~~
- 22 | ~~space.~~
- 23 | ~~(3) Open space areas shall be maintained in natural vegetation or landscaped per WCC~~
- 24 | ~~20.80.325.~~
- 25 | ~~(4) For properties within the jurisdiction of the Shoreline Management Program (WCC Title~~
- 26 | ~~23), submerged lands and/or tidelands within the boundaries of any waterfront parcel that~~
- 27 | ~~are located waterward of the ordinary high water mark shall not be used in open space~~
- 28 | ~~calculations.~~

**Comment [w14]:** Taken from original code section WCC 20.71.

**Comment [w15]:** Staff proposal. Impervious surface limitations removed in section .302 because of stormwater treatment options in WCC 20.51.420.

**Comment [w16]:** PC recommendation from **May 10, 2012**

- 29 | ~~**.302** Impervious surface requirements shall be as follows:~~
- 30 | ~~(1) For uses in the UR, URM and RR Zone Districts, at least 80 percent of the lot or parcel~~
- 31 | ~~shall be kept free of structures and impervious surfaces.~~

**Comment [w17]:** Staff proposal; impervious surfaces area addressed in new section WCC 20.51.420.

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

~~(2) For uses in the R-Zone District, at least 90 percent of the lot or parcel shall be kept free of structures and impervious surfaces.~~

~~(3) Where subsection (1) or (2) of this section does not allow 2,500 square feet of total impervious surface area, 2,500 square feet shall be allowed.~~

~~(4) Two or more lots of record consolidated pursuant to the provisions of WCC 20.83.070 shall be treated as one undivided parcel for the purpose of calculating total allowable impervious surface. Where two or more lots or parcels are consolidated, are not subject to the provisions of WCC 20.83.070, and are not subject to a permanent restrictive covenant that precludes development of buildings, structures or other improvements not otherwise identified by said covenant, 4,000 square feet of impervious surface shall be allowed.~~

~~(5) Preexisting nonconforming impervious surfaces may be routinely maintained/repaired or redeveloped; provided, that if 50 percent or greater of the preexisting nonconforming impervious area is to be redeveloped, then the applicable impervious surface limitations of subsections (1), (2) and (3) of this section shall apply. However, if a legal nonconforming structure is destroyed, the nonconforming use may be reconstructed using the pre-existing footprint. Expansion of nonconforming impervious surfaces shall be prohibited.~~

~~(6) A mobile home within an existing mobile home park may be replaced with a larger mobile home (not to exceed a maximum of 1,500 square feet), provided there is not an increase in the overall number of mobile homes in the park or any increase in other impervious surfaces beyond the new mobile home footprint.~~

~~(7) For properties within the jurisdiction of the Shoreline Management Program (WCC Title 23), submerged lands and/or tidelands within the boundaries of any waterfront parcel that are located waterward of the ordinary high water mark shall not be used in impervious/pervious surface calculations.~~

~~(8) Any portion of a roof overhang or other overhanging architectural feature which projects further than three feet from the footprint of a structure shall be calculated as impervious surface.~~

~~(9) Alternative surface methods described in WCC 20.71.603 may be used. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-079 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-063 § 1, 2001; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).~~

**20.51.310 Cluster subdivisions.**

The purpose of cluster subdivision is to provide a method of creating building lots with spatially efficient sizes. Clustering is intended to consolidate development and associated infrastructure, reduce development costs, and increase infrastructure efficiency. Clustering is also intended to help preserve open space and the character of areas, reduce total impervious surface area, and minimize development effects on critical areas and associated

**Comment [w18]:** Taken from original code section WCC 20.71

## EXHIBIT A-Whatcom County Code Proposed Chapter 20.51

1 buffers, as defined in Chapter [16.16](#) WCC, and resource lands. Preservation of open space is  
2 thereby intended to reduce potential stormwater runoff and associated impacts while  
3 assuring protection of viable, undeveloped, and naturally vegetated corridors for wildlife  
4 habitat, protection of watersheds, preservation of critical areas, preservation of aesthetic  
5 values including view corridors, and preservation of trail and/or recreation areas. (Ord.  
6 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-048 Exh. A, 2005; Ord. 2004-  
7 007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075,  
8 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### 9 **20.51.320 Cluster design standards.**

10 The creation of new building lots within the ~~Water Resource Protection Lake Whatcom~~  
11 ~~Watershed~~ Overlay Districts shall be subject to the following design standards:

Comment [w19]: Taken from original code section WCC 20.71

Comment [w20]: New chapter reference

12 (1) Cluster subdivisions shall be required for all land divisions resulting in lots less than five  
13 acres in size, with the exception of boundary line adjustments.

14 (2) A cluster subdivision shall include a permanent open space reserve area meeting the  
15 criteria established in WCC [20.51.330](#).

16 (3) The minimum cluster lot size requirements of the underlying zone district shall apply.

17 (4) The maximum number of building lots in a lot cluster shall be 10.

18 (5) Clusters containing two or more lots of less than one acre within a proposed  
19 development shall be separated by at least 80 feet.

20 (6) Clustered building lots may only be created through the subdivision, short subdivision or  
21 binding site plan process pursuant to WCC Title 21.

22 (7) Building lots shall be designed and located to be compatible with, and avoid disturbance  
23 of, critical areas or ~~other valuable or unique natural resources~~ known archaeological sites,  
24 as well as physical constraints of the site.

Comment [w21]: PC Subcommittee recommended change.

25 (8) Building lots shall be arranged in a cluster/concentrated pattern.

26 (9) A cluster subdivision shall have no more than two common encroachments on existing  
27 county roads unless site constraints require additional road access. The arrangement of  
28 clustered building lots shall be designed to avoid development forms commonly known as  
29 linear, straight line or highway strip patterns.

30 (10) As applicable, interior streets shall be designed to allow future vehicular access to any  
31 portion of the reserve tract which may be divided into future building lots; provided, that  
32 the required permanent open space reserve area, pursuant to WCC [20.51.330](#), shall not be  
33 further subdivided. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-048  
34 Exh. A, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A,  
35 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002).

### 36 **20.51.330 Open space reserve area.**



**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

1 (1) For purposes of this title, an “open space reserve area” shall be defined as that portion  
2 of a subdivision or short subdivision set aside in accordance with this chapter, and  
3 permanently dedicated for active or passive recreation, critical area protection, natural  
4 resource or archaeological site preservation, wildlife habitat and/or visual enjoyment, and  
5 shall be consistent with the definition of “open space” pursuant to WCC [20.97.275](#).

6 (2) The open space reserve area shall be subject to the following provisions:

7 (a) The minimum open space reserve area shall be determined by the minimum  
8 cluster subdivision reserve area requirements of the underlying zone district.

9 (b) A permanent open space reserve area shall be protected using one of the following  
10 mechanisms:

11 (i) Placement in a separate nonbuilding tract owned in common by all lots within  
12 the subdivision; or

13 (ii) Covered by a protective easement ~~or public or private land trust dedication~~  
14 which protects at least the minimum required cluster reserve area specified in the  
15 underlying zone district; or

**Comment [w22]:** PC recommendation from  
May 10, 2012

16 (iii) Preserved through an appropriate permanent protective mechanism that  
17 provides the same level of permanent protection as subsection (2)(b)(i) of this  
18 section as determined by the county zoning administrator or hearing examiner  
19 which applies to at least the minimum required cluster reserve area specified in  
20 the underlying zone district.

21 (c) The boundaries of the open space portion of the reserve area may be altered only  
22 if the county finds that in dedicating adjacent reserve areas it would further the  
23 objectives listed in WCC [20.51.310](#) by altering the reserve area and increasing the  
24 area of reserve proportionately on the adjacent land being subdivided so that there is  
25 no net reduction in open space reserve area.

26 (d) The purpose of the open space reserve area as defined in subsection (1) of this  
27 section shall be recorded on the face of the final plat or short plat.

28 (e) The remaining unused development density and/or impervious surface allowances  
29 remaining on the parcel containing the open space reserve area, based on the gross  
30 density of the parent parcel, may be assigned to that portion of the reserve tract not  
31 subject to the minimum area requirements of subsection (2)(b) of this section. The  
32 density shall be recorded on the face of the final plat or short plat. The development  
33 rights assigned to the reserve tract in accordance with this subsection may not be  
34 transferred if the ~~perVIOUS surface~~ area associated with the reserve tract has been  
35 transferred to the other building lots within the subdivision.

**Comment [w23]:** PC recommendation from  
May 10, 2012

36 (f) The requirements stated in subsections (2)(c) and (d) of this section shall be  
37 recorded as a restriction on the face of the final plat or short plat, and shall constitute

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

1 an agreement between Whatcom County and the current/future owner(s) of record  
2 that shall run with the land. Said restriction(s) may be amended by mutual agreement  
3 between said parties after review for consistency and compliance with the official  
4 Whatcom County Zoning Ordinance, the Whatcom County Subdivision Ordinance, and  
5 the Whatcom County Comprehensive Plan.

6 ~~(g) For cluster subdivisions approved after December 7, 1999, that portion of the~~  
7 ~~reserve tract which is kept in pervious open space may be counted toward pervious~~  
8 ~~surface area requirements for the building lots in the subdivision on a prorated basis.~~  
9 ~~(Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-048 Exh. A, 2005;~~  
10 ~~Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003;~~  
11 ~~Ord. 2002-075, 2002; Ord. 2002-034, 2002).~~

**Comment [w24]:** PC recommendation from May 10, 2012

**20.51.340 Building setback/buffer areas.**

**Comment [w25]:** Taken from original code section WCC 20.71

12 **.341** Setbacks for all properties within the overlay district shall be as follows: Class I and  
13 Class II roads shall have a minimum setback of 30 feet; and Class III, IV and V roads shall  
14 have a minimum setback of 20 feet; provided, that the road right-of-way meets the  
15 minimum standard for road rights-of-way pursuant to the Whatcom County Development  
16 Standards.  
17

18 **.342** Roof overhangs or other overhanging architectural features shall not project further  
19 than 18 inches into the side or rear yard setbacks. Such overhangs may extend three feet  
20 into the front yard setback; however, in no case shall they extend more than one-half the  
21 depth of the front yard setback. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005;  
22 Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord.  
23 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-062 § 1, 2001; Ord. 2001-021 § 1,  
24 2001; Ord. 99-086, 1999).

