

DRAFT

1 **Chapter 21.24**
2 **DEVELOPMENT STANDARDS – CRITICAL AREAS**

3
4 Sections:

- 5 **21.24.010 Purpose.**
6 **21.24.020 Applicability.**
7 **21.24.030 Critical area maps and inventories.**
8 **21.24.040 Complete exemptions.**
9 **21.24.050 Limited exemptions.**
10 **21.24.060 Public agency and utility critical areas exceptions.**
11 **21.24.070 Reasonable use exceptions.**
12 **21.24.080 Subdivisions and density calculations within critical areas.**
13 **21.24.090 Disclosure and notice on title.**
14 **21.24.100 Critical area determination.**
15 **21.24.110 Critical areas report requirement.**
16 **21.24.120 Mitigation requirements.**
17 **21.24.140 Critical area markers and signs.**
18 **21.24.150 Native growth protection areas and designations on site plans.**
19 **21.24.200 Critical aquifer recharge areas – Designation.**
20 **21.24.210 Critical aquifer recharge areas – Development standards.**
21 **21.24.230 Critical aquifer recharge areas – Permitted alterations.**
22 **21.24.240 Critical aquifer recharge areas – Critical areas report additional requirements.**
23 **21.24.350 Frequently flooded areas - Designation.**
24 **21.24.360 Frequently flooded areas – Development standards.**
25 **21.24.370 Frequently flooded areas – Permitted alterations.**
26 **21.24.380 Frequently flooded areas – Critical areas report additional requirements.**

27
28
29 **21.24.010 Purpose.**

- 30 (1) Introduction. The purpose of this chapter is to ~~implement~~ designate and classify ecologically
31 critical areas, to protect these areas and their functions and values, and to supplement the
32 development regulations contained within the Woodinville Municipal Code through best
33 available science and additional controls as required by the Growth Management Act.
34 Additionally, this chapter is intended to encourage development that meets the goals and
35 policies of the ~~Washington State Environmental Policy Act, Chapter 43.21C RCW, and the~~
36 City of Woodinville Comprehensive Plan ~~which call for protection of the natural environment~~
37 ~~and the public health and safety by:~~ These goals include:
38 (a) Goal E-1: To preserve and enhance aquatic and wildlife habitat.
39 (b) Goal E-2: To protect the public from natural hazards resulting from disturbance of the
40 environment.
41 (c) Goal E-3: To protect and improve water quality.
42 (d) Goal E-5: To promote the preservation of Woodinville's Northwest woodland
43 character.
44 ~~(1) Including the best available science requirements pursuant to the Washington State~~
45 ~~Growth Management Act and giving special consideration to anadromous fish when~~
46 ~~developing the critical areas regulations;~~
47 ~~(2) Establishing development standards to protect defined critical areas;~~
48 3) (2) Scope. Critical areas include critical aquifer recharge areas, geologically hazardous area,
49 wetlands, streams, frequent flood areas, and fish and wildlife habitat conservation areas.
50 The City of Woodinville recognizes that critical areas provide a variety of valuable and
51 beneficial biological and environmental functions that benefits the city and its residents, but

Style Definition: Normal: Space After: 0 pt, Line spacing: single

Commented [SC1]: This section was updated based on recommendations from the Gap Analysis. The purpose section is reoriented to provide a, the connection to the City's Comprehensive Plan, and GMA.

Commented [SC2]: Under this Intent section, the reader is introduced to types of critical areas regulated in the City and the importance of regulating critical areas. Where possible, language was consolidated to reduce redundancy.

The following deleted items were moved as follows:
 -(7) was consolidated with (b)
 -(8) was consolidated with (d). The currently used language by state agencies broadly at preventing cumulative adverse impact, which may include mitigation under the umbrella in addition to other measures.
 -(9) was consolidated with (d)
 -(10) was consolidated with (d). Measuring quality/quantity is not necessarily a goal, but it is an implementation measure required in this CAO
 -(11) was consolidated with (g). Staff did not believe it was necessary to include the language related to the public trust as to navigable waters as a separate item. Additionally, the SMP provides additional protections to navigable waters.

DRAFT

1 [that some critical areas may pose a threat to public safety and property. The standards](#)
 2 [established in this chapter are intended to protect critical areas while providing property](#)
 3 [owners with reasonable use of their property. This chapter seeks to:](#)

- 4 (a) Protecting members of the public and public resources and facilities from injury, loss
 5 of life, property damage or financial loss due to flooding, erosion, landslides,
 6 seismic events, soil subsidence or steep slope failures;
- 7 (4b) Maintaining [and protecting](#) healthy, functioning ecosystems through the protection
 8 of unique, fragile, and valuable elements of the environment, including ground and
 9 surface waters, wetlands, and fish and wildlife and their habitats, and to conserve
 10 the biodiversity of plant and animal species;
- 11 (5c) Directing activities not dependent on critical areas resources to less ecologically
 12 sensitive areas and mitigating unavoidable impacts to critical areas by regulating
 13 alterations in and adjacent to critical areas;
- 14 (6d) Preventing cumulative adverse environmental impact to water quality, [and](#)
 15 [availability, net loss of](#) wetlands, [streams, lakes,](#) fish and wildlife habitat, and ~~the~~
 16 ~~overall net loss of wetlands,~~ frequently flooded areas, and habitat conservation
 17 areas;
- 18 ~~(7) Protecting unique, fragile and valuable elements of the environment including, but not~~
 19 ~~limited to, wildlife and its habitat;~~
- 20 ~~(8) Requiring mitigation of unavoidable impacts on environmentally sensitive areas by~~
 21 ~~regulating alterations in or near critical areas;~~
- 22 ~~(9) Preventing cumulative adverse environmental impacts on water availability, water~~
 23 ~~quality, wetlands and streams;~~
- 24 ~~(10) Measuring the quantity and quality of wetland and stream resources and preventing~~
 25 ~~overall net loss of wetland and stream functions;~~
- 26 ~~(11) Protecting the public trust as to navigable waters and aquatic resources;~~
- 27 (42e) Meeting the requirements of the National Flood Insurance Program and
 28 maintaining the City of Woodinville as an eligible community for Federal flood
 29 insurance benefits;
- 30 (43i) Alerting members of the public including, but not limited to, appraisers, owners,
 31 potential buyers, or lessees to the development limitations of critical areas;
- 32 (44g) Providing for public enjoyment of environmentally protected areas by encouraging
 33 when feasible and sensible, multiple use of critical area buffers; and
- 34 ~~(15) Providing City officials with sufficient information to protect critical areas.~~
- 35 (h) [Serve as a basis for exercise of the City's substantive authority under the State](#)
 36 [Environmental Policy Act \(SEPA\) and the City's SEPA rules.](#)

37
 38 **21.24.020 Applicability.**

- 39 (1) [Compliance with this chapter.](#) The provisions of this chapter shall apply to all land uses [and](#)
 40 [activities](#) in the ~~City of Woodinville~~ [city limits](#), and all persons within the ~~City~~ [city limits](#) shall
 41 comply with the requirements of this chapter.
- 42 ~~(2) The City of Woodinville shall not approve any No permit or otherwise issue any authorization~~
 43 ~~shall be approved or issued~~ to alter the condition of any land, water, or vegetation, or to
 44 construct or alter any structure or improvement without first assuring compliance with the
 45 requirements of this chapter.
- 46 ~~3) Approval of a development proposal pursuant to the provisions of this chapter does not~~
 47 ~~discharge the obligation of the applicant to comply with the provisions of this chapter.~~
- 48 (2) [Alterations. Any human activity that results or is likely to result in an impact upon the existing](#)
 49 [condition of a critical area is an alteration that is subject to specific limitations as specified by](#)
 50 [this chapter. Alterations include, but are not limited to, grading; filling; dredging; draining;](#)
 51 [channelizing; applying herbicides, pesticides or any hazardous substance; discharging](#)

Commented [SC3]: See note above. These goals were consolidated with other items above.

Commented [SC4]: Where appropriate, staff has changed the titles. In this instance, city limits is more clear in terms of the jurisdictional boundaries. Readers often confuse City of Woodinville between the government, the land area, or as a whole

DRAFT

pollutants except stormwater; grazing domestic animals; paving; constructing; cutting, pruning, topping, trimming, relocating or removing vegetation; or any other human activity which results or is likely to result in an impact to existing vegetation, hydrology, wildlife or wildlife habitat. Alterations do not include walking, fishing, any other passive recreation, or other similar activities.

~~(34) Conflict of provisions.~~ When ~~any another~~ provision of ~~any other chapter of the City of~~ Woodinville Municipal Code conflicts with this chapter or when the provisions of this chapter are in conflict, that provision which provides more environmental protection to ~~environmentally~~ critical areas shall apply, unless specifically provided otherwise in this chapter, or unless such provision conflicts with Federal or State laws or regulations.

~~(5) Forest practices.~~ The provisions of this chapter shall apply to all forest practices over which the City has jurisdiction pursuant to Chapter ~~76.09 RCW and WAC Title 222.76.09 RCW and~~ WAC Title 222.

~~21.24.030 Appeals.~~

~~Any decision to approve, condition or deny a development proposal based on the requirements of this chapter may be appealed according to and as part of the appeal procedure for the permit or approval involved.~~

~~21.24.040 Critical areas rules.~~

~~The directors of the applicable departments within the City of Woodinville are authorized to adopt such administrative rules and regulations as are necessary and appropriate to implement this chapter and to prepare and require the use of such forms as are necessary to its administration.~~

~~21.24.050 Alteration.~~

~~Any human activity which results or is likely to result in an impact upon the existing condition of a critical area is an alteration which is subject to specific limitations as specified for each critical area. Alterations include, but are not limited to, grading, filling, dredging, draining, channelizing, applying herbicides or pesticides or any hazardous substance, discharging pollutants except storm water, grazing domestic animals, paving, constructing, applying gravel, modifying for surface water management purposes, cutting, pruning, topping, trimming, relocating or removing vegetation or any other human activity which results or is likely to result in an impact to existing vegetation, hydrology, wildlife or wildlife habitat. Alterations do not include walking, fishing or any other passive recreation or other similar activities.~~

21.24.030 Critical area maps and inventories.

(1) Critical Areas Map. The approximate location and extent of critical areas are shown on the City's adopted critical areas map. The latest critical areas map is available from the Development Services Department. The maps do not provide a final critical area determination. Adopted critical areas maps include:

- (a) Federal Emergency Management Administration flood insurance rate maps;
- (b) US Geological Survey landslide hazard, seismic hazard, and volcano hazard maps;
- (c) Department of Natural Resources seismic hazard maps for Western Washington;
- (d) Department of Natural Resources slope stability map;
- (e) National Wetlands Inventory;
- (f) Locally adopted maps, including the Critical Aquifers Recharge Areas map and Geologically Hazardous map.

