# Oregon Water Resources Department Water Rights Division

Water Rights Application ASR Permit #001 Endorsement to Certificate 80496

### Final Order

## Appeal Rights

This is a Final Order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review must be filed within the 60 day time period specified by ORS 183.484(2). Pursuant to ORS 536.075 and OAR 137-004-0080 you may either petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

This statement of judicial review rights does not create a right to judicial review of this order, if judicial review is otherwise precluded by law. Where no changes have been made to a Proposed Final Order on a water right application and no protests have been filed during the protest period, the Final Order is not subject to judicial review.

## Authority

Oregon Revised Statutes (ORS) 537 and Oregon Administrative Rules (OAR) 690-350 establish the process by which an application for an ASR permit may be submitted and evaluated by the Department.

### Findings of Fact

- 1. On November 17, 2007, the City of Baker City submitted an application to the Department for an aquifer storage and recovery (ASR) permit.
- 2. The Department received and considered comments on the application.
- 3. The Department issued a Proposed Final Order on January 20, 2009. The protest period closed March 6, 2009, and no protests were filed.
- 4. Comments received during the protest period sought certain clarifications and changes in the draft ASR permit in the Proposed Final Order. Although clarifications are provided here and the changes considered, no changes were made in the attached permit.
- The City's compliance with its currently approved water management and conservation plan is a requirement (condition 3) of the attached ASR permit. Non-compliance could result in regulation of ASR activities.
- 6. In condition 9(A), the City's cooperation with a Department request for diversion information may require ad hoc flow measurements until flowmeters are installed pursuant to the schedule in the water management and conservation plan.
- 7. In condition 9(A) and (B), existing users are users of water rights that existed prior to issuance of the ASR permit.
- 8. In condition 9(B), the language "conflicts with an existing appropriator's lawful right to use water" pertains to injury to existing rights.

#### Conclusions of Law

Pursuant to ORS 537 and OAR 690-350, the Department finds:

- 1. The proposed use will not impair or be detrimental to the public interest, and
- 2. There is a water right for injection source water.

#### Order

Application ASR Permit #001 therefore is approved as proposed by the Proposed Final Order, and ASR Permit #001 is issued as limited by the conditions proposed by the Proposed Final Order.

DATED April

Phillip C. Ward, Director

Water Resources Department

This document was prepared by Donn Miller. If you have any questions about any of the statements contained in this document I am most likely the best person to answer your questions. You can reach me at 503-986-0845. If you have previously filed a protest and want to know its status, please contact Patricia McCarty at 503-986-0820. If you have other questions about the Department or any of its programs please contact our Customer Service Group at 503-986-0801. Address all other correspondence to: Water Rights Section, Oregon Water Resources Department, 725 Summer St NE Ste A, Salem OR 97301-1266, Fax: 503-986-0901.

#### STATE OF OREGON

## COUNTY OF BAKER

# PERMIT FOR AQUIFER STORAGE AND RECOVERY (ASR)

### THIS ASR PERMIT IS HEREBY ISSUED TO:

City of Baker City c/o Michelle Owen P.O. Box 650 Baker City, OR 97814

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: ASR PERMIT #001

PREVIOUS ASR TESTING AUTHORIZATION: ASR LIMITED LICENSE #009

SOURCE OF WATER: 23 CREEK AND SPRING SOURCES AUTHORIZED UNDER CERTIFICATE

80496

## POINTS OF DIVERSION LOCATIONS:

GOODRICH CREEK: SE ¼ SE ¼, SECTION 35, T8S, R38E, W.M; 80 FEET SOUTH & 610 FEET EAST FROM NW CORNER, SECTION 35

COYOTE SPRINGS: NW ¼ SW ¼, SECTION 2, T9S, R38E, W.M.; 1343 FEET NORTH & 656 FEET EAST FROM SW CORNER, SECTION 2

LITTLE MILL CREEK: SW ¼ SW ¼, SECTION 2, T9S, R38E, W.M.; 1012 FEET NORTH & 472 FEET EAST FROM SW CORNER, SECTION 2

BIG MILL CREEK: SW  $\frac{1}{4}$  NW  $\frac{1}{4}$ , SECTION 11, T9S, R38E, W.M.; 2033 FEET SOUTH & 1093 FEET EAST FROM NW CORNER, SECTION 11

