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1 **Chapter 21.24**

2 **DEVELOPMENT STANDARDS – CRITICAL AREAS**

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29 **21.24.010 Purpose.**

30 (1) Introduction. The purpose of this chapter is to designate and classify ecologically critical
31 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 City of Woodinville Comprehensive Plan. These goals include:

36 (a) Goal E-1: To preserve and enhance aquatic and wildlife habitat.

37 (b) Goal E-2: To protect the public from natural hazards resulting from disturbance of the
38 environment.

39 (c) Goal E-3: To protect and improve water quality.

40 (d) Goal E-5: To promote the preservation of Woodinville's Northwest woodland
41 character.

42 (2) Scope. Critical areas include critical aquifer recharge areas, geologically hazardous area,
43 wetlands, streams, frequent flood areas, and fish and wildlife habitat conservation areas.
44 The City of Woodinville recognizes that critical areas provide a variety of valuable and
45 beneficial biological and environmental functions that benefits the city and its residents, but
46 that some critical areas may pose a threat to public safety and property. The standards
47 established in this chapter are intended to protect critical areas while providing property
48 owners with reasonable use of their property. This chapter seeks to:

49 (a) Protecting members of the public and public resources and facilities from injury, loss
50 of life, property damage or financial loss due to flooding, erosion, landslides,
51 seismic events, soil subsidence or steep slope failures;

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- 1 (b) Maintaining and protecting healthy, functioning ecosystems through the protection of
- 2 unique, fragile, and valuable elements of the environment, including ground and
- 3 surface waters, wetlands, and fish and wildlife and their habitats, and to conserve
- 4 the biodiversity of plant and animal species;
- 5 (c) Directing activities not dependent on critical areas resources to less ecologically
- 6 sensitive areas and mitigating unavoidable impacts to critical areas by regulating
- 7 alterations in and adjacent to critical areas;
- 8 (d) Preventing cumulative adverse environmental impact to water quality and availability,
- 9 net loss of wetlands, streams, lakes, fish and wildlife habitat, and frequently flooded
- 10 areas, and habitat conservation areas;
- 11 (e) Meeting the requirements of the National Flood Insurance Program and maintaining
- 12 the City of Woodinville as an eligible community for Federal flood insurance
- 13 benefits;
- 14 (f) Alerting members of the public including, but not limited to, appraisers, owners,
- 15 potential buyers, or lessees to the development limitations of critical areas;
- 16 (g) Providing for public enjoyment of environmentally protected areas by encouraging
- 17 when feasible and sensible, multiple use of critical area buffers; and
- 18 (h) Serve as a basis for exercise of the City's substantive authority under the State
- 19 Environmental Policy Act (SEPA) and the City's SEPA rules.
- 20

21 **21.24.020 Applicability.**

- 22 (1) Compliance with this chapter. The provisions of this chapter shall apply to all land uses and
- 23 activities in the city limits, and all persons within the city limits shall comply with the
- 24 requirements of this chapter. No permit or authorization shall be approved or issued to alter
- 25 the condition of any land, water, or vegetation, or to construct or alter any structure or
- 26 improvement without first assuring compliance with the requirements of this chapter.
- 27 (2) Alterations. Any human activity that results or is likely to result in an impact upon the existing
- 28 condition of a critical area is an alteration that is subject to specific limitations as specified by
- 29 this chapter. Alterations include, but are not limited to, grading; filling; dredging; draining;
- 30 channelizing; applying herbicides, pesticides or any hazardous substance; discharging
- 31 pollutants except stormwater; grazing domestic animals; paving; constructing; cutting,
- 32 pruning, topping, trimming, relocating or removing vegetation; or any other human activity
- 33 which results or is likely to result in an impact to existing vegetation, hydrology, wildlife or
- 34 wildlife habitat. Alterations do not include walking, fishing, any other passive recreation, or
- 35 other similar activities.
- 36 (3) Conflict of provisions. When another provision of the Woodinville Municipal Code conflicts
- 37 with this chapter or when the provisions of this chapter are in conflict, that provision which
- 38 provides more environmental protection to critical areas shall apply, unless specifically
- 39 provided otherwise in this chapter, or unless such provision conflicts with Federal or State
- 40 laws or regulations.
- 41 5) Forest practices. The provisions of this chapter shall apply to all forest practices over which
- 42 the City has jurisdiction pursuant to Chapter 76.09 RCW and WAC Title 222.
- 43
- 44
- 45

46 **21.24.030 Critical area maps and inventories.**

- 47 (1) Critical Areas Map. The approximate location and extent of critical areas are shown on the
- 48 City's adopted critical areas map. The latest critical areas map is available from the
- 49 Development Services Department. The maps do not provide a final critical area
- 50 determination. Adopted critical areas maps include:
- 51 (a) Federal Emergency Management Administration flood insurance rate maps;

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- 1 (b) US Geological Survey landslide hazard, seismic hazard, and volcano hazard maps;
- 2 (c) Department of Natural Resources seismic hazard maps for Western Washington;
- 3 (d) Department of Natural Resources slope stability map;
- 4 (e) National Wetlands Inventory;
- 5 (f) Locally adopted maps, including the Critical Aquifers Recharge Areas map and
- 6 Geologically Hazardous map.

