

# Critical Aquifer Recharge Areas Category I and II KITSAP COUNTY Washington

## Critical Aquifer Recharge Area Categories.

Critical Aquifer Recharge Areas means those land areas that contain hydro geologic conditions that facilitate aquifer recharge and/or transmit contaminants to an underlying aquifer. Critical aquifer recharge areas under this title may be established based on general criteria, specifically designated due to special circumstances, or based on scientific studies and mapping efforts. Factors considered in the identification of critical aquifer recharge areas include depth to water table, presence of highly permeable soils (specifically Group A Hydrologic Soils), presence of flat terrain, and the presence of more permeable surficial geology.

## Category I Critical Aquifer Recharge Areas:

Category I critical aquifer recharge areas are those areas where the potential for certain land use activities to adversely affect groundwater is high. Category I critical aquifer recharge areas include:

1. Areas inside the five-year time of travel zone for Group A water system wells, calculated in accordance with the Washington State Well Head Protection Program.
2. Areas inside the ten-year time of travel zones in wellhead protection areas when the well draws its water from an aquifer that is at or above sea level and is overlain by permeable soils without an underlying protective impermeable layer.
3. Areas identified as Significant Recharge Areas due to special circumstances or identified in accordance with WAC 365-190-080 (2) (c) as aquifer areas of significant potable water supply with susceptibility to groundwater contamination, including but not limited to the following:
  - a. Hensville Significant Recharge Area. The Hensville aquifer is a significant potable water supply that is highly susceptible to the introduction of pollutants. Additional information regarding this aquifer is available from the Kitsap Public Utility District.
  - b. Seabeck Significant Recharge Area. The Seabeck aquifer is a significant potable water supply that is being developed for use in central and north Kitsap County. Additional information regarding this aquifer is available from the Kitsap Public Utility District.
  - c. Island Lake Significant Recharge Area. The Island Lake aquifer is a significant potable water supply for the Silverdale area. Additional information regarding this aquifer is available from the Silverdale Water District.
  - d. Gorst Significant Recharge Area. Aquifers in the Gorst basin are highly susceptible to the introduction of pollutants and provide significant potable water supplies for the City of Bremerton.
  - e. Poulsbo Significant Recharge Area. The Poulsbo aquifer is highly susceptible to the introduction of pollutants and provides a significant potable water supply for the Kitsap Public Utility District and City of Poulsbo.
4. The department may add, reclassify or remove critical aquifer recharge areas based on additional information about areas of significant potable water supply with susceptibility to groundwater contamination or based on changes to sole source aquifers or wellhead protection areas as identified in wellhead protection programs.

## Category II Critical Aquifer Recharge Areas

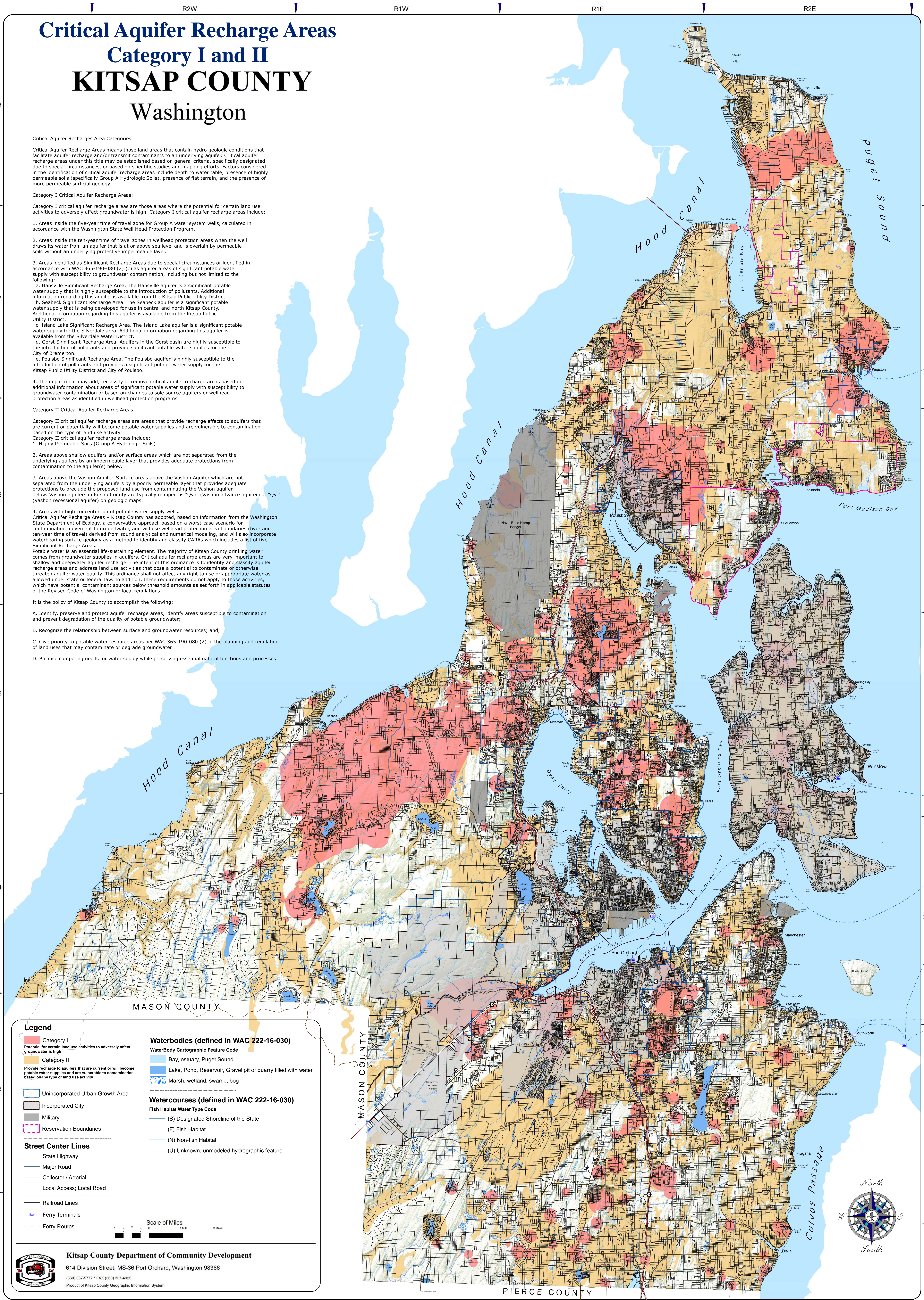
Category II critical aquifer recharge areas are areas that provide recharge effects to aquifers that are current or potentially will become potable water supplies and are vulnerable to contamination based on the type of land use activity.

