



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

February 24, 2015

City of Yakima Water/Irrigation Division  
ATTN: David Brown, Water/Irrigation Manager  
2301 Fruitvale Blvd  
Yakima, WA 98902

**RE: Temporary Permit for the Beneficial Use of Water for Municipal Supply under Reservoir Application No. R4-34552**

This letter constitutes your TEMPORARY PERMIT under Reservoir Application Number R4-34552. This Temporary Permit authorizes the storage, recovery and beneficial use of water for municipal supply, subject to the provisions included below.

On April 12, 2002, the City of Yakima (City) filed Application No. R4-34552 with the Washington State Department of Ecology (Ecology) for a new reservoir permit. The source of water is a diversion from the Naches River under Acquavella Court Claim Nos. 02110, (A) 02826, (A) 03014, (A) 03015, and (A) 05474, Superseding Certificate No. S4-01141C(A), Superseding Permit No. S4-01141P(B), and Certificate No. G4-00990ALS. The existing diversion structure from the Naches River is located within the SW ¼, Section 13, Township 14N, Range 17E.W.M., Yakima County, Washington. The proposed reservoir is an aquifer in the Upper Ellensburg Formation. The proposed project entails diversion of source water, treatment at the City's water treatment plant, conveyance through the distribution system, injection into the aquifer system, and withdrawal of the stored water by wells at a later date for municipal uses.

The proposed points of injection are the City's Gardner well located approximately 1400 feet south and 1250 feet west of the northeast corner of Section 36, T. 13N., R. 18E.W.M. and the City's Kissel Well located approximately 300 feet east and 100 feet south of the north-west corner of Section 35, Township 13 North, Range 18E.W.M. The associated Yakima County Tax Parcel Nos. are 181336-14033 and 181335-22014. The Gardner Well is located in the northwest corner of Gardner Park in the south end of the City. The Kissel Well is located in the northwest corner of Kissel Park, in the south end of the City. The proposed points of withdrawal are the City's existing domestic groundwater wells (Gardner, Kissel, Airport and Kiwanis).

This Temporary Permit is associated with the Pilot Phase of the City's Aquifer Storage and Recovery (ASR) project. Work to be performed under this authorization is described in the City of Yakima Technical Memorandum, ASR Application R4-34522 Package, prepared by Golder Associates, Inc., dated December, 2014 (ASR Technical Memorandum), as amended below. This project is part of the groundwater storage element of the [Yakima Basin Integrated Water Resource Management Plan](#). Potential benefits of this project include:

- Surface water diverted in winter months can be used to restore the aquifer water balance and build up a reservoir over time, to be drawn upon as needed.
- Capturing winter streamflow for use in summer will help off-set anticipated hydrologic shifts in the timing of runoff resulting from climate change.
- Over time, potentially large volumes of water could be stored underground in the Yakima Valley for far less cost compared to an equivalent surface water storage facility.
- Artificially recharged groundwater is likely to increase Yakima River baseflow year round.



- Yakima River benefits from increased baseflow are likely to accrue above the Parker gage, potentially increasing Total Water Supply Available.
- The City may reduce their diversion of surface water during low flow times and draw upon groundwater stored in the aquifers, allowing more water to pass their diversion on the Naches River during that time.
- Stored groundwater could be pumped and used to augment river flow.
- Additional recharge/recovery wells can be installed to increase the capacity of the system and spread capital costs over time.
- Interties with neighboring water systems may be included in an expanded regional groundwater recharge program.
- Recharged water and associated water seepage to the river may be used to offset or mitigate other water uses.

A significant amount of information has been collected for this project that the City and Ecology are using to evaluate project operation and environmental impacts. This information will be used to prepare a reservoir permit that meets the requirements of Chapter 173-157 WAC, as proposed in Reservoir Permit Application No. R4-34552. This Temporary Permit will provide additional information and allows the City to recharge, store and beneficially use stored groundwater using existing wells as the point of withdrawal while Ecology is reviewing the application.

