



**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Southwest Region Office**

PO Box 47775, Olympia, WA 98504-7775 • 360-407-6300

August 23, 2022

Jefferson Public Utility District
ATTN: Bill Graham
310 Four Corners Road
Port Townsend WA 98368

Re: Water Right Application No. G2-29120

Dear Bill Graham:

This document will not be sent in the US mail. In order for Ecology to confirm you received this document, please reply to the email this document was attached to with the following: *"I have received Ecology's decision via email. This email serves as my response that I am the addressee or their agent, and that the decision has been received and certified mail is not requested."*

Water Right Application G2-29120 was filed with a priority date of September 29, 1994 and requests an instantaneous groundwater withdraw of 250 gallons per minute (gpm) from one well. Subsequently, a preliminary permit was issued to drill and test a well. Following the drilling and testing of this well (Community Well), Pacific Groundwater Group submitted *the Quilcene Community Test Well Installation, Testing, and Yield Analysis Jefferson County, Washington (February, 1997)* report fulfilling the preliminary permit.

Jefferson Public Utility District (PUD) requested to add the United States Forest Service (USFS) well (ABR-399), to G2-29120 as a second point of withdrawal. It is anticipated the Community Well will be pumped at an instantaneous rate of 90 gpm and the USFS well will be pumped at an instantaneous rate of 50 gpm. Under the two wells, Jefferson PUD is proposing a combined instantaneous withdrawal rate of 140 gpm.

Next Steps

Before Ecology can process your application, you will need to conduct a pumping test on the USFS well. This is to determine if water is both physically and legally available and to determine if the proposed withdrawal will impair senior water rights.



You will need to hire a qualified consultant to evaluate the potential impacts of your project, noncompliance with chapter 173-517 Washington Administrative Code (WAC). The consultant will need to take several steps, including:

Pumping Test

- **Develop and perform a site specific testing plan for your well.** The Preliminary Permit outlines the details needed for site specific testing.

Modeling

- **Develop a numerical groundwater flow model or another predictive tool to determine to what extent groundwater capture from pumping both wells will impact individual streams regulated under chapter 173-517 WAC and if the proposed pumping will impair senior water right holders.** Using both the PGG (February, 1997) report and pump test data under this preliminary permit for the USFS well, streamflow capture must be identified and estimated to determine if your application can be approved using water reserved for future use, WAC 173-517-150.

Ecology reserves the right to request more information in support of your application if necessary.

You must submit the results of your well testing outlined above by September 1, 2025.

If you have any questions, or are no longer interested in pursuing Water Right Application G2-29120, please contact Matthew Kogle at (360) 280-2983 or matthew.kogle@ecy.wa.gov.

Sincerely,



Matthew Kogle
Staff Hydrogeologist - Permit Writer
SWRO Water Resources Program

Enclosure: *Your Right to Be Heard*



PRELIMINARY PERMIT to Test a Well for Water Right Application

Water Right Application G2-29120 was filed on September 29, 1994 and requests a groundwater withdraw of 250 gallons per minute (gpm) from a well for multiple domestic supply. The proposed point of withdraw is located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, Township 27 North, Range 02 West of the Willamette Meridian. On December 18, 2019, G2-29120 was amended to add an existing well as a second point of withdrawal located within the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 24, Township 27 North, Range 02 West of the Willamette Meridian for Municipal supply purposes.

Under the authority of RCW 90.03.290, Ecology can issue a Preliminary Permit for a water right applicant to conduct studies, surveys, and investigations to gather information to assess a water right application. This Preliminary Permit allows temporary groundwater withdrawals for testing purposes only.

Ecology needs information that evaluates your proposed withdrawal before your application can be processed. Impacts to area users and surface water impacts need to be evaluated. Ecology reserves the right to ask for more information before making a final decision on the application, if necessary.