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

11 **21.24.040 Complete exemptions.**

12 The following activities are exempt from the provisions of this chapter, provided they are
13 otherwise consistent with the provision of other local, state, and federal law requirements:

- 14 (1) Emergency actions necessary to prevent an immediate threat to public health, safety and
15 welfare or that pose an imminent risk of damage to public or private property. Alteration
16 undertaken pursuant to this subsection is reported to the City immediately. The impacted
17 critical areas and its buffers shall be fully restored in accordance with a critical areas report
18 and mitigation plan;
- 19 (2) Agricultural activities in existence before March 31, 1993, as follows:
 - 20 (a) Mowing of hay, grass, or grain crops;
 - 21 (b) Tilling, dicing, planting, seeding, harvesting and related activities for pasture, food
22 crops, grass seed or sod if such activities do not take place on steep slopes;
 - 23 (c) Normal and routine maintenance of existing irrigation and drainage ditches not used
24 by fish species and do not drain directly into salmon-bearing waterbodies; and
 - 25 (d) Normal and routine maintenance of farm ponds, fish ponds, manure lagoons and
26 livestock watering ponds;
- 27 (3) Local collection and distribution utility lines, mains, equipment, appurtenances, including
28 electric facilities with an associated voltage of 55,000 volts or less, not including substations;
29 public sewer local collection; public water local distribution; natural gas; cable
30 communications; or telephone facilities. Local collection and distribution utilities may be
31 allowed in critical areas or their buffers, as follows:
 - 32 (a) Normal and routine maintenance or repair of existing utility structures;
 - 33 (b) Relocation of local collection and distribution utility lines when required by a local
34 governmental agency; and
 - 35 (c) Replacement, operation, repair, modification, installation, or construction in an
36 improved public road right-of-way of local collection and distribution utility lines, when
37 such facilities are located within an improved public road right-of-way or City-
38 authorized private roadway.
- 39 (4) Maintenance, operation, repair or replacement of publicly improved roadways or recreation
40 areas, provided any such alteration does not involve the expansion of structures or related
41 improvements into previously unimproved areas of rights-of-way;
- 42 (5) Removal of non-native invasive species. Work shall be limited to hand removal of non-native
43 invasive species, unless permits from affected regulatory agencies have been obtained for
44 approved biological or chemical treatments.
- 45 (6) Passive recreation, educational and scientific research that do not degrade critical areas or
46 buffers, such as fishing, hiking and bird watching, not including trail building or clearing.
- 47
- 48

DRAFT**21.24.050 Limited exemptions.**

(1) The following are exempt from the provisions of this chapter and any administrative rules promulgated hereunder, except for the notice on title provisions, WMC 21.24.170 through 21.24.180, and the frequently flooded areas provisions, WMC 21.24.350 through 21.24.380:

- (a) Single-family detached residences in existence prior to March 31, 1993 or approved under a variance or reasonable use permit may be expanded, repaired, modified, or replaced, provided all of the following are met:
 - (i) Expansion does not increase the existing footprint of the residence lying within the above-described buffer or building setback area by more than 1,000 square feet over that existing;
 - (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.
- (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 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.

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 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:
 - (i) There is no other practical alternative to the proposed development with less impact on the critical area;
 - (ii) The application of this chapter would unreasonably restrict the ability to provide services to the public;
 - (iii) Any impacts permitted to the critical area are mitigated in accordance with WMC 21.24.140 to the greatest extent possible;
 - (iv) The proposed development protects critical areas and/or buffer functions and values consistent with best available science; and

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1 (v) The proposed development is consistent with other applicable regulations and
2 requirements.

3 (c) This exception shall not allow the use of the following critical areas for regional
4 retention/detention facilities except where the applicant can clearly demonstrate that
5 the facility will protect public health and safety or repair damaged natural resources:

6 (i) Class 1 stream buffers;

7 (ii) Category I wetland buffers with plant associations of infrequent occurrence; or

8 (iii) Category I or II wetland buffers, which provide critical or outstanding habitat
9 for herons, raptors or State or Federal designated endangered or threatened
10 species unless clearly demonstrated by the applicant that there will be no
11 impact on such habitat.

12
13 **21.24.070 Reasonable use exceptions.**

14 (1) If the application of this chapter would deny all reasonable use of the property, the applicant
15 may apply for a reasonable use permit pursuant to this subsection:

16
17 (a) The reasonable use permit shall be reviewed as Type III project permit, pursuant to
18 Chapters 17.07 through 17.17 WMC. The Hearing Examiner shall make a decision
19 based on the following criteria:

20 (i) The application of this chapter would deny all reasonable use of the property;

21 ((ii) The proposed development does not pose an unreasonable threat to the
22 public health, safety or welfare on or off the development proposal site;

23 (iii) Any alterations to the critical area shall be the minimum necessary to allow
24 for reasonable use of the property;

25 (iv) Any impacts permitted to the critical area are mitigated in accordance with
26 WMC 21.24.140 to the greatest extent possible;

27 (v) The proposed development protects critical areas and/or buffer functions and
28 values consistent with best available science; and

29 (vi) The proposed development is consistent with other applicable regulations
30 and requirements.