**20.51.350 Development criteria.**

**Comment [w26]:** Taken from original code section WCC 20.71

25 (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord.  
26 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034,  
27 2002; Ord. 2001-021 § 1, 2001).

**20.51.360 Parking space dimensions.**

**Comment [w27]:** Taken from original code section WCC 20.71

29 A standard parking space shall have the rectangular dimensions of 10 feet in width and 20  
30 feet in length; provided, that for any parking area of six or more spaces, 50 percent of all  
31 spaces may have the rectangular dimensions of eight feet in width and 15 feet in length;  
32 and further provided, that these spaces are marked for use by compact automobiles. Except  
33 in single-family residential areas, all dimensions shall be exclusive of driveways, aisles and  
34 other circulation areas required under WCC [20.80.560](#) and [20.80.570](#). (Ord. 2009-009 Exh.  
35 A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003;  
36 Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021  
37 § 1, 2001; Ord. 99-086, 1999).  
38

**20.51.370 Parking requirements.**

**Comment [w28]:** Taken from original code section WCC 20.71

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1 Parking shall conform to the requirements of WCC [20.80.500](#) through [20.80.590](#) unless  
2 otherwise specified in this section. Minimum parking requirements may be reduced through  
3 any of the following methods:
- 4 (1) A shared parking agreement has been filed with the county auditor establishing a shared  
5 parking lot for land uses with noncompeting hours of operation, or for multitenant retail and  
6 commercial facilities; provided, the parking lot is not located further than 700 feet from any  
7 of the uses it is intended to serve.
- 8 (a) The minimum required parking in shared facilities shall be based on the land use  
9 with the highest parking demand.
- 10 (b) Mixed use developments with similar operating hours may be required to submit a  
11 parking demand study to determine if parking can be combined.
- 12 (2) A 20 percent reduction may be approved if an establishment is located within 1,000 feet  
13 of any regularly scheduled bus stop.
- 14 (3) The zoning administrator determines that a reduced requirement will reduce overall  
15 impervious surfaces while maintaining consistency with this title. (Ord. 2009-009 Exh. A,  
16 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord.  
17 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1,  
18 2001; Ord. 99-086, 1999).

~~**20.51.380 Alternative surfacing methods.**~~

~~Alternative surfaces including, but not limited to, bark or wood mulch, washed gravel,  
grid/lattice systems, permeable interlocking pavers, pervious concrete, porous asphalt, and  
other similar approved materials are encouraged. Alternative surfacing methods may be  
approved for fringe or overflow parking areas, emergency parking areas, private roads, fire  
lanes, road shoulders, bike paths, walkways, patios, driveways, and easement service roads  
in residential or commercial zones unless site constraints make use of such materials  
detrimental to water quality. Utilization of alternative surfacing methods shall be subject to  
review and approval by the Whatcom County public works department, the fire marshal  
and/or the county ADA coordinator for compliance with other applicable regulations and  
development standards. Surfaces shall be considered impervious surfaces under WCC  
[20.71.300](#) unless the following conditions are met:~~

~~(1) Bark, wood mulch, and washed gravel shall be designed and installed so that all rain  
water falling upon the alternative surface will be infiltrated directly beneath the alternative  
surface without generating surface runoff based on the one-year, 24-hour storm event.~~

~~(2) Other alternative surface methods shall be designed and installed in accordance with the  
guidelines in the 2005 Low Impact Development Technical Guidance Manual for Puget  
Sound or subsequent version, prepared by the Puget Sound Action Team (Publication No.  
PSAT 0503), as applicable. No pervious surface credit shall be given for projects utilizing an  
underdrain system. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007  
§ 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002;~~

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

1 ~~Ord. 2002-034, 2002; Ord. 2001-049 § 1, 2001; Ord. 2001-021 § 1, 2001; Ord. 99-086,~~  
2 ~~1999).~~

**Comment [w29]:** Staff proposal. Alternative surfacing methods addressed through stormwater BMPs in WCC 20.51.420.

3  
4 **20.51.390 Vehicular access.**

**Comment [w30]:** Taken from original code section WCC 20.71.

5 Driveways and curb cuts shall be minimized along all arterial and collector roads. Each  
6 existing lot shall be allowed only one driveway or curb cut; adjacent lots are encouraged to  
7 share access points. In new developments, lots or leased sites shall be oriented toward  
8 internal driveways, parking areas, or roads with limited access to arterial or collector roads.  
9 (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord.  
10 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034,  
11 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

12 **20.51.400 Roads, curbs, gutters and sidewalks.**

**Comment [w31]:** Taken from original code section WCC 20.71.

13 The intent of this section is to reduce impervious surfaces and stormwater runoff.  
14 Innovative street sections, which do not compromise public safety, shall be encouraged in  
15 the watershed. Narrow streets and reduced sidewalk standards that satisfy pedestrian and  
16 vehicular circulation requirements may be implemented with the approval of the Whatcom  
17 County public works department. Unless specifically required, roads shall not be wider than  
18 the minimum applicable standard. A rural road standard may be approved by the Whatcom  
19 County public works department for urban density residential areas where the developer  
20 provides adequate off-street parking and pedestrian walkways. (Ord. 2009-009 Exh. A,  
21 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord.  
22 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1,  
23 2001; Ord. 99-086, 1999).

24  
25 **20.51.410 Seasonal Clearing Activity Limitations**

**Comment [w32]:** Taken from original code section WCC 20.80.735.

26 The intent of seasonal clearing activity limitations is to establish a more stringent standard  
27 for clearing activity in highly valued water resource areas, environmentally sensitive areas,  
28 or areas where natural conditions are so unstable that clearing activity in the areas can  
29 result in hazardous conditions. Implementation of best management practices, including  
30 phased clearing, tree retention and seasonal clearing limitations, is intended to limit the  
31 amount of exposed soils on site that are susceptible to erosion at any one time, thereby  
32 improving site stability during development and reducing potential for transport of dissolved  
33 pollutants and sediments off site. Preservation of existing trees on site also reduces the  
34 quantity and maintains the quality of stormwater leaving a site during and after  
35 development activities by encouraging interception, infiltration and evapotranspiration of  
36 rainfall and surface runoff.

37 (1) County review and approval shall be required for all clearing activities associated with a  
38 fill and grade permit, building permit or other development proposal.

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1 (2) Clearing activity, as defined in WCC [20.97.054](#), that will result in exposed soils  
2 exceeding 500 square feet shall not be permitted from October 1st through May 31st;  
3 provided, that:
- 4 (3) The zoning administrator may approve an exemption to this requirement for the  
5 following activities:
- 6 (a) Routine maintenance and repair of erosion and sediment control measures;
- 7 (b) Activities located at or waterward of the ordinary high water mark subject to  
8 state, federal, and/or local (per Chapter [16.16](#) WCC and/or WCC Title [23](#)) conditions  
9 of approval requiring commencement of clearing activity between October 1<sup>st</sup> and  
10 May 31<sup>st</sup> for purposes of minimizing surface water disturbance and site inundation by  
11 high water or wave action;
- 12 (c) Activities necessary to address an emergency that presents an unanticipated and  
13 imminent threat to public health, safety or the environment that requires immediate  
14 action within a time too short to allow full compliance with this section. Upon  
15 abatement of the emergency situation, the clearing activity shall be reviewed for  
16 consistency with this chapter and may be subject to additional permit requirements;  
17 provided, that the applicant shall make a reasonable attempt to contact the zoning  
18 administrator prior to the activity. When prior notice is not feasible, notification of  
19 the action shall be submitted to the zoning administrator as soon as the emergency  
20 is addressed and no later than two business days following such action. Emergency  
21 construction does not include development of new permanent protective structures  
22 where none previously existed.
- 23 (d) The proposed activity does not involve the conversion of forest land, is outside  
24 critical areas and associated buffers, and is exclusively related to agriculture as  
25 defined in this title; or
- 26 (e) The proposed activity consists of nonconversion forest practices, other than Class  
27 IV-General forest practices on platted land, and other than those with an approved  
28 COHP regulated under Chapter [76.09](#) RCW; or
- 29 (4) To ensure compliance with subsection (2) of this section, Whatcom County planning and  
30 development services shall not issue development permits requiring more than 500 square  
31 feet of land disturbance located within the Lake Whatcom watershed within two weeks prior  
32 to the watershed seasonal closure on October 1st.
- 33 (5) Soil disturbance associated with an exempt clearing activity shall be minimized to the  
34 maximum extent practicable. The zoning administrator shall have the authority to condition  
35 an exempt activity to ensure that temporary erosion and sediment control measures will be  
36 implemented.

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1 (6) An exemption from the seasonal land clearing requirements of this section does not  
2 grant authorization for any work to be done in a manner that does not comply with other  
3 provisions of this chapter or other applicable development regulations.
  
- 4 (7) Within the Lake Whatcom Watershed Overlay District, clearing activity must conform to  
5 the following conditions:
  - 6 (a) Temporary erosion and sediment control shall be installed and inspected prior to  
7 any clearing activity. The technical administrator shall conduct periodic inspections  
8 to ensure the integrity of temporary erosion and sediment controls. Temporary  
9 erosion and sediment control measures include, but are not limited to, installation of  
10 silt fencing, installation of check dams, covering of excavation piles, and mulching of  
11 exposed soils, as specified in the Whatcom County Development Standards.
  
  - 12 (b) Phased Clearing. Construction activities and clearing activities shall be phased to  
13 limit the amount of exposed soil that occurs at any one time, if determined to be  
14 appropriate by the technical administrator, based on site characteristics or  
15 constraints including, but not limited to, slopes, proximity to shorelines and  
16 wetlands. A phased clearing plan may be required. A phased clearing plan, if  
17 required, shall be submitted for review and approval by the technical administrator  
18 prior to any clearing activity and shall contain a detailed construction schedule or  
19 timeline.
  