(2) Maps showing critical areas are to be used for guidance purposes only and may be continuously updated as new critical areas are identified. If there is a conflict among the maps, inventory and site-specific features, the actual presence or absence of the features defined in this chapter as critical areas shall govern.

Commented [SC5]: This was consolidated with subsection 1 for ease of reading

Commented [SC6]: This section is unnecessary. Appeals should not be included in this chapter. All of the appeals under Title 21 are found in Chapter 17.17

Commented [SC7]: This section is unnecessary. We do not have critical area administrative rules and regulations outside of this chapter.

Commented [SC8]: This was moved to section 21.24.020(2), as it ties in with the applicability section.

DRAFT

21.24.060-040 Complete exemptions.

The following activities are exempt from the provisions of this chapter and any administrative rules promulgated hereunder, provided they are otherwise consistent with the provision of other local, state, and federal law requirements:

- (1) Alterations in response to emergencies that threaten the Emergency actions necessary to prevent an immediate threat to public health, safety and welfare or which that pose an imminent risk of damage to public or private property as long as any alteration. Alteration undertaken pursuant to this subsection is reported to the City immediately. ~~The Development Services Director~~ The impacted critical areas and its buffers shall confirm that an emergency exists and determine what, if any, be fully restored in accordance with a critical areas report and mitigation shall be required to protect the health, safety, welfare and environment and to repair any resource damage; plan;
- (2) Agricultural activities in existence before March 31, 1993, as follows:
 - (a) Mowing of hay, grass, or grain crops;
 - (b) Tilling, dicing, planting, seeding, harvesting and related activities for pasture, food crops, grass seed or sod if such activities do not take place on steep slopes;
 - (c) Normal and routine maintenance of existing irrigation and drainage ditches not used by ~~salmonids~~ fish species and do not drain directly into salmon-bearing waterbodies; and
 - (d) Normal and routine maintenance of farm ponds, fish ponds, manure lagoons and livestock watering ponds;
- (3) ~~Public water, electric~~ Local collection and natural gas distribution, utility lines, mains, equipment, appurtenances, including electric facilities with an associated voltage of 55,000 volts or less, not including substations; public sewer local collection; public water local distribution; natural gas; cable communications; or telephone utility facilities. Local collection and related activities undertaken pursuant to Public Works Director approved best management practices and Policy U-1.12 of the Comprehensive Plan ~~distribution utilities may be allowed in critical areas or their buffers,~~ as follows:
 - (a) Normal and routine maintenance or repair of existing utility structures ~~or rights-of-way;~~
 - (b) Relocation of ~~electric facilities, local collection and distribution utility lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less, only when required by a local governmental agency, which approves the new location of the facilities; and~~
 - (c) Replacement, operation, repair, modification ~~or~~ installation, or construction in an improved public road right-of-way of ~~all electric facilities, lines, equipment or appurtenances, not including substations, with an associated voltage of 55,000 volts or less local collection and distribution utility lines,~~ when such facilities are located within an improved public road right-of-way or ~~Public Works Director~~ City-authorized private roadway;
 - (d) Relocation of ~~public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances, only when required by a local governmental agency which approves the new location of the facilities; and~~
 - (e) Replacement, operation, repair, modification, installation or construction of ~~public sewer local collection, public water local distribution, natural gas, cable communication or telephone facilities, lines, pipes, mains, equipment or appurtenances when such facilities are located within an improved public right-of-way or Public Works Director authorized private roadway;~~
- (4) Maintenance, operation, repair or replacement of publicly improved roadways ~~as long as or~~ recreation areas, provided any such alteration does not involve the expansion of

Commented [SC9]: Re-worded for clarity.

Commented [SC10]: Restoration is required regardless of the emergency. The strikethrough language implies that staff more discretion than in practice.

Commented [SC11]: From the Gap Analysis, page 4: Ag exemption for maintenance and repair of ditches and drainages NOT used by salmonids. Consider implication for those which 1) are used by fish other than salmonids and/or 2) ditches and drainages which drain directly to salmon bearing waterbodies.

Commented [SC12]: Section (3) was re-worded to reduce the unnecessary repetition and redundancy. Subsections (d) and (e) were deleted and the language was placed in (3)

Commented [SC13]: Right-of-way maintenance and repair should not be under the utility exception

Commented [SC14]: Unnecessary. Utility line relocation never permitted without permission and approval of all applicable agencies, whether in a critical area or not

Commented [SC15]: Consolidated and moved up to section (3), (a), (b) and (c)

Commented [SC16]: Should this include privately improved roadways as well?

DRAFT

- 1 ~~roadways~~structures or related improvements into previously unimproved ~~rights-of-way or~~
2 ~~portions of rights-of-way when such facilities are located within an improved public right-of-~~
3 ~~way or Public Works Director-authorized private roadway;~~areas of rights-of-way;
- 4 (5) ~~Maintenance, operation or repair of publicly improved recreation areas as long as any such~~
5 ~~alteration does not involve the expansion of improvements into previously unimproved~~
6 ~~recreation areas;~~
- 7 (6) ~~All clearing and grading activities which are exempt from the requirement for a clearing and~~
8 ~~grading permit as specified in the WMC, unless these activities require other permits or~~
9 ~~authorizations as specified in WMC 21.24.020.~~
- 10 (5) Removal of non-native invasive species. Work shall be limited to hand removal of non-native
11 invasive species, unless permits from affected regulatory agencies have been obtained for
12 approved biological or chemical treatments.
- 13 (6) Passive recreation, educational and scientific research that do not degrade critical areas or
14 buffers, such as fishing, hiking and bird watching, not including trail building or clearing.

Commented [SC17]: Repetitive

Commented [SC18]: Language was consolidated with section (4)

15
16 **21.24.050070 Partial Limited exemptions.**

- 17 (1) The following are exempt from the provisions of this chapter and any administrative rules
18 promulgated hereunder, except for the notice on title provisions, WMC ~~21.24.170 through~~
19 ~~21.24.180, and the flood hazard area provisions, WMC 21.24.220 through~~
20 ~~21.24.260;~~21.24.170 through 21.24.180, and the frequently flooded areas provisions, WMC
21 21.24.350 through 21.24.380:
- 22 ~~(a) Structural modification of, addition to, repair or replacement of structures, except~~
23 ~~single detached residences, in existence before March 31, 1993, which do not meet~~
24 ~~the building setback or buffer requirements for wetlands, streams or geological~~
25 ~~hazard areas if the modification, addition, replacement or related activity does not~~
26 ~~increase the existing footprint of the structure lying within the above-described~~
27 ~~building setback area, critical area or buffer. Modifications, additions, and/or~~
28 ~~replacement of structures shall use bioengineered techniques beneficial to fish and~~
29 ~~wildlife and based upon the best available science, including but not limited to stream~~
30 ~~bank stabilization, wetland enhancement, water quality improvement, and similar~~
31 ~~methods to preserve and/or enhance habitat functions.~~
- 32 ~~(b) Structural modification of, addition to, repair or replacement of single detached~~
33 ~~residences in existence before March 31, 1993, or residences allowed by reasonable~~
34 ~~use or variance process which do not meet the building setback or buffer~~
35 ~~requirements for wetlands, streams or geological hazard areas if the modification,~~
36 ~~addition, replacement or related activity~~(a) Single-family detached residences in
37 existence prior to March 31, 1993 or approved under a variance or reasonable use
38 permit may be expanded, repaired, modified, or replaced, provided all of the
39 following are met:
- 40 (i) Expansion does not increase the existing footprint of the residence lying within
41 the above-described buffer or building setback area by more than 1,000
42 square feet over that existing ~~before March 31, 1993, and no portion of the~~
43 ~~modification, addition or replacement is located closer to the critical area or, if~~
44 ~~the existing residence is in the sensitive area, extends farther into the critical~~
45 ~~area. Modifications, additions, and/or replacement of structures shall use~~
46 ~~bioengineered techniques beneficial to fish and wildlife and based upon the~~
47 ~~best available science, including but not limited to stream bank stabilization,~~
48 ~~wetland enhancement, water quality improvement, and similar methods to~~
49 ~~preserve and/or enhance habitat functions; and;~~
- 50 (ii) No portion of the modification, addition, or replacement is located closer or
51 extends farther to the critical area or its buffer;

DRAFT

(iii) The proposal includes on-site mitigation to offset any impacts to critical areas consistent with the provisions of this chapter; and

(iv) The proposal will not significantly affect fish and wildlife habitat, stream bank stability, drainage capabilities, flood potential, and steep slopes and landslide hazards on neighboring properties.

(b) All other structures, except single detached residences, in existence prior to March 31, 1993 may be expanded, repaired, modified, or replaced, provided all of the following are met:

(i) Expansion does not increase the existing footprint of the structure lying within the above-described building setback area, critical area or buffer;

(ii) No portion of the modification, addition, or replacement is located closer or extends farther to the critical area or its buffer;

(iii) The proposal includes on-site mitigation to offset any impacts to critical areas consistent with the provisions of this chapter; and

(iv) The proposal will not significantly affect fish and wildlife habitat, stream bank stability, drainage capabilities, flood potential, and steep slopes and landslide hazards on neighboring properties.

(c) Maintenance or repair of structures which that do not meet the development standards of this chapter for geological hazard areas, if the maintenance or repair does not increase the footprint of the structure and there is no increased risk to life or property as a result of the proposed maintenance or repair.