31 (b) Any authorized alteration of a critical area under this subsection shall be subject to
32 conditions established by the Hearing Examiner to safeguard public health, general
33 welfare and safety..

34
35 **21.24.080 Subdivisions and density calculations within critical areas.**

36 (1) The intent of this section is to provide for the preservation of critical areas and critical area
37 buffers, flexibility in design, and consistent treatment of different types of development
38 proposals.

39 (2) The subdivision and short subdivision of land located in geologically hazardous areas,
40 frequently flooded areas, wetlands, streams, and fish and wildlife habitat conservation areas
41 shall be subject to the following:

42 (a) Land that is located wholly within the critical area or its buffer may not be subdivided.

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

48 (c) Access roads and utilities serving the proposed may be permitted within the critical
49 area and associated buffers only if the city determines that no other feasible
50 alternative exists and when consistent with this chapter.

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

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

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

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

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

17 (b) No additional density is allowed over the base density of the underlying zone.

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

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

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
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

22
 23 (d) All other applicable dimensional requirements pursuant to WMC 21.12.030 shall be
 24 met.

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

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

28 (g) The lot sizes shall not be averaged pursuant to WMC 21.12.180.

29 (h) No panhandle lots are permitted.

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

32
 33
 34 **21.24.090 Disclosure and notice on title.**

35 (1) The applicant shall disclose to the City the presence of critical areas on the project area and
 36 any mapped or identifiable critical areas within 100 feet of the applicant's property.

37 (2) The owner of any property containing critical areas or buffers on which a development
 38 proposal is submitted, except a public right-of-way or the site of a permanent public facility,
 39 shall file for record with the King County Auditor a notice approved in form by the City.. The

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1 notice shall state the presence of critical areas or buffers on the property, of the application
2 of this chapter to the property, and that limitations on actions in or affecting such critical
3 areas or buffers may exist. The notice shall run with the land and failure to provide such
4 notice to any purchaser prior to transferring interest in the property shall be a violation of this
5 chapter.

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

9
10 **21.24.100 Critical area determination.**

- 11 (1) The City shall perform a critical area review for any development permit application or other
12 request for permission to proceed with an alteration on a site that includes a critical area or
13 is within an identified critical area buffer.

- 14 (2) As part of the critical area determination, the City shall:

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

24
25 **21.24.110 Critical areas report requirement.**

- 26 (1) General. An application for a development proposal that includes a critical area buffer shall
27 include a critical area report that uses the best available science to evaluate the proposal
28 and all probable impacts.

- 29 (2) Waiver. The Development Services Director may waive the requirement for a report if the
30 applicant demonstrates that:

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

- 35 (3) Report format. The critical areas report shall be in the form of a written document. A critical
36 area report may be combined with any studies required by other laws and regulations. If
37 necessary to ensure compliance with this chapter, additional information from the applicant
38 may be required, separate from the critical areas report. (4) If the development proposal will
39 affect only a part of the development proposal site, the Development Services Director may
40 limit the scope of the required special study to include only that part of the site that may be
41 affected by the development.

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

- 45 (a) Identification and characterization of all critical areas within 300 feet of the project area;;
46 (b) Existing conditions of the critical area, including an assessment of habitat and
47 ecological functions and values;
48 (c) Assessment of the impacts of any alteration proposed for a critical area or buffer;
49
50 (d) A scale map of the project area. If only a portion of the development site has been
51 mapped pursuant to WMC 21.24.130, the unmapped portion shall be clearly identified

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1 and labeled on the site plans. The site plans shall be attached to the notice on title
2 required by WMC 21.24.090.(e) Development sequencing consistent with WMC
3 21.24.090;

- 4 (f) Project narrative describing the proposal; anticipated temporary and permanent impacts
5 to critical areas or its buffers; construction activities and sequencing; restoration,
6 enhancement, or mitigation measures; and other relevant information;
- 7 (g) Construction plans, including site diagrams, cross-sectional drawings, topographic
8 elevations at two-foot intervals; existing and final grade elevations; and other drawings to
9 demonstrate construction techniques and anticipated final outcomes;
- 10 (h) A description of proposed mitigation actions and mitigation site selection criteria.
11 Mitigation shall be design to achieve no net loss of ecological function consistent with
12 WMC 21.24.120 and mitigation requirements for each affected critical area;
- 13 (i) Evaluation of the proposal for the additional requirements for each critical area. Critical
14 areas reports for two or more types of critical areas must meet the report requirements
15 for each relevant type of critical area.
- 16 (6) A permit or approval sought as part of a development proposal for which multiple permits
17 are required may adopt a previously approved critical area report if:
- 18 (a) There is no material change in the development proposal since the prior review;
19 (b) There is no new information available that is important to the critical area review of
20 the site or particular critical area;
21 (c) The permit or approval under which the prior review was conducted has not expired,
22 or if no expiration date exists, no more than five years have lapsed since the
23 issuance of that permit or approval; and
24 (d) The prior permit or approval, including any conditions, has been complied with.

