

1 **Public Review Draft 3/1/17**

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4 **Kitsap County Code Title 19**

5 **Critical Areas Ordinance**

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8 Underline / Strike-out Version

9 **19.600 Critical Aquifer Recharge Areas**

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1 **Chapter 19.600**
2 **CRITICAL AQUIFER RECHARGE AREAS**

3 Sections:

4 **19.600.605 Purpose.**

5 **19.600.610 Critical aquifer recharge area categories.**

6 **19.600.615 Development standards.**

7 **19.600.620 Activities with potential threat to groundwater.**

8
9 **19.600.605 Purpose.**

10 Potable water is an essential life-sustaining element for people and many other species and because the
11 majority of Kitsap County drinking water comes from groundwater supplies in aquifers, ~~C~~critical aquifer
12 recharge areas are very important to ensure the quality and quantity of shallow and deepwater aquifers
13 recharge. Once groundwater is contaminated, it is difficult, costly, and sometimes impossible to clean up.
14 Preventing contamination is necessary to avoid exorbitant costs, hardships, and potential physical harm
15 to people and ecosystems. In addition, without replenishment, the amount of water for potable use can
16 be diminished or even depleted. The intent of this chapter is thus to identify and classify aquifer recharge
17 areas in accordance with RCW [36.70A.170](#) and address land use activities that pose a potential to
18 directly or indirectly contaminate or otherwise threaten aquifer water quality and quantity. This section
19 ~~shall~~ does not affect any right to use or appropriate water as allowed under state or federal law. In
20 addition, these requirements do not apply to those activities ~~which~~ that have potential contaminant
21 sources below threshold amounts as set forth in applicable statutes of the Revised Code of Washington
22 or local regulations.

23 It is the policy of Kitsap County to accomplish the following:

- 24 A. Identify, preserve and protect aquifer recharge areas ~~which that are identify areas~~
25 susceptible to contamination ~~by~~ and preventing degradation of the quality and, if needed, the
26 quantity of potable groundwater;
- 27 B. Recognize the relationship between surface and groundwater resources; and
- 28 C. Give priority to potable water resource areas per WAC ~~365-190-080~~ 365-190-100 in the
29 planning and regulation of land uses that may directly or indirectly contaminate or degrade
30 groundwater.

1 D. Balance competing needs for water supply while preserving essential natural functions and
2 processes, especially for maintaining critical fish and wildlife habitat conservation areas.

3 **19.600.610 Critical aquifer recharge area categories.**

4 As defined at Section 19.150.210, a critical aquifer recharge area means those land areas that contain
5 hydrogeologic conditions that facilitate aquifer recharge and/or transmit contaminants to an underlying
6 aquifer. Critical aquifer recharge areas under this title may be established based on general criteria,
7 specifically designated due to special circumstances, or based on scientific studies and mapping efforts.
8 Factors considered in the identification of critical aquifer recharge areas include depth to water table,
9 presence of highly permeable soils (specifically Group A Hydrologic Soils), presence of flat terrain, and
10 the presence of more permeable surficial geology.

11 A. Category I Critical Aquifer Recharge Areas. Category I critical aquifer recharge areas are
12 those areas where the potential for certain land use activities to adversely affect groundwater is
13 high. Category I critical aquifer recharge areas include:

14 1. Areas inside the five-year time of travel zone for Group A water system wells,
15 calculated in accordance with the Washington State Well Head Protection Program.

16 2. Areas inside the ten-year time of travel zones in wellhead protection areas ~~when the~~
17 ~~well draws its water from an aquifer that is at or above sea level~~ and which are not
18 separated from the underlying aquifers by an impermeable layer that provides adequate
19 protections from contamination to the aquifer(s) below.

20 3. Areas identified as significant recharge areas due to special circumstances or
21 identified in accordance with ~~WAC 365-190-080~~ WAC 365-190-100(4) as aquifer areas
22 of significant potable water supply with susceptibility to groundwater contamination,
23 including but not limited to the following:

24 a. Hansville Significant Recharge Area. The Hansville aquifer is a significant
25 potable water supply that is highly susceptible to the introduction of pollutants.
26 Additional information regarding this aquifer is available from the Kitsap Public
27 Utility District.

28 b. Seabeck Significant Recharge Area. The Seabeck aquifer is a significant
29 potable water supply that is being developed for use in central and north Kitsap
30 County. Additional information regarding this aquifer is available from the Kitsap
31 Public Utility District.