This TEMPORARY PERMIT is subject to the following conditions:

1. This Temporary Permit becomes effective immediately and will remain in effect until January 1, 2017, unless sooner revoked, revised, or extended by the Department of Ecology.
2. All expenses, risks, and liabilities incurred during operation under this temporary permit shall be borne by the applicant. If senior water right holders, including wells exempt from permitting under RCW 90.44.050, are adversely affected during any portion of the operations the activity shall be terminated immediately.
3. This Temporary Permit may be revoked if the applicant fails to comply with the terms and conditions of this Temporary Permit.
4. The issuance of this Temporary Permit in no way guarantees a reservoir permit will be issued.
5. Withdrawal of stored groundwater for beneficial use may take place from any of the City's existing municipal wells (Gardner, Kissel, Kiwanis and Airport), at rates and volumes described in the ASR Technical Memorandum.
6. No discharge of water to surface waters of the state is authorized in this Temporary Permit. The City shall monitor the discharge of water on the surface to ensure that all discharge water infiltrates prior to reaching surface water. Water quality field parameters shall be observed during recovery of stored water as described in the ASR Technical Memorandum, as amended below. If any water quality problems are observed during any portion of the ASR operations, water quality samples shall be collected for laboratory analyses and/or the activity shall be terminated immediately.
7. The City shall manage recharge operations and proceed with adequate safeguards in place to prevent the injection of water with DBP concentrations higher than  $\frac{1}{2}$  the current drinking water limits for DBPs. This includes the requirement that the City continue to follow WA DOH and US EPA guidance and requirements to minimize the formation of disinfection bi-products to the maximum extent reasonable.
8. The anticipated schedule, volume, and rates of recharge, storage, and recovery are as outlined in the ASR Technical Memorandum except as follows: total recharge under this temporary

authorization will not exceed 4,000 gpm or 3,000 AF per year.

9. Water quality samples shall be collected and analyzed for DBP's in accordance with the following table using methods and procedures as described in the Gardner Well ASR Test Quality Assurance Project Plan, prepared by Golder Associates, dated April 10, 2014. Copies of the Quality Assurance Project Plan can be obtained by contacting Ecology's project coordinator. Source water samples shall be collected as near as possible to each recharge well. Storage groundwater samples shall be collected from each well used for recharge. Recovery groundwater samples shall be collected from each well used to recover stored groundwater. Percentages represent recharge volumes within an annual recharge cycle.

| Phase    | Percent of Recharge Volume  | Media        |
|----------|-----------------------------|--------------|
| Recharge | 0%                          | Source Water |
|          | 50%                         | Source Water |
|          | 100%                        | Source Water |
| Storage  | 1 month after recharge ends | Groundwater  |
| Recovery | 0%                          | Groundwater  |
|          | 50%                         | Groundwater  |
|          | 100%                        | Groundwater  |

10. All activities shall comply with the procedures as specified in the ASR Draft Technical Memorandum, prepared by Golder Associates, dated December 2014, except as Ecology may approve in writing prior to any material deviation, and the attached Quality Assurance Project Plan, dated April 10, 2014.
11. Deviations from the program outlined in this temporary authorization shall be documented and request for approval shall be submitted in writing to Ecology's project coordinator.
12. The operator of the system under this authorization shall have a copy of this Temporary Permit and be aware of the parameters and provisions and operate accordingly.
13. All water level, flow rate, temperature, pressure, water quality, and other relevant data collected as part of the Temporary Permit shall be provided to Ecology in electronic format (i.e., spreadsheet) with the reporting requirements as described in Section 7.3 in the Draft ASR Technical Memorandum prepared by Golder Associates, dated December 2014.
14. This Temporary Permit shall in no way excuse the permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations including those administered by other programs of the Department of Ecology.
15. The issuance of this Temporary Permit does not convey a right of access to or other right to use land, which you do not legally possess. Obtainment of such a right is a private matter between the applicant and owner of that land.
16. The water sources and/or transmission facilities may not be located entirely upon the land owned by the applicant. Therefore, the applicant is advised that issuance of a permit by the Department of Ecology for appropriation of waters in question does not convey a right of access to, or other right to use, land which the applicant does not legally possess.
17. Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use and data collection that are kept to meet the above conditions, and to

inspect at reasonable times any measuring device used to meet the above conditions, but only to the extent otherwise allowed by law.