25
26 **21.24.120 Mitigation requirements.**

- 27 (1) General.Mitigation, maintenance and monitoring measures shall be in place to protect critical
28 areas and buffers from alterations resulting from proposed development.
- 29 (2) Mitigation. Mitigation shall be in-kind and on-site where feasible, and shall be designed to
30 maintain and enhance ecological functions and values, and to prevent risk from hazards
31 posed by the critical area. Mitigation measures shall evaluate goals and objectives of
32 proposed mitigation relating to impact to functions and values. Review of best available
33 science supporting the proposed mitigation is required.
- 34 (3) Mitigation sequencing. When an alteration to a critical area is proposed, such alteration shall
35 be avoided, minimized, or compensated for, as outlined by WAC 197-11-768, in the
36 following order of preference:
- 37 (a) Avoiding the impact altogether by not taking a certain action or parts of actions;
38 (b) Minimizing impacts by limiting the degree or magnitude of the action and its
39 implementation;
40 (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected
41 environment;
42 (d) Reducing or eliminating the impact over time by preservation and maintenance
43 operations during the life of the action;
44 (e) Compensating for the impact by replacing or providing substitute resources or
45 environments; and/or
46 (f) Monitoring the impacts and compensation projects and taking appropriate corrective
47 measures.

48
49 **21,24,130 Maintenance, monitoring, and contingency.**

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

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

16 (2) Performance guarantee. A performance bond or other security equal to or greater than 150
17 percent of the actual cost of mitigation shall be posted in a form acceptable to the City prior
18 to issuance of construction permits. Actual costs shall include all labor and materials
19 associated with the mitigation activity. The security shall be sufficient to guarantee that all
20 required mitigation measures will be completed in a timely manner in accordance with this
21 chapter.

22 (3) Maintenance guarantee. A maintenance/monitoring bond or other security equal to or
23 greater than 20 percent of the cost of mitigation shall be posted in a form acceptable to the
24 City prior to final inspection, occupancy, or release of the performance bond, whichever is
25 first. The security shall be sufficient to guarantee satisfactory workmanship on, materials in
26 and performance of or related to structures and improvements allowed or required by this
27 chapter for a period of up to five years. The duration of maintenance/monitoring obligations
28 shall be established by the Development Services Director, based upon the nature of the
29 proposed mitigation, maintenance or monitoring and the likelihood and expense of correcting
30 mitigation or maintenance failures.

31 (4) Corrective measures. Where monitoring reveals a significant deviation from predicted
32 impacts or a failure of mitigation or maintenance measures, the applicant shall be responsible
33 for appropriate corrective action which, when approved, shall be subject to further monitoring.

34 (5) Restoration. Performance and maintenance/monitoring bonds or other security shall also be
35 required for restoration of a critical area or buffer not performed as part of a mitigation or
36 maintenance plan, except that no security shall be required for minor stream restoration
37 carried out pursuant to this chapter. The bond or other security shall be in a form and amount
38 deemed acceptable by the Development Services Director.

39 (6) Time limit. Performance and maintenance/monitoring bonds or other security authorized by
40 this section shall remain in effect until the City determines, in writing, that the standards
41 bonded for have been met.

42 (7) Obligation. Depletion, failure or collection of security funds shall not discharge the obligation
43 of an applicant or violator to complete required mitigation, maintenance, monitoring or
44 restoration.

45
46 **21.24.140 Critical area markers and signs.**

47 (1) Survey stakes. Permanent survey stakes delineating the boundary between adjoining
48 property and critical area tracts shall be set, using iron or concrete markers as established by
49 current survey standards.

50 (2) When required. Signage and fencing shall be required for all wetlands and fish and wildlife
51 habitat conservation areas. The City shall determine if fencing and permanent signage is

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1 necessary to protect other types of critical areas. Signage and fencing shall be located along
2 the outer boundary of a critical area buffer or tract in order to protect the critical area.

