



*Leading the community in promoting health
and preventing disease.*

Permit #: _____

Applicant: _____

Staff _____

Date of Review: _____

Hydrogeologic Report Checklist

WCC 24.11.060(B)(2)&(3) requires that an applicant for a new permit-exempt withdrawal provides evidence of legal availability in the form of a hydrogeologic report. The report must be prepared, signed and stamped by a professional hydrogeologist licensed in the State of Washington and shall at a minimum include:

- ___ 1. Project location.
 - ___ a. Parcel
 - ___ b. Address

- ___ 2. Proposed permit exempt well location.
 - ___ a. Township, range, section, 1/4, 1/4 section.
 - ___ b. Latitude and longitude
 - ___ c. Located where "Surface Water Is Regulated" (Check Whatcom Domestic Water Availability Map)
 - ___ d. Located where "Instream Flows Not Set By Rule" (Samish River watershed, Point Roberts, Eliza Island, or Lummi Island)
 - ___ e. Located where "Surface Water is Regulated" but within 1,000 feet of coast line

- ___ 3. Proposed permit exempt well description.
 - ___ a. Ecology well tag number
 - ___ b. Water well report
 - ___ c. Total depth and screen depth
 - ___ d. Potential yield (gallons per minute, drawdown and time length of test)
 - ___ e. Available water quality

- ___ 4. Proposed permit exempt well use.
 - ___ a. Single-family domestic well
 - ___ b. Other
 - ___ c. Indoor use (estimated gallons per day)
 - ___ d. Outdoor use (estimated gallons per day)

- ___ 5. Site-specific hydraulic and hydrogeologic characteristics regarding potential impacts to regulated surface water (established in WAC 173-501) and impairment of senior water rights, including:
 - ___ a. A site plan(s) acceptable to the Administrative Official or Health Officer, which indicates the approximate locations of known or geologically representative wells (abandoned and active), senior water rights (including existing permit exempt wells), springs, and potentially impacted streams, ditches and other water courses located within 1,000 feet of the proposed permit exempt well.

- ___b. Characteristics and stratigraphic relationships of surface soils and underlying geologic units including estimates of thickness, horizontal and vertical extent, lithologic permeability, surface soil infiltration rates; and identified structural features such as faults, fractures, and fissures that could affect surface and/or groundwater flow.
- ___c. Estimates of annual precipitation and evapotranspiration rates for the project area.
- ___d. Aquifer characteristics including determination of recharge and discharge areas, transmissivity, storage coefficient, hydraulic conductivity, porosity, and groundwater flow direction and velocity for the affected aquifer(s). The characterization shall include:
 - Appropriately scaled hydrogeological cross section(s) depicting underlying lithology and aquifer(s)
 - Appropriately scaled groundwater contour map(s) depicting the elevation and flow direction of the potentially affected aquifer(s).
- ___e. Determination of the degree of continuity between groundwater and regulated surface water (per WAC 173-501) and an evaluation of the potential impacts to these flows and other senior water rights from the proposed groundwater withdrawals.

If it is determined that the proposed use of the well impacts/impairs a senior water right, including instream flows established in Chapter 173-501 WAC, in accordance with current statutes and case law, then a mitigation report that includes the following elements must also be submitted. Additional items may be required based on project type and mitigation proposal.

- ___a. A clear and accurate description of the proposed mitigation system.
- ___b. Estimated mitigation volume.
- ___c. Source of mitigation water.
- ___d. Evidence that the mitigation will be occurring in kind, in time, and in place.
- ___e. Monitoring, reporting, and quality assurance/quality control plan.
- ___f. Documentation adequate to demonstrate that the mitigation will remain in place for the duration of the impact, including, for example financial assurances or documentation of permanent dedication of water for mitigation purposes.