1 c. Island Lake Significant Recharge Area. The Island Lake aquifer is a
2 significant potable water supply for the Silverdale area. Additional information
3 regarding this aquifer is available from the Silverdale Water District.

4 d. Gorst Significant Recharge Area. Aquifers in the Gorst basin are highly
5 susceptible to the introduction of pollutants and provide significant potable water
6 supplies for the City of Bremerton.

7 e. Poulsbo Significant Recharge Area. The Poulsbo aquifer is highly
8 susceptible to the introduction of pollutants and provides a significant potable
9 water supply for the Kitsap Public Utility District and City of Poulsbo.

10 4. The department may add, reclassify or remove Category I critical aquifer recharge
11 areas based on additional information about areas of significant potable water supply with
12 susceptibility to groundwater contamination or supply reduction, or based on changes to
13 sole source aquifers or wellhead protection areas as identified in wellhead protection
14 programs.

15 B. Category II Critical Aquifer Recharge Areas. Category II critical aquifer recharge areas are
16 areas that provide recharge effects to aquifers that are current or potentially will become potable
17 water supplies and are vulnerable to contamination based on the type of land use activity. The
18 general location of these areas is available on the Kitsap County geographic information system.
19 Category II critical aquifer recharge areas include:

20 1. Highly Permeable Soils (Group A Hydrologic Soils). The general location and
21 characteristics of Group A Hydrologic Soils in Kitsap County is given in the Soil Survey of
22 Kitsap County by the U.S. Department of Agriculture, Natural Resources Conservation
23 Service (NRCS). The soil survey information is available on the Kitsap County
24 geographic information system (GIS).

25 2. Areas above shallow aquifers ~~and/or~~ surface areas that are ~~not~~ separated from the
26 underlying aquifers by an impermeable layer that provides adequate protections from
27 contamination to the aquifer(s) below. The general location of shallow aquifers in Kitsap
28 County is based upon the professional judgment of licensed hydrogeologists with
29 knowledge of the area. The location of shallow aquifers is available on the Kitsap County
30 geographic information system (GIS).

1 3. Areas above the Vashon Aquifer. Surface areas above the Vashon Aquifer ~~which~~
2 that are not separated from the underlying aquifers by a poorly permeable layer that
3 provides adequate protections to preclude the proposed land use from contaminating the
4 Vashon aquifer below. Vashon aquifers in Kitsap County are typically mapped as “Qva”
5 (Vashon advance aquifer) or “Qvr” (Vashon recessional aquifer) on geologic maps. Best
6 available information concerning the location of Vashon aquifers is available on the
7 Kitsap County geographic information system (GIS).

8 4. Areas with high concentration of potable water supply wells.

9 5. The department may add, reclassify or remove Category II critical aquifer recharge
10 areas based on additional information about areas of potential potable water supply with
11 susceptibility to groundwater contamination or supply reduction, or based on changes to
12 sole source aquifers or wellhead protection areas as identified in wellhead protection
13 programs.

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15 C. Mapping. Kitsap County, in coordination with water purveyors and other agencies, will
16 produce maps indicating the location of critical aquifer recharge areas and their defining
17 characteristics.

18 **19.600.615 Development standards.**

19 A. Category I Critical Aquifer Recharge Areas.

20 1. Land uses identified in Table 19.600.620 are prohibited in Category I critical aquifer
21 recharge areas, unless a waiver is granted by the department. ~~;~~ ~~and~~

22 2. Requests for waivers for activities listed in Table 19.600.620 shall include a
23 hydrogeological report (See Chapter 19.700, Special Reports) that includes a detailed
24 risk-benefit analysis that considers credible, worst-case scenarios. The hydrogeological
25 report shall evaluate potential impacts of a proposed land use or activity on both
26 groundwater and surface water quality and quantity. The waiver will be evaluated and
27 treated as a special use review (19.100.145) and be reviewed by the department, ~~the~~
28 ~~health district~~ Kitsap Public Health, affected tribes, and the affected water purveyors.

29 B. Category II Critical Aquifer Recharge Areas.

1 1. Land uses identified in Table 19.600.620 that are proposed in a Category II aquifer
2 recharge areas may be required to submit a hydrogeological report (See Chapter 19.700,
3 Special Reports), as determined in subsection (2) below. The scope of the report shall be
4 based on site-specific conditions.