HAWK SPRINGS: SE ¼ SE ¼, SECTION 11, T9S, R38E, W.M.; 696 FEET NORTH & 1162 FEET WEST FROM SE CORNER, SECTION 11

LITTLE MARBLE CREEK: SW ¼ SE ¼, SECTION 11, T9S, R38E, W.M.; 253 FEET NORTH & 1391 FEET WEST FROM SE CORNER, SECTION 11

BIG MARBLE CREEK AT MARBLE SPRINGS: NW ¼ NW ¼, SECTION 13, T9S, R38E, W.M.; 931.2 FEET SOUTH & 127.6 FEET EAST FROM NW CORNER, SECTION 13

CAMPER SPRINGS: NW ¼ SE ¼, SECTION 13, T9S, R38E, W.M.; 1659 FEET NORTH & 1339 FEET WEST FROM SE CORNER, SECTION 13

HERMAN SPRINGS: NW ¼ NE ¼, SECTION 24, T9S, R38E, W.M.: 400 FEET SOUTH & 1369 FEET WEST FROM NE CORNER, SECTION 24

BIG SALMON CREEK: NW ¼ NE ¼, SECTION 24, T9S, R38E, W.M.; 330 FEET SOUTH & 1369 FEET WEST FROM NE CORNER, SECTION 24

HENRY SPRINGS: NE ¼ NE ¼, SECTION 24, T9S, R38E, W.M.; 443 FEET SOUTH & 374 FEET WEST FROM NE CORNER, SECTION 24

FINLEY SPRINGS: NE ¼ NE ¼, SECTION 24, T9S, R38E, W.M.; 253 FEET SOUTH & 181 FEET WEST FROM NE CORNER, SECTION 24

LITTLE SALMON SPRINGS: SE ¼ SE ¼, SECTION 18, T9S, R39E, W.M.; 556 FEET NORTH & 1037 FEET WEST FROM SE CORNER, SECTION 18

LITTLE SALMON CREEK: SE ¼ SE ¼, SECTION 18, T9S, R39E, W.M.; 124 FEET NORTH & 809 FEET WEST FROM SE CORNER, SECTION 18

SLUM TOWN SPRINGS: NW ¼ NE ¼, SECTION 20, T9S, R39E, W.M.; 616 FEET SOUTH & 2484 FEET WEST FROM NE CORNER, SECTION 20

ROCK SPRINGS: SE ¼ NE ¼, SECTION 20, T9S, R39E, W.M.; 1383 FEET SOUTH & 438 FEET WEST FROM NE CORNER, SECTION 20

NORTH PRONG OF WASHINGTON GULCH: SE ¼ SW ¼, SECTION 21, T9S, R39E, W.M.; 622 FEET NORTH & 1407 FEET EAST FROM SW CORNER, SECTION 21

MIDDLE PRONG OF WASHINGTON GULCH: SE ¼ NE ¼, SECTION 29, T9S, R39E, W.M.; 1326 FEET SOUTH & 128 FEET WEST FROM NE CORNER, SECTION 29

SOUTH PRONG OF WASHINGTON GULCH: NW ¼ SW ¼, SECTION 28, T9S, R39E, W.M.: 1565 FEET NORTH & 348 FEET EAST FROM SW CORNER, SECTION 28

CONN SPRINGS: NE ¼ NE ¼, SECTION 32, T9S, R39E, W.M.; 521 FEET SOUTH & 245 FEET WEST FROM NE CORNER, SECTION 32

BYAM SPRINGS: NW ¼ NE ¼, SECTION 32, T9S, R39E, W.M.; 1119 FEET SOUTH & 2560 FEET WEST FROM NE CORNER, SECTION 32

ELK CREEK: SE ¼ SE ¼, SECTION 30, T9S, R39E, W.M.; 240 FEET NORTH & 397 FEET WEST FROM SE CORNER, SECTION 30

MARBLE CREEK: SW ¼ NW ¼, SECTION 13, T9S, R38E, W.M.; 1365 FEET SOUTH & 696 FEET EAST FROM NW CORNER, SECTION 13

### ASR WELL LOCATION:

RESERVOIR (ASR) WELL: NW ¼ SE ¼, SECTION 19, T9S, R40E, W.M.; 2433 FEET NORTH & 2015 FEET WEST FROM SE CORNER SECTION 19

MAXIMUM DIVERSION RATE: 3.0 CUBIC FEET PER SECOND

MAXIMUM INJECTION RATE: 1,300 GPM AT THE RESERVOIR (ASR) WELL

MAXIMUM VOLUME OF STORAGE: 200 MILLION GALLONS (STORAGE ACCOUNT AND ANNUAL INJECTION MAXIMUMS)