### Category II critical aquifer recharge areas include:

1. Highly Permeable Soils (Group A Hydrologic Soils).
  2. Areas above shallow aquifers and/or surface areas which are not separated from the underlying aquifers by an impermeable layer that provides adequate protections from contamination to the aquifer(s) below.
  3. Areas above the Vashon Aquifer. Surface areas above the Vashon Aquifer which are not separated from the underlying aquifers by a poorly permeable layer that provides adequate protections to preclude the proposed land use from contaminating the Vashon aquifer below. Vashon aquifers in Kitsap County are typically mapped as "Qva" (Vashon advance aquifer) or "Qvr" (Vashon recessional aquifer) on geologic maps.
  4. Areas with high concentration of potable water supply wells.
- Critical Aquifer Recharge Areas - Kitsap County has adopted, based on information from the Washington State Department of Ecology, a conservative approach based on a worst-case scenario for contamination movement to groundwater, and will use wellhead protection area boundaries (five- and ten-year time of travel) derived from sound analytical and numerical modeling, and will also incorporate waterbearing surface geology as a method to identify and classify CARAs which includes a list of five Significant Recharge Areas. Potable water is an essential life-sustaining element. The majority of Kitsap County drinking water comes from groundwater supplies in aquifers. Critical aquifer recharge areas are very important to shallow and deepwater aquifer recharge. The intent of this ordinance is to identify and classify aquifer recharge areas and address land use activities that pose a potential to contaminate or otherwise threaten aquifer water quality. This ordinance shall not affect any right to use or appropriate water as allowed under state or federal law. In addition, these requirements do not apply to those activities, which have potential contaminant sources below threshold amounts as set forth in applicable statutes of the Revised Code of Washington or local regulations.

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

- A. Identify, preserve and protect aquifer recharge areas, identify areas susceptible to contamination and prevent degradation of the quality of potable groundwater;
- B. Recognize the relationship between surface and groundwater resources; and,
- C. Give priority to potable water resource areas per WAC 365-190-080 (2) in the planning and regulation of land uses that may contaminate or degrade groundwater.
- D. Balance competing needs for water supply while preserving essential natural functions and processes.



## Legend

- Category I  
Potential for certain land use activities to adversely affect groundwater is high.
- Category II  
Provide recharge to aquifers that are current or will become potable water supplies and are vulnerable to contamination based on the type of land use activity.

- Unincorporated Urban Growth Area
- Incorporated City
- Military
- Reservation Boundaries

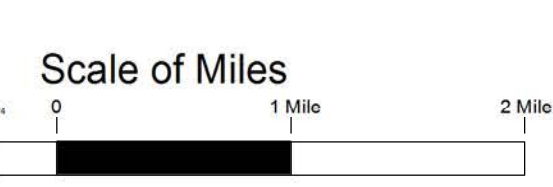
- ### Street Center Lines
- State Highway
  - Major Road
  - Collector / Arterial
  - Local Access; Local Road
  - Railroad Lines
  - Ferry Terminals
  - Ferry Routes

## Waterbodies (defined in WAC 222-16-030)

- WaterBody Cartographic Feature Code
- Bay, estuary, Puget Sound
  - Lake, Pond, Reservoir, Gravel pit or quarry filled with water
  - Marsh, wetland, swamp, bog

## Watercourses (defined in WAC 222-16-030)

- Fish Habitat Water Type Code
- (S) Designated Shoreline of the State
  - (F) Fish Habitat
  - (N) Non-fish Habitat
  - (U) Unknown, unmodeled hydrographic feature.



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Product of Kitsap County Geographic Information System