  - 20 (c) Soil Stabilization. All disturbed areas shall be provided with soil stabilization  
21 within two days of the time of disturbance. The technical administrator may approve  
22 an exemption to this requirement when a tree canopy area retention plan includes a  
23 soil stabilization plan. This plan component must specifically detail erosion and  
24 sediment control and stormwater runoff measures that provide runoff control equal  
25 to or greater than the protection provided by the standard two-day soil stabilization  
26 requirements of this section.

**20.51.420 Permanent Stormwater Management Systems**

Comment [w33]: PC approved changes March 22, 2012

- 28 (1) Exemptions. This section does not apply to any of the following projects, work, or  
29 activities (which does not necessarily exempt them from other stormwater related titles  
30 and/or standards that might otherwise apply; see WCC 20.51.040(6), WCC  
31 20.51.040(7) and WCC 20.80.630(3)) within the Lake Whatcom Watershed Overlay  
32 District:
  - 34 (a) Installations of, and/or repairs to, and/or replacements of, any of the following  
35 facilities:
    - 36 1. Below grade:
      - 37 i. Pipe,
      - 38 ii. Conduit,

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1           iii. Ductwork,
- 2           iv. Cabling and wiring (direct burial or conduit encased),
- 3       2. Above grade:
  - 4           i. Utility or light poles,
  - 5           ii. Communication and/or data transmission systems pedestals,
- 6       3. Below grade, at grade, and/or above grade appurtenances to any of the above
- 7           respective facilities.
- 8       (b) Roof replacements and/or conversions at the same, or less, surface area.
- 9           Conversions to metal roofs require coatings with inert non-leachable materials.
- 10       (c) Deck, porch, and/or other raised surfaces area replacements at the same, or less,
- 11           surface area.
- 12       (d) Land disturbing activities (per WCC 20.97 definition) of less than 5,000 square feet
- 13           in total area, excluding any impervious surface area work within the land area
- 14           disturbed.
- 15       (e) Projects, work, or activities that will create less than:
  - 16           1. 501 square feet of previously nonexistent impervious surface area and/or
  - 17           permeable pavement area (per WCC 20.97 definitions), and/or
  - 18           2. 1,501 square feet of replaced impervious surface area and/or replaced
  - 19           permeable pavement area (per WCC 20.97 definitions).
  - 20           ~~(f) Any new parcels created by a proposed subdivision or short subdivision (per WCC~~
  - 21           ~~21.10.020(32) definition) if the created parcel(s) is/are greater than 22,000 gross~~
  - 22           ~~square feet in area.~~
  - 23           ~~(g)~~ Maintenance (e.g., debris, moss, and/ or mildew removal) of existing impervious
  - 24           surface areas and/or permeable pavement areas. Pre-existing nonconforming
  - 25           impervious surfaces may be routinely maintained/repared.
  - 26           ~~(h)~~ If a legal nonconforming structures are destroyed, the nonconforming use
  - 27           may be reconstructed using the pre-existing footprint. Damage repairs (e.g., from
  - 28           fire, wind, falling trees or limbs, flooding) to existing impervious surface areas
  - 29           and/or permeable pavement areas within their same respective existing footprints.
  - 30           Expansion of nonconforming impervious surfaces shall be subject to this ordinance.
  - 31           (h) For a Single Family Dwelling that meets all of the following:
  - 32           1. To be located within the platted boundaries of, and in general belonging to, an
  - 33           incorporated homeowners association; and

**Comment [PJG34]:** Clarified language Natural Resource Committee May 7, 2013

**Comment [PJG35]:** Plats are not required to install stormwater bmp's for future development (see change to .420(2)(a)(3)), only a stormwater plan. Stormwater manual reference to 22,000 sf no longer applies.

**Formatted:** Indent: Left: 0.63", Hanging: 0.25"

EXHIBIT A-Whatcom County Code Proposed Chapter 20.51

2. Which association has a stormwater runoff management and phosphorus mitigation plan that provides at least the same level of overall protection from and/or treatment of phosphorus runoff to Lake Whatcom as would the application of WCC 20.51.420(2) to any of the individual parcels therein that may be developed; and

3. Ongoing implementation program, applicable to all newly developed parcels within that association's boundaries, as well as to the association as a whole; and

4. Which plan and program have been agreed to by a memorandum of agreement between Whatcom County and the Incorporated Homeowners Association; and

5. Permanent Best Management Practices shall follow the NPDES standards in WCC 20.80.630.

Formatted: Indent: Left: 0.56"

(2) Best Management Practices.

(a) Unless otherwise exempt per WCC 20.51.420(1), or unless a standard land use vesting determination concludes otherwise, all projects, work, or activities, including subdivisions, binding site plans, and non-exempt new short subdivision parcels, proposed to occur within the Lake Whatcom Watershed Overlay District shall incorporate presumptive BMPs and/or demonstrative BMPs, per WCC 20.51.420(2)(c) and/or WCC 20.51.420(2)(d), respectively, to:

(1) All project, work, or activity affected:

- i. Net land area disturbed (per WCC 20.97 definition, and/or
- ii. Newly created and/or replaced:
  - A. Net new impervious surface area (per WCC 20.97 definition), and/or
  - B. Net replaced impervious surface area (per WCC 20.97 definition), and/or
  - C. Net new permeable pavement area (per WCC 20.97 definition), and/or
  - D. Net replaced permeable pavement area (per WCC 20.97 definition), and/or

~~iii. The land area subdivided, and/or~~

Formatted: Indent: Left: 1.13"

(2) Existing off-parcel phosphorus-unmitigated areas and/or on-parcel phosphorus-unmitigated areas within the entire Lake Whatcom Watershed at a 2:1 ratio of phosphorus-unmitigated area to the corresponding project, work, or activity affected area(s) that WCC 20.51.420(2)(a)(1)(i) – (ii) outlines.



EXHIBIT A-Whatcom County Code Proposed Chapter 20.51

~~(3) The developable areas and infrastructure as required for long and short subdivision approval. A stormwater management plan for developable areas and required infrastructure, consistent with the 2012 Stormwater Management Manual for Western Washington is required prior to primarily plat approval. Installation of required BMPs for infrastructure is required prior to final plat approval.~~

Comment [PjG36]: May 21, Nat Resource Committee: stormwater systems for future development does NOT need to be installed prior to plat approval, BMP installation is necessary for road improvements and required infrastructure. A plan is required for both .

(b) The development stormwater runoff (per WCC 20.97 definition) phosphorus loading profile from each phosphorus-mitigated area noted in WCC 20.51.420(2)(a)(1) & (2) shall not exceed ~~by a factor of 1.25~~ the corresponding natural stormwater runoff (per WCC 20.97 definition) phosphorus loading profile from each respective phosphorus-mitigated area.

Comment [PjG37]: May 21, Nat Resource Committee removed. Changes the phosphorus loading to natural conditions in order to meet County and TMDL goals.

(c) Presumptive BMPs (per WCC 20.97 definition). Presumptive BMPs, which are combinable with each other and with demonstrative BMPs, follow:

1. ~~Full infiltration and downspout full infiltration. See the 2012 current Stormwater Management Manual for Western Washington (per WCC 20.97 definition) BMP T5.10A Volume III Section 3.1.1 and (per WCC 20.97 definition) Volume III Chapter III Section 3.3.9(A). Use of these BMPs may requires an engineered design (per WCC 20.97 definition).~~

Comment [PjG38]: BMP added by staff, full downspout infiltration

2. Full dispersion:

i. See current Stormwater Management Manual for Western Washington Volume V Chapter 5 BMP T5.30. This BMP might, but does not necessarily, require an engineered design. See ~~current the 2012~~ Stormwater Management Manual for Western Washington Volume V, Chapter 5, pages 5-30 through 5-38 for further design requirements and infeasibility criteria.

~~i. Chapter 3 page 3-1 to determine need for an engineered design.~~

~~ii. See current Stormwater Manual Volume III Appendix C paragraph 7.2.1. Use of this BMP requires an engineered design. If impervious surface areas exceed 10% of the site, those excess impervious surface areas shall not drain to the native vegetation area. The excess impervious surface areas are subject to the treatment and flow control requirements of WCC 20.51.420(2)(a)(1), and/or WCC 20.51.420(2)(a)2.i, and/or WCC 20.51.420(2)(a)2.iii, and/or WCC 20.51.420(2)(a)(3).~~

~~iii. See current Stormwater Manual Volume III Appendix C paragraph 7.2.2. Use of this BMP requires an engineered design.~~

~~3. Flow dispersion and infiltration. See current Stormwater Manual Volume III Appendix C paragraph 7.2.4. Use of this BMP requires an engineered design. This BMP, which is primarily used for road projects, is adaptable to residential projects where Type A Outwash Soils already exist, and/or are imported and established per the stated criteria.~~

Comment [PjG39]: Changes reference to 2012 Manual, Natural Resource Committee on 5/7/2013.

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

1 (d) Demonstrative BMPs (per WCC 20.97 definition). Demonstrative BMPs, which are  
 2 combinable with each other and with presumptive BMPs, use engineered designs  
 3 that, once constructed or installed, and presuming that system preservation  
 4 activities occur as prescribed by the design engineer, will satisfy ~~current the 2012~~  
 5 Stormwater Management Manual for Western Washington Minimum Requirements  
 6 numbers 3 ~~—8, and 10~~ through 9, disregarding any Minimum Requirement  
 7 applicability thresholds therein, while also conforming to at least one of the  
 8 following:

**Comment [PjG40]:** Changes reference to 2012 Manual, Natural Resource Committee on 5/7/2013.

- 9 1. The engineered design limits the estimated phosphorus loading in development  
 10 stormwater runoff to less than 0.1875 lb of P/acre/year. Engineered designs  
 11 shall cite and use only WSDOE-approved references for estimated phosphorus  
 12 loading information and criteria.
- 13 2. The monthly development stormwater runoff volume does not exceed the  
 14 monthly natural stormwater runoff volume of the project, work, or activity  
 15 affected areas, as determined by a WSDOE-approved continuous runoff model.
- 16 3. Development stormwater runoff does not occur

17 (3) System Recording, Protection, and Maintenance. A declaration of covenant shall be  
 18 recorded for each property where permanent stormwater BMPs exist. The covenant is  
 19 used to protect the stormwater management facilities from cover by structures or  
 20 impervious material, soil compaction, and damage by soil removal and grade alteration.  
 21 A draft of the proposed covenant must be reviewed and approved by Whatcom County  
 22 prior to recording. All required covenants must be recorded prior to final permit  
 23 issuance for the proposed project.