#### **YOUR RIGHT TO APPEAL**

You have a right to appeal this decision to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this decision. 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 the following within 30 days of the date of receipt of this decision:

- File your appeal and a copy of this decision 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 decision 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**

| <b>Street Addresses</b>  | <b>Mailing Addresses</b>  |
|--|---|
| <b>Department of Ecology</b><br>Attn: Appeals Processing Desk<br>300 Desmond Drive SE<br>Lacey, WA 98503 | <b>Department of Ecology</b><br>Attn: Appeals Processing Desk<br>PO Box 47608<br>Olympia, WA 98504-7608 |
| <b>Pollution Control Hearings Board</b><br>1111 Israel Road SW Ste 301<br>Tumwater, WA 98501             | <b>Pollution Control Hearings Board</b><br>PO Box 40903<br>Olympia, WA 98504-0903                       |

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>  
To find laws and agency rules visit the Washington State Legislature Website: <http://www.leg.wa.gov/CodeReviser>

Send a copy of your appeal to:  
Mark Schuppe, Operations Manager  
Office of the Columbia River  
Department of Ecology  
15 W Yakima Ave Ste 200  
Yakima WA 98902-3452

Sincerely,



Mark C. Schuppe  
Operations Manager  
Office of Columbia River

MCS:DN:aa (150212)

Enclosures: Your Right To Be Heard

Certified Mail: 7010 0290 0000 7127 4901

cc: Philip Rigdon, Director, Natural Resources Division, Yakama Nation  
Dave Nazy, Dept. of Ecology

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CITY OF YAKIMA WATER/IRRIGATION DIVISION  
 ATTN: DAVID BROWN, WATER/IRRIGATION MANAGER  
 2301 FRUITVALE BLVD  
 YAKIMA WA 98902

City, State, ZIP+4

PS Form 3800, August 2006 See Reverse for Instructions

7010 0290 0000 7127 4901

| SENDER: COMPLETE THIS SECTION   | COMPLETE THIS SECTION ON DELIVERY  |
|---|--|
| <ul style="list-style-type: none"> <li>■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>■ Print your name and address on the reverse so that we can return the card to you.</li> <li>■ Attach this card to the back of the mailpiece, or on the front if space permits. <i>Permit 1502</i></li> </ul> | <p>A. Signature<br/> <input checked="" type="checkbox"/> <i>Hildi Tolackson</i> <input type="checkbox"/> Agent<br/> <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <span style="float: right;">C. Date of Delivery</span><br/> <i>Hildi Tolackson 3/2</i></p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes<br/>       If YES, enter delivery address below: <input checked="" type="checkbox"/> No</p> |
| <p>1. Article Addressed to:</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           CITY OF YAKIMA WATER/IRRIGATION DIVISION<br/>           ATTN: DAVID BROWN, WATER/IRRIGATION MANAGER<br/>           2301 FRUITVALE BLVD<br/>           YAKIMA WA 98902         </div>   | <p>3. Service type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail<br/> <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise<br/> <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>   |
| <p>2. Article Number<br/>       (Transfer from service label)</p>   | <div style="border: 1px solid black; padding: 2px; text-align: center; font-family: monospace;">         7010 0290 0000 7127 4901       </div>   |
| <p>PS Form 3811, February 2004 <span style="margin-left: 100px;">Domestic Return Receipt</span> <span style="float: right;">102595-02-M-1540</span></p>   |  |