## Instructions

**Complete one form for each ground water source** (well, well of a wellfield, spring, spring of a springfield) used in your water system (make copies as necessary). Contact your [regional office](https://doh.wa.gov/community-and-environment/drinking-water/offices-and-staff) if you need a copy of the instruction packet.

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| **Part 1: System Information** |
| **Well Owner/Manager** |   |
| **Water System Name** |   | **PWSID** |   |
| **County** |   | **Source Number** |   |
| **Well Depth (Feet)** |   |
| **Source Name** |   |
| **WA Well Tag ID Number** |   |
| **Well Not Tagged** | [ ]  |
| **Number of Connections** |   | **Population Served** |   |
| **Township** |   | **Range** |   |
| **Section** |   | **¼ ¼ Section** |   |
| **Latitude/Longitude** |   | **/** |   |
| **How was latitude/longitude determined?** |
| [ ]  | **GPS** | [ ]  | **Survey** | [ ]  | **Topographical Map** |
| **Other** |   |
| *Note: Please see instruction packet for details and explanations of all questions in Parts 2 through 5.* |
| **Part 2: Well Construction and Source Information** |
| **1. Original well construction date** |   |
| **Latest well reconstruction date** |   |
|[ ]  **Information Unavailable** |
| **2. Well Driller** |   |
|[ ]  **Well Driller Unknown** |
| **3. Type of Well** |
|[ ]  **Drilled** |[ ]  **Rotary** |[ ]  **Bored** |[ ]  **Cable (Percussion)** |[ ]  **Dug** |
|[ ]  **Other** |[ ]  **Spring(s)** |[ ]  **Lateral Collector (Ranney)** |
|[ ]  **Driven** |[ ]  **Jetted** |[ ]  **Other** |  |
| **4. Well Report Available** |
|[ ]  **Yes** (attach copy to form) |[ ]  **No** |

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| **5. Average Pumping Rate** |   | **Gallons/Minute** |
| **Information Source** |   |
| **If not documented, how was pumping rate determined?** |
|   |
|[ ]  **Pumping Rate Unknown** |
| **6. Is this source treated?** |
| **If so, what type of treatment?** |
|[ ]  **Disinfection** |[ ]  **Filtrations** |[ ]  **Carbon Filter** |[ ]  **Air Stripper** |[ ]  **Other** |
| **Purpose of treatment (describe materials removed or controlled by treatment).** |
|   |
| **7. If source is chlorinated, is a chlorine residual maintained?** |[ ]  **Yes** |[ ]  **No** |
| **Residual level (at point closest to source).** |   |
|  |
| **Part 3: Hydrogeologic Information** |
| **1. Depth to top of open interval** (check one) |
|[ ]  **Less than 20 feet** |[ ]  **20-49 feet** |[ ]  **50-99 feet** |
|[ ]  **100-200 feet** |[ ]  **Greater than 200 feet** |[ ]  **Information Unavailable** |
| **2. Depth to Groundwater** (static water level) |
|[ ]  **Less than 20 feet** |[ ]  **20-49 feet** |[ ]  **Greater than 100 feet** |
|[ ]  **Flowing well/spring** (artesian) |
| **How was water level determined?** |
|[ ]  **Well Log** |[ ]  **Other** |   |
|[ ]  **Depth to Groundwater Unknown** |
| **3. If source is flowing well or spring, what is the confining pressure?** |
|   | **PSI** (pounds per square inch) ~**OR~** |
|   | **Feet above wellhead** |
| **4. If source is flowing well or spring, is there a surface impoundment, reservoir, or catchment associated with this source?** |
|[ ]  **Yes** |[ ]  **No** |
| **5. Wellhead elevation in feet** (height above mean sea level.) |
|   |
| **How was elevation determined?** |
|[ ]  **Topographic Map** |[ ]  **Drilling/Well Log** |[ ]  **Altimeter** |
|[ ]  **Other** |   |
|[ ]  **Information Unavailable** |