**Comment [PjG41]:** New subsection changes added by Natural Resource Committee on 5/7/2013. Changes would record the location of the stormwater facility, establish responsibility for maintenance, and protect the stormwater dispersion area – a requirement of the NPDES permit.

**Formatted:** Font: Verdana, 10 pt, Not Bold

**Formatted:** pp1, Indent: Left: 0", Hanging: 0.31", Adjust space between Latin and Asian text, Adjust space between Asian text and numbers

**Formatted:** Font: Verdana, 10 pt

**Formatted:** Indent: Left: 0.43", Space After: 0 pt, Line spacing: single, Outline numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + Tab after: 0.75" + Indent at: 0.75", Tab stops: 0.43", List tab + Not at 1"

**Formatted:** Font: Verdana, 10 pt

25 (a) Notice on Title: For all permanent stormwater facilities, the type of stormwater  
 26 system and location shall be recorded with the County Auditor real estate records in a  
 27 format similar to the recording documents in Whatcom County Development  
 28 Standards, Chapter 2, Section 221. The recording document provides notice to future  
 29 owners of the presence of stormwater system on the lot, and shall contain:

**Formatted:** Indent: Left: 0.8", No bullets or numbering

**Formatted:** Font: Verdana, 10 pt

31 (i) A site plan to scale, showing the location and descriptions of stormwater  
 32 facilities, treatment BMPs, terrain features, Protective Native Growth Areas, and  
 33 stormwater flowpaths.

34 (ii) Notice of the property owner's responsibility to retain, uphold, and protect  
 35 the devices, features, pathways, Protective Native Growth Areas, and operate  
 36 and maintain BMPs at the owner's expense.

37  
 38 (b) Protected Native Growth Area (PNGA): For projects that utilize dispersion for  
 39 their stormwater system, a Protected Native Growth Area covenant shall be required to  
 40 meet the following criteria:

**Formatted:** List Paragraph, Indent: Left: 0.25", Line spacing: Multiple 1.15 li, Outline numbered + Level: 2 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 0.75" + Tab after: 0.75" + Indent at: 0.75"

**Formatted:** Strikethrough

**Formatted:** Font: (Default) Verdana, 10 pt

**EXHIBIT A-Whatcom County Code Proposed Chapter 20.51**

- 1 (i) Include native plant species including, but not limited to, those on approved  
 2 lists provided by Whatcom County common to this region.
- 3 (ii) Be described in the recorded documents as "a Protected Native Growth Area  
 4 established for the purposes of dispersing and treating stormwater flows."
- 5 (iii) Retain all vegetation and trees within the PNGA at the time of permit  
 6 application aside from approved timber harvest activities and the removal of  
 7 hazardous and diseased trees. Hazard trees, (as defined in Chapter 20.97  
 8 WCC, are identified an evaluation and determination by an ISA licensed  
 9 arborist may be required.
- 10 (iv) The PNGA can include onsite critical areas and its buffer.
- 11 (v) Limit uses in the PNGA shall be limited to those specified in WCC 16.16.
- 12 (vi) Provide a Notice of Activity consistent with WCC 16.16.235, to remove trees  
 13 within a PNGA when a permit is not required by 20.51.420(1), trees may be  
 14 removed within a PNGA with a Notice of Activity consistent with 16.16.235  
 15 under the following circumstances:
- 16 1. Fire prevention methods when supported by the county fire marshal;  
 17 2. Hazard trees, as defined in Chapter 20.97 WCC, are identified (an  
 18 evaluation and determination by a licensed arborist may be required);  
 19 3. Encroachments where the trunk, branches, or roots would be, or are in  
 20 contact with main or accessory structures; or  
 21 4. Where installation and/or maintenance of roads or utilities would  
 22 unavoidably require removal or cutting through the root system.
- 23 **20.51.430 Forest Area Preservation.**
- 24 ~~For the intent and purpose of this chapter, the term "Forested Area" shall refer to the tree canopy and any native vegetation (as defined by the most current version of the Washington State Department of Ecology Stormwater Management Manual for Western Washington) that occurs within the boundaries of the tree canopy. (1) When a permit is not required by 20.51.420(1) tree canopy areas may be removed when limited to those canopy areas affected under the following circumstances:~~
- 25 ~~(1) Fire prevention methods when supported by the county fire marshal;~~
- 26 ~~(2) Hazard trees, as defined in Chapter 20.97 WCC, are identified (an evaluation and determination by a licensed arborist may be required);~~
- 27 ~~(3) Encroachments where the trunk, branches or roots would be, or are, in contact with main or accessory structures; or~~
- 28 ~~(4) Where installation and/or maintenance of roads or utilities would unavoidably require removal or cutting through the root system.~~

**Formatted:** Indent: Left: 1", Space After: 0 pt, Numbered + Level: 3 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 1.5" + Indent at: 1.63", Pattern: Clear, Tab stops: Not at 0.5"

**Formatted:** Strikethrough

**Formatted:** Default Paragraph Font, Font: (Default) +Body (Calibri), 11 pt

**Formatted:** Strikethrough

**Comment [PJG42]:** Language cleaned up based on Nat Resource Committee comments on 5/7/2013.

**Formatted:** Indent: Left: 1", Numbered + Level: 3 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 1.5" + Indent at: 1.63"

**Formatted:** Strikethrough

**Formatted:** Indent: Left: 1", Line spacing: single, Numbered + Level: 3 + Numbering Style: i, ii, iii, ... + Start at: 1 + Alignment: Right + Aligned at: 1.5" + Indent at: 1.63", Tab stops: Not at 0.5"

**Formatted:** Strikethrough

**Formatted:** Indent: Left: 0.94", Line spacing: Multiple 1.15 li, Outline numbered + Level: 7 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1.44" + Indent at: 1.69", Tab stops: Not at 0.5"

**Formatted:** Default Paragraph Font, Font: (Default) Times New Roman, 12 pt

**Formatted:** List Paragraph, Indent: Left: 0.94", Outline numbered + Level: 7 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 1.44" + Indent at: 1.69", Adjust space between Latin and Asian text, Adjust space between Asian text and numbers, Pattern: Clear (Background 1), Tab stops: Not at 0.5"

**Formatted:** Font: Verdana, 10 pt

**Formatted:** Indent: Left: 0.31", First line: 0"

**Comment [PJG43]:** Changes made at 5/7/2013 Natural Resource Committee. Forest Area Preservation is clarified as a Protective Native Growth Area, with applicable sections moved to 20.51.420 (3)(b)

**Formatted:** Normal, Line spacing: single, Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

**Formatted:** Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

**Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

**Chapter 20.71  
WATER RESOURCE PROTECTION OVERLAY DISTRICT\***

Sections:

- [20.71.010](#) Purpose.
- [20.71.020](#) Application.
- [20.71.021](#) Area and applicability.
- [20.71.050](#) Permitted uses.
- [20.71.100](#) Accessory uses.
- [20.71.150](#) Conditional uses.
- [20.71.200](#) Prohibited uses.
- [20.71.300](#) Open space and impervious surfaces.
- [20.71.350](#) Cluster subdivisions.
- [20.71.351](#) Cluster design standards.
- [20.71.352](#) Open space reserve area.
- [20.71.400](#) Building setback/buffer areas.
- [20.71.600](#) Development criteria.
- [20.71.601](#) Parking space dimensions.
- [20.71.602](#) Parking requirements.
- [20.71.603](#) Alternative surfacing methods.
- [20.71.604](#) Vehicular access.
- [20.71.700](#) Roads, curbs, gutters and sidewalks.

\*Prior legislation: Ord. 2008-035, which expired March 20, 2009, was formerly codified in this chapter.

**20.71.010 Purpose.**

The Water Resource Protection Overlay District is an overlay zone that is intended to impose additional controls to preserve and protect unique and important water resources within Whatcom County. This district is designed to protect the long-term viability of the ~~Lake Whatcom~~, Lake Samish and Lake Padden watersheds while creating a regulatory framework to address the needs of these watersheds that are not otherwise provided for in the underlying zone districts. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

**20.71.020 Application.**

(Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001).

**20.71.021 Area and applicability.**

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

(1) The Water Resource Protection Overlay District is an overlay zone that covers the entire geographic area of the Lake Whatcom, Lake Samish and Lake Padden watersheds within Whatcom County’s jurisdiction. For purposes of this title, the Lake Samish watershed shall consist of that portion of the Friday Creek subbasin of the Samish River watershed that lies within Whatcom County.

(2) This district may be expanded to include other areas through the annual zoning text amendment process.

(3) The ~~Lake Whatcom~~, Lake Samish and Lake Padden watersheds are also designated as stormwater special districts pursuant to WCC [20.80.635](#) and water resource special management areas pursuant to WCC [20.80.735](#).

(4) In the event that the provisions of this chapter conflict with the provisions of the Shoreline Management Program (WCC Title [23](#)), Chapter [16.16](#) WCC, Critical Areas, the Whatcom County Development Standards, the provisions of the underlying zoning district or other applicable county policies or regulations, then the most restrictive shall apply; provided, that the minimum setback provisions established in WCC [20.71.401](#) shall prevail. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.050 Permitted uses.**

All permitted uses in the underlying zone districts are permitted except as expressly prohibited, made conditional, or further conditioned by this chapter.

**.051** Private noncommercial greenhouses less than 250 square feet. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.100 Accessory uses.**

All accessory uses in the underlying zone districts are permitted except as expressly prohibited or made conditional, or further conditioned by this chapter. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.150 Conditional uses.**

All conditional uses in the underlying zone districts shall remain conditional uses unless expressly prohibited, made conditional, or further conditioned by this chapter. In addition, the following uses shall only be conditionally permitted:

**.151** On-site storage facilities for hazardous wastes associated with outright permitted uses or approved conditional uses, other than cottage industries as defined in WCC [20.71.215](#), subject to the most current

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

siting criteria under Chapter [173-303](#) WAC within the Rural, Rural Forestry, Commercial Forestry, Neighborhood Commercial and Resort Commercial Zone Districts only.