MAXIMUM WITHDRAWAL RATE: 2,000 GPM OF STORED WATER THROUGH THE RESERVOIR (ASR) WELL

MAXIMUM STORAGE DURATION: ONGOING

# This ASR permit is issued with the following conditions:

- 1) Record of Use. The permittee shall maintain a record of injection and recovery, including the total number of hours of injection and recovery and the total metered quantity injected and recovered. The record of use may be reviewed by Department staff upon request.
- 2) Modification/Revocation. The Department shall notify the permittee in writing and allow the permittee to respond when considering the following actions:
  - (A) The Department may modify the ASR permit for any of the following reasons:
    - (i) to reflect changes in Oregon Department of Human Services (DHS)(formerly Oregon Health Division) and Oregon Department of Environmental Quality (DEQ) water quality or treatment standards:
    - (ii) to address needed technological changes as requested by DHS or DEQ to minimize constituents regulated under OAR 333-061-0030 (ORS 448.131 and 448.273) or OAR 340-40 (ORS 468B.165);
    - (iii) upon written request from the permittee for minor adjustments to the authorization in the permit. (For purposes of this permit, a well location change to an adjacent 1/4 1/4 section is a minor adjustment as are data-based changes to recovery percentages.)
    - (iv) upon written request from the permittee for changes to the limits for the recovery of stored water. Any person operating an ASR project under a permit, upon approval by the Director, may recover up to 100 percent of the water stored in the aquifer storage facility if valid scientific data gathered during operations under the limited license or permit demonstrates that the injected source water is not lost through migration or other means and that ground water otherwise present in the aquifer has not been irretrievably lost as a result of aquifer storage or recovery.
  - (B) The Director may revoke or modify the ASR permit for any of the following reasons:
    - (i) to prevent or mitigate substantial interference with other water rights, minimum perennial streamflows established prior to the granting of the ASR permit, or aquifer water quality; or

- (ii) to address any other unintended, injurious effects of the ASR activity.
- (C) The Department shall offer an additional public comment opportunity consistent with the notice and comment provisions of OAR 690-350-020 prior to modifying the permit.
- 3) Compliance with Other Laws. The injection of acceptable water into the aquifer, as well as its storage and recovery under this permit, shall comply with all applicable local, state or federal laws. This shall include but not be limited to compliance with the DEQ Underground Injection Control registration program as authorized under the Safe Drinking Water Act (40 CFR 144.26). Also, discharges to waterways must be in compliance with all DEQ requirements. The City shall comply with the Department-approved water management and conservation plan.

# 4) Water Quality Conditions and Limits:

- (A) The permittee shall minimize, to the extent technically feasible, practical and cost-effective, the concentration of constituents in the injection source water that are not naturally present in the aquifer;
- (B) Except as otherwise provided in (C) of this condition, if the injection source water contains constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) that are detected at greater than 50 percent of the established levels (MCLs or MMLs in the cited rules), the permittee shall employ technically feasible, practical and cost-effective methods to minimize concentrations of such constituents in the injection source water;
- (C) Constituents that have a secondary contaminant level or constituents that are associated with disinfection of the injection source water may be injected into the aquifer up to the standards established under OAR 333-061-030 (ORS 448.131 and .273);
- (D) The Department may, based upon valid scientific data, further limit certain constituents in the injection source water if the Department finds that those constituents will interfere with or pose a threat to the maintenance of the water resources of the state for present or future beneficial uses;
- (E) The permittee shall be in compliance with treatment requirements and performance standards for source water that fall in categories identified in OAR 333-061-0032;
- (F) If during the course of ASR operations, a constituent which is regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) is detected above the 50 percent level prescribed in condition (4)(B) or the 100 percent level prescribed in condition (4)(C), the permittee shall immediately stop injection activities upon receipt of lab data and notify the Department within five days.