~~(2) The grazing of livestock is exempt from the provisions of this chapter and any administrative rules promulgated hereunder, except for the livestock restriction provisions, WMC 21.24.320 and 21.24.360, and any animal density limitations established by law, if the grazing activity was in existence before March 31, 1993.~~

~~(3) A permit or approval sought as part of a development proposal for which multiple permits are required is exempt from the provisions of this chapter and any administrative rules promulgated hereunder, except for the notice on title provisions, WMC 21.24.170 and 21.24.180, if:~~

~~(a) The City of Woodinville previously reviewed all critical areas on the site;~~

~~(b) There is no material change in the development proposal since the prior review;~~

~~(c) There is no new information available, which is important to any critical area review of the site or particular critical area;~~

~~(d) The permit or approval under which the prior review was conducted has not expired or, if no expiration date exists, no more than five years have lapsed since the issuance of that permit or approval; and~~

~~(e) The prior permit or approval, including any conditions, has been complied with.~~

21.24.080 Exceptions.

21.24.060 Public agency and utility critical areas exceptions.

(1) If the application of this chapter would prohibit a development proposal by a public agency or public utility, the agency or utility may apply for a critical area exception pursuant to this subsection:

~~(a) The public agency or utility shall apply to the Department and shall make available to the Department other related project documents such as permit applications to other agencies, special studies and environmental documents. The Development Services Director shall prepare a recommendation to the Hearing Examiner.~~

(b) The critical area exception shall be reviewed as Type III project permit, pursuant to Chapters 17.07 through 17.17 WMC. The Hearing Examiner shall make a decision based on the following criteria:

Commented [SC19]: These exemptions were placed into bullets, above for readability. Changes were made so that "bioengineered techniques beneficial to fish and wildlife.." was removed. The language appears to be unnecessarily specific – instead, the language should generally require that no adverse impacts should occur to fish and wildlife habitat, stream banks, etc.

Commented [SC20]: Not applicable in the city

Commented [SC21]: This should be removed – projects that are not exempt should not have individual permits that are exempt. Staff recommends that language should be adopted under 21.24.110(6) allowing an applicant to adopt a previous critical area study if the information is still valid.

The intent appears to be to reduce the number of reports generated and adopt one critical area report for a set of permits.

Commented [SC22]: This requirement is unnecessary. Relevant studies and information is required as part of the submittal and does not need to be reiterated here.

DRAFT

- 1 (i) There is no other practical alternative to the proposed development with less
2 impact on the ~~sensitive-critical~~ area; ~~and~~
3 (ii) The ~~proposal minimizes~~application of this chapter would unreasonably restrict
4 the ~~impact on~~ability to provide services to the public;
5 (iii) Any impacts permitted to the critical area are mitigated in accordance with
6 WMC 21.24.140 to the greatest extent possible;
7 (iv) The proposed development protects critical areas ~~and/or~~ buffer functions
8 and values consistent with best available science; and
9 (v) The proposed development is consistent with other applicable regulations and
10 requirements.
11 (c) This exception shall not allow the use of the following critical areas for regional
12 retention/detention facilities except where ~~there is a clear showing~~the applicant can
13 clearly demonstrate that the facility will protect public health and safety or repair
14 damaged natural resources:
15 (i) Class 1 stream buffers;
16 (ii) ~~Class 4~~Category I wetland buffers with plant associations of infrequent
17 occurrence; or
18 (iii) ~~Class 4~~ Category I or 2 wetland buffers, which provide critical or outstanding
19 habitat for herons, raptors or State or Federal designated endangered or
20 threatened species unless clearly demonstrated by the applicant that there
21 will be no impact on such habitat.

22
23 21.24.070 Reasonable use exceptions.

- 24 (1) If the application of this chapter would deny all reasonable use of the property, the applicant
25 may apply for a reasonable use permit pursuant to this subsection:
26 (a) ~~The applicant shall apply to the Department, and the Development Services Director~~
27 ~~shall prepare a recommendation to the Hearing Examiner;~~
28 (b) The reasonable use permit shall be reviewed as Type III project permit, pursuant to
29 Chapters ~~17.07 through 17.17~~ WMC 17.07 through 17.17 WMC. The Hearing
30 Examiner shall make a decision based on the following criteria:
31 (i) The application of this chapter would deny all reasonable use of the property;
32 (ii) ~~There is no other reasonable use with less impact on the sensitive area;~~
33 (iii) ~~(ii)~~ (ii) The proposed development does not pose an unreasonable threat to the
34 public health, safety or welfare on or off the development proposal site ~~and is~~
35 ~~consistent with the general purposes of this chapter and the public interest;~~
36 ~~and;~~
37 (iv) (iii) Any alterations ~~permitted~~ to the ~~sensitive~~critical area shall be the minimum
38 necessary to allow for reasonable use of the property;
39 (v) Any impacts permitted to the critical area are mitigated in accordance with
40 WMC 21.24.140 to the greatest extent possible;
41 (vi) The proposed development protects critical areas and/or buffer functions and
42 values consistent with best available science; and
43 (vii) The proposed development is consistent with other applicable regulations
44 and requirements.
45 (be) Any authorized alteration of a ~~sensitive-critical~~ area under this subsection shall be
46 subject to conditions established by the Hearing Examiner ~~including, but not limited~~
47 ~~to, mitigation under an approved mitigation plan to safeguard public health, general~~
48 welfare and safety.
49

DRAFT

21.24.085-Density-080 Subdivisions and density calculations for within critical areas.

(1) ~~The intent of this section is The following regulations for density calculation for single-family residential subdivisions and short plats are designed~~ to provide for the preservation of critical areas and critical area buffers, flexibility in design, and consistent treatment of different types of development proposals.

(2) ~~The regulations subdivision and short subdivision of land located in geologically hazardous areas, frequently flooded areas, wetlands, streams, and fish and wildlife habitat conservation areas shall apply be subject to all properties on which the following:~~

(a) ~~Land that is located wholly within the critical areas such as streams, wetlands, steep slopes, area or its buffer may not be subdivided.~~

(b) ~~Land that is located partially within the critical area or its buffer may be divided; provided, that the developable portion of each new lot and floodways of streams its access is located outside of the critical area or its buffer. Each resulting lot shall meet the minimum lot size, and have sufficient buildable area outside of, and will not affect the critical area or its buffer.~~

(c) ~~Access roads and utilities serving the proposed may be permitted within the critical area and associated critical area buffers limit land area available for development. This section lists the maximum only if the city determines that no other feasible alternative exists and when consistent with this chapter.~~

(3) ~~For single-family residential subdivisions and short plats on sites with critical areas and/or buffers,~~ on-site density credits ~~that may be transferred on a particular site~~ from the critical area to a developable site area. ~~However, in In~~ some cases, the maximum density credits may not be attainable due to other site constraints including but not limited to acreage constraints of the developable site area.

(4a) ~~For sites where up to 50 percent of the site is constrained by critical areas, up to 100 percent of the density that could be achieved on the constrained area portion of the site can be transferred to the nonsensitive developable portion of the property.~~

(b) ~~For sites that are over 50 percent constrained by critical areas, up to 50 percent of the density that could be achieved on the constrained area portion of the site can be transferred to the nonsensitive developable portion of the property; provided,~~

(5) ~~On-site density transfer is subject to the following:~~

(a) ~~The density credit can only be transferred within the development proposal site. The on-site density transfer provided for in this section shall not be applied to allow density from a constrained site to be transferred to an unconstrained parcel, lot or site when combined with a constrained site by subdivision, binding site plan, lot line adjustment or other means of land assemblage or arrangement for development.~~

(b) ~~This on-site transfer is subject to the following conditions:~~

(a) ~~No additional density is allowed over the base density of the underlying zone.~~

(b) ~~The minimum lot size and other dimensional requirements of the underlying zoning classification may be reduced to accommodate the transfers in densities per the following table:~~

Table 21.24.070(4)(c) – Reduced Dimensional Standards

Zone Zone	Minimum Lot Size	Maximum Building Coverage	Maximum Impervious Surface	Lot Width at Street
R-1	31,000 sf	15%	20%	100 ft/ 75 ft on cul-de-sac

Commented [SC23]: This language was originally located in the geologically hazardous areas, but applies to other critical areas as well.

DRAFT

R-4	7,200 sf	35%	45%	60 ft
R-6	5,000 sf	50%	70%	50 ft
R-8	4,600 sf	55%	75%	30 ft

(ed) All other applicable dimensional requirements pursuant to WMC ~~21.12.030~~21.12.030 shall be met.

(de) The area to which the density is transferred shall not be constrained by another critical area regulation.

(ef) No portion of the critical area shall be included as part of the minimum lot size.

(fg) The lot sizes shall not be averaged pursuant to WMC ~~21.12.180~~21.12.180.

(gh) No panhandle lots are permitted.

~~(3) The density credit can only be transferred within the development proposal site.~~

(6) Except as allowed by WMC 21.32.095, ~~Nonconforming lots~~, in no event shall a lot be less in size than specified by subsection (2) of this section.

~~21.24.090 Critical area maps and inventories.~~

~~(1) Critical Areas Map. The distribution of many critical areas in the City of Woodinville are displayed on maps in the King County Critical Areas Map Folio and the City of Woodinville Critical Areas Map. Many of the wetlands are inventoried and rated and that information is published in the King County Wetlands Inventory Notebooks.~~

~~(2) Flood Hazard Maps. Many flood hazard areas are mapped by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for King County."~~

~~(3) King County Critical Recharge Areas Map. The King County Critical Recharge Areas, including any authorized updates to this map, is hereby adopted as the designation of critical aquifer recharge areas in the City of Woodinville.~~

~~If there is a conflict among the maps, inventory and site-specific features, the actual presence or absence of the features defined in this title as critical areas shall govern.~~

~~21.24.100~~21.24.090 Disclosure by applicant and notice on title.