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| **6. Confining Layers** *(This can be completed only for those sources with a drilling log, well log, or geologic report describing subsurface conditions. Please refer to Instruction Packet for example.)* |
|   | **Evidence of confining layer(s) in well log.** |
|   | **No evidence of confining layer(s) in well log.** |
| **If there is evidence of a confining layer, is the depth to ground water more than 20 feet above the bottom of the lowest confining layer?** |
|[ ]  **Yes** |[ ]  **No** |
|[ ]  **Information Unavailable** |
| **7. Sanitary Setback** |
|[ ]  **Less than 100 feet\*** |[ ]  **100-120 feet** |[ ]  **120-200 feet** |[ ]  **Greater than 200 feet** |
| **\*If less than 100 feet, describe the site conditions.** |
| Click or tap here to enter text. |
| **8. Wellhead Construction** |
|[ ]  **Wellhead enclosed in wellhouse** |
|[ ]  **Controlled access** (describe in box below.) |
| Click or tap here to enter text. |
| **Other uses for wellhouse** (describe in box below.) |
| Click or tap here to enter text. |
|[ ]  **No wellhead control.** |
| **9. Surface Seal** |
|[ ]  **18 feet** |[ ]  **Greater than 18 feet** |[ ]  **Less than 18 feet** (**No** ECY approval) |
|[ ]  **Less than 18 feet** (ECY approval copy attached) |[ ]  **Depth of seal unknown** |[ ]  **No surface seal** |
| **10. Annual Rainfall** (inches per year) |
|[ ]  **Less than 10 in/yr** |[ ]  **10-25 in/yr** |[ ]  **Greater than 15 in/yr** |

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| **Part 4: Mapping Your Groundwater Resource** |
| **1. Annual volume of water pumped in gallons** |   |
| **How was this determined?** |
|[ ]  **Meter** |[ ]  **Estimated** |[ ]  **Pumping rate** |   |
|  |[ ]  **Pump capacity** |   |
|  |[ ]  **Pump rate and capacity** |   |
| **Other** (describe in box below) |
| Click or tap here to enter text. |
| **2. Determined time of travel using:** |
|[ ]  **Calculated Fixed Radius estimate of groundwater movement** (see instruction packet) |
|[ ]  **Alternate Numerical Model** |
| **Six-month groundwater travel time** (in feet) |   |
| **One-year groundwater travel time** (in feet) |   |
| **Five-year groundwater travel time** (in feet) |   |
| **Ten-year groundwater travel time** (in feet) |   |
| **Information available on length of screened/open interval?** |
|[ ]  **Yes** |[ ]  **No** |
| **Length of screened/open interval** (in feet) |   |
| **3. Is there a river, lake, pond, stream, or other obvious surface water body within the six-month time of travel boundary?** (Mark and identify on map.) |
|[ ]  **Yes** |[ ]  **No**  |
| **4. Is there a stormwater and/or wastewater facility, treatment lagoon, or holding pond located within the six-month time of travel boundary?** |
|[ ]  **Yes** |[ ]  **No**  |
| **Comments** |
| Click or tap here to enter text. |

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| **Part 5: Assessment of Water Quality** |
| **1. Regional sources of risk to groundwater** |
| Please indicate if any of the following are present within a circular area around your water source having a radius up to and including the five-year ground water travel time. If you do not know if one of the following is present, mark the “unknown” space. |
|  | **Six-Month** | **One-Year** | **Five-Year** | **Unknown** |
| **Likely pesticide application** |[ ] [ ] [ ] [ ]
| **Stormwater injection well** |[ ] [ ] [ ] [ ]
| **Other injection wells** |[ ] [ ] [ ] [ ]
| **Abandoned groundwater well** |[ ] [ ] [ ] [ ]
| **Landfills, dumps, disposal areas** |[ ] [ ] [ ] [ ]
| **Known hazardous materials clean-up site** |[ ] [ ] [ ] [ ]
| **Known water quality problems** |[ ] [ ] [ ] [ ]
| **Population density less than one house/acre** |[ ] [ ] [ ] [ ]
| **Residences commonly have septic tanks** |[ ] [ ] [ ] [ ]
| **Wastewater treatment lagoons** |[ ] [ ] [ ] [ ]
| **Sites used for land application of waste** |[ ] [ ] [ ] [ ]
| Please include a map of the wellhead and time of travel areas with this form. Mark and identify on the map any of the risks listed above. |
| If other recorded or potential sources of ground water contamination exist within the ten-year time of travel circular zone around your water supply, please describe in the box below. |
| Click or tap here to enter text. |
| **2. Source-specific water quality records.** For each type of test below, **mark the row that applies to the sample results for this source**. Consider all sample results from the past 12 years. Maximum Contaminant Levels (MCLs) and State Advisory Levels (SALs) are noted next to the specific test and are listed in the instruction packet. |
| **A. Nitrate** (Nitrate MCL = 10 mg/liter) |
|[ ]  **Results greater than MCL** |
|[ ]  **Less than 2 mg/liter nitrate** |
|[ ]  **2-5 mg/liter nitrate** |
|[ ]  **Greater than 5 mg/liter nitrate** |
| **B. VOCs** (VOC detection level is 0.5 ug/liter or 0.0005 mg/liter) |
|[ ]  **Results greater than MCL or SAL** |
|[ ]  **VOCs detected at least once** |
|[ ]  **VOCs never detected** |
|[ ]  **VOC sampling records unavailable** |