# 5) Water Quality Sampling.

- (A) Injection Water. The permittee shall follow the water quality testing plan on table 8 of the ASR permit application and, otherwise, sample and analyze injection water for the constituents and parameters at the frequency required by DHS for community drinking water systems.
- (B) Wells. The permittee shall follow the water quality testing plan on table 8 of the ASR permit application and, otherwise, sample and analyze pre-injection, receiving aquifer water at the

Reservoir (ASR) well for the constituents and parameters at the frequency required by DHS for community drinking water systems.

- (C) Withdrawal of Stored Water. The permittee shall follow the water quality testing plan on table 8 of the ASR permit application and, otherwise, sample and analyze water withdrawn from storage for the constituents and parameters at the frequency required by DHS for community drinking water systems.
- 6) Water Level Monitoring. The permittee shall monitor water levels in the wells (BAKE 1148, 1780, and 1145) as described in table 9 of the ASR permit application. The permittee shall submit for approval a detailed water level monitoring plan for testing at any subsequent injection or monitoring well.
- 7) Recovery. The availability of stored water for recovery is based on the following factors:
  - (A) Available stored water is determined on a well-by-well basis in a storage account. The permittee may recover up to 95 percent of the quantity injected under this permit during the water year that the water was injected. After that water year, the availability of stored water shall be further diminished each water year such that the permittee may only recover up to 80 percent of any water year-to-water year storage carryover. (For example, water year 2009 lasts from October 1, 2008 through September 30, 2009.)
  - (B) Any water withdrawn from the ASR well identified in this permit shall first be debited against the quantity available in the aquifer by virtue of ASR storage. When the ASR storage is depleted at the ASR well, any water withdrawn from the ASR well shall be considered a draft of natural ground water, requiring separate or additional authorization. This permit does not authorize withdrawal of more water than was injected.
  - (C) The availability of stored water is a running account that is subject to determination at any time.
- 8) Reporting. Except as otherwise noted, the permittee shall provide the Department a written report of the results of ASR operations for each water year by February 15th of the following water year. The first report shall be due in 2010 and include results from water year 2009. The report shall detail the several kinds of data collected during the water year (including water quality results), analyze those data to show the ASR project impacts on the aquifer, account for the injection of stored water, withdrawals of stored and natural water, and the new-year carryover storage at each well. The first report shall include any partial-year results under ASR limited license #009 and the testing and monitoring described in the ASR permit application. In addition to any graphical or tabular reporting, the City shall report past and future water level data digitally in a format specified by the Department.
- 9) Protection for Existing Water Users. The following provisions are prompted as protections for existing users:
  - (A) The permittee shall cooperate with the efforts of the Department to protect existing water rights and the water quality of existing users that rely upon the receiving aquifer and the injection source water. When requested, the permittee shall provide the Department information on the water sources and amounts of water from each source being used for ASR and provide the Watermaster access to the diversions;

- (B) The appropriation of water for ASR shall be regulated in favor of existing users when the Department determines the appropriation of water for ASR under this permit conflicts with an existing appropriator's lawful right to use water;
- (C) Surface water diversions for ASR injection may only occur between November 1 and July 15.
- (D) Annual ASR Meeting. Each spring, but no later than April 30th, the City shall hold a public meeting with proper notice to discuss its injection plans for the remainder of the injection season. The meeting will be an opportunity for other water users to share their concerns on the plans. Ideally, the meeting will occur at a time when the water outlook for the remainder of the injection season is fairly clear.
- 10) Use of Recovered Water. The permittee shall use any recovered water for the use(s) authorized in Certificate 80496.
- 11) Additional Conditions on an Informal Basis. The Department may suggest additional conditions to the permittee. Provided that those conditions are agreed to and undertaken by the permittee, the Department may forego formal changes to this permit. This informal process does not extend to obligation reductions.
- 12) Other Measures. The permittee shall take any additional measures appropriate to address ASR-related issues of landslide activation, seepage, streamflow increases, aquifer boundary determination, aquifer storage efficiency, and water quality protection.

Phillip C. Ward, Director

Water Resources Department