(1) The applicant shall disclose to the ~~Development Services Director~~City the presence of critical areas on the ~~development proposal site~~project area and any mapped or identifiable ~~sensitive~~critical areas within 100 feet of the applicant's property.

~~(2) The owner of any property containing critical areas or buffers on which a development proposal is submitted, except a public right-of-way or the site of a permanent public facility, shall file for record with the King County Auditor a notice approved in form by the City. The required contents and form of the notice shall be set forth in administrative rules. (2) If the development proposal site contains or is within a critical area, the applicant shall submit an affidavit, to the extent consistent with the applicant's constitutional rights which declares whether the applicant has knowledge of any illegal alteration to any or all sensitive areas on the development proposal site and whether the applicant previously has been found in violation of this chapter, pursuant to Chapter 21.50 WMC, Enforcement. If the applicant previously has been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the Development Services Director.~~

The notice shall state the presence of critical areas or buffers on the property, of the application of this chapter to the property, and that limitations on actions in or affecting such critical areas or buffers may exist. The notice shall run with the land and failure to provide such

Commented [SC24]: No rules exist.

DRAFT

1 notice to any purchaser prior to transferring interest in the property shall be a violation of this
2 chapter.

3 (3) The applicant shall submit proof to the City that the notice has been filed prior to approval of
4 a development proposal for the property or, in the case of subdivisions, short subdivisions,
5 and binding site plans, at or before recording.

6
7 **21.24.140~~100~~ Critical area ~~review~~ determination.**

8 (1) The ~~Development Services Director~~ City shall perform a critical area review for any City of
9 ~~Woodinville~~ development ~~proposal~~ permit application or other request for permission to
10 proceed with an alteration on a site ~~which~~ that includes a critical area or is within an identified
11 critical area buffer.

12 (2) As part of the critical area determination, the City review, the Development Services Director
13 shall:

- 14 (a) Determine whether any critical area exists on the property and confirm its nature and
15 type;
- 16 (b) Determine whether a critical area ~~special study~~ report is required;
- 17 (c) Evaluate the critical area ~~special study~~ report;
- 18 (d) Determine whether the development proposal is consistent with this chapter;
- 19 (e) Determine whether any proposed alteration to the critical area is necessary; and
- 20 (f) Determine if the mitigation and monitoring plans and bonding measures proposed by
21 the applicant are sufficient to protect the public health, safety and welfare, consistent
22 with the goals, purposes, objectives and requirements of this chapter.

23
24 **21.24.120~~110~~ Critical area ~~special study~~ areas report requirement.**

25 (1) General. An applicant application for a development proposal ~~which~~ that includes a critical
26 area ~~or is within an identified critical area~~ buffer shall ~~submit~~ include a critical area special
27 study ~~(report requirements are available at the Community Development Department)~~ report
28 that uses the best available science to ~~adequately~~ evaluate the proposal and all probable
29 impacts.

30 (2) Waiver. The Development Services Director may waive the requirement for a special
31 study report if the applicant ~~shows, to the Development Services Director's~~
32 ~~satisfaction,~~ demonstrates that:

- 33 (a) There will be no alteration of the critical area or buffer;
- 34 (b) The development proposal will not have an impact on the critical area in a manner
35 contrary to the goals, purposes, objectives and requirements of this chapter; and
- 36 (c) The minimum standards required by this chapter are met.

37 (3) Report format. The critical areas report shall be in the form of a written document. A critical
38 area report may be combined with any studies required by other laws and regulations. If
39 necessary to ensure compliance with this chapter, ~~the Development Services Director may~~
40 ~~require~~ additional information from the applicant may be required, separate from the critical
41 areas report. ~~special study.~~

42 (4) If the development proposal will affect only a part of the development proposal site, the
43 Development Services Director may limit the scope of the required special study to include
44 only that part of the site that may be affected by the development.

45 (5) Report contents. A critical areas report shall evaluate the proposed project area and critical
46 areas within 300 feet of the project area or have the potential to be affected by this proposal.
47 A critical areas report shall include the following information:

48 **21.24.130 Contents of critical area ~~special study.~~**

49 (1) ~~The critical area special study shall be in the form of a written report and shall contain the~~
50 ~~following, as applicable:~~

Commented [SC25]: Reworded to reduce confusion.
This section was consolidated with the section below.

DRAFT

- 1 (a) ~~Using the best available science, identification and characterization of all sensitive~~ critical areas within 300 feet of the project area; on or encompassing the development
 2 proposal site;
- 3
- 4 (b) Existing conditions of the critical area, including an assessment of habitat and ecological
 5 functions and values;
- 6 (c) ~~Using the best available science, assessment~~ Assessment of the impacts of any
 7 alteration proposed for a critical area or buffer; ~~assessment of the impacts of any~~
 8 ~~alteration on the development proposal, other properties and the environment, and/or~~
 9 ~~assessment of the impacts to the development proposal resulting from development in~~
 10 ~~the critical area or buffer;~~
- 11 (c) ~~Studies, which propose adequate mitigation, maintenance, monitoring and contingency~~
 12 ~~plans and bonding measures;~~
- 13 (d) A scale map of the project area. If only a portion of the development site has been
 14 mapped pursuant to WMC 21.24.130, the unmapped portion shall be clearly identified
 15 and labeled on the site plans. The site plans shall be attached to the notice on title
 16 required by WMC 21.24.090, development proposal site; and
- 17 (e) Development sequencing consistent with WMC 21.24.090;
- 18 (f) Project narrative describing the proposal; anticipated temporary and permanent impacts
 19 to critical areas or its buffers; construction activities and sequencing; restoration,
 20 enhancement, or mitigation measures; and other relevant information;
- 21 (g) Construction plans, including site diagrams, cross-sectional drawings, topographic
 22 elevations at two-foot intervals; existing and final grade elevations; and other drawings to
 23 demonstrate construction techniques and anticipated final outcomes;
- 24 (h) A description of proposed mitigation actions and mitigation site selection criteria.
 25 Mitigation shall be design to achieve no net loss of ecological function consistent with
 26 WMC 21.24.120 and mitigation requirements for each affected critical area;
- 27 (i) Evaluation of the proposal for the additional requirements for each critical area. Critical
 28 areas reports for two or more types of critical areas must meet the report requirements
 29 for each relevant type of critical area.
- 30 (e) ~~Detailed studies, as required by the Development Services Director;~~
- 31 (2) ~~A critical area special study may be combined with any studies required by other laws and~~
 32 ~~regulations; and~~
- 33 (3) ~~If the development proposal will affect only a part of the development proposal site, the~~
 34 ~~Development Services Director may limit the scope of the required special study to include~~
 35 ~~only that part of the site, which may be affected by the development.~~
- 36 21.24.(6) A permit or approval sought as part of a development proposal for which multiple
 37 permits are required may adopt a previously approved critical area report if:
- 38 (a) There is no material change in the development proposal since the prior review;
- 39 (b) There is no new information available that is important to the critical area review of
 40 the site or particular critical area;
- 41 (c) The permit or approval under which the prior review was conducted has not expired,
 42 or if no expiration date exists, no more than five years have lapsed since the
 43 issuance of that permit or approval; and
- 44 (d) The prior permit or approval, including any conditions, has been complied with.
- 45
- 46 21.24.140 ~~120~~ Mitigation requirements, maintenance, monitoring and contingency.
- 47 (1) ~~General. As determined by the Development Services Director, mitigation~~ Mitigation,
 48 maintenance and monitoring measures shall be in place to protect critical areas and buffers
 49 from alterations occurring on the development proposal site of a resulting from proposed
 50 development.

Commented [SC26]: Common practice to combine a critical area report with other studies. Not necessary to lay out

Commented [SC27]: This was moved up to Section (4)
Formatted: Font Alignment: Auto

Commented [SC28]: This language is originally from 21.24.040(3). See the staff comment in that section for explanation of why this language has moved.

Commented [SC29]: Maintenance, monitoring and contingency were moved to 21.24.130.

Mitigation requirements were lacking in the existing code.

Mitigation sequencing is a standard measure to evaluate alterations in a critical area. Applicants are required to evaluate the impacts of a proposal based on a preference order from no action to compensation.

DRAFT

(2) Mitigation. Mitigation shall be in-kind and on-site where feasible, and shall be designed to maintain and enhance ecological functions and values, and to prevent risk from hazards posed by the critical area. Mitigation measures shall evaluate goals and objectives of proposed mitigation relating to impact to functions and values. Review of best available science supporting the proposed mitigation is required. ~~Where monitoring reveals a significant deviation from predicted impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible for appropriate corrective action which, when approved, shall be subject to further monitoring.~~

Commented [SC30]: Moved to section 4

(3) Mitigation sequencing. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for, as outlined by WAC 197-11-768, in the following order of preference:
 (a) Avoiding the impact altogether by not taking a certain action or parts of actions;
 (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
 (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;
 (e) Compensating for the impact by replacing or providing substitute resources or environments; and/or
 (f) Monitoring the impacts and compensation projects and taking appropriate corrective measures.

21.24.130 Maintenance, monitoring, and contingency.

(1) Maintenance and monitoring. A program shall be included as part of the mitigation plan, and shall include the following:

Commented [SC31]: This section adds language in for standard maintenance and monitoring requirements, which are not present in the existing code.

- (a) Performance standards, which shall include:
 - (i) 100 percent survival of installed vegetation within the first two years of planting;
 - (ii) At least 80 percent survival of installed vegetation for three years or more; and
 - (iii) Less than 10 percent of the mitigation area covered in nonnative invasive species for five years or more.
- (b) Contingency plan identifying courses of action and corrective measures to be taken if monitoring or evaluation indicates that the performance measures have not been met;
- (c) A schedule for site monitoring, which includes at minimum one monitoring or inspection every 12 months;
- (d) Monitoring period necessary to ensure that the performance standards have been met, not to be less than five years; and
- (e) Information on maintenance bonds or financial guarantees to ensure that the mitigation plan is implemented.

Commented [SC32]: These percentages are typical for maintenance programs, but these percentages can be increased or decreased.