The requirements of this Preliminary Permit must be met within the deadline or Water Right Application G2-29120 will automatically be rejected. This Preliminary Permit does not commit Ecology to approve the water right for your project. Other uses needing a water right permit are not allowed unless approved.

Ecology has determined the activities authorized under this Preliminary Permit are categorically exempt from SEPA review under WAC 197-11-800(17).

Please make sure that your consultant receives a copy of this Preliminary Permit to ensure compliance with all requirements. If adverse impacts to senior water right holders occur during any portion of the test, the test must be stopped immediately. Once testing is complete, the well must be capped so it does not pose a safety hazard.

This Preliminary Permit will remain in effect until **September 1, 2025**, unless revoked sooner by Ecology. Applicant will assume all expenses, risks, and liabilities incurred in response to this Preliminary Permit.

This Preliminary Permit is subject to existing rights and the following requirements:

Existing well evaluation:

- The well should be evaluated by a Licensed Well Driller or Professional Engineer with a focus on groundwater evaluation. Existing wells must meet minimum requirements



outlined in Chapter 18.104 RCW (Washington Water Well Construction Act of 1971) and Chapter 173-160 WAC (Minimum Standards for Construction and Maintenance of Water Wells).

- In addition to the requirements outlined in chapter 18.104 RCW and chapter 173-160 WAC, the following should be provided:
 - Well Reports.
 - Well development procedures.
 - Data collected from previously conducted pumping tests.
 - Historical static water level and pumping level data, if available.
 - Documentation of problems with well performance.
 - History of well rehabilitation, cleaning, and redevelopment.
 - Present condition of casing, well screen, or perforations.
 - Current condition of well surface seal.
- Existing well locations should meet the siting requirements as listed below:
 - Wells must be at least 100 feet away from potential sources of contamination, such as a sewer, septic tank, privy as specified in WAC 173-160-171. Wells must also be at least 1,000 feet away from solid waste landfills. These minimum distances must also comply with state and local health laws.
 - The well must have a well-maintained access port. A backflow check-valve must also be installed. This valve will prevent water from flowing back into the well when pumping stops so data collected during recovery is accurate.

Requirements for test observation wells:

- At least one observation well should be monitored for drawdown, recovery and water quality during the aquifer test, if available.
- Observation wells must be completed in the same aquifer as the pumping well and not be actively pumping during the test.
- Wells should be selected where they will best determine potential for impacts to surface water in the area, and effects on nearby wells.



Requirements for pumping test:

The Washington State Department of Health (DOH) Water System Design Manual (DOH #331-123, Revised June 2020), Appendix E provides guidelines for designing and conducting aquifer tests (available at www.doh.wa.gov/ehp/dw). DOH guidelines are minimum requirements. Additional guidelines can be found in Washington State Department of Ecology Water Resources Program Guidance: Aquifer Test Procedure (Publication 20-11-093, October 2020), available at <https://fortress.wa.gov/ecy/publications/summarypages/2011093.html> Failure to follow correct methods may require the tests to be repeated.

- A Washington Licensed Hydrogeologist or Registered Engineer, specializing in groundwater evaluation, must supervise the test and perform data analysis.
- The well must be tested at a constant rate not less than the maximum design rate of the well.
- The test **must be designed to provide the following information:**
 - Distance and time drawdown response in the producing aquifer.
 - Aquifer transmissivity.
 - Aquifer storage coefficient and specific yield.
 - Effects on regulated surface water.
 - Effects to area users.

Select accurate water level devices, such as transducers, or electric tape, to measure water levels. All watches and clocks used for timing should be synchronized so that each measurement can be referenced to the exact time since pumping began.

- The pumping portion of the test must be at least 24 hours long OR until the water level in the pumping well has been stable for at least four (4) hours, whichever occurs last.

Water levels are stable if they drop less than 0.1 foot in an hour while the well is pumping. Measuring points for water levels must be accurately located within 10 feet horizontally and 1 foot vertically.