**.152** Retail or wholesale plant nurseries or greenhouses for storage, propagation and culture of plants, provided:

(1) Greenhouses shall not be larger than 1,000 square feet.

(2) Greenhouses and cultivated ground shall not be located within 250 feet of ~~Lake Whatcom~~, Lake Samish, Lake Padden or streams subject to the Shoreline Management Program; 200 feet from fish-bearing streams; or 150 feet from other streams and their tributaries that flow into ~~Lake Whatcom~~, Lake Samish or Lake Padden.

(3) A monitoring program has been established to ensure that chemical and pesticide quantities in stormwater runoff do not exceed state water quality standards. Complete control of drainage from the operation shall be in effect. Such runoff will be tested for pollutants bimonthly by a licensed water quality testing agency. All requirements will be met at the owner's expense.

(4) No person shall apply a commercial fertilizer, either liquid or granular, that is labeled as containing more than zero percent phosphorous or other compound containing phosphorous, such as phosphate; provided, that such fertilizers may be used for establishment of new vegetation in the first growing season.

**.185** Type I solid waste handling facilities, except:

(1) Moderate risk waste facilities; and

(2) Facilities in the Recreation and Open Space District. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-014 § 2, 2004; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.200 Prohibited uses.**

In addition to the uses prohibited in the underlying zone districts, the following uses are prohibited, except as per Chapter [20.83](#) WCC:

**.201** Dry cleaning establishments.

**.202** Gas stations, service stations, combustion engine repair garages and automotive wrecking yards.

**.203** Sod farming.

**.204** Aquaculture and mariculture projects.

**Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

- .205 Operation of fur farms.
- .206 Confinement feeding operations.
- .207 Asphalt and concrete batch plants.
- .208 Gravel bar scalping projects within the jurisdiction of the Shoreline Management Program.
- .209 Utilization of sewage sludge on land.
- .210 On-site treatment facilities for hazardous wastes.
- .211 Type I solid waste handling facilities, except those specified in WCC [20.71.185](#).
- .212 Type II and Type III solid waste handling facilities.
- .213 Golf courses.
- .214 Cemeteries.
- .215 Cottage industries that would require on-site hazardous waste storage facilities.
- .216 Surface mining outside of designated Mineral Resource Lands (MRL) Special Districts; provided, that surface mining, rock crushing, washing and sorting subject to the Forest Practices Act (Chapter [76.09](#) RCW) are permitted.
- .217 Major passenger intermodal terminals.
- .218 Freight railroad switching yards and terminals.
- .219 Agriculture, including animal husbandry, horticulture, viticulture, floriculture, and the cultivation of crops.
- .220 Animal hospitals and accessory kennels and stables.
- .221 Commercial kennels and stables. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-014 § 2, 2004; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

**20.71.300 Open space and impervious surfaces.**

**.301** Open space requirements shall be as follows:

- (1) For uses in the TC and NC Zones, at least 25 percent of the parcel shall be reserved as open space.

**Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

(2) For uses in the RC Zone, at least 40 percent of the parcel shall be reserved as open space.

(3) Open space areas shall be maintained in natural vegetation or landscaped per WCC [20.80.325](#).

(4) For properties within the jurisdiction of the Shoreline Management Program (WCC Title [23](#)), submerged lands and/or tidelands within the boundaries of any waterfront parcel that are located waterward of the ordinary high water mark shall not be used in open space calculations.

**.302** Impervious surface requirements shall be as follows:

(1) For uses in the UR, URM and RR Zone Districts, at least 80 percent of the lot or parcel shall be kept free of structures and impervious surfaces.

(2) For uses in the R Zone District, at least 90 percent of the lot or parcel shall be kept free of structures and impervious surfaces.

(3) Where subsection (1) or (2) of this section does not allow 2,500 square feet of total impervious surface area, 2,500 square feet shall be allowed.

(4) Two or more lots of record consolidated pursuant to the provisions of WCC [20.83.070](#) shall be treated as one undivided parcel for the purpose of calculating total allowable impervious surface. Where two or more lots or parcels are consolidated; are not subject to the provisions of WCC [20.83.070](#); and are not subject to a permanent restrictive covenant that precludes development of buildings, structures or other improvements not otherwise identified by said covenant, 4,000 square feet of impervious surface shall be allowed.

(5) Preexisting nonconforming impervious surfaces may be routinely maintained/repared or redeveloped; provided, that if 50 percent or greater of the preexisting nonconforming impervious area is to be redeveloped, then the applicable impervious surface limitations of subsections (1), (2) and (3) of this section shall apply. However, if a legal nonconforming structure is destroyed, the nonconforming use may be reconstructed using the pre-existing footprint. Expansion of nonconforming impervious surfaces shall be prohibited.

(6) A mobile home within an existing mobile home park may be replaced with a larger mobile home (not to exceed a maximum of 1,500 square feet), provided there is not an increase in the overall number of mobile homes in the park or any increase in other impervious surfaces beyond the new mobile home footprint.

(7) For properties within the jurisdiction of the Shoreline Management Program (WCC Title [23](#)), submerged lands and/or tidelands within the boundaries of any waterfront parcel that are located waterward of the ordinary high water mark shall not be used in impervious/pervious surface calculations.



## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

(8) Any portion of a roof overhang or other overhanging architectural feature which projects further than three feet from the footprint of a structure shall be calculated as impervious surface.

(9) Alternative surface methods described in WCC [20.71.603](#) may be used. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-079 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-063 § 1, 2001; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.350 Cluster subdivisions.**

The purpose of cluster subdivision is to provide a method of creating building lots with spatially efficient sizes. Clustering is intended to consolidate development and associated infrastructure, reduce development costs, and increase infrastructure efficiency. Clustering is also intended to help preserve open space and the character of areas, reduce total impervious surface area, and minimize development effects on critical areas and associated buffers, as defined in Chapter [16.16](#) WCC, and resource lands. Preservation of open space is thereby intended to reduce potential stormwater runoff and associated impacts while assuring protection of viable, undeveloped, and naturally vegetated corridors for wildlife habitat, protection of watersheds, preservation of critical areas, preservation of aesthetic values including view corridors, and preservation of trail and/or recreation areas. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-048 Exh. A, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.351 Cluster design standards.**

The creation of new building lots within Water Resource Protection Overlay Districts shall be subject to the following design standards:

(1) Cluster subdivisions shall be required for all land divisions resulting in lots less than five acres in size, with the exception of boundary line adjustments.

(2) A cluster subdivision shall include a permanent open space reserve area meeting the criteria established in WCC [20.71.352](#).

(3) The minimum cluster lot size requirements of the underlying zone district shall apply.

(4) The maximum number of building lots in a lot cluster shall be 10.

(5) Clusters containing two or more lots of less than one acre within a proposed development shall be separated by at least 80 feet.

(6) Clustered building lots may only be created through the subdivision, short subdivision or binding site plan process pursuant to WCC Title [21](#).

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

(7) Building lots shall be designed and located to be compatible with, and avoid disturbance of, critical areas or other valuable or unique natural resources or known archaeological sites, as well as physical constraints of the site.

(8) Building lots shall be arranged in a cluster/concentrated pattern.

(9) A cluster subdivision shall have no more than two common encroachments on existing county roads unless site constraints require additional road access. The arrangement of clustered building lots shall be designed to avoid development forms commonly known as linear, straight line or highway strip patterns.

(10) As applicable, interior streets shall be designed to allow future vehicular access to any portion of the reserve tract which may be divided into future building lots; provided, that the required permanent open space reserve area, pursuant to WCC [20.71.352](#), shall not be further subdivided. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-048 Exh. A, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002).

### **20.71.352 Open space reserve area.**

(1) For purposes of this title, an “open space reserve area” shall be defined as that portion of a subdivision or short subdivision set aside in accordance with this chapter, and permanently dedicated for active or passive recreation, critical area protection, natural resource or archaeological site preservation, wildlife habitat and/or visual enjoyment, and shall be consistent with the definition of “open space” pursuant to WCC [20.97.275](#).

(2) The open space reserve area shall be subject to the following provisions:

(a) The minimum open space reserve area shall be determined by the minimum cluster subdivision reserve area requirements of the underlying zone district.

(b) A permanent open space reserve area shall be protected using one of the following mechanisms:

(i) Placement in a separate nonbuilding tract owned in common by all lots within the subdivision; or

(ii) Covered by a protective easement or public or private land trust dedication which protects at least the minimum required cluster reserve area specified in the underlying zone district; or

(iii) Preserved through an appropriate permanent protective mechanism that provides the same level of permanent protection as subsection (2)(b)(i) of this section as determined by

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

the county zoning administrator or hearing examiner which applies to at least the minimum required cluster reserve area specified in the underlying zone district.

(c) The boundaries of the open space portion of the reserve area may be altered only if the county finds that in dedicating adjacent reserve areas it would further the objectives listed in WCC [20.71.350](#) by altering the reserve area and increasing the area of reserve proportionately on the adjacent land being subdivided so that there is no net reduction in open space reserve area.

(d) The purpose of the open space reserve area as defined in subsection (1) of this section shall be recorded on the face of the final plat or short plat.

(e) The remaining unused development density and/or impervious surface allowances remaining on the parcel containing the open space reserve area, based on the gross density of the parent parcel, may be assigned to that portion of the reserve tract not subject to the minimum area requirements of subsection (2)(b) of this section. The density shall be recorded on the face of the final plat or short plat. The development rights assigned to the reserve tract in accordance with this subsection may not be transferred if the pervious surface area associated with the reserve tract has been transferred to the other building lots within the subdivision.

(f) The requirements stated in subsections (2)(c) and (d) of this section shall be recorded as a restriction on the face of the final plat or short plat, and shall constitute an agreement between Whatcom County and the current/future owner(s) of record that shall run with the land. Said restriction(s) may be amended by mutual agreement between said parties after review for consistency and compliance with the official Whatcom County Zoning Ordinance, the Whatcom County Subdivision Ordinance, and the Whatcom County Comprehensive Plan.