~~21.24.150 Security, insure mitigation, maintenance and monitoring.~~

(2) Performance guarantee. A performance bond or other security equal to or greater than 150 percent of the actual cost of mitigation shall be posted in a form acceptable to the City prior to issuance of construction permits. Actual costs shall include all labor and materials associated with the mitigation activity. ~~When mitigation required pursuant to a development proposal is not completed prior to the Development Services Director finally approving the proposal, the Development Services Director may delay final approval until mitigation is completed or may require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the Development Services Director.~~ The security shall be sufficient to guarantee that all required mitigation measures will be completed in a

Commented [SC33]: Three to five years is typical. The City has been requiring five year periods.

Commented [SC34]: In practice, a performance bond is not pushed off until the applicant determines they cannot complete the mitigation in time or before other permits are approved. A performance bond is a required component of a critical areas report. Staff does not issue without a bond, regardless of where the mitigation is in the sequence.

DRAFT

- 1 ~~timely manner in accordance with this chapter. no later than the time established by the~~
2 ~~Development Services Director in accordance with this chapter.~~
- 3 (32) Maintenance guarantee. A maintenance/monitoring bond or other security equal to or
4 greater than 20 percent of the cost of mitigation shall be posted in a form acceptable to the
5 City prior to final inspection, occupancy, or release of the performance bond, whichever is
6 first. If the development proposal is subject to mitigation, maintenance or monitoring plans,
7 ~~the applicant shall post a maintenance/monitoring bond or other security in a form and~~
8 ~~amount deemed acceptable the Development Services Director.~~ The security shall be
9 sufficient to guarantee satisfactory workmanship on, materials in and performance of or
10 related to structures and improvements allowed or required by this chapter for a period of up
11 to five years. The duration of maintenance/monitoring obligations shall be established by the
12 Development Services Director, based upon the nature of the proposed mitigation,
13 maintenance or monitoring and the likelihood and expense of correcting mitigation or
14 maintenance failures.
- 15 (4) Corrective measures. Where monitoring reveals a significant deviation from predicted
16 impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible
17 for appropriate corrective action which, when approved, shall be subject to further monitoring.
- 18 (53) Restoration. Performance and maintenance/monitoring bonds or other security shall also
19 be required for restoration of a critical area or buffer not performed as part of a mitigation or
20 maintenance plan, except that no security shall be required for minor stream restoration
21 carried out pursuant to this chapter. The bond or other security shall be in a form and amount
22 deemed acceptable by the Development Services Director.
- 23 (46) Time limit. Performance and maintenance/monitoring bonds or other security authorized by
24 this section shall remain in effect until the ~~Development Services Director~~City determines, in
25 writing, that the standards bonded for have been met.
- 26 (57) Obligation. Depletion, failure or collection of security funds shall not discharge the
27 obligation of an applicant or violator to complete required mitigation, maintenance, monitoring
28 or restoration.
- 29 (6) ~~Public development proposals shall be relieved from having to comply with the security~~
30 ~~requirements of this section if public funds have previously been committed for mitigation,~~
31 ~~maintenance, monitoring or restoration.~~

32
33 **21.24.460140 Critical area markers and signs.**

- 34 (1) Survey stakes. Permanent survey stakes delineating the boundary between adjoining
35 property and critical area tracts shall be set, using iron or concrete markers as established by
36 current survey standards.
- 37 (2) When required. Signage and fencing shall be required for all wetlands and fish and wildlife
38 habitat conservation areas. The City shall determine if fencing and permanent signage is
39 necessary to protect other types of critical areas. Signage and fencing shall be located along
40 the outer boundary between of a critical area buffer or tract and contiguous land in order to
41 protect the critical area.
- 42 (3) Permanent signs. Signs shall be identified with permanent signs, made of an enamel-coated
43 metal face and attached to a metal post or other material of equal durability. Signs must be
44 posted at an interval of 75 feet and must be maintained by the property owner in perpetuity.
45 The sign shall follow the City's adopted signage standard, be worded as follows or with
46 alternative language as approved by the City.

47
48 Protected Critical Area
49 Do Not Disturb
50 Help protect and care for this area
51 Contact City of Woodinville 489-2754

Commented [SC35]: Moved from existing section 21.24.140(2)

Commented [SC36]: Redundant?

Commented [SC37]: This section was changed to include some more details on material type, spacing, etc. The wording is similar to the signage currently found around the City. Planning Commission may wish to adopt a standard detail for the signage for consistency.

DRAFT

1
2 (4) Fencing. Required fencing shall be constructed of permanent and durable materials. Fencing
3 shall be designed so as to not interfere with species migration and shall be constructed in a
4 manner that minimizes impacts to the critical areas and associated habitat.
5

6 **21.24.170 Notice on title.**

7 ~~(1) The owner of any property containing critical areas or buffers on which a development~~
8 ~~proposal is submitted, except a public right-of-way or the site of a permanent public facility,~~
9 ~~shall file a notice approved by the Development Services Director with the County's records~~
10 ~~and elections division. The required contents and form of the notice shall be set forth in~~
11 ~~administrative rules. The notice shall inform the public of the presence of critical areas or~~
12 ~~buffers on the property, of the application of this chapter to the property and that limitations~~
13 ~~on actions in or affecting such critical areas or buffers may exist. The notice shall run with the~~
14 ~~land.~~

15 ~~(2) The applicant shall submit proof that the notice has been filed for public record before the~~
16 ~~Development Services Director and/or Building Official shall approve any development~~
17 ~~proposal for the property or, in the case of subdivisions, short subdivisions and binding site~~
18 ~~plans, at or before recording.~~

19
20 **21.24.150 ~~180 Critical area tracts or easements~~ Native growth protection areas and**
21 **designations on site plans.**

22 (1) Tracts. Critical area tracts ~~A native growth protection area (NGPA) in the form of a~~ shall be
23 used to delineate and protect those critical areas and buffers listed below in development
24 proposals for subdivisions, short subdivisions or binding site plans and shall be recorded on
25 all documents of title of record for all affected lots:

- 26 (a) All geological hazard areas and buffers which are one acre or greater in size;
- 27 (b) All fish and wildlife conservation areas;
- 28 (c) All wetlands and buffers;
- 29 (d) All streams and buffers.

30 (2) Tract interest. Any required ~~critical area~~ NGPA tract shall be held in an undivided interest by
31 each owner of a building lot within the development with this ownership interest passing with
32 the ownership of the lot or shall be held by an incorporated homeowner's association or
33 other legal entity, which assures the ownership, maintenance, and protection of the tract.

34 (3) Site plans submitted as part of development proposals for building permits and clearing and
35 grading permits shall include and delineate all flood hazard areas (if they have been
36 mapped by FEMA, King County or the City of Woodinville or if a special study is required),
37 geological hazard areas, streams and wetlands, buffers and building setbacks and native
38 growth protection easements. If only a part of the development site has been mapped
39 pursuant to WMC 21.24.130, the part of the site which has not been mapped shall be clearly
40 identified and labeled on the site plans. The site plans shall be attached to the notice on title
41 required by WMC 21.24.170.

42 (3) Easements. ~~If a NGPA tract is not required in accordance with subsection (1), a NGPA in the~~
43 form of an easement may be required over delineated critical areas to protect them in
44 perpetuity.

45 (4) Recording. NGPAs shall be recorded on all documents of the title of record and shall be
46 designated on the face of the plat or recorded drawing.

47 ~~(a5) Native growth protection areas (NGPA) shall be marked with critical area signage and/or~~
48 ~~(wildlife friendly) fencing to protect wildlife corridors and to discourage human intrusion into~~
49 ~~the critical area. Fencing options will be left up to the discretion of the Director to further~~
50 ~~protect wildlife habitat pursuant to WMC 21.24.140.~~

Commented [SC38]: This section was moved up to 21.24.090 and consolidated with the disclosure section.

Commented [SC39]: The terminology in the existing code was inconsistent. "Critical area tracts," "critical area easements", "native growth protection easements," was changed to "native growth protection areas". NGPAs cover both tracts and easements

DRAFT

(6b) Native growth protection areas may be enhanced as part of a mitigation or restoration project. The ~~NGPEN~~NGPA shall be designated as protected habitat for fish and wildlife and shall be left in its natural state (with the exception of mitigation to enhance habitat). Any downed trees shall remain in the NGPA to provide habitat for wildlife.

~~(4) Native growth protection easements may be required over delineated critical areas to protect them in perpetuity, as determined by the Development Services Director. Easements shall be recorded with the County Assessor's Office prior to issuance of a certificate of occupancy.~~

Commented [SC40]: Covered with sections (1) and (3) above.

21.24.190200 Critical aquifer recharge areas – Designation and rating.

(1) Definition. Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined in WAC 365-190-030(2). Due to soil infiltration conditions of these CARAs, they contribute significantly to the replenishment of groundwater, and often have a high potential for contamination of groundwater resources.

~~(1) The map entitled King County Critical Recharge Areas, including any authorized updates to this map, is hereby adopted as the designation of critical aquifer recharge areas in the City of Woodinville. The designated critical aquifer recharge areas map may be updated from time to time as new information becomes available pursuant to WMC 21.24.080 and 21.24.090.~~

(2) Designation. Identification of CARAs shall be made in based on the City's adopted Critical Aquifer Recharge Areas map. Areas meeting the CARA designation are critical areas and subject to the provisions of this chapter.

Commented [SC41]: Golder completed a CARA map for the City. Language related to update of maps is listed in 21.24.080.

(3) Category. Critical aquifer recharge areas are categorized as follows:

- (a) Category I critical aquifer recharge areas include those areas designated on the critical aquifer recharge area map as highly susceptible to ground water contamination and that are located within a sole source aquifer or wellhead protection area.
- (b) Category II critical aquifer recharge areas include those mapped areas designated that:
 - (i) Have a medium susceptibility to ground water contamination and are located in a sole source aquifer or wellhead protection area; or
 - (ii) Are highly susceptible to ground water contamination and are not located in a sole source aquifer or wellhead protection area.

Commented [SC42]: Golder's mapping does not include categories as the existing code does. Need to clarify.