- 3 (3) Permanent signs. Signs shall be made of an enamel-coated metal face and attached to a
4 metal post or other material of equal durability. Signs must be posted at an interval of 75
5 feet and must be maintained by the property owner in perpetuity. The sign shall follow the
6 City's adopted signage standard, be worded as follows or with alternative language as
7 approved by the City:
8

9
10 Protected Critical Area
11 Do Not Disturb
12 Help protect and care for this area
13 Contact City of Woodinville 489-2754

- 14 (4) Fencing. Required fencing shall be constructed of permanent and durable materials. Fencing
15 shall be designed so as to not interfere with species migration and shall be constructed in a
16 manner that minimizes impacts to the critical areas and associated habitat.
17

18 **21.24.150 Native growth protection areas and designations on site plans.**

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

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

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

- 31 (3) Site plans submitted as part of development proposals for building permits and clearing and
32 grading permits shall include and delineate all flood hazard areas (if they have been
33 mapped by FEMA, King County or the City of Woodinville or if a special study is required),
34 geological hazard areas, streams and wetlands, buffers and building setbacks and native
35 growth protection easements. If only a part of the development site has been mapped
36 pursuant to WMC 21.24.130, the part of the site which has not been mapped shall be clearly
37 identified and labeled on the site plans. The site plans shall be attached to the notice on title
38 required by WMC 21.24.170.(3) Easements. If a NGPA tract is not required in accordance
39 with subsection (1), a NGPA in the form of an easement may be required over delineated
40 critical areas to protect them in perpetuity.

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

- 43 (5) Native growth protection areas shall be marked with critical area signage and/or fencing to
44 protect wildlife corridors and to discourage human intrusion into the critical area pursuant to
45 WMC 21.24.140.

- 46 (6) Native growth protection areas may be enhanced as part of a mitigation or restoration
47 project. The NGPA shall be designated as protected habitat for fish and wildlife and shall be
48 left in its natural state (with the exception of mitigation to enhance habitat). Any downed
49 trees shall remain in the NGPA to provide habitat for wildlife.
50

21.24.200 Critical aquifer recharge areas – Designation.

- (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.
- (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 sand subject to the provisions of this chapter.
- (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.
- (4) An applicant can request that the City declassify a specific area included in the map adopted under subsection (2) 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.

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

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21.24.230 Critical aquifer recharge areas – Permitted alterations.

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

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

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, Vehicle and Equipment Washwater Discharges/Best Management Practices Manual (DOE 95-056)
Chemical treatment storage and disposal facilities	WAC 173-303-182
Hazardous waste generator (boat repair shops, biological research facility, dry cleaners, furniture stripping, motor vehicle service garages, photographic processing, printing and publishing shops, etc.)	Chapter 173-303 WAC
Injection wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk yards and salvage yards	Chapter 173-304 WAC, 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

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Activity	Applicable State and Federal Regulations
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, 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

21.24.240 Critical aquifer recharge areas – Critical areas report additional requirements.

(1) In addition to the general critical report requirements in WMC 21.24.110, critical areas reports for CARAs must address the requirements of this section.

- (a) Prepared by a qualified professional. A critical areas report for CARAs shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer who is licensed in the State of Washington with a minimum of five years of experience in the field and with experience in preparing hydrogeologic assessments.
- (b) Hydrogeologic Assessment. For all proposed activities to be located in a critical aquifer recharge area, a critical area report shall contain a Level I hydrogeological assessment. A Level 2 hydrogeologic assessment shall be required for any of the following proposed activities:
 - (i) Activities that result in five percent (5%) or more impervious site area;
 - (ii) Activities that divert, alter, or reduce the flow of surface or ground waters, or reduce the recharging of the aquifer;
 - (iii) The use of hazardous substances, other than household chemicals used according to the directions specified on the packaging for domestic applications;
 - (iv) The use of injection wells, including on-site septic systems, except those domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one (1) system per one (1) acre; or
 - (v) Any other activity determined by the City to likely to have an adverse impact on ground water quality or quantity or on the recharge of the aquifer.
- (c) Level 1 Hydrogeologic Assessment. A level one hydrogeologic assessment shall include the following site- and proposal-related information at a minimum:
 - (i) Available information regarding geologic and hydrogeologic characteristics of the site including the surface location of all critical aquifer recharge areas

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- 1 located on site or immediately adjacent to the site, and permeability of the
2 unsaturated zone;
- 3 (ii) Ground water depth, flow direction, and gradient based on available
4 information;
- 5 (iii) Currently available data on wells and springs within 1,300 feet of the project
6 area;
- 7 (iv) Location of other critical areas, including surface waters, within 1,300 feet of
8 the project area;
- 9 (v) Available historic water quality data for the area to be affected by the
10 proposed activity; and
- 11 (vi) Best management practices proposed to be utilized.
- 12 (d) Level 2 Hydrogeologic Assessment. A level two hydrogeologic assessment shall
13 include the following site- and proposal-related information at a minimum, in addition
14 to the requirements for a level one hydrogeological assessment:
- 15 (i) Historic water quality data for the area to be affected by the proposed activity
16 compiled for at least the previous five (5) year period;
- 17 (ii) Ground water monitoring plan provisions;
- 18 (iii) Discussion of the effects of the proposed project on the ground water quality
19 and quantity, including:
- 20 (A) Predictive evaluation of ground water withdrawal effects on nearby
21 wells and surface water features; and
- 22 (B) Predictive evaluation of contaminant transport based on potential
23 releases to ground water; and
- 24 (iv) A spill plan that identifies equipment and/or structures that could fail, resulting
25 in an impact. Spill plans shall include provisions for regular inspection, repair,
26 and replacement of structures and equipment that could fail.