- Water pumped during the test should be discharged so it will not recharge the drawdown cone or influence monitoring during the test.
- Recovery data must be collected from all wells until the water level in the pumped well nears pre-pumping conditions and the water-level recovery rate is less than 0.1 foot per hour.
- Water levels in the area may be tidally influenced. Sufficient baseline (non-pumping) water level measurements should be completed to understand how the well may be



influence by tides. Baseline measurements should be compared with tidal records, and corrected, if needed.

- Data collected must be corrected for influences of barometric pressure, if applicable.

Ecology recommends measuring water levels in the test and observation well every hour at least 48 hours before the start of the aquifer test. This will help evaluate aquifer response to external stresses such as precipitation and well interference. Barometric pressure should also be monitored on similar schedule, particularly for confined aquifers, so corrections for barometric influences can be made

- For water quality sampling, water samples must be collected from the pumping well and observation wells and tested for chlorides and conductivity at a laboratory accredited by the Department of Ecology. Water samples must be collected as follows:
 - From the pumping well:
 - During the first 30 minutes of pumping.
 - About mid-way through pumping.
 - During the last 15 minutes of pumping.
 - From the observation wells:
 - Before the pump test starts.
 - Immediately after all recovery data is collected and the well has recovered to its static water level.

Please be aware that the state or county health department may require additional testing prior to the approval of your project. If your project involves a public water system, please check with the appropriate health agency to determine what additional testing is required before you conduct the test.

Requirements for reporting:

Applicant must file a report with Ecology when aquifer testing is complete. This information must provide Ecology with the information needed to evaluate results of the study. Ecology may request any of this information in an electronic format.

The report should contain the following information:

- Maps showing locations of wells used in pump test (pumping and observation wells) and surface water bodies.
- Pumping well information.
 - Construction diagrams.
 - Well report
 - Lithology description of units.



- Pump intake depth.
- Wellhead elevation and way measured.
- Identification of measuring point.
- Monitoring well information.
 - Well reports (if available).
 - Well information and way it was determined (if no well report).
 - Wellhead elevations and way measured.
 - Total well depth and way determined.
 - Screened interval and way determined.
 - Description of measuring point.

All water level and water quality data must be presented in both tabular form and on data plots.

- Distances between pumping well and observation well(s).
- Testing information.
 - Pumping rates.
 - Duration of pumping and recovery.
 - Water level information.
 - Raw data and corrected measurements.
 - Discussion of the methods and calculations used to determine aquifer characteristics.
 - Copies of the all field data sheets related to the testing.
- Hydrogeology information.
 - Hydrogeologic cross-sections.
 - Description of the hydrogeologic system.
 - Copies of all laboratory data sheets.
- Impacts to the Big Quilcene and Little Quilcene Rivers.
 - Projected impacts to the Big Quilcene River by pumping both the Community Well and the USFS well.
 - Projected impacts to the Little Quilcene River by pumping both the Community Well and the USFS well.

YOUR RIGHT TO APPEAL

You have a right to appeal this Preliminary Permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this Preliminary Permit. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).



To appeal you must do all of the following within 30 days of the date of receipt of this Preliminary Permit:

- File your appeal and a copy of this with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this Preliminary Permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

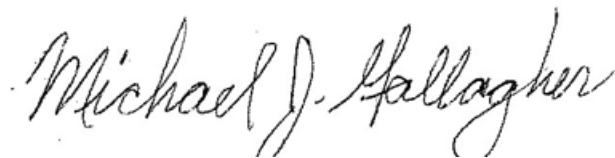
ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Michael J. Gallagher, Section Manger
Department of Ecology, SWRO
PO Box 47775
Lacey, WA 98504-7775

If you have any questions regarding this Preliminary Permit, please contact Matthew Kogle at (360) 280-2983 or matthew.kogle@ecy.wa.gov.

Sincerely,



Michael Gallagher, LHG
Section Manager
SWRO Water Resources Program