(4) An applicant can request that the ~~Development Services Director~~City declassify a specific area included in the map adopted under subsection (4) of this section. The request must be supported by a critical areas report that includes a hydro-geologic assessment. The request to declassify an area shall be reviewed by the Development Services Director following the procedure in WMC 21.24.110.

21.24.200210 Critical aquifer recharge areas – Development regulations standards.

(1) The following new uses or activities are not allowed in Category I critical aquifer recharge areas:

- (a) Hazardous liquid transmission pipelines;
- (b) Sand and gravel, and hard rock mining on land ~~that is not zoned for mining as of December 1, 2004;~~
- (c) Mining of any type below the ground water table;
- (d) Processing, storage, and disposal of radioactive wastes;
- (e) Hydrocarbon extraction;
- (f) Commercial wood treatment facilities on permeable surfaces;
- (g) Golf courses;
- (h) Cemeteries;

Commented [SC43]: No land in the city is zoned for mining

DRAFT

- 1 (i) Wrecking yards;
- 2 (j) Landfills for hazardous waste, municipal solid waste, or special waste; and
- 3 (k) On-site septic systems on lots smaller than one acre without a treatment system that
- 4 results in effluent nitrate-nitrogen concentrations below 10 milligrams per liter.
- 5 (2) The following new uses and activities are not allowed in a Category II critical aquifer
- 6 recharge area:
- 7 (a) Mining of any type below the water table;
- 8 (b) Processing, storage, and disposal of radioactive substances;
- 9 (c) Hydrocarbon extraction;
- 10 (d) Commercial wood treatment facilities on permeable surfaces;
- 11 (e) Wrecking yards;
- 12 (f) Landfills for hazardous waste, municipal solid waste, or special waste; and
- 13 (g) On-site septic systems on lots smaller than one acre without a treatment system that
- 14 results in effluent nitrate-nitrogen concentrations below 10 milligrams per liter.

21.24.230 Critical aquifer recharge areas – Permitted alterations.

(3) The following standards apply to any development proposal in a critical aquifer recharge area:

- 18 (a) All storage tanks proposed to be located in a critical aquifer recharge area must
- 19 comply with local building code requirements and must conform to the International
- 20 Fire Code requirements for secondary containment.
- 21 (b) Commercial vehicle repair and servicing must be conducted over impermeable pads
- 22 and within a covered structure capable of withstanding normally expected weather
- 23 conditions. Chemicals used in the process of vehicle repair and servicing must be
- 24 stored in a manner that protects them from weather and provides containment
- 25 should leaks occur.
- 26 (c) No dry wells shall be allowed in critical aquifer recharge areas on sites used for
- 27 vehicle repair and servicing. Dry wells existing on the site prior to facility
- 28 development must be abandoned using techniques approved by the Washington
- 29 State Department of Ecology prior to commencement of the proposed activity.
- 30 (d) The activities listed below shall be conditioned in accordance with the applicable
- 31 State and Federal regulations as necessary to protect critical aquifer recharge areas.

Commented [SC44]: The table below was revised with updated manuals or guides where possible.

Activity	Applicable State and Federal Regulations
Above-ground storage tanks	WAC 173-303-640
Animal feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Washwater Discharges (WDOE WQ-R-Best Management Practices Manual (DOE 95-56056))
Chemical treatment storage and disposal facilities	WAC 173-303-182
Hazardous waste generator (boat repair shops, biological research facility, dry cleaners, furniture stripping,	Chapter 173-303 WAC

DRAFT

Activity	Applicable State and Federal Regulations
motor vehicle service garages, photographic processing, printing and publishing shops, etc.)	
Injection wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk yards and salvage yards	Chapter 173-304 WAC, Best Management Practices to Prevent Storm Water Pollution at Vehicles Recycler Facilities (WDOE 94-146) , Vehicle Recyclers: A Guide for Implementing the Industrial Stormwater General National Pollutant Discharge Elimination System (NPDES) Permit Requirements (DOE 94-146)
Oil and gas drilling	WAC 332-12-450, Chapter 173-218 WAC
On-site sewage systems (large scale)	Chapter 173-240 WAC
On-site sewage systems (< 14,500 gal./day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide storage and use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Storm Water Pollution at Log Yards (WDOE 95-53) Industrial Stormwater General Permit Implementation Manual for Log Yards (DOE 04-10-031)
Solid waste handling and recycling facilities	Chapter 173-304 WAC
Surface mining	WAC 332-18-015
Underground storage tanks	Chapter 173-360 WAC
Wastewater application to land surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

Commented [SC45]: No longer exists

- 1
- 2 [21.24.240 Critical aquifer recharge areas – Critical areas report additional requirements.](#)
- 3 [\(1\) In addition to the general critical report requirements in WMC 21.24.110, critical areas](#)
- 4 [reports for CARAs must address the requirements of this section.](#)
- 5 [\(a\) Prepared by a qualified professional. A critical areas report for CARAs shall be](#)
- 6 [prepared by a qualified professional who is a hydrogeologist, geologist, or engineer](#)

DRAFT

1 who is licensed in the State of Washington with a minimum of five years of
2 experience in the field and with experience in preparing hydrogeologic assessments.

3 (b) Hydrogeologic Assessment. For all proposed activities to be located in a critical
4 aquifer recharge area, a critical area report shall contain a Level I hydrogeological
5 assessment. A Level 2 hydrogeologic assessment shall be required for any of the
6 following proposed activities:

- 7 (i) Activities that result in five percent (5%) or more impervious site area;
- 8 (ii) Activities that divert, alter, or reduce the flow of surface or ground waters, or
9 reduce the recharging of the aquifer;
- 10 (iii) The use of hazardous substances, other than household chemicals used
11 according to the directions specified on the packaging for domestic
12 applications;
- 13 (iv) The use of injection wells, including on-site septic systems, except those
14 domestic septic systems releasing less than 14,500 gallons of effluent per
15 day and that are limited to a maximum density of one (1) system per one (1)
16 acre; or
- 17 (v) Any other activity determined by the City to likely to have an adverse impact
18 on ground water quality or quantity or on the recharge of the aquifer.

19 (c) Level 1 Hydrogeologic Assessment. A level one hydrogeologic assessment shall
20 include the following site- and proposal-related information at a minimum:

- 21 (i) Available information regarding geologic and hydrogeologic characteristics of
22 the site including the surface location of all critical aquifer recharge areas
23 located on site or immediately adjacent to the site, and permeability of the
24 unsaturated zone;
- 25 (ii) Ground water depth, flow direction, and gradient based on available
26 information;
- 27 (iii) Currently available data on wells and springs within 1,300 feet of the project
28 area;
- 29 (iv) Location of other critical areas, including surface waters, within 1,300 feet of
30 the project area;
- 31 (v) Available historic water quality data for the area to be affected by the
32 proposed activity; and
- 33 (vi) Best management practices proposed to be utilized.

34 (d) Level 2 Hydrogeologic Assessment. A level two hydrogeologic assessment shall
35 include the following site- and proposal-related information at a minimum, in addition
36 to the requirements for a level one hydrogeological assessment:

- 37 (i) Historic water quality data for the area to be affected by the proposed activity
38 compiled for at least the previous five (5) year period;
- 39 (ii) Ground water monitoring plan provisions;
- 40 (iii) Discussion of the effects of the proposed project on the ground water quality
41 and quantity, including:
 - 42 (A) Predictive evaluation of ground water withdrawal effects on nearby
43 wells and surface water features; and
 - 44 (B) Predictive evaluation of contaminant transport based on potential
45 releases to ground water; and
- 46 (iv) A spill plan that identifies equipment and/or structures that could fail, resulting
47 in an impact. Spill plans shall include provisions for regular inspection, repair,
48 and replacement of structures and equipment that could fail.

50 **21.24.350 210 Flood hazard areas — Components. Frequently flooded areas - Designation.**

51 (1) Definition and location.

Commented [SC46]: Language is from DOE's model ordinance. May want to consider simplifying requirements to avoid confusion between CARA Categories I and II and hydrogeologic assessment Level I and 2.

Commented [SC47]: Frequently flooded areas (previously flood hazard areas) has been moved starting from 21.24.210. The sections have been renumbered to start at 21.24.300, adjacent to streams/fish and wildlife areas. The purpose of this was to place similar or overlapping critical areas together for ease of reading.

DRAFT

1 A flood hazard area consists of the following components:

2 (a) Frequently flooded areas consist of the following components:

3 (i) Floodplain;

4 (ii) Flood fringe;

5 (iii) Zero-rise floodway; and

6 (iv) Federal Emergency Management Agency ("FEMA") FEMA floodway.

7 (2) The Public Works Director shall determine the flood hazard area after obtaining, reviewing
8 and utilizing base flood elevations and available floodway data for a flood having a one percent
9 chance of being equaled or exceeded in any given year, often referred to as the "100-year
10 flood." The base flood is determined for existing conditions, unless a basin plan including
11 projected flows under future developed conditions has been completed and adopted by the City
12 of Woodinville, in which case those future flow projections shall be used. In areas where the
13 Flood Insurance Study for the County includes detailed base flood calculations, those
14 calculations shall be used until projections of future flows are completed and adopted by the
15 City of Woodinville.

16 ~~21.24.220 Flood Insurance Study adopted.~~

17 (b) Location. Frequently flooded areas shall include the following areas:

18 (i) Areas identified on the flood insurance map(s). Those areas of special flood
19 hazard identified by the Federal Insurance and Mitigation Administration
20 (FIMA) in a scientific and engineering report entitled "the most current version
21 of the Flood Insurance Study for King County" dated November 8, 1999, and
22 any revisions thereto, with accompanying Flood Insurance Maps flood
23 insurance maps (FIRM), and any revisions thereto, The Flood Insurance
24 Study and accompanying maps are hereby adopted by reference and
25 declared to be a part of this chapter.

26 (ii) Areas identified by the City. Those areas of special flood hazard identified by
27 the City based on a review of base flood elevation and floodway data
28 available from federal, state, county or other agency sources when base flood
29 elevation data has not been provided from FIMA, identified as A and V zones
30 of the flood insurance maps.