(g) For cluster subdivisions approved after December 7, 1999, that portion of the reserve tract which is kept in pervious open space may be counted toward pervious surface area requirements for the building lots in the subdivision on a prorated basis. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2005-048 Exh. A, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002).

### **20.71.400 Building setback/buffer areas.**

**.401** Setbacks for all properties within the overlay district shall be as follows: Class I and Class II roads shall have a minimum setback of 30 feet; and Class III, IV and V roads shall have a minimum setback of 20 feet; provided, that the road right-of-way meets the minimum standard for road rights-of-way pursuant to the Whatcom County Development Standards.

**.402** Roof overhangs or other overhanging architectural features shall not project further than 18 inches into the side or rear yard setbacks. Such overhangs may extend three feet into the front yard setback;

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

however, in no case shall they extend more than one-half the depth of the front yard setback. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-062 § 1, 2001; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.600 Development criteria.**

(Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001).

### **20.71.601 Parking space dimensions.**

A standard parking space shall have the rectangular dimensions of 10 feet in width and 20 feet in length; provided, that for any parking area of six or more spaces, 50 percent of all spaces may have the rectangular dimensions of eight feet in width and 15 feet in length; and further provided, that these spaces are marked for use by compact automobiles. Except in single-family residential areas, all dimensions shall be exclusive of driveways, aisles and other circulation areas required under WCC [20.80.560](#) and [20.80.570](#). (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.602 Parking requirements.**

Parking shall conform to the requirements of WCC [20.80.500](#) through [20.80.590](#) unless otherwise specified in this section. Minimum parking requirements may be reduced through any of the following methods:

(1) A shared parking agreement has been filed with the county auditor establishing a shared parking lot for land uses with noncompeting hours of operation, or for multitenant retail and commercial facilities; provided, the parking lot is not located further than 700 feet from any of the uses it is intended to serve.

(a) The minimum required parking in shared facilities shall be based on the land use with the highest parking demand.

(b) Mixed use developments with similar operating hours may be required to submit a parking demand study to determine if parking can be combined.

(2) A 20 percent reduction may be approved if an establishment is located within 1,000 feet of any regularly scheduled bus stop.

(3) The zoning administrator determines that a reduced requirement will reduce overall impervious surfaces while maintaining consistency with this title. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1,

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.603 Alternative surfacing methods.**

Alternative surfaces including, but not limited to, bark or wood mulch, washed gravel, grid/lattice systems, permeable interlocking pavers, pervious concrete, porous asphalt, and other similar approved materials are encouraged. Alternative surfacing methods may be approved for fringe or overflow parking areas; emergency parking areas, private roads, fire lanes, road shoulders, bike paths, walkways, patios, driveways, and easement service roads in residential or commercial zones unless site constraints make use of such materials detrimental to water quality. Utilization of alternative surfacing methods shall be subject to review and approval by the Whatcom County public works department, the fire marshal and/or the county ADA coordinator for compliance with other applicable regulations and development standards. Surfaces shall be considered impervious surfaces under WCC [20.71.300](#) unless the following conditions are met:

(1) Bark, wood mulch, and washed gravel shall be designed and installed so that all rain water falling upon the alternative surface will be infiltrated directly beneath the alternative surface without generating surface runoff based on the one-year, 24-hour storm event.

(2) Other alternative surface methods shall be designed and installed in accordance with the guidelines in the 2005 Low Impact Development Technical Guidance Manual for Puget Sound or subsequent version, prepared by the Puget Sound Action Team (Publication No. PSAT 0503), as applicable. No pervious surface credit shall be given for projects utilizing an underdrain system. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-049 § 1, 2001; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.604 Vehicular access.**

Driveways and curb cuts shall be minimized along all arterial and collector roads. Each existing lot shall be allowed only one driveway or curb cut; adjacent lots are encouraged to share access points. In new developments, lots or leased sites shall be oriented toward internal driveways, parking areas, or roads with limited access to arterial or collector roads. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.71.700 Roads, curbs, gutters and sidewalks.**

The intent of this section is to reduce impervious surfaces and stormwater runoff. Innovative street sections, which do not compromise public safety, shall be encouraged in the watershed. Narrow streets and reduced sidewalk standards that satisfy pedestrian and vehicular circulation requirements may be implemented with the approval of the Whatcom County public works department. Unless specifically

## Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735

required, roads shall not be wider than the minimum applicable standard. A rural road standard may be approved by the Whatcom County public works department for urban density residential areas where the developer provides adequate off-street parking and pedestrian walkways. (Ord. 2009-009 Exh. A, 2009; Ord. 2005-085 § 1, 2005; Ord. 2004-007 § 1, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 99-086, 1999).

### **20.80.635 Stormwater special districts.**

(1) Whatcom County shall establish the following geographical areas as stormwater special districts:

(a) Drayton Harbor watershed.

~~(b) Lake Whatcom watershed.~~

~~(e)-(b)~~ Lake Samish watershed.

~~(d)-(c)~~ Birch Bay watershed.

~~(e)-(d)~~ Lake Padden watershed.

(2) Requirements for these areas are contained in WCC [20.80.636](#) and in the Whatcom County Development Standards, Chapter 2. (Ord. 2009-009 Exh. B, 2009; Ord. 2008-035 Exh. A, 2008; Ord. 2005-030 § 1 Exh. A, 2005; Ord. 2004-051 Exh. A, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002).

### **20.80.636 Stormwater special district requirements.**

In areas designated as stormwater special districts (per WCC [20.80.635](#)), permanent on-site stormwater quality and quantity facilities shall be required on all lots less than five acres in size for projects that meet either of the following criteria:

(1) New construction or remodels that increase impervious surfaces by more than 500 square feet; or

(2) Renovation projects where the estimated cost of the work exceeds 50 percent of the assessed value of the existing structure. Interior remodels, nonpolluting roof replacements, house maintenance and energy upgrades shall be exempt from this requirement.

If stormwater quality and quantity facilities are required based on either of these criteria, the provisions of the Whatcom County Development Standards, Chapter 2, Section 221, shall apply to the entire property, unless it can be demonstrated that off-site facilities would provide better treatment, or unless common detention and water quality facilities meeting the standards of the 1996 Whatcom County Development Standards or the 1992 Department of Ecology Stormwater Management Manual for the Puget Sound

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

Basin (or more current versions) have been approved as part of a comprehensive stormwater management plan for that subdivision, binding site plan, short subdivision, or major development approval. (Ord. 2009-009 Exh. B, 2009; Ord. 2005-030 § 1 Exh. A, 2005; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-034, 2002; Ord. 2001-021 § 1, 2001; Ord. 2000-066 § 1, 2000).

### **20.80.735 Water resource special management areas.**

The purpose of a water resource special management area is to establish a more stringent standard for clearing activity in highly valued water resource areas, environmentally sensitive areas, or areas where natural conditions are so unstable that clearing activity in the areas can result in hazardous conditions. Implementation of best management practices, including phased clearing, tree retention and seasonal clearing limitations, is intended to limit the amount of exposed soils on site that are susceptible to erosion at any one time, thereby improving site stability during development and reducing potential for transport of dissolved pollutants and sediments off site. Preservation of existing trees on site also reduces the quantity and maintains the quality of stormwater leaving a site during and after development activities by encouraging interception, infiltration and evapotranspiration of rainfall and surface runoff.

Whatcom County shall establish the following geographic areas as water resource special management areas:

- ~~Lake Whatcom watershed;~~
- Drayton Harbor watershed;
- Lake Padden watershed;
- Lake Samish watershed; and
- Birch Bay watershed.

(1) Water Resource Special Management Area Review Thresholds. County review and approval shall be required for clearing activities which exceed the following thresholds. If the clearing activity does not meet the threshold criteria, county review is not required. However, the owner is still subject to, and must comply with, the minimum requirements established in this chapter and in the Whatcom County Development Standards.

- (a) ~~Lake Whatcom~~, Lake Samish and Lake Padden Watersheds. County review and approval shall be required for all clearing activities associated with a fill and grade permit, building permit or other

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

development proposal. Clearing activities which are not associated with a development permit shall require county review if they are:

(i) Five thousand square feet or greater during the dry season, June 1st through September 30th; or

(ii) Five hundred square feet or greater during the wet season, October 1st through May 31st.

(2) Within water resource special management areas, clearing activity must conform to the following conditions:

(a) Temporary erosion and sediment control shall be installed and inspected prior to any clearing activity. The technical administrator shall conduct periodic inspections to ensure the integrity of temporary erosion and sediment controls. Temporary erosion and sediment control measures include, but are not limited to, installation of silt fencing, installation of check dams, covering of excavation piles, and mulching of exposed soils, as specified in the Whatcom County Development Standards.

(b) Phased Clearing. Construction activities and clearing activities shall be phased to limit the amount of exposed soil that occurs at any one time, if determined to be appropriate by the technical administrator, based on site characteristics or constraints including, but not limited to, slopes, proximity to shorelines and wetlands. A phased clearing plan may be required. A phased clearing plan, if required, shall be submitted for review and approval by the technical administrator prior to any clearing activity and shall contain a detailed construction schedule or timeline.

(c) Soil Stabilization. All disturbed areas shall be provided with soil stabilization within two days of the time of disturbance. The technical administrator may approve an exemption to this requirement when a tree canopy area retention plan includes a soil stabilization plan. This plan component must specifically detail erosion and sediment control and stormwater runoff measures that provide runoff control equal to or greater than the protection provided by the standard two-day soil stabilization requirements of this section.

(d) Tree Canopy Area Retention. In the ~~Lake Whatcom~~, Lake Samish and Lake Padden watersheds, in addition to compliance with all other requirements of this title and other titles of the Whatcom County Code, clearing activities on any lot or parcel, with the exception of nonconversion forest practices occurring on lands platted after January 1, 1960, shall comply with the following provisions:

(i) Existing tree canopy areas, as defined by the dripline of the tree(s), may be removed for purposes of a building site, driveways, parking areas, and areas to be landscaped, but such



## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

areas shall not exceed a cumulative total of 5,000 square feet or 35 percent of the existing tree canopy area, whichever is greater.

