

**Oregon Water Resources Department  
Water Rights Services Division**

Water Rights Application  
Number G-17497

**Proposed Final Order**

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

*Application History*

On October 19, 2011, Klamath County School District and Lost River High School submitted an application to the Department for the following water use permit:

- Amount of Water: 0.89 cubic foot per second (CFS)
- Use of Water: geo-thermal (heating & cooling)
- Source of Water: Production Well 1 (KLAM 57529) in Lost River Basin
- Area of Proposed Use: Klamath County within Section 10, Township 41 South, Range 11 East, W.M.

On March 30, 2012, the Department mailed the applicant notice of its Initial Review, determining that "*the appropriation of 0.89 CFS from Production Well 1 (KLAM 57529) in Lost River Basin for geo-thermal use (heating & cooling) is allowable during the full period requested, year-round, contingent on the submission of the required additional information.*" The applicant did not notify the Department to stop processing the application within 14 days of that date.

On April 3, 2012, 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.

On May 14, 2012, the applicant submitted the additional information required in the Initial Review.

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

*Findings of Fact*

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.

Production Well 1 (KLAM 57529) is in the Merrill-Malin area and 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 over-appropriated 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.

The Department finds that the amount of water requested, 0.89 CFS, is an acceptable amount.

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.

Production Well 1 (KLAM 57529) in Lost River Basin is not within or above a State Scenic Waterway.

The proposed ground water use is not within a designated critical ground water area.

#### *Conclusions of Law*

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.

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.

Water **is not available** for the proposed use.

The proposed use will not injure other water rights.

The proposed use complies with other rules of the Water Resources Commission not otherwise described above.

The application is in compliance with the State Agency Coordination Program regarding land use.

No proposed flow rate and duty of water higher than the general basin-wide standard is needed.

For these reasons, the required presumption **has not** been established.

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.

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 the pumped water be injected into the same aquifer (water-bearing zone).

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

Approval will allow economical exploitation of renewable energy.

- (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 to achieve this end.

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

Production Well 1 (KLAM 57529) is in the Merrill-Malin area and 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 over-appropriated 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 water-bearing zone. Therefore, ground water will likely be available within the capacity of the resource, and if properly conditioned, the proposed use of ground water will avoid injury to existing ground water rights.

- (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.

- (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 necessary to protect existing vested and inchoate rights.

- (g) The state water resources policy.**

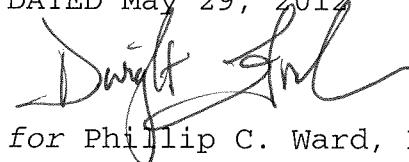
The Department determined the proposed use is consistent with the state water resources policy formulated under ORS 537.505 to 537.534.

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.

Recommendation

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

DATED May 29, 2012



for Phillip C. Ward, Director  
Water Resources Department

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 **July 13, 2012**. 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 \$300 required by ORS 536.050; and
- If you are not the applicant, the protest fee of \$600 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.
- *If you do not protest this Proposed Final Order and if no substantive changes are made in the Final Order, you will not have an opportunity for judicial review, protest or appeal of the Final Order when it is issued.*

#### 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 **July 13, 2012**. 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 \$150. If a hearing is scheduled, an additional fee of \$350 must be submitted along with a request for intervention.

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.

*This document was prepared by Jeana Eastman. 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 503-986-0859.*

*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

This is not a permit.  
STATE OF OREGON

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

LOST RIVER HIGH SCHOOL  
23330 WHY 50  
MERRILL, OR 97633

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

APPLICATION FILE NUMBER: G-17497

SOURCE OF WATER: PRODUCTION WELL 1 (KLAM 57529) IN LOST RIVER BASIN

PURPOSE OR USE: GEO-THERMAL (HEATING & COOLING)

MAXIMUM RATE: 0.89 CUBIC FOOT PER SECOND

PERIOD OF USE: YEAR ROUND

DATE OF PRIORITY: OCTOBER 19, 2011

WELL LOCATIONS:

PRODUCTION WELL 1 (KLAM 57529): NE ¼ SE ¼, SECTION 10, T41S, R11E,  
W.M.; 165 FEET SOUTH AND 485 FEET WEST FROM E1/4 CORNER, SECTION 10

PROPOSED INJECTION WELL 2: NE ¼ SE ¼, SECTION 10, T41S, R11E, W.M.;  
740 FEET SOUTH AND 620 FEET WEST FROM E1/4 CORNER, SECTION 10

THE PLACE OF USE IS LOCATED AS FOLLOWS:

NE ¼ SE ¼  
SECTION 10  
TOWNSHIP 41 SOUTH, RANGE 11 EAST, W.M.

