

Groundwater Transfer Review Summary Form

Transfer/PA # T- 14220

GW Reviewer Grayson Fish Date Review Completed: 8/25/2023

NOTE: The same source and injury considerations are favorable for approving this proposed transfer. However, the high likelihood of triggered decline conditions in the From-POA well suggests enlargement might result from this transfer, as discussed in Section 8 of this review.

Summary of Same Source Review:

The proposed change in point of appropriation is not within the same aquifer as per OAR 690-380-2110(2).

Summary of Injury Review:

The proposed transfer will result in another, existing water right not receiving previously available water to which it is legally entitled or result in significant interference with a surface water source as per 690-380-0100(3).

Summary of GW-SW Transfer Similarity Review:

The proposed SW-GW transfer doesn't meet the definition of "similarly" as per OAR 690-380-2130.

This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations.



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Ground Water Review Form:

- Water Right Transfer**
- Permit Amendment**
- GR Modification**
- Other**

Application: T-14220

Applicant Name: Four H Organics LLC

Proposed Changes: POA APOA SW→GW RA
 USE POU OTHER

Reviewer(s): Grayson Fish

Date of Review: 8/25/2023

Date Reviewed by GW Mgr. and Returned to WRSD: Jl 4/18/251

The information provided in the application is insufficient to evaluate whether the proposed transfer may be approved because:

- The water well reports provided with the application do not correspond to the water rights affected by the transfer.
- The application does not include water well reports or a description of the well construction details sufficient to establish the ground water body developed or proposed to be developed.
- Other _____

1. Basic description of the changes proposed in this transfer: The applicant proposes to temporarily transfer place of irrigation use on 100.7 acres associated with **Certificate 80751** from authorized POA “Haught” well **KLAM 15111** (identified by the applicant as the associated alteration **KLAM 10680**) to proposed POA “Strum” well **KLAM 53738** (identified by the applicant as the associated deepening **KLAM 57553**) approximately 4.75 miles to the east-southeast. Proposed POA “Strum” is not currently an authorized POA for any water right.
2. Will the proposed POA develop the same aquifer (source) as the existing authorized POA?
 Yes No Comments: Both the proposed and existing authorized POA are located within the Tule Lake Valley and access groundwater from “basalt” (Late Tertiary volcanic rocks) at depth.
3. a) Is there more than one source developed under the right (e.g., basalt and alluvium)?
 Yes No _____
 b) If yes, estimate the portion of the right supplied by each of the sources and describe any limitations that will need to be placed on the proposed change (rate, duty, etc.): N/A

4. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another ground water right**?
 Yes No Comments: The closest groundwater POA associated with a senior water right is **KLAM 15082** under **Certificate 27312**. Proposed POA “Strum” well is located approximately 3,800 feet south of the senior POA. The reduced intervening distance will likely cause an increase in interference with **KLAM 15050** which also sources water from volcanic rocks at depth.
- b) If yes, would this proposed change, at its maximum allowed rate of use, likely result in another groundwater right not receiving the water to which it is legally entitled?
 Yes No If yes, explain: Due to the generally high-transmissivity and thickness of the aquifer it is unlikely that the proposed change at the maximum allowed rate of use would result in a nearby water right not receiving the water to which it is legally entitled to.
5. a) Will this proposed change, at its maximum allowed rate of use, likely result in an increase in interference with **another surface water source**?
 Yes No Comments: The proposed change would not substantially change the impacts to nearby surface water sources in the area.
- b) If yes, at its maximum allowed rate of use, what is the expected change in degree of interference with any **surface water sources** resulting from the proposed change?
 Stream: _____ Minimal Significant
 Stream: _____ Minimal Significant
 Provide context for minimal/significant impact: _____
6. For SW-GW transfers, will the proposed change in point of diversion affect the surface water source similarly (as per OAR 690-380-2130) to the authorized point of diversion specified in the water use subject to transfer?
 Yes No Comments: N/A
7. What conditions or other changes in the application are necessary to address any potential issues identified above: _____
8. Any additional comments: Groundwater level data from wells in the Malin area of the Tule Lake Valley indicate significant declines have occurred since 2001 (See attached area well hydrograph). **KLAM 14829** is located a little over a quarter of a mile to the west of the from well **KLAM 15111** and has seen 57.09 feet of decline from an annual high of 215.58 feet below land surface (bls) in April 12, 2000 to 272.67 feet bls in May 17, 2023 (See attached hydrograph of **KLAM 14829**). When looking at the combined hydrographs of the “Haught” well and the “Strum” well, a similar declining trend is apparent (See attached POA hydrograph).
- A point of concern for this proposed transfer is that the authorized From-POA (Haught Well, KLAM 15111) is likely to have triggered the decline conditions stipulated in the associated water right.**

The permit and certificate associated with this From-POA transfer are **G-12590** and **81751**, respectively. Permit **G-12590** list use as “Supplemental Irrigation” and establishes a reference level for **KLAM 15111** with the following language: *“Following the first year of water use, the user shall submit seven consecutive annual reports of static water level measurements. The first of these seven annual measurements will establish the reference level against which annual measurements will be compared.”* The permit also stipulated that annual static water level measurements would be measured in the month of March. The first and only reported water use under this permit/certificate was in 2001. The only March measurement available on GWIS after use began was on March 7, 2003. Based on this information, the reference level for **KLAM 15111** under permit **G-12590** and Certificate **81751** would be as follows:

- **KLAM 15111 - March 7, 2023 – 226.01 feet bls**

Permit **G-12590** was certificated in 2005 under certificate **81751** with use listed as “Irrigation”. Certificate **81751** requires the following:

- *“The water user shall maintain the meter or measuring device in good working order, shall keep a complete record of the amount of water used each month and shall submit a report which includes the recorded water use measurements to the Department annually or more frequently as may be required by the Director.”*
- *“To monitor the effects of water use from the well(s) authorized under this right, the Department requires the water user to make and report annual static water level measurements. The static water level shall be measured in the month of **March**. Reports shall be submitted to the Department within 30 days of measurement.”*

Water use under certificate **81751** has not been reported to the Department since 2008 with the last reported use of water occurring in 2001. The last annual static March measurement was in 2003, which the last measurement for the well occurring in April 13, 2006.

Certificate **81751** contains three water level decline conditions. The most relevant, and most likely to be validated is the following: *“The water user shall discontinue use of, or reduce the rate or volume of withdrawal from, the well(s) if annual water level measurements reveal any of the following events: (C) A water level decline of 25 or more feet.”*

While recent groundwater data is not available from From-POA **KLAM 15111**, it is likely that the 25 foot of decline condition has been triggered. This statement is supported by the 57.09 feet of total decline observed in **KLAM 14829** (with over 23.27 feet of decline occurring since 2020) and the general decline trends observed in wells that source water from the volcanics at depth in the Malin area.

Because decline conditions have likely been triggered in the authorized POA, it appears that this proposed transfer will result in enlargement of Certificate 81751. Specifically, one definition of “enlargement” is: *“Diverting more water at