(ii) The following criteria shall be used to determine which tree canopy areas are to be prioritized for retention:

- (A) Stands of mature native trees;
- (B) Trees on sensitive slopes, on lands classified as having landslide hazards, or high erosion hazards, as defined under the critical areas ordinance;
- (C) Trees within critical areas or their associated setback and/or buffer areas as defined under WCC Title [16](#) or [23](#); or
- (D) Trees with significant habitat value as identified by a qualified wildlife biologist or by the technical administrator, per WCC Title [16](#).

(iii) Existing trees and vegetation may be used to meet all or part of the landscaping requirements of this title.

(iv) The county shall require that tree canopy areas to be retained are identified on a site plan and clearly flagged, or delineated, on the site. A tree canopy area retention plan must accompany a project or clearing permit application and be approved by the technical administrator before clearing activity takes place. The plan shall contain the following components:

- (A) A scaled drawing identifying the following:
  1. North arrow;
  2. Property boundaries;
  3. Existing structures;
  4. Site access;
  5. Tree canopy areas to be removed;
  6. The outer dripline of tree canopy areas to be retained;
  7. Critical areas including, but not limited to, slopes, wetlands, and habitat conservation areas;

**Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

8. Protection measures to be utilized for areas that will be undisturbed; and

9. Areas to be replanted pursuant to subsection (2)(d)(vii) of this section;

(B) A planting schedule that indicates the time frame for replanting of trees as applicable; and

(C) Provisions for maintenance and monitoring.

(v) Prior to any clearing activity or development activity, any tree canopy area designated for retention shall be delineated by temporary fencing, tape, or other indicators around the outer dripline of the trees. Temporary fencing, tape, or other indicators shall be clearly visible and shall be maintained for the duration of the proposed clearing or development activity. Any tree canopy areas designated for retention shall be field verified by the technical administrator before clearing activities begin. Trees within canopy areas designated for retention shall not be damaged by clearing, excavation, ground surface level changes, soil compaction, or any other activities that may cause damage to roots or trunks. Machinery, impervious surfaces, fill and storage of construction materials shall be kept outside of the dripline of the tree canopy areas designated for retention.

(vi) Tree canopy areas may be removed when limited to those canopy areas affected under the following circumstances:

(A) Fire prevention methods when supported by the county fire marshal;

(B) Hazard trees, as defined in Chapter [20.97](#) WCC, are identified (an evaluation and determination by a licensed arborist or forester may be required);

(C) Encroachments where the trunk, branches or roots would be, or are, in contact with main or accessory structures; or

(D) Where installation and/or maintenance of roads or utilities would unavoidably require removal or cutting through the root system.

(vii) In the event that tree canopy areas in excess of the applicable threshold must be removed to facilitate reasonable use of the site, or to eliminate hazard trees, not less than two replacement trees shall be planted for every tree removed. Replacement trees shall:

(A) Be of the same, or similar, native species as those trees removed from site;

(B) Be planted to re-establish tree clusters where they previously existed, or to enhance protected tree clusters;

**Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

(C) Be planted in locations appropriate to the species' growth habitat and horticultural requirements; and

(D) Be located away from areas where damage is likely.

(viii) If any trees within canopy areas designated for retention are damaged or destroyed through the fault of the applicant, agent or successor, the applicant, their agent or successor shall restore the site pursuant to a restoration plan approved by the county.

(ix) The county may require a bond or other security in an amount not to exceed 125 percent of the merchantable timber to guarantee retention of existing trees within designated canopy areas during construction. In the event of a dispute between the landowner and the county over the established value, an assessment will be made by a professional forester or arborist whose selection will be made by mutual agreement between the county and the landowner. The fee for the services of the professional forester or arborist shall be paid by the landowner or responsible party. In the event any trees designated to be retained are removed, the county shall require that sufficient trees be re-planted to replace those previously in existence. In the event that replanting does not occur, the county may enforce upon any bond posted. Each tree removed or destroyed shall constitute a separate violation.

(e) Seasonal Clearing Activity Limitations. In the ~~Lake Whatcom~~, Lake Samish and Lake Padden watersheds, clearing activity, as defined in WCC [20.97.054](#), that will result in exposed soils exceeding 500 square feet shall not be permitted from October 1st through May 31st; provided, that:

(i) In addition to the clearing activities exempted under WCC [20.80.733](#), the zoning administrator may approve an exemption to this requirement for the following activities:

(A) Routine maintenance and repair of erosion and sediment control measures;

(B) Activities located at or waterward of the ordinary high water mark subject to state, federal, and/or local (per Chapter [16.16](#) WCC and/or WCC Title [23](#)) conditions of approval requiring commencement of clearing activity during the wet season, as defined in subsection (1)(a)(ii) of this section, for purposes of minimizing surface water disturbance and site inundation by high water or wave action;

(C) Activities necessary to address an emergency that presents an unanticipated and imminent threat to public health, safety or the environment that requires immediate action within a time too short to allow full compliance with this section. Upon abatement of the emergency situation, the clearing activity shall be reviewed for consistency with this chapter and may be subject to additional permit requirements; provided, that the

## **Exhibit B – Removal of “Lake Whatcom watershed” reference in Whatcom County Code Sections 20.71, 20.80.635, and 20.80.735**

applicant shall make a reasonable attempt to contact the zoning administrator prior to the activity. When prior notice is not feasible, notification of the action shall be submitted to the zoning administrator as soon as the emergency is addressed and no later than two business days following such action. Emergency construction does not include development of new permanent protective structures where none previously existed.

(ii) To ensure compliance with subsection (2)(e) of this section, Whatcom County planning and development services shall not issue development permits requiring more than 500 square feet of land disturbance located within the ~~Lake Whatcom~~, Lake Samish or Lake Padden watersheds within two weeks prior to the watershed seasonal closure on October 1st.

(iii) Soil disturbance associated with an exempt clearing activity shall be minimized to the maximum extent practicable. The zoning administrator shall have the authority to condition an exempt activity to ensure that temporary erosion and sediment control measures will be implemented.

(iv) An exemption from the seasonal land clearing requirements of this section does not grant authorization for any work to be done in a manner that does not comply with other provisions of this chapter or other applicable development regulations.

(f) One Hundred Fifty Percent Violation Fines. When a violation occurs in an area designated as a water resource special management area the total fine assessment shall be increased to 150 percent of the standard penalty as provided for in Chapter [20.94](#) WCC, Enforcement and Penalties. (Ord. 2010-006 Exh. A, 2010; Ord. 2010-001 Exh. A, 2010; 2009-056 Exh. A, 2009; Ord. 2009-009 Exh. B, 2009; Ord. 2005-074 § 1, 2005; Ord. 2005-061 Exh. A, 2005; Ord. 2005-032 Exh. A, 2005; Ord. 2005-030 § 1 Exh. A, 2005; Ord. 2004-051 Exh. A, 2004; Ord. 2003-049 § 1, 2003; Ord. 2003-032 Exh. A, 2003; Ord. 2002-075, 2002; Ord. 2002-053, 2002; Ord. 2002-034, 2002).

## **EXHIBIT C-Proposed definitions for WCC 20.97**

**Current Stormwater Manual**- The Washington State Department of Ecology (WSDOE) Stormwater Management Manual for Western Washington edition that is in effect on the date that the County receives a complete application for the project, work, or activity.

**Demonstrative BMPs**- Those BMPs that do not otherwise qualify as presumptive.

**Development stormwater**- Stormwater that results from non-native vegetated areas.

**Development runoff**- Runoff that results from non-native vegetated areas.

**Development stormwater runoff**- Stormwater runoff that originates from non-native vegetated areas.

**Engineered design**- A design performed, and/or supervised, by a Washington State licensed professional engineer.

**Forested Area** – The area encompassed by the tree canopy and any native vegetation that occurs within the boundaries of the tree canopy.

**Hazard Tree** – Any tree that is susceptible to immediate fall due to its condition (damaged, diseased, or dead) or other factors, and which because of its location is at risk of damaging permanent physical improvements to property or causing personal injury.

**Interflow**- The portion of precipitation that infiltrates into the soil and moves laterally through the upper soil horizons until intercepted by a stream channel or until it returns to the surface, e.g., in a roadside ditch, a wetland, a spring, or a seep. Interflow is a function of the soil system depth, permeability, and water-holding capacity.

**Land disturbing activity**- Activity that results in a movement of earth or a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling, and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered a land disturbing activity. Vegetation maintenance practices are not considered land-disturbing activity.

**May**- Permissive action.

**Native Vegetation** – Vegetation comprised of plant species, other than noxious weeds, that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been

## **EXHIBIT C-Proposed definitions for WCC 20.97**

expected to naturally occur on the site. Examples include trees such as Douglas Fir, Western Hemlock, Western Red Cedar, Alder, Big-leaf Maple, and Vine Maple; shrubs such as willow, elderberry, salmonberry and salal; and herbaceous plants such as sword fern, foam flower, and fire weed. (From Department of Ecology Stormwater Manual)

**Natural runoff**- Runoff that originates from native vegetated areas.

**Natural stormwater**- Stormwater that originates from native vegetated areas.

**Natural stormwater runoff**- Stormwater runoff that originates from native vegetated areas.

**Net land area disturbed**- The quantity of disturbed native vegetated land area minus the quantity of any non-native vegetated land area converted to native vegetation by a proposed project, work, or activity.

**Net new impervious surface area**- The quantity of new minus the quantity of any existing impervious surface area converted to native vegetation by a proposed project, work, or activity.

**Net new permeable pavement areas**- The quantity of new permeable pavement area minus the quantity of any existing permeable pavement area converted to native vegetation by a proposed project, work, or activity.

**Net replaced impervious surface area**- The quantity of replaced impervious surface area minus the quantity of any existing impervious surface area converted to native vegetation by a proposed project, work, or activity.

**Net replaced permeable pavement areas**- The quantity of replaced permeable pavement area minus the quantity of any existing permeable pavement area converted to native vegetation by a proposed project, work, or activity.

**Permeable pavement**- Pervious concrete, porous asphalt, permeable pavers, or other forms of pervious or porous paving material intended to allow passage of water through the pavement section. It often includes an aggregate base that provides structural support and acts as a stormwater reservoir.

**Phosphorus-mitigated**- Areas where the development stormwater runoff phosphorus loading profile does not exceed the corresponding natural stormwater runoff phosphorus loading profile.