31 (2) Use of additional information. The Flood Insurance Study and the FIRM are on file at the
32 Woodinville City Hall. may use additional flood information that is more restrictive or detailed
33 than that provided in the Flood Insurance Study to designate frequently flooded areas,
34 including data on channel migration, historical data, high water marks, photographs of past
35 flooding, location of restrictive floodways, maps showing future build-out conditions, maps
36 that show riparian habitat areas, or similar information.

37 (3) Flood elevation data. When base flood elevation data is not available (A and V zones), the
38 City shall obtain, review, and reasonably utilize any base flood elevation and floodway data
39 available from a federal, state, or other source, in order to administer this Chapter.

40 (4) Designation made by City. The best available flood insurance maps are to be used as a
41 guide for the City, project applicants, and the public and should be considered a minimum
42 designation of frequently flooded areas. Flood insurance maps are subject to continuous
43 updated as areas are reexamined or new areas are identified. Mewer and more restrictive
44 information for flood hazard area identification as outlined in WMC 21.24.210(2) shall be the
45 basis for regulation until a new FIRM is issued which incorporates the data utilized under
46 WMC 21.24.210(2).

47 (5) For all new structures or substantial improvements in a flood hazard area, the applicant shall
48 provide certification by a professional civil engineer or land surveyor licensed by the State of
49 Washington for the following:

50 (a) The actual as-built elevation of the lowest floor, including basement; and

51 (b) The actual as-built elevation to which the structure is flood-proofed, if applicable.

Commented [SC48]: Incorporated with sections below.

DRAFT

1 ~~(26)~~ The engineer or surveyor shall indicate if the structure has a basement.
2 ~~(73)~~ The Building Official shall maintain the certifications required by this section for public
3 inspection.

4
5 **21.24.360~~230~~ Flood fringe Frequently flooded areas – Development standards and**
6 **permitted alterations.**

7 (1) Base flood storage volume. Development shall not reduce the effective base flood storage
8 volume of the floodplain. Grading or other activity ~~which that~~ would reduce the effective
9 storage volume shall be mitigated by creating compensatory storage on the site or off the site
10 ~~if legal.~~ Legal arrangements ~~can~~ shall be made to assure that the effective compensatory
11 storage volume will be preserved in perpetuity over time. ~~Grading for construction of livestock~~
12 ~~manure storage facilities to control nonpoint source water pollution designed to the standards~~
13 ~~of and approved by the County Conservation District is exempt from this compensatory~~
14 ~~storage requirement.~~

15 (2) In addition to requiring the applicant to meet the requirements of WMC 21.24.360 through
16 21.24.380 and other applicable local, State, and Federal requirements, the City shall:

- 17 (a) Notify adjacent communities and the Department of Ecology prior to any alteration or
18 relocation of a watercourse designated as a zone beginning with A on a FIRM map,
19 and submit evidence of such notification to the Federal Insurance and Mitigation
20 Administration.
21 (b) Require that maintenance be provided within the altered or relocated portion of said
22 watercourse so that the flood-carrying capacity is not diminished.

23
24 **21.24.370 Frequently flooded areas – Permitted alterations.**

25 (1) Flood fringe. The following shall apply to development located within the flood fringe:

26 (a) No structure shall be allowed which would be at risk due to stream bank
27 destabilization including, but not limited to, that associated with channel relocation or
28 meandering.

29 ~~(3) All elevated construction shall be designed and certified by a professional structural~~
30 ~~engineer licensed by the State of Washington and shall be approved by the Public~~
31 ~~Works Director prior to construction.~~

32 (4b) Subdivisions, short subdivisions and binding site plans shall meet the following
33 requirements:

- 34 (a) New building lots shall contain 5,000 square feet or more of buildable land
35 outside the zero-rise floodway, and building setback areas shall be shown on
36 the face of the plat to restrict permanent structures to this buildable area;
37 (b)ii) All utilities and facilities such as sewer, gas, electrical and water systems
38 shall be located and constructed to minimize or eliminate flood damage
39 consistent with subsections ~~(5), (6)(c), (d) and (7e)~~ of this section;
40 (c)iii) Base flood data and flood hazard notes shall be shown on the face of the
41 recorded subdivision, short subdivision or binding site plan including, but not
42 limited to, the base flood elevation, required flood protection elevations and
43 the boundaries of the floodplain and the zero-rise floodway, if determined;
44 and
45 (d)iv) The following notice shall also be shown on the face of the recorded
46 subdivision, short subdivision, or binding site plan for all affected lots:

47
48 **NOTICE**

49 Lots and structures located within flood hazard areas may
50 be inaccessible by emergency vehicles during flood events.

Commented [JN49]: Maps are included in WMC 21.24.080

Commented [SC50]: Not applicable within city limits

Commented [SC51]: Unnecessary – standard requirement under IBC for new construction, not just for those in frequent flood areas.

DRAFT

Residents and property owners should take appropriate advance precautions.

~~(e) If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that:~~

~~(iv) All such proposals are consistent with the need to minimize flood damage within the flood-prone area;~~

~~(ii) All public utilities and facilities, such as sewer, gas, electrical, and water systems, are located and constructed to minimize or eliminate flood damage; and~~

~~(iii) Adequate drainage is provided to reduce exposure to flood hazards.~~

~~(5c) New residential structures and substantial improvements of existing residential structures shall meet the following requirements:~~

~~(a) The lowest floor, including basement, shall be elevated one to one and one-half between 1 to 1.5 feet above the base flood elevation.~~

~~(b) Portions of a structure which are below the lowest floor area shall not be fully enclosed. The areas and rooms below the lowest floor shall be designed to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for satisfying this requirement shall meet or exceed the following requirements:~~

~~(i) A minimum of two openings on opposite walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;~~

~~(ii) The bottom of all openings shall be no higher than one foot above grade; and~~

~~(iii) Openings may be equipped with screens, louvers or other coverings or devices if they permit the unrestricted entry and exit of floodwaters;~~

~~(c) Materials and methods which that are resistant to and minimize flood damage shall be used; and~~

~~(d) All electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities shall be flood-proofed to or elevated above the flood protection elevation;~~

~~(6) New nonresidential structures and substantial improvements of existing nonresidential structures shall meet the following requirements:~~

~~(a) The elevation requirement for residential structures contained in subsection (5) of this section shall be met; or~~

~~(b) The structure shall be flood-proofed to the flood protection elevation and shall meet the following requirements:~~

~~(i) The applicant shall provide certification~~

~~(v) The structures shall be certified by a professional civil or structural engineer licensed by the State of Washington that the flood-proofing methods are adequate to withstand the flood depths, pressures, velocities, impacts, uplift forces and other factors associated with the base flood. After construction, the engineer shall certify that the permitted work conforms with the approved plans and specifications; and~~

~~(ii) Approved building permits for flood-proofed nonresidential structures shall contain a statement notifying applicants that flood insurance premiums shall be based upon rates for structures, which that are one foot below the flood-proofed level;~~

~~(c) Materials and methods which are resistant to and minimize flood damage shall be used; and~~

Commented [SC52]: Listed above.

Commented [SC53]: Residential and non-residential structures were consolidated together and section 6 was eliminated to reduce redundancy. Requirements for both were nearly the same.

Commented [SC54]: Section appears to contradict section immediate above. What would be the room below the lowest floor?

DRAFT

- 1 ~~(d) All electrical, heating, ventilation, plumbing, air conditioning equipment and~~
- 2 ~~other utility and service facilities shall be flood-proofed to or elevated above~~
- 3 ~~the flood protection elevation.~~
- 4 (7)(v) All new construction and substantial improvements shall be anchored to
- 5 prevent flotation, collapse or lateral movement of the structure.
- 6 (8d) Mobile and manufactured homes shall meet the following requirements:
- 7 (a) ~~Manufactured homes and (i) New mobile and manufactured homes to be~~
- 8 ~~placed or substantially improved on sites of existing mobile and~~
- 9 ~~manufactured homes:~~
- 10 (i) ~~Outside of a mobile home park or subdivision;~~
- 11 (ii) ~~In a new mobile home park or subdivision;~~
- 12 (iii) ~~In an expansion to an existing mobile home park or subdivision; or~~
- 13 (iv) ~~In an existing mobile home park or subdivision on which a mobile home has~~
- 14 ~~incurred "substantial damage" as the result of a flood;~~
- 15 ~~shall be elevated on a permanent foundation such that the lowest floor of the~~
- 16 ~~manufactured or mobile home is elevated one foot above the base flood~~
- 17 ~~elevation, and is securely anchored to an adequately designed foundation~~
- 18 ~~system to resist flotation collapse and lateral movement.~~
- 19 (b) ~~Manufactured and mobile homes to be placed or substantially improved on~~
- 20 ~~sites in an existing mobile home park or subdivision that are not subject to the~~
- 21 ~~above manufactured and mobile home provisions must be elevated so that~~
- 22 ~~either:~~
- 23 (i) ~~The lowest floor of the manufactured or mobile home is elevated to one foot~~
- 24 ~~above the base flood elevation; or~~
- 25 (ii) ~~The manufactured or mobile home chassis is supported by reinforced piers or~~
- 26 ~~other foundation elements of at least equivalent strength that are no less than~~
- 27 ~~36 inches in height above grade and be securely anchored to an adequately~~
- 28 ~~designed foundation system to resist flotation, collapse, and lateral~~
- 29 ~~movement.~~
- 30 (e)(ii) All new or substantially improved manufactured and mobile homes shall be
- 31 securely anchored to prevent flotation, collapse, or lateral movement, and
- 32 shall be installed using methods and practices that minimize flood damage.
- 33 Anchoring methods may include, but are not limited to, use of over-the-top or
- 34 frame ties to ground anchors (reference FEMA's "Manufactured Homes
- 35 Installation in Flood Hazard Areas" guidebook for additional techniques).
- 36 (d) ~~No permit or approval for the following (iii) Compliance with this chapter~~ shall
- 37 ~~be required for new construction or expansion of a mobile home park, or~~
- 38 ~~reconstruction of streets, utilities or pads in an existing mobile home park~~
- 39 ~~exceeding 50 percent of the assessed value of such structures. granted~~
- 40 ~~unless all manufactured or mobile homes within the mobile home park meet~~
- 41 ~~the requirements in subsection (8)(b) of this section:~~
- 42 (i) ~~A new mobile home park;~~
- 43 (ii) ~~An expansion of an existing mobile home park; or~~
- 44 (iii) ~~Any repair or reconstruction of streets, utilities or pads in an existing mobile~~
- 45 ~~home park which equals or exceeds 50 percent of the value of such streets,~~
- 46 ~~utilities or pads.~~
- 47 (9e) Recreational vehicles ~~must either~~ shall meet one of the following requirements:
- 48 (a) Be on the site for fewer than 180 consecutive days;
- 49 (b) Be fully licensed and ready for highway use, on its wheels or jacking system,
- 50 be attached to the site only by quick disconnect-type utilities and security
- 51 devices, and have no permanently attached additions; or

Commented [SC55]: Unnecessary to call out specific cases. This calls out every possible location for a mobile/manufactured home

Commented [SC56]: Incorporated in (ii)

Commented [SC57]: City does not have any existing mobile home parks or subdivisions

Commented [SC58]: Incorporated in section above.