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| **C. EDB/DBCP** (EDB MCL = 0.05 ug/l or 0.00005 mg/l. DBCP MCL = 0.2 ug/l or 0.0002 mg/l.) |
|[ ]  **EDB/DBCP detected below MCL at least once** |
|[ ]  **EDB/DBCP detected above MCL at least once** |
|[ ]  **EDB/DBCP never detected** |
|[ ]  **EDB/DBCP tests not required** |
| **D. Other SOCs (pesticides, herbicides, or SOCs other than EDB/DBCP** |
|[ ]  **Other SOCs detected** (pesticides, herbicides or other synthetic organic chemicals) |
|[ ]  **Other SOC tests performed but none detected** (list test methods in comments) |
|[ ]  **Other SOC tests not performed** |
| If any SOCs in addition to EDB/DBCP were detected, please identify and date. If other SOC tests were performed, but no SOCs detected, list test methods in box below. |
| Click or tap here to enter text. |
| **E. Bacterial Contamination** |
| Any bacterial detection(s) in the past three years in samples taken from the source (not distribution sampling records)? |
|[ ]  **Yes** |[ ]  **No**  |
| Any bacterial detection(s) in the past three years in the distribution system attributed to the source? |
|[ ]  **Yes** |[ ]  **No**  |
| Source sampling records for bacteria unavailable. |
|[ ]  **Yes** |[ ]  **No**  |
|  |
| **Part 6: Geographic or Hydrologic Factors Contributing to a Non-Circular Zone of Contribution** |
| The following questions will help identify those ground water sources that the calculated fixed radius (CFR) method described in Part 4 may not accurately represent. For these sources, use the CFR areas as a preliminary delineation of the critical time of travel zones for that source. As a system develops its Wellhead Protection Plan for these sources, consider a more detailed delineation method. |
| **1. Is there evidence of obvious hydrologic boundaries within the ten-year time of travel zone of the CFR?** (Does the largest circle extend over a stream, river, lake, up a steep hillside, and/or over a mountain or ridge?) |
|[ ]  **Yes** |[ ]  **No**  |
| Describe in the box below, with references to map produced in Part 4. |
| Click or tap here to enter text. |

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| **2. Aquifer Material** |
| A. does the drilling log, well log, or other geologic/engineering reports identify that the well is located in an area where the underground conditions are identified as fractured rock and/or basalt terrain? |
|[ ]  **Yes** |[ ]  **No**  |
| B. Does the drilling log, well log, or other geologic/engineering reports indicate that the well is located in an area where underground conditions are primarily identified as coarse sand and gravel? |
|[ ]  **Yes** |[ ]  **No**  |
| **3. Is the source located in an aquifer with a high horizontal flow rate?** (These can include sources located on flood plains of large rivers, artesian wells with high water pressure, and/or shallow flowing wells and springs.) |
|[ ]  **Yes** |[ ]  **No**  |
| **4. Are there other high capacity wells (agricultural, municipal and/or industrial) located within the CFRs?**  |
| A. Presence of groundwater extraction wells removing more than approximately 500 gal/min within… |
|  | **Yes** | **No** | **Unknown** |  |
| **Less than six-month travel time** |[ ] [ ] [ ]   |
| **Six-month to one-year travel time** |[ ] [ ] [ ]   |
| **One to five-year travel time** |[ ] [ ] [ ]   |
| **Five to ten-year travel time** |[ ] [ ] [ ]   |
| B. Presence of groundwater recharge wells (dry wells) or heavy irrigation within… |
|  | **Yes** | **No** | **Unknown** |  |
| **Less than one-year travel time** |[ ] [ ] [ ]   |
| **One to five-year travel time** |[ ] [ ] [ ]   |
| **Five to ten-year travel time** |[ ] [ ] [ ]   |
| Please identify or describe additional hydrologic or geographic conditions that you believe may affect the shape of the zone of contribution for this source. Where possible, reference them to locations on the map produced in Part 4. |
| Click or tap here to enter text. |
|  |
| **Form Completed By** |
| **Name of Authorized Person** |   |
| **Signature** |   |
| **Title** |   |
| **Date** |   |

# For more information

Questions? Contact Nikki Guillot, Source Water Protection Program Manager, 360-236-3114.

Contact our nearest regional office from 8 AM to 5 PM, Monday through Friday.

[Eastern Region](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/OfficesandStaff/EasternRegionalOfficeStaff), Spokane Valley, 509-329-2100.

[Northwest Region](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/OfficesandStaff/NorthwestRegionalOfficeStaff), Kent, 253-395-6750.

[Southwest Region](https://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/OfficesandStaff/SouthwestRegionalOfficeStaff), Tumwater, 360-236-3030.

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