## **EXHIBIT C-Proposed definitions for WCC 20.97**

**Phosphorus neutral**- Areas where the development stormwater runoff phosphorus loading profile does not exceed the natural stormwater runoff phosphorus loading profile from that area.

**Phosphorus-unmitigated**- Areas where the development stormwater runoff phosphorus loading profile exceeds the corresponding natural stormwater runoff phosphorus loading profile.

**Presumptive BMPs**- Those BMPs that will require no additional development stormwater runoff flow control or treatment per current Stormwater Manual declaration once physically established in compliance with all current Stormwater Manual criteria.

**Replaced impervious surface** – For structures, the removal and replacement of impervious surfaces down to the foundation. For other impervious surfaces, the removal down to bare soil or base course and replacement. (From ~~Draft~~ 2012 DOE Stormwater Manual)

**Replaced impervious surface area**- For structures, the removal and replacement of impervious surfaces down to the foundation. For other impervious surfaces, the removal down to bare soil or base course and replacement.

**Replaced permeable pavement area**- The removal and replacement of permeable pavement areas down to bare soil or base course and replacement.

**Runoff**- The portion of precipitation that does not evaporate or naturally percolate into the ground, but flows via one or more of the following means:

- surface or overland flow,
- interflow,
- shallow ground water,  
into one or more of the following:
  - stormwater drainage facilities,
  - defined surface waterbodies (e.g., rivers, streams, creeks, sloughs, ponds, lakes),
  - springs,
  - seeps,
  - wetlands

**Shall**- Mandatory action.

**Should**- Recommended action, but not mandatory or required.

## **EXHIBIT C-Proposed definitions for WCC 20.97**

**Stormwater**- The portion of precipitation that does not evaporate or naturally percolate into the ground, but flows via one or more of the following means:

- surface or overland flow,
- interflow,
- pipes and other features of a stormwater drainage system,  
into one or more of the following:
- defined surface waterbodies (e.g., rivers, streams, creeks, sloughs, ponds, lakes),
- constructed infiltration facilities.

**Stormwater runoff**- The portion of precipitation that does not evaporate or naturally percolate into the ground, but flows via one or more of the following means:

- surface or overland flow,
- interflow,
- shallow ground water,
- pipes and other features of a stormwater drainage system,  
into one or more of the following:
- defined surface waterbodies (e.g., rivers, streams, creeks, sloughs, ponds, lakes),
- springs,
- seeps,
- wetlands.



# Phosphorus Neutral Stormwater BMP Cost Estimates for Small Lots

County Council has asked staff to provide design and cost estimates for stormwater systems on parcels smaller than 10,000 ft<sup>2</sup>. Staff from the County, City, and Conservation District framed up an approach, and the Engineering Services Division has drawn up detailed designs and review sheets to facilitate the review.

Private engineering firms (Jones Engineers, Wilson Engineering, 2020 Engineering, Freeland & Associates, RH2 Engineering) have volunteered their time to evaluate the proposed designs and provide budget level cost estimates for each of the four phosphorus neutral designs, and one design that meets the existing NPDES stormwater standard. Table 1 is the cost to design and build the five different stormwater systems reported as an average of the estimates provided by the private engineering community.

These estimates will help inform County Council's decision to on whether or not to exempt small lots from the proposed new development phosphorus neutral ordinance that would apply within the County's portion of the Watershed.

Table 1.

No:	Stormwater System					Landscaping, \$/SF	
	1	2A	2B	3	4	Min	Max
<b>Description:</b>	<b>Current Standard<sup>1</sup></b>	Zero Runoff		Matched Runoff	Treated Runoff		
<b>Phosphorus Neutral:</b>	<b>NO</b>	<b>YES</b>					
<b>Average Cost:</b>	<b>\$ 9,220.00</b>	<b>\$29,080.00</b>	<b>\$20,040.00</b>	<b>\$19,920.00</b>	<b>\$17,300.00</b>	<b>\$ 1.82</b>	<b>\$ 4.92</b>
<b>System Cost as % of average home Value<sup>2</sup>:</b>	<b>3%</b>	<b>8%</b>	<b>6%</b>	<b>5%</b>	<b>5%</b>	<b>Na</b>	<b>Na</b>

(1) The NPDES 2012 WSDOE SWMMWW Minimum Requirement No 5 applies

(2) \$363,450: 2013 average assessed value of a home on a 10,000ft<sup>2</sup> lot in Sudden Valley

**Lot Description:** Sudden Valley D10 L11

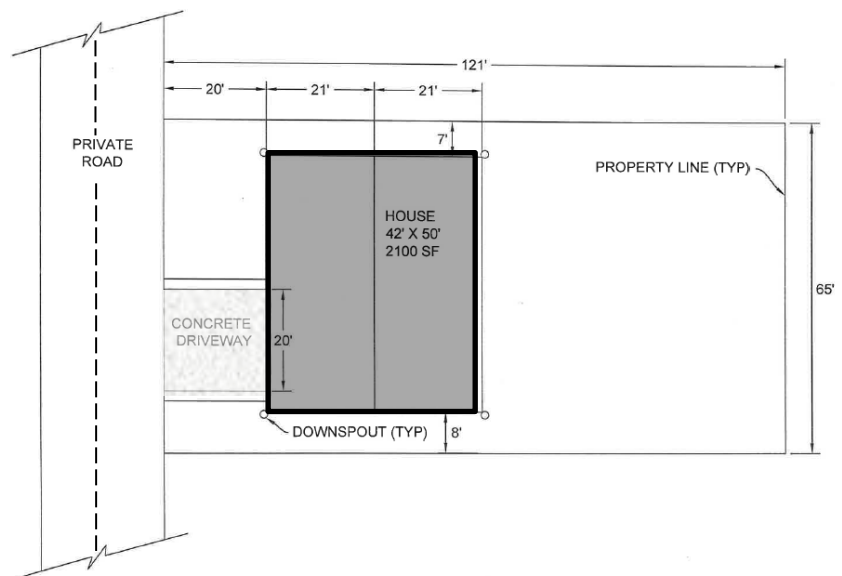
Land area: 7,865 SF

Average slope: 40%

Roof Area: 2,100 SF

Driveway area: 400 SF

Lawn area: 0 SF



## Exhibit D - County Council Natural Resource Discussion May 21, 2013

The respective cost estimate for each individual stormwater system design reflect:

- "Budget level" accuracy (i.e., +/- 15%), and
  
- All costs, including those for:
  - Geotechnical engineer or equivalent consulting services for site evaluations and corresponding report preparation (i.e., for sites with steep slopes and/or landslide hazard areas), and
  
  - Engineered design document preparation (including but not limited to, site visits, alternatives analysis, and necessary modeling (i.e., for System Nos 2B, 3, and 4), as if you were designing the corresponding system for a client), and
  
  - *Stormwater Site Plan* (per 2012 WSDOE SWMMWW definition) preparation, and
  
  - Construction costs (labor and material).

**EXHIBIT E - CODE AMENDMENTS TO WCC 20.51 FOR  
NATURAL RESOURCE COMMITTEE DISCUSSION MAY 21, 2013**

Formatted: Font: Verdana

Formatted: Font: Verdana

Formatted: Font: Verdana

**CHANGE 1**

Clarifies the requirements for Stormwater installation of BMP's on Plats creating parcels < 22,000 sqft, based on comments at 5/7/2013 Natural Resource Committee.

(2) Best Management Practices.

(a) Unless otherwise exempt per WCC 20.51.420(1), or unless a standard land use vesting determination concludes otherwise, all projects, work, or activities, including subdivisions, binding site plans, and non-exempt new short subdivision parcels, proposed to occur within the Lake Whatcom Watershed Overlay District shall incorporate presumptive BMPs and/or demonstrative BMPs, per WCC 20.51.420(2)(c) and/or WCC 20.51.420(2)(d), respectively, to:

(1) All project, work, or activity affected:

- i. Net land area disturbed (per WCC 20.97 definition, and/or
- ii. Newly created and/or replaced:
  - A. Net new impervious surface area (per WCC 20.97 definition), and/or
  - B. Net replaced impervious surface area (per WCC 20.97 definition), and/or
  - C. Net new permeable pavement area (per WCC 20.97 definition), and/orD. Net replaced permeable pavement area (per WCC 20.97 definition), and/or

~~iii. (2) The developable areas and infrastructure as required for long and short subdivision approval. Installation of stormwater BMPs according to stormwater management plan is required prior to final plat approval, and/or~~

**New Exemption in WCC 20.51.420(1)**

(K) Projects, work, or activity that is within the planned developed land area of plats approved according to WCC 20.51.420(2)(a)(3) that have phosphorus neutral stormwater community systems

**CHANGE 2**

Changes the phosphorus loading factor to 1 in order to meet County and TMDL goals. Currently written it is 25% above the natural loading conditions, which makes it difficult to utilize the prescriptive design standards for full dispersion and infiltration.

• **Changes to meet phosphorus neutral goal**

Exhibit A, Page 14, line 17-

20.51.420(2)(b) The development stormwater runoff (per WCC 20.97 definition) phosphorus loading profile from each phosphorus-mitigated area noted in WCC 20.51.420(2)(a)(1) & (2) shall not exceed ~~by a factor of 1.25~~ the corresponding natural stormwater runoff (per WCC 20.97 definition) phosphorus loading profile from each respective phosphorus-mitigated area.

- **Removing small lots from the phosphorus Neutral Standard**

**CHANGE 3**

This change exempts small lots below a certain size to be from meeting the Phosphorus neutral standard

Within 20.51.030 Area and Applicability,  
“(1) The Lake Whatcom Watershed Overlay District is an overlay zone that covers the entire geographic area of the Lake Whatcom watershed within Whatcom County’s jurisdiction, and applies to all land disturbing or conversion projects, work or activities within the overlay zone, for parcels that are greater than **X,XXX** square feet. For parcels less than **X,XXX** square feet, any proposed project shall follow the applicable NPDES standards in WCC 20.630 and in 20.71 Water Resource Protection Overlay, WCC 20.80.635 Stormwater Special Districts, and WCC 20.80.735 Water Resource Special Management Areas.”