5 2. The need for ~~additional information~~ a hydrogeological report will be determined by
6 the department, the health district and the affected water purveyor when the proposed
7 land use or activity may impact groundwater and surface water quality and quantity.
8 Based on the results of the report, controls, mitigation, and/or other requirements will be
9 established as a ~~prerequisite for the development proposal being approved.~~ condition of
10 approval.

11 C. Notification and Review.

12 1. Affected water purveyors, tribes and the Kitsap ~~County Public Health-District~~ will be
13 notified and invited to comment during the preliminary phases of the county's review of
14 any development application in a critical aquifer recharge area. ~~process on the proposed~~
15 ~~land use and potential impacts~~. The purveyor may recommend appropriate mitigation to
16 reduce potential impacts. ~~The~~ and the department will consider these recommendations
17 to develop appropriate permit conditions.

18 2. The department will also notify ~~the health district~~ Kitsap Public Health and affected
19 water purveyors through the environmental review process when those development
20 activities listed in Table 19.600.620 are proposed outside the areas designated critical
21 aquifer recharge areas.

22 ~~3. Land use decisions within Category I and II critical aquifer recharge areas may be~~
23 ~~appealed to the Kitsap County hearing examiner.~~

24 D. Stormwater. Stormwater ~~infiltration~~ best management practices ~~shall be encouraged to the~~
25 ~~maximum extent possible as a first priority in stormwater management.~~ shall be accomplished in
26 accordance with Title 12 KCC.

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28 **19.600.620 Activities with potential threat to groundwater quality.**

TABLE 19.600.620
ACTIVITIES WITH POTENTIAL THREAT TO GROUNDWATER QUALITY

A.	Above & Below Ground Storage Tanks	
	1.	Hazardous and industrial waste treatment
	2.	Hazardous and industrial waste storage
	3.	Hazardous material storage
B.	Animal Feedlots	
C.	Commercial Operations	
	1.	Gas stations/service stations/truck terminals
	2.	Petroleum distributors/storage
	3.	Auto body repairs shops/rust proofers
	4.	Auto chemical supply storers/retailers
	5.	Truck, automobile, and combustion engine repair shops
	6.	Dry cleaners
	7.	Photo processors
	8.*	Auto washes
	9.*	Laundromats
	10.*	Beauty Salons
	11.	Research or chemical testing laboratories, which handle significant quantities of hazardous materials
	12.	Food processors/meat packers/slaughter houses
	13.	Airport maintenance/fueling operation areas
	14.	Junk and salvage yards
	15.	Storing or processing manure, feed, or other agriculture by products by commercially permitted businesses

	16.	Large-scale storage or use of pesticides, insecticides, herbicides, or fertilizer by commercial or agricultural operations
	17.	Golf courses
	18.	Cemeteries
D.	Deep Injection Wells	
	1.	Waste-water disposal wells (wells that, after treatment, inject water back into the aquifer)
	2.	Oil and gas activity disposal wells
	3.	Mineral extraction disposal wells
E.	De-icing Salts Storage Piles	
F.	Industrial Operations	
	1.	Furniture strippers/painters/finishers
	2.	Concrete/asphalt/tar/coal companies
	3.	Industrial manufacturers: chemicals, pesticides/herbicides, paper, leather products, textiles, rubber, plastic/fiberglass, silicone/glass, pharmaceuticals, electrical equipment
	4.	Metal platers/heat treaters/smelters/annealers/descalers
	5.	Wood preserves
	6.	Chemical reclamation facilities
	7.	Boat refinishers
	8.	Hydrocarbon extraction
G.	Land Application	
	1.	Waste-water application (spray irrigation)
	2.	Waste-water byproduct (sludge) application
	3.	Petroleum refining waste application
	4.	Hazardous waste applications
H.	Landfills	
	1.	Industrial hazardous and non-hazardous landfill

	2.	Municipal sanitary landfill
I.	Material Transfer Operations	
	1.	Hazardous and industrial waste transfers
	2.	Hazardous material transfers
J.	Materials Stockpiles	
K.	Mining and Mine Drainage	
L.	Onsite Septic Systems (Large Onsite Septic System or LOSS Category)	
M.	Pipelines	
	1.	Hazardous and industrial waste transfer
	2.	Hazardous material transfer
N.	Radioactive Disposal Sites and Processing of Radioactive Wastes	
O.	Sand and Gravel Mining Operations	
* If not on a sewer system with a treatment plant.		

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