

THIS IS AN ENTIRELY NEW ARTICLE**Chapter 18.55
CRITICAL AREAS**

Sections:

Article XX. Groundwater Susceptibility and Critical Aquifer Recharge Areas

18.55.800 Designation of groundwater susceptibility and critical aquifer recharge areas.

18.55.810 Critical Areas Report.

Article XX. Groundwater Susceptibility and Critical Aquifer Recharge Areas**18.55.800 Designation of groundwater susceptibility and critical aquifer recharge areas.**

Groundwater recharge areas play an important role in groundwater quality and the general environmental health of the area in which they are located. Although no critical aquifer recharge areas are designated within the city limits at this time, the City understands the importance of protecting its groundwater resources. For example, groundwater can be an important source of water in City streams and wetlands, particularly during dry summer months, which supports associated vegetation communities and aquatic habitat. Some communities rely on groundwater for irrigation or drinking water. In the City, areas susceptible to groundwater contamination have been designated using the City of Kenmore Groundwater Susceptibility Map, which was developed based on the *Guidance Document for the Establishment of Critical Aquifer Recharge Area Ordinances* (Ecology, 1998). The map is the result of combining the ratings of a variety of factors for areas throughout the City including: geologic unit (i.e. depositional environment), near surface permeability (based on the county soil map), and depth to groundwater. The map identifies areas with “moderate” or “high” susceptibility to groundwater contamination.

18.55.810 Critical Areas Report.

A. The purpose of a hydrogeologic assessment report is to evaluate actual hydrogeologic conditions and determine a site’s proximity to vulnerable groundwater resources. This information then is used to evaluate the likely impacts of proposed activities and to determine appropriate construction practices, monitoring programs, and other mitigation measures required to ensure achievement of the purpose and intent of these regulations.

B. The information required by the hydrogeologic assessment report should be coordinated with the study and reporting requirements for any other critical areas located on the site.

C. The hydrogeologic assessment report shall be prepared by a qualified professional who is a hydrogeologist, geologist, or engineer licensed in the State of Washington and has experience in preparing hydrogeologic assessments.

D. The City of Kenmore Groundwater Susceptibility Map, referenced under KMC 18.55.800, identifies the level of evaluation required at a particular site within the City.

1. Level One Hydrogeological Assessment – Areas of Moderate Susceptibility.

a. A level one hydrogeologic assessment shall be required for any of the following non-residential proposed activities at sites located within groundwater susceptibility zones that are rated as “Moderate Susceptibility:”

i. The storage, handling, treatment, use, production, recycling, or disposal of hazardous substances, other than hazardous household substances used according to the directions specified on the packaging for domestic applications. See RCW 70.105.010.

ii. 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 system per acre.

iii. Any other activity determined by the *city manager* likely to have an adverse impact on groundwater quality or quantity, or on groundwater recharge.

a. A level one hydrogeologic assessment shall include the following site and development-related information at a minimum:

i. Information regarding geologic and hydrogeologic characteristics of the site, including the permeability of the unsaturated zone (soils located above the groundwater table) based on existing data.

ii. Groundwater depth, flow direction, and gradient based on available information.

iii. Location of wells and springs within 1,300 feet of the project area.

- iv. Location of other critical areas, including surface waters, within 1,300 feet of the project site.
- v. Available historic water quality data for the area to be affected by the proposed activity.
- vi. Best Management Practices (BMPs) proposed to be utilized.

2. Level Two Hydrogeologic Assessment – Areas of High Susceptibility.

- a. A level two hydrogeologic assessment shall be required for any of the following non-residential, proposed activities at sites located within groundwater susceptibility zones that are rated as “High Susceptibility:”
 - i. The storage, handling, treatment, use, production, recycling, or disposal of hazardous substances, other than hazardous household substances used according to the directions specified on the packaging for domestic applications. See RCW 70.105.010.
 - ii. 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 system per acre.
 - iii. Any other activity determined by the city manager likely to have an adverse impact on groundwater quality or quantity, or on groundwater recharge.
- b. A level two hydrogeologic assessment shall include the following site and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeologic assessment:
 - i. Historic water quality and elevation data for the area to be affected by the proposed activity compiled for at least the previous five-year period, unless otherwise approved by the *city manager*.
 - ii. Groundwater monitoring plan provisions.
 - iii. Discussion of the effects of the proposed project on groundwater quality and quantity, including:

1. Predictive evaluation of groundwater withdrawal effects on nearby wells and surface water features.
 2. Predictive evaluation of contaminant transport based on potential releases to groundwater.
- iv. Identification of the type and quantities of any hazardous materials that will be stored, handled, treated, used, produced, recycled, or disposed of on the site, including but not limited to materials, such as elevator lift/hydraulic fluid, hazardous materials used during construction, materials used by the building occupants, proposed storage and manufacturing uses, etc.
 - v. Proposed methods of storing any of the above substances, including containment methods to be used during construction and/or use of the proposed facility.
 - vi. Proposed plan for implementing protection standards during construction.
 - vii. A spill prevention, control and countermeasure (SPCC) plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail.
 - viii. A discussion of past environmental investigations, sampling, spills, or incidents that may have resulted in or contributed to contaminated soil or groundwater at the site. Attach copies of all historical and current reports, and sampling results.