

Chapter 18.12

CRITICAL AQUIFER RECHARGE AREAS

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18.12.010 **Critical aquifer recharge areas designation.** Critical aquifer recharge areas (CARA) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARA have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. The following areas have been identified based on local conditions:

- A. Wellhead protection areas. Wellhead protection areas shall be defined by the boundaries of the ten (10) year time of ground water travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-135.
- B. Special protection areas. Special protection areas are those areas defined by WAC 173-200-090 serving to identify ground waters that require increased protection due to unique characteristics. No special protection areas are located in Benton City. (Ord 874, December 2010)

18.12.020 **Mapping of critical aquifer recharge areas.**

- A. The approximate location and extent of critical aquifer recharge areas are shown on the adopted critical area map.
- B. This map is to be used as a guide for the City, project applicant and/or property owners, and may be continuously updated as new Information becomes available. (Ord 874, December 2010)

18.12.030 **Regulation.** The following are in place to protect critical aquifer recharge areas and regulate activities that might potentially impact these areas.

- A. Benton City Sewer Regulations (Title 13A), including provisions for wellhead protection areas.
- B. Benton City Building Code (Title 15).
- C. Benton City Zoning Code (Title 20).
- D. State and federal regulations applicable to specific uses including, but not limited to, those provided in Sections 18.20.050 and 18.12.060. (Ord 874, December 2010)

18.12.040 Performance standards – General requirements.

- A. Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not adversely affect the recharging of the aquifer and that the propose activity will not cause contaminants to enter the aquifer.
- B. The proposed activity must comply with the water source protection requirements and recommendations of the federal Environmental Protection Agency, State Department of Health, and the Benton County Health Department, and as provided in the City's wellhead protection regulations.
- C. The proposed activity must be designed and constructed in accordance with erosion control and surface/stormwater management requirements in current City regulations. (Ord 874, December 2010)

18.12.050 Performance standards – Specific uses.

- A. Storage Tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirement and must conform to the following requirements:
 - 1. Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
 - a. Prevent releases due to corrosion or structural failure for the operational life of the tank;
 - b. Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and,

- c. Use material in the construction or lining of the tank that is compatible with the substance to be stored.
 2. Aboveground Tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
 - a. Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
 - b. Have a primary containment area enclosing or underlying the tank or part thereof; and
 - c. A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.
- B. Vehicle repair and servicing. 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. Spreading or injection of reclaimed water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the departments of Ecology and Health.
 1. Surface spreading must meet the ground water recharge criteria given in Chapter 90.46.080 RCW and Chapter 90.46.010(10).
 2. Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.
- D. State and federal regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations. (Ord 874, December 2010)

**Statutes, Regulations, and Guidance Pertaining to
Ground Water Impacting Activities**

Activity	Statute – Regulation - Guidance
Above Ground Storage Tanks	Chapter 173-303-640 WAC
Animal Feedlots	Chapter 173-216-WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices For Vehicles and Equipment Discharges (WDOE WQ-R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303-182 WAC
Hazardous Waste Generator (<i>Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.</i>)	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, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC, WAC, 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, 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18-015 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

(Ord 874, December 2010)

18.12.060 **Uses prohibited from critical aquifer recharge areas.** The following activities and uses are prohibited in critical aquifer recharge areas.¹

- A. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, and inert and demolition waste landfills; and

- B. Underground injection wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells (Chapter 173-218 WAC). (Ord 874, December 2010)

¹ Prohibited uses are based on “Guidance Document for the Establishment of Critical Aquifer Recharge Area Ordinances,” by Ecology, July 2000, publication #97-30