# Oregon Water Resources Department Water Right Services Division

Water Rights Application Number G-17883

Prior to the issuance of a permit, the Department must receive permit recording fees in the amount of \$450.00. Please include your application number on your check made out to the Oregon Water Resources Department.

## Proposed Final Order

Summary of Recommendation: The Department recommends that the attached draft permit be issued with conditions.

Findings of Fact

- 1. On July 1, 2014, Klamath County School District submitted an application to the Department for the following water use permit:
  - Amount of Water: 0.90 cubic foot per second (CFS)
  - Use of Water: geothermal (heating & cooling)
  - Source of Water: Production Well (KLAM 13296) and Injection Well (KLAM 57685/L104227) in Lost River Basin
  - Area of Proposed Use: Klamath County within Section 30, Township 39 South, Range 10 East, W.M.
- 2. On November 7, 2014, the Department mailed the applicant notice of its Initial Review, determining that "the appropriation of 0.90 CFS from Production Well (KLAM 13296) in Lost River Basin for year-round geothermal use (heating & cooling) is allowable." The applicant did not notify the Department to stop processing the application within 14 days of that date.
- 3. On November 11, 2014, the Department gave public notice of the application in its weekly notice. The public notice included a request for comments, and information for interested persons about obtaining future notices and a copy of the Proposed Final Order. No written comments were received within 30 days.

In reviewing applications, the Department may consider any relevant sources of information, including the following:

- any applicable basin program
- applicable statutes, administrative rules, and case law
- the amount of water available
- the rate and duty for the proposed use

- any general basin-wide standard for flow rate and duty of water allowed
- the need for a flow rate and duty higher than the general standard
- pending senior applications and existing water rights of record
- any applicable comprehensive plan or zoning ordinance
- recommendations by other state agencies
- the Scenic Waterway requirements of ORS 390.835
- designations of any critical ground water areas
- any comments received
- 4. Under ORS 536.340(1)(a), the Water Resources Commission may establish a basin program to classify sources of water supply as to the highest and best use and quantities of use, and that classification of sources of water supply has the effect of restricting the use and quantities of use thereof to the uses and quantities of uses specified in the classification. The Commission has not established a basin program for the Klamath River basin. Therefore, neither the proposed use nor the quantity of water is restricted as a result of this consideration.
- 5. Ground Water Findings Under OAR 690-009

  The Department determined, consistent with OAR 690-009-0040(4), that the proposed ground water use will not have the potential for substantial interference with surface water.

In making this determination, the Department considered whether:

- (a) There is a hydraulic connection from the proposed well(s) to any surface water sources.
- (b) The point of appropriation is a horizontal distance less than one-fourth mile from the surface water source;
- (c) The rate of appropriation is greater than five cubic feet per second, if the point of appropriation is a horizontal distance less than one mile from the surface water source;
- (d) The rate of appropriation is greater than one percent of the pertinent adopted minimum perennial streamflow or instream water right with a senior priority date, if one is applicable, or of the discharge that is equaled or exceeded 80 percent of time, as determined or estimated by the Department, and if the point of appropriation is a horizontal distance less than one mile from the surface water source;
- (e) The ground water appropriation, if continued for a period of 30 days, would result in stream depletion greater than 25 percent of the rate of appropriation, if the point of appropriation is a horizontal distance less than one mile from the surface water source.

According to the Department's rules, the potential for substantial interference is assumed if (a) and either (b) or (c) or (d) or (e) are met. For this application, the Department determined that there is no potential for substantial interference, because either (a) is not met, or (b), (c), (d) or (e) are not met, or both.

- 6. The Department has determined that additional ground water use would add to ongoing groundwater level declines. As a result, the Department has determined that groundwater is over-appropriated and will not likely be available within the capacity of the resource and/or without injury to existing groundwater rights. However, the application proposes no additional groundwater use (i.e., non-consumptive use) because all of the water produced will be injected into the same aquifer in a closed-loop system.
- 7. Production Well (KLAM 13296) and Injection Well (KLAM 57685/L104227) in Lost River Basin are not within or above a State Scenic Waterway.
- 8. The Department finds that the amount of water requested, 0.90 CFS, is an acceptable amount.
- 9. Documentation has been submitted from the relevant land-use planning jurisdiction that indicates an approved land-use decision has been obtained, and that either no administrative appeals were received, or all such appeals have concluded.
- 10. The proposed ground water use is not within a designated critical ground water area.

#### Conclusions of Law

- 1. Under the provisions of ORS 537.621, the Department must presume that a proposed use will ensure the preservation of the public welfare, safety and health if the proposed use is allowed in the applicable basin program established pursuant to ORS 536.300 and 536.340 or given a preference under ORS 536.310(12), if water is available, if the proposed use will not injure other water rights and if the proposed use complies with rules of the Water Resources Commission.
- 2. Under ORS 536.340(1)(a), the Water Resources Commission may establish a basin program to classify sources of water supply as to the highest and best use and quantities of use, and that classification of sources of water supply has the effect of restricting the use and quantities of use thereof to the uses and quantities of uses specified in the classification. The Commission has not established a basin program for the Klamath River basin. Therefore, neither the proposed use nor the quantity of water is restricted as a result of this consideration.

- 3. Water is not available for the proposed use.
- 4. The proposed use will not injure other water rights.
- 5. The proposed use complies with other rules of the Water Resources Commission not otherwise described above.
- 6. The application is in compliance with the State Agency Coordination Program regarding land use.
- 7. No proposed flow rate and duty of water higher than the general basin-wide standard is needed.
- 8. For these reasons, the required presumption has not been established.
- 9. OAR 690-310-0140(2)(b) states that when the presumption is not established, the Department shall determine whether the proposed use will impair or adversely affect the public welfare, safety and health, and may make specific findings to demonstrate that even though the presumption is not established, the proposed use will not impair or adversely affect the public welfare, safety and health, and propose approval of the application with appropriate modifications or conditions.
- 10. To determine whether the proposed use will preserve the public welfare, safety and health, the factors in ORS 537.625(3), shown in bold below, have been considered as follows:
  - (a) The conservation of the highest use of the water for all purposes, including irrigation, domestic use, municipal water supply, power development, public recreation, protection of commercial and game fishing and wildlife, fire protection, mining, industrial purposes, navigation, scenic attraction or any other beneficial use to which the water may be applied for which it may have a special value to the public.

The use is non-consumptive and the draft permit is conditioned to require that all produced water be injected into the same aquifer (water-bearing zone). There will be no consumption of water, therefore the resource is fully conserved.

(b) The maximum economic development of the waters involved.

Approval will allow exploitation of renewable geothermal energy, which is an important means of addressing economic and environmental concerns regarding the water/energy nexus. Therefore there is no indication that the proposed use would not represent the maximum economic development of the waters involved.

# (c) The control of the waters of this state for all beneficial purposes, including drainage, sanitation and flood control.

The proposed permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices, including, but not limited to, measurement, recording and reporting conditions and, if necessary, regulation by the Watermaster.

# (d) The amount of waters available for appropriation for beneficial use.

The Department has determined that additional ground water use would add to ongoing ground-water level declines. As a result, the Department has determined that ground water is overappropriated and will not likely be available within the capacity of the resource and/or without injury to existing ground water rights. However, the application proposes no additional ground water use (i.e., non-consumptive use) because all of the water produced will be injected into the same aquifer. There will be no consumption of water, therefore the amount of water available for appropriation is not a meaningful consideration.

# (e) The prevention of wasteful, uneconomic, impracticable or unreasonable use of the waters involved.

The draft permit is conditioned such that wasteful, uneconomic, impracticable or unreasonable use of the waters involved is prevented. The proposed use, as conditioned in the attached draft permit, will require conservation measures and reasonable use of the water, therefore there is no indication the use would be wasteful, uneconomic, impracticable or unreasonable.

### (f) All vested and inchoate rights to the waters of this state or to the use of the waters of this state, and the means necessary to protect such rights.

The pending application's priority date and the Department's existing system of regulation are the means used to protect existing vested and inchoate rights.

#### (g) The state water resources policy.

The Department has determined the proposed use is otherwise consistent with the state water resources policy formulated under ORS 537.505 to 537.534.

- 11. The Department therefore concludes that, in accordance with OAR 690-310-0140(2)(b), although the presumption is not established, the proposed use as modified and conditioned in the attached draft permit will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.
- 12. When issuing permits, ORS 537.628(1) authorizes the Department to include limitations and conditions which have been determined necessary to protect the public welfare, safety, and health. The attached draft permit is conditioned accordingly.

#### Recommendation

The Department recommends that the attached draft permit be issued with conditions.

DATED March 17, 2015

E. Timothy Wall.

E. Timothy Wallin, Water Rights Program Manager for Thomas M. Byler, Director

#### Protests

Under the provisions of ORS 537.153(7) (for surface water) or ORS 537.621(8) (for ground water), you can protest this Proposed Final Order. Protests must be received in the Water Resources Department no later than **May 1, 2015**. Protests must be in writing, and must include the following:

- Your name, address, and telephone number;
- A description of your interest in the Proposed Final Order, and, if you claim to represent the public interest, a precise statement of the public interest represented;
- A detailed description of how the action proposed in the Proposed Final Order would impair or be detrimental to your interest;
- A detailed description of how the Proposed Final Order is in error or deficient, and how to correct the alleged error or deficiency;

- Any citation of legal authority to support your protest, if known;
- To affect the department's determination that the proposed use in this application will, or will not, ensure the preservation of the public welfare, safety and health as described in ORS 537.525, ORS 537.621(2)(b) requires that a protest demonstrate, by a preponderance of evidence any of the following: (a) One or more of the criteria for establishing the presumption are, or are not, satisfied; or (b) The specific aspect of the public welfare, safety and health under ORS 537.525 that would be impaired or detrimentally affected, and specifically how the identified aspect of the public welfare, safety and health under ORS 537.525 would be impaired or be adversely affected;
- If you are the applicant, the protest fee of \$350 required by ORS 536.050; and
- If you are not the applicant, the protest fee of \$700 required by ORS 536.050 and proof of service of the protest upon the applicant.
- If you are the applicant, a statement of whether or not you are requesting a contested case hearing. If you do not request a hearing, the Department will presume that you do not wish to contest the findings of the Proposed Final Order.

#### Requests for Standing

Under the provisions of ORS 537.153(7) (for surface water) or ORS 537.621(8) (for ground water), persons other than the applicant who support a Proposed Final Order can request standing for purposes of participating in any contested case proceeding on the Proposed Final Order or for judicial review of a Final Order.

Requests for standing must be received in the Water Resources Department no later than **May 1, 2015**. Requests for standing must be in writing, and must include the following:

- The requester's name, mailing address and telephone number;
- If the requester is representing a group, association or other organization, the name, address and telephone number of the represented group;
- A statement that the requester supports the Proposed Final Order as issued;

- A detailed statement of how the requester would be harmed if the Proposed Final Order is modified; and
- A standing fee of \$200. If a hearing is scheduled, an additional fee of \$500 must be submitted along with a petition for party status.

After the protest period has ended, the Director will either issue a Final Order or schedule a contested case hearing. The contested case hearing will be scheduled only if a protest has been submitted and either:

- upon review of the issues, the director finds that there are significant disputes related to the proposed use of water, or
- the applicant requests a contested case hearing within 30 days after the close of the protest period.

If you do not request a hearing within 30 days after the close of the protest period, or if you withdraw a request for a hearing, notify the Department or the administrative law judge that you will not appear or fail to appear at a scheduled hearing, the Director may issue a Final Order by default. If the Director issues a Final Order by default, the Department designates the relevant portions of its files on this matter, including all materials that you have submitted relating to this matter, as the record for purpose of proving a *prima facie* case upon default.

You may be represented by an attorney at the hearing. Legal aid organizations may be able to assist a party with limited financial resources. Generally, partnerships, corporations, associations, governmental subdivisions or public or private organizations are represented by an attorney. However, consistent with OAR 690-002-0020 and OAR 137-003-0555, an agency representative may represent a partnership, corporation, association, governmental subdivision or public or private organization if the Department determines that appearance of a person by an authorized representative will not hinder the orderly and timely development of the record in this case.

Notice Regarding Service Members: Active duty service members have a right to stay proceedings under the federal Service Members Civil Relief Act. 50 U.S.C. App. §§501-597b. You may contact the Oregon State Bar or the Oregon Military Department for more information. The toll-free telephone number for the Oregon State Bar is: 1 (800) 452-8260. The toll-free telephone number of the Oregon Military Department is: 1 (800) 452-7500. The Internet address for the United States Armed Forces Legal Assistance Legal Services Locator website is: <a href="http://legalassistance.law.af.mil">http://legalassistance.law.af.mil</a>

This document was prepared by Kim French. 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 503-986-0816.

If you have questions about how to file a protest or a request for standing, please refer to the respective sections in this Proposed Final Order entitled "Protests" and "Requests for Standing". 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.

DRAFT

#### COUNTY OF KLAMATH

#### DRAFT PERMIT TO APPROPRIATE THE PUBLIC WATERS

THIS DRAFT PERMIT IS HEREBY ISSUED TO

KLAMATH COUNTY SCHOOL DISTRICT 10501 WASHBURN WAY KLAMATH FALLS, OR 97603

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

APPLICATION FILE NUMBER: G-17883

SOURCE OF WATER: PRODUCTION WELL (KLAM 13296) AND INJECTION WELL (KLAM 57685/L104227) IN LOST RIVER BASIN

PURPOSE OR USE: GEOTHERMAL (HEATING & COOLING)

MAXIMUM RATE: 0.90 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR-ROUND

DATE OF PRIORITY: JULY 1, 2014

WELL LOCATIONS:

PRODUCTION WELL (KLAM 13296): SE ¼ NW ¼, SECTION 30, T39S, R10E, W.M.; 1600 FEET SOUTH AND 1850 FEET EAST FROM NW CORNER, SECTION 30

INJECTION WELL (KLAM 57685/L104227): NW 1/4 SW 1/4, SECTION 30, T39S, R10E, W.M.; 3620 FEET SOUTH AND 590 FEET EAST FROM NW CORNER, SECTION 30

THE PLACE OF USE IS LOCATED AS FOLLOWS:

SW 1/4 NW 1/4 SECTION 30

TOWNSHIP 39 SOUTH, RANGE 10 EAST, W.M.

### Measurement devices, and recording/reporting of annual water use conditions:

Before water use may begin under this permit, the permittee Α. shall install a totalizing flow meter at each point of appropriation and injection. Each flow meter shall be located within 50 feet of the wellhead. Adjacent to each flow meter

shall be a clearly visible monument with a sign noting the flow meter. The permittee shall maintain the device in good working order.

- B. The permittee shall allow the watermaster access to the device; provided however, where any device is located within a private structure, the watermaster shall request access upon reasonable notice.
- C. The permittee shall keep a complete record of the volume of water diverted each month, and shall submit a report which includes water-use measurements to the Department annually or more frequently as may be required by the Director. Further, the Director may require the permittee to report general water-use information, including the place and nature of use of water under the permit.
- D. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.

#### Static Water Level Conditions

The Department requires the water user to obtain, from a qualified individual (see below), and report annual static water levels for each well on the permit. The static water level shall be measured in the month of March. Reports shall be submitted to the Department within 30 days of measurement.

The permittee shall report an initial March static water-level measurement once well construction is complete and annual measurements thereafter. Annual measurements are required whether or not the well is used. The first annual measurement will establish a reference level against which future measurements will be compared. However, the Director may establish the reference level based on an analysis of other water-level data. The Director may require the user to obtain and report additional water levels each year if more data are needed to evaluate the aquifer system.

All measurements shall be made by a certified water rights examiner, registered professional geologist, registered professional engineer, licensed well constructor or pump installer licensed by the Construction Contractors Board. Measurements shall be submitted on forms provided by, or specified by, the Department. Measurements shall be made with equipment that is accurate to at least the standards specified in OAR 690-217-0045. The Department requires the individual performing the measurement to:

- A. Associate each measurement with an owner's well name or number and a Department well log ID; and
- B. Report water levels to at least the nearest tenth of a foot as depth-to-water below ground surface; and
- C. Specify the method of measurement; and
- D. Certify the accuracy of all measurements and calculations reported to the Department.

The water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s) if any of the following events occur:

- A. Annual water-level measurements reveal an average water-level decline of three or more feet per year for five consecutive years; or
- B. Annual water-level measurements reveal a water-level decline of 15 or more feet in fewer than five consecutive years; or
- C. Annual water-level measurements reveal a water-level decline of 15 or more feet; or
- D. Hydraulic interference leads to a decline of 15 or more feet in any neighboring well with senior priority.

The period of restricted use shall continue until the water level rises above the decline level which triggered the action or the Department determines, based on the permittee's and/or the Department's data and analysis, that no action is necessary because the aquifer in question can sustain the observed declines without adversely impacting the resource or causing substantial interference with senior water rights. The water user shall not allow excessive decline, as defined in Commission rules, to occur within the aquifer as a result of use under this permit. If more than one well is involved, the water user may submit an alternative measurement and reporting plan for review and approval by the Department.

The production well and the injection well shall be constructed to extract or inject ground water from and to the same water-bearing zone.

Prior to use of water under this permit, the permit holder must register the injection activity with the Oregon Department of Environmental Quality's Underground Injection Control Program, which can be contacted at 2020 SW 4th Ave, Ste 400, Portland OR 97201, or 503-229-5263.

Dedicated Measuring Tube: Wells with pumps shall be equipped with a minimum 3/4-inch diameter, unobstructed, dedicated measuring tube pursuant to figure 200-5 in OAR 690-200. For existing wells with a pump

installed, installation of the measuring tube shall occur when the pump is removed or replaced and/or when the well is deepened, reconstructed or altered.

Prior to using water from any well listed on this permit, the permittee shall ensure that the well has been assigned an OWRD Well Identification Number (Well ID tag), which shall be permanently attached to the well. The Well ID shall be used as a reference in any correspondence regarding the well, including any reports of water use, water level, or pump test data.

One hundred percent of the groundwater extracted from the production well(s) must be injected in the authorized injection well(s), which can be confirmed by flowmeter data. Otherwise, the use is subject to regulation, including possible cancellation of the permit.

Prior to use of water under this permit, the permit holder shall submit documentation affirming that all applicable requirements of OAR 690-230 have been met.

Groundwater production shall occur from the predominantly basalt unit below the predominantly basin-fill unit by casing and sealing through the basin-fill unit into the basalt unit.

#### STANDARD CONDITIONS

Failure to comply with any of the provisions of this permit may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the permit.

If the number, location, source, or construction of any well deviates from that proposed in the permit application or required by permit conditions, this permit may be subject to cancellation, unless the Department authorizes the change in writing.

If substantial interference with surface water or a senior water right occurs due to withdrawal of water from any well listed on this permit, then use of water from the well(s) shall be discontinued or reduced and/or the schedule of withdrawal shall be regulated until or unless the Department approves or implements an alternative administrative action to mitigate the interference. The Department encourages junior and senior appropriators to jointly develop plans to mitigate interferences.

The well(s) shall be constructed and maintained in accordance with the General Standards for the Construction and Maintenance of Water Supply Wells in Oregon. The works shall be equipped with a usable access port adequate to determine water-level elevation in the well at all times.

If the riparian area is disturbed in the process of developing a point of appropriation, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. For purposes of mitigation, the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.

The use may be restricted if the quality of downstream waters decreases to the point that those waters no longer meet state or federal water quality standards due to reduced flows.

Where two or more water users agree among themselves as to the manner of rotation in the use of water and such agreement is placed in writing and filed by such water users with the watermaster, and such rotation system does not infringe upon such prior rights of any water user not a party to such rotation plan, the watermaster shall distribute the water according to such agreement.

Prior to receiving a certificate of water right, the permit holder shall submit to the Water Resources Department the results of a pump test meeting the Department's standards for each point of appropriation (well), unless an exemption has been obtained in writing under OAR 690-217. The Director may require water-level or pump-test data every ten years thereafter.

This permit is for the beneficial use of water without waste. The water user is advised that new regulations may require the use of best practical technologies or conservation practices to achieve this end.

By law, the land use associated with this water use must be in compliance with statewide land-use goals and any local acknowledged land-use plan.

Completion of construction and application of the water shall be made within five years of the date of permit issuance. If beneficial use of permitted water has not been made before this date, the permittee may submit an application for extension of time, which may be approved based upon the merit of the application.

Within one year after making beneficial use of water, the permittee shall submit a claim of beneficial use, which includes a map and report, prepared by a Certified Water Rights Examiner. Issued

DRAFT - THIS IS  $\underline{\text{NOT}}$  A PERMIT

E. Timothy Wallin, Water Rights Program Manager for Thomas M. Byler, Director

# Mailing List for PFO Copies

Application #G-17883

PFO Date March 17, 2015

## Original mailed to applicant:

KLAMATH COUNTY SCHOOL DISTRICT, 10501 WASHBURN WAY, KLAMATH FALLS, OR 97603

### **SENT VIA EMAIL:**

- 1. Agent adkins@adkinsengineering.com
- 2. WRD Watermaster # 17

#### Copies sent to:

- 1. WRD File # G-17883
- 2. Water Availability: Shawn Ortiz-Turner

Copies Mailed
By:
(SUPPORT STAFF)
on:
(DATE)

Protest/ Standing Dates checked

CASEWORKER: Kim French