DRAFT

(eiii) Meet the requirements of subsection (8d) of this section and the elevations and anchoring requirements of manufactured and mobile homes.

(40) Utilities shall meet the following requirements:

(ai) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(bij) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;

(eiii) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding;

(div) Sewage and agricultural waste storage facilities shall be flood-proofed to the flood protection elevation;

(ev) Above-ground utility transmission lines, other than electric transmission lines, shall only be allowed for the transport of nonhazardous substances; and

(fvi) Buried utility transmission lines transporting hazardous substances shall be buried at a minimum depth of four feet below the maximum depth of scour for the base flood, as predicted by a professional civil engineer licensed by the State of Washington, and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated.

(g14) ~~Critical Essential public~~ facilities may be allowed within the flood fringe of the floodplain, but only when no feasible alternative site is available. ~~Critical facilities shall be evaluated through the conditional or special use permit process.~~

~~Critical Essential public~~ facilities constructed within the flood fringe shall have the lowest floor elevated to three or more feet above the base flood elevation. Flood-proofing and sealing measures shall be taken to ensure that hazardous substances will not be displaced by or released into floodwaters. Access routes elevated to or above the base flood elevation shall be provided to all ~~critical essential public~~ facilities from the nearest maintained public street or roadway.

(h12) Prior to approving any permit for alterations in the flood fringe, ~~the Public Works Director~~ City shall determine that all permits required by State or Federal law have been obtained.

~~21.24.240 Zero-rise floodway — Development standards and permitted alterations.~~

(1) ~~(2) Zero-rise floodway and FEMA floodway.~~ The requirements ~~which that~~ apply to the flood fringe shall also apply to the zero-rise floodway ~~and FEMA floodway.~~ The more restrictive requirements shall apply where there is a conflict.

~~(a) New residential or nonresidential structures are prohibited within the FEMA floodway.~~

(2b) A development proposal including, but not limited to, new or reconstructed structures shall not cause any increase in the base flood elevation unless the following requirements are met:

(ai) Amendments to the Flood Insurance Rate Map are adopted by FEMA, in accordance with 44 CFR 70, to incorporate the increase in the base flood elevation; and

(bij) Appropriate legal documents are prepared in which all property owners affected by the increased flood elevations consent to the impacts on their property. These documents shall be filed with the title of record for the affected properties.

(3c) The following are presumed to produce no increase in base flood elevation and shall not require a ~~special study~~ critical area report to establish this fact:

(ai) New residential structures outside the FEMA floodway on lots in existence before March 31, 1993, which contain less than 5,000 square feet of

Commented [SC59]: Consolidated with FEMA floodway section below

DRAFT

- 1 buildable land outside the zero-rise floodway and which have a total building
- 2 footprint of all proposed structures on the lot of less than 2,000 square feet;
- 3 (b)ii) Substantial improvements of existing residential structures in the zero-rise
- 4 floodway, but outside the FEMA floodway, where the footprint is not
- 5 increased; ~~or~~
- 6 ~~(c)iii)~~ Substantial improvements of existing residential structures meeting the
- 7 requirements for new residential structures in WMC ~~21.24.230.21.24.230; or~~
- 8 4(iv) Substantial improvements of existing residential structures in the FEMA
- 9 floodway, meeting the requirements of WAC 173-158-070, as amended.
- 10 (d) Post or piling construction techniques which permit water flow beneath a structure
- 11 shall be used.
- 12 (5e) All temporary structures or substances hazardous to public health, safety and
- 13 welfare, except for hazardous household substances or consumer products
- 14 containing hazardous substances, shall be removed from the zero-rise floodway
- 15 during the flood season from September 30th to May 1st.
- 16 (6f) New residential or nonresidential structures shall meet the following requirements:
- 17 (a) The structures shall be outside the FEMA floodway; and
- 18 (b)ii) The structures shall be on lots in existence before March 31, 1993, which
- 19 contain less than 5,000 square feet of buildable land outside the zero-rise
- 20 floodway.
- 21 (7g) Utilities may be allowed within the zero-rise floodway if the City determines that no
- 22 feasible alternative site is available, subject to the following requirements:
- 23 (a) Installation of new on-site sewage disposal systems shall be prohibited
- 24 unless a waiver is granted by the department of public health; and
- 25 (b)ii) Construction of sewage treatment facilities shall be prohibited.
- 26 ~~(8) Critical facilities shall not be allowed within the zero-rise floodway except as~~
- 27 ~~provided in WMC 21.24.230(11).~~
- 28 ~~(9) Livestock manure storage facilities and associated nonpoint source water pollution~~
- 29 ~~facilities designed, constructed and maintained to the standards of and approved in a~~
- 30 ~~conservation plan by the King County Conservation District may be allowed if the~~
- 31 ~~Public Works Director reviews and approves the location and design of the facilities.~~
- 32 (14) Structures and installations ~~that, which~~ are dependent upon the floodway, may be
- 33 located in the floodway if the development proposal is approved by all agencies with
- 34 jurisdiction. Such structures include, but are not limited to:
- 35 (a) Dams or diversions for water supply, flood control, hydroelectric production,
- 36 irrigation or fisheries enhancement;
- 37 (b)ii) Flood damage reduction facilities, such as levees and pumping stations;
- 38 (c)iii) Stream bank stabilization structures where no feasible alternative exists for
- 39 protecting public or private property;
- 40 (d)iv) Storm water conveyance facilities subject to the development standards for
- 41 streams and wetlands and the King County Surface Water Design Manual;
- 42 (e)v) Boat launches and related recreation structures;
- 43 (f)vi) Bridge piers and abutments; and
- 44 (g)vii) Other fisheries enhancement or stream restoration projects.
- 45 **21.24.250 FEMA floodway — Development standards and permitted alterations.**
- 46 (1) The requirements which apply to the zero-rise floodway shall also apply to the FEMA
- 47 floodway. The more restrictive requirements shall apply where there is a conflict.
- 48 2) A development proposal including, but not limited to, new or reconstructed structures shall
- 49 not cause (any increase in the base flood elevation.
- 50 (3) New residential or nonresidential structures are prohibited within the FEMA floodway.

Commented [SC60]: What was this requirement intended for?

Commented [SC61]: Removed., as it is not allowed per section (330)(11)

DRAFT

(4) Substantial improvements of existing residential structures in the FEMA floodway, meeting the requirements of WAC 173-158-070, as amended, are presumed to produce no increase in base flood elevation and shall not require a special study to establish this fact.

21.24.260 Flood hazard areas — Certification by engineer or surveyor.

21.24.260 Flood hazard areas — Certification by engineer or surveyor.

(1) For all new structures or substantial improvements in a flood hazard area, the applicant shall provide certification by a professional civil engineer or land surveyor licensed by the State of Washington of:

- (a) The actual as-built elevation of the lowest floor, including basement; and
- (b) The actual as-built elevation to which the structure is flood-proofed, if applicable.

(2) The engineer or surveyor shall indicate if the structure has a basement.

(3) The Building Official shall maintain the certifications required by this section for public inspection.

21.24.380 Frequently flooded areas – Critical areas report additional requirements.

(1) In addition to the general critical report requirements of WMC 21.24.120, critical areas reports for frequently flooded areas shall include a flood hazard assessment and must address the requirements of this section.

(a) Prepared by a qualified professional. A critical areas report for frequently flooded areas shall be prepared by a qualified professional who is a hydrologist or engineer licensed in the State of Washington. The qualified professional shall have a minimum of five years of experience in the field and experience in preparing flood hazard assessments.

(b) Site areas. The following areas shall be addressed:

- (i) The site area of the proposed activity;
- (ii) All areas of a special flood hazard, as indicated in the flood insurance maps within 200 feet of the project area; and
- (iii) All other flood areas indicated on the flood insurance maps within 200 feet of the project area.

(c) Site and construction plans. A copy of the site and construction plans for the development proposal showing:

- (i) Floodplain (100-year flood elevation), 10- and 50-year flood elevations, floodway, other critical areas, buffers, and shoreline areas;
- (ii) Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;
- (iii) Clearing limits; and
- (iv) Elevation of the lowest floor of all structures, and the level to which any nonresidential structure has been floodproofed.

(d) Watercourse alteration. Alteration of natural watercourses shall be avoided, if feasible. If unavoidable, a critical area report shall include:

- (i) Extent of Watercourse Alteration. A description of and plan showing the extent to which a watercourse will be altered or relocated as a result of proposal;
- (ii) Maintenance program required for watercourse alterations. A maintenance program that provides maintenance practices for the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished; and
- (iii) Compliance documentation. Information describing and documenting how the proposed watercourse alteration complies with the requirements of WMC 21.24.400 through 21.2.440, the adopted Shoreline Master Program, and other applicable state or federal permit requirements.

Commented [SC62]: Moved to 21.24.360