Measurement, recording and reporting conditions:

- A. Before water use may begin under this permit, the permittee shall install a totalizing flow meter at each production and injection well, which shall be located within 50 feet of the wellhead.

- B. The totalizing flow meter at Production Well 1 (KLAM 57529) shall be installed before the line split that directs water to the heat exchange unit.
- C. Totalizing flow meters shall be installed at the beginning and at the end of the heat exchange unit and on the permittee's exempt use line located after the line split to the heat exchange unit and before the first location of the permittee's exempt use.
- D. Adjacent to each totalizing flow meter shall be a clearly visible monument with a sign noting the flow meter.
- E. The permittee shall maintain the totalizing flow meters in good working order.
- F. The permittee shall record monthly readings at each totalizing flow meter, and shall submit a report which includes the recorded amounts 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.
- G. The permittee shall allow the watermaster access to the totalizing flow meters; provided however, where any meter is located within a private structure, the watermaster shall request access upon reasonable notice.
- H. The Director may provide an opportunity for the permittee to submit alternative measuring and reporting procedures for review and approval.

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.

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 one or more feet per year for five consecutive years; or
- B. Annual water-level measurements reveal a water-level decline of 5 or more feet in fewer than five consecutive years; or
- C. Hydraulic interference leads to a decline of 10 or more feet in any neighboring well with senior priority.
- D. The Department Ground Water Section Staff approved static ground water level measurements at well KLAM 53269 (Loren Kandra) near Adams Point is below 55 feet below land surface.

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 use is not contributing to the decline or contributing to the groundwater level being below 55 feet below land surface at well KLAM 53269 or 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.

Dedicated Measuring Tube: Wells with pumps shall be equipped with an 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 or reconstructed or altered.

All wells shall be constructed to extract or inject groundwater from and to the same or adjoining water-bearing zone within the basalt unit below the basin sediments. To meet this criterion, each well shall have at minimum continuous casing and continuous seal from land surface, through the sediment to the productive portion of the basalt unit. Additionally, there shall be no more than 100 feet difference when comparing the well bottom elevation for any two of the permitted wells.

This permit is valid if and only if 100 percent of the groundwater extracted from the production well(s) is injected in the authorized injection well(s), which can be confirmed by flow-meter data. Otherwise, the use is unauthorized and subject to regulation, including possible immediate cancellation of the permit.

All water produced under this permit shall be injected into the authorized well(s). Prior to receiving a certificate of water right, the permit holder shall submit documentation affirming that any applicable additional requirements of the Department's Division 230 rules 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.

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.

#### **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 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 in accordance with the General Standards for the Construction and Maintenance of Water Wells in Oregon. The works shall be equipped with a usable access port, and may also include an air line and pressure gauge 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 NOT A PERMIT**

E. Timothy Wallin, Water Rights Program Manager  
for Phillip C. Ward, Director  
Water Resources Department

# Mailing List for PFO Copies

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Application #G-17497

PFO Date May 29, 2012

**Original mailed to applicants:**

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

LOST RIVER HIGH SCHOOL  
23330 WHY 50  
MERRILL, OR 97633

Copies sent to:

1. WRD - File # G-17497
2. Water Availability: Ken Stahr

|  |
|--|
| Copies Mailed<br>By: _____<br>(SUPPORT STAFF)<br>on: _____<br>(DATE) |
|--|

PFO and Map Copies sent to:

3. WRD - Watermaster # 17

|  |
|--|
| Protest/<br>Standing Dates<br>checked<br>_____ |
|--|

Copies sent to Other Interested Persons (CWRE, Agent, Well Driller, Commenter, etc.)

1. Hanson, Andrew  
Adkins Consulting Engineers, Inc, 2950 Shasta Way, Klamath Falls OR 97603
2. DEQ, Water Quality Division, David Cole, 2020 SW 4<sup>th</sup> Ave, Suite 400 Portland OR 97201