27
28 **21.24.350 Frequently flooded areas - Designation.**

29 (1) Definition and location.

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

- 31 (i) Floodplain;
- 32 (ii) Flood fringe;
- 33 (iii) Zero-rise floodway; and
- 34 (iv) FEMA floodway.

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

- 36 (i) Areas identified on the flood insurance map(s). Those areas of special flood
37 hazard identified by the Federal Insurance and Mitigation Administration
38 (FIMA) in the most current version of the Flood Insurance Study for King
39 County dated with accompanying flood insurance maps (FIRM), . The Flood
40 Insurance Study and accompanying maps are hereby adopted by reference.
- 41 (ii) Areas identified by the City. Those areas of special flood hazard identified by
42 the City based on a review of base flood elevation and floodway data
43 available from federal, state, county or other agency sources when base flood
44 elevation data has not been provided from FIMA, identified as A and V zones
45 of the flood insurance maps.

46 (2) Use of additional information. The City may use additional flood information that is more
47 restrictive or detailed than that provided in the Flood Insurance Study to designate
48 frequently flooded areas, including data on channel migration, historical data, high water
49 marks, photographs of past flooding, location of restrictive floodways, maps showing future
50 build-out conditions, maps that show riparian habitat areas, or similar information.

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- 1 (3) Flood elevation data. When base flood elevation data is not available (A and V zones), the
2 City shall obtain, review, and reasonably utilize any base flood elevation and floodway data
3 available from a federal, state, or other source, in order to administer this Chapter.
- 4 (4) Designation made by City. The flood insurance maps are to be used as a guide for the City,
5 project applicants, and the public and should be considered a minimum designation of
6 frequently flooded areas. Flood insurance maps are subject to continuous updated as areas
7 are reexamined or new areas are identified. Mewer and more restrictive information for flood
8 hazard area identification shall be the basis for regulation.
- 9 (5) For all new structures or substantial improvements in a flood hazard area, the applicant shall
10 provide certification by a professional civil engineer or land surveyor licensed by the State of
11 Washington for the following:
- 12 (a) The actual as-built elevation of the lowest floor, including basement; and
 - 13 (b) The actual as-built elevation to which the structure is flood-proofed, if applicable.
- 14 (6) The engineer or surveyor shall indicate if the structure has a basement.
- 15 (7) The Building Official shall maintain the certifications required by this section for public
16 inspection.

17
18 **21.24.360 Frequently flooded areas – Development standards.**

- 19 (1) Base flood storage volume. Development shall not reduce the effective base flood storage
20 volume of the floodplain. Grading or other activity that would reduce the effective storage
21 volume shall be mitigated by creating compensatory storage on the site or off the site. Legal
22 arrangements shall be made to assure that the effective compensatory storage volume will
23 be preserved in perpetuity.
- 24 (2) In addition to requiring the applicant to meet the requirements of WMC 21.24.360 through
25 21.24.380 and other applicable local, State, and Federal requirements, the City shall:
- 26 (a) Notify adjacent communities and the Department of Ecology prior to any alteration or
27 relocation of a watercourse designated as a zone beginning with A on a FIRM map,
28 and submit evidence of such notification to the Federal Insurance and Mitigation
29 Administration.
 - 30 (b) Require that maintenance be provided within the altered or relocated portion of said
31 watercourse so that the flood-carrying capacity is not diminished.

32
33 **21.24.370 Frequently flooded areas – Permitted alterations.**

- 34 (1) Flood fringe. The following shall apply to development located within the flood fringe:
- 35 (a) No structure shall be allowed which would be at risk due to stream bank
36 destabilization including, but not limited to, that associated with channel relocation or
37 meandering.
 - 38 (b) Subdivisions, short subdivisions and binding site plans shall meet the following
39 requirements:
 - 40 (i) New building lots shall contain 5,000 square feet or more of buildable land
41 outside the zero-rise floodway, and building setback areas shall be shown on
42 the face of the plat to restrict permanent structures to this buildable area;
 - 43 (ii) All utilities and facilities such as sewer, gas, electrical and water systems shall
44 be located and constructed to minimize or eliminate flood damage consistent
45 with subsections (c), (d) and (e) of this section;
 - 46 (iii) Base flood data and flood hazard notes shall be shown on the face of the
47 recorded subdivision, short subdivision or binding site plan including, but not
48 limited to, the base flood elevation, required flood protection elevations and
49 the boundaries of the floodplain and the zero-rise floodway, if determined;
50 and

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- 1 (iv) The following notice shall also be shown on the face of the recorded
2 subdivision, short subdivision, or binding site plan for all affected lots:

3
4 **NOTICE**

5 Lots and structures located within flood hazard areas may
6 be inaccessible by emergency vehicles during flood events.
7 Residents and property owners should take appropriate
8 advance precautions.

- 9 (v) All such proposals are consistent with the need to minimize flood
10 damage within the flood-prone area;
- 11 (vi) Adequate drainage is provided to reduce exposure to flood hazards.
- 12 (c) New structures and substantial improvements of existing structures shall meet the
13 following requirements:
- 14 (i) The lowest floor, including basement, shall be elevated between 1 to 1.5 feet
15 above the base flood elevation.
- 16 (ii) Portions of a structure which are below the lowest floor area shall not be fully
17 enclosed. The areas and rooms below the lowest floor shall be designed to
18 automatically equalize hydrostatic and hydrodynamic flood forces on exterior
19 walls by allowing for the entry and exit of floodwaters. Designs for satisfying
20 this requirement shall meet or exceed the following requirements:
- 21 (A) A minimum of two openings on opposite walls having a total open area
22 of not less than one square inch for every square foot of enclosed area
23 subject to flooding shall be provided;
- 24 (B) The bottom of all openings shall be no higher than one foot above
25 grade; and
- 26 (C) Openings may be equipped with screens, louvers or other coverings or
27 devices if they permit the unrestricted entry and exit of floodwaters;
- 28 (iii) Materials and methods that are resistant to and minimize flood damage shall
29 be used;
- 30 (iv) All electrical, heating, ventilation, plumbing, air conditioning equipment and
31 other utility and service facilities shall be flood-proofed to or elevated above
32 the flood protection elevation;
- 33
- 34 (v) The structures shall be certified by a professional civil or structural engineer
35 licensed by the State of Washington that the flood-proofing methods are
36 adequate to withstand the flood depths, pressures, velocities, impacts, uplift
37 forces and other factors associated with the base flood. After construction,
38 the engineer shall certify that the permitted work conforms with the approved
39 plans and specifications; and
- 40 (iv) Approved building permits for flood-proofed nonresidential structures shall
41 contain a statement notifying applicants that flood insurance premiums shall
42 be based upon rates for structures that are one foot below the flood-proofed
43 level.
- 44 (v) All new construction and substantial improvements shall be anchored to
45 prevent flotation, collapse or lateral movement of the structure.
- 46 (d) Mobile and manufactured homes shall meet the following requirements:
- 47 (i) New mobile and manufactured homes or substantial improvements of existing
48 mobile and manufactured homes shall be elevated on a permanent foundation
49 such that the lowest floor of the manufactured or mobile home is elevated one
50 foot above the base flood elevation.

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- 1 (ii) All new or substantially improved manufactured and mobile homes shall be
2 securely anchored to prevent flotation, collapse, or lateral movement, and
3 shall be installed using methods and practices that minimize flood damage.
4 Anchoring methods may include, but are not limited to, use of over-the-top or
5 frame ties to ground anchors (reference FEMA's "Manufactured Homes
6 Installation in Flood Hazard Areas" guidebook for additional techniques).
- 7 (iii) Compliance with this chapter shall be required for new construction or
8 expansion of a mobile home park, or reconstruction of streets, utilities or pads
9 in an existing mobile home park exceeding 50 percent of the assessed value
10 of such structures.
- 11 (e) Recreational vehicles shall meet one of the following requirements:
- 12 (i) Be on the site for fewer than 180 consecutive days;
- 13 (ii) Be fully licensed and ready for highway use, on its wheels or jacking system,
14 be attached to the site only by quick disconnect-type utilities and security
15 devices, and have no permanently attached additions; or
- 16 (iii) Meet the requirements of subsection (d) of this section and the elevations
17 and anchoring requirements of manufactured and mobile homes.
- 18 (f) Utilities shall meet the following requirements:
- 19 (i) All new and replacement water supply systems shall be designed to minimize
20 or eliminate infiltration of flood waters into the system;
- 21 (ii) New and replacement sanitary sewage systems shall be designed to minimize
22 or eliminate infiltration of flood waters into the systems and discharge from
23 the systems into flood waters;
- 24 (iii) On-site waste disposal systems shall be located to avoid impairment to them
25 or contamination from them during flooding;
- 26 (iv) Sewage and agricultural waste storage facilities shall be flood-proofed to the
27 flood protection elevation;
- 28 (v) Above-ground utility transmission lines, other than electric transmission lines,
29 shall only be allowed for the transport of nonhazardous substances; and
- 30 (vi) Buried utility transmission lines transporting hazardous substances shall be
31 buried at a minimum depth of four feet below the maximum depth of scour for
32 the base flood, as predicted by a professional civil engineer licensed by the
33 State of Washington, and shall achieve sufficient negative buoyancy so that
34 any potential for flotation or upward migration is eliminated.
- 35 (g) Essential public facilities may be allowed within the flood fringe of the floodplain, but
36 only when no feasible alternative site is available. Essential public facilities
37 constructed within the flood fringe shall have the lowest floor elevated to three or
38 more feet above the base flood elevation. Flood-proofing and sealing measures shall
39 be taken to ensure that hazardous substances will not be displaced by or released
40 into floodwaters. Access routes elevated to or above the base flood elevation shall
41 be provided to all essential public facilities from the nearest maintained public street
42 or roadway.
- 43 (h) Prior to approving any permit for alterations in the flood fringe, City shall determine
44 that all permits required by State or Federal law have been obtained.
- 45 (2) Zero-rise floodway and FEMA floodway. The requirements that apply to the flood fringe
46 shall also apply to the zero-rise floodway and FEMA floodway. The more restrictive
47 requirements shall apply where there is a conflict.
- 48 (a) New residential or nonresidential structures are prohibited within the FEMA floodway.
- 49 (b) A development proposal including, but not limited to, new or reconstructed structures
50 shall not cause any increase in the base flood elevation unless the following
51 requirements are met:

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- 1 (i) Amendments to the Flood Insurance Rate Map are adopted by FEMA, in
2 accordance with 44 CFR 70, to incorporate the increase in the base flood
3 elevation; and
- 4 (ii) Appropriate legal documents are prepared in which all property owners
5 affected by the increased flood elevations consent to the impacts on their
6 property. These documents shall be filed with the title of record for the
7 affected properties.
- 8 (c) The following are presumed to produce no increase in base flood elevation and shall
9 not require a critical area report to establish this fact:
- 10 (i) New residential structures outside the FEMA floodway on lots in existence
11 before March 31, 1993, which contain less than 5,000 square feet of
12 buildable land outside the zero-rise floodway and which have a total building
13 footprint of all proposed structures on the lot of less than 2,000 square feet;
- 14 (ii) Substantial improvements of existing residential structures in the zero-rise
15 floodway, but outside the FEMA floodway, where the footprint is not
16 increased;
- 17 (iii) Substantial improvements of existing residential structures meeting the
18 requirements for new residential structures in WMC 21.24.230; or
- 19 ((iv) Substantial improvements of existing residential structures in the FEMA
20 floodway, meeting the requirements of WAC 173-158-070, as amended.
- 21 (d) Post or piling construction techniques which permit water flow beneath a structure
22 shall be used.
- 23 (e) All temporary structures or substances hazardous to public health, safety and
24 welfare, except for hazardous household substances or consumer products
25 containing hazardous substances, shall be removed from the zero-rise floodway
26 during the flood season from September 30th to May 1st.
- 27 (f) New residential or nonresidential structures shall meet the following requirements:
- 28 (i) The structures shall be outside the FEMA floodway; and
- 29 (ii) The structures shall be on lots in existence before March 31, 1993, which
30 contain less than 5,000 square feet of buildable land outside the zero-rise
31 floodway.
- 32 (g) Utilities may be allowed within the zero-rise floodway if the City determines that no
33 feasible alternative site is available, subject to the following requirements:
- 34 (i) Installation of new on-site sewage disposal systems shall be prohibited unless
35 a waiver is granted by the department of public health; and
- 36 (ii) Construction of sewage treatment facilities shall be prohibited.
- 37 (i) Structures and installations that are dependent upon the floodway, may be located in
38 the floodway if the development proposal is approved by all agencies with
39 jurisdiction. Such structures include, but are not limited to:
- 40 (i) Dams or diversions for water supply, flood control, hydroelectric production,
41 irrigation or fisheries enhancement;
- 42 (ii) Flood damage reduction facilities, such as levees and pumping stations;
- 43 (iii) Stream bank stabilization structures where no feasible alternative exists for
44 protecting public or private property;
- 45 (iv) Storm water conveyance facilities subject to the development standards for
46 streams and wetlands and the King County Surface Water Design Manual;
- 47 (v) Boat launches and related recreation structures;
- 48 (vi) Bridge piers and abutments; and
- 49 (vii) Other fisheries enhancement or stream restoration projects.

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1 **21.24.380 Frequently flooded areas – Critical areas report additional requirements.**

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

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

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

11 (i) The site area of the proposed activity;

12 (ii) All areas of a special flood hazard, as indicated in the flood insurance maps within
13 200 feet of the project area; and

14 (iii) All other flood areas indicated on the flood insurance maps within 200 feet of the
15 project area.

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

18 (i) Floodplain (100-year flood elevation), 10- and 50-year flood elevations,
19 floodway, other critical areas, buffers, and shoreline areas;

20 (ii) Proposed development, including the location of existing and proposed
21 structures, fill, storage of materials, and drainage facilities, with dimensions
22 indicating distances to the floodplain;

23 (iii) Clearing limits; and

24 (iv) Elevation of the lowest floor of all structures, and the level to which any
25 nonresidential structure has been floodproofed.

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

28 (i) Extent of Watercourse Alteration. A description of and plan showing the extent
29 to which a watercourse will be altered or relocated as a result of proposal;

30 (ii) Maintenance program required for watercourse alterations. A maintenance
31 program that provides maintenance practices for the altered or relocated
32 portion of the watercourse to ensure that the flood carrying capacity is not
33 diminished; and

34 (iii) Compliance documentation. Information describing and documenting how the
35 proposed watercourse alteration complies with the requirements of WMC
36 21.24.400 through 21.2.440, the adopted Shoreline Master Program, and
37 other applicable state or federal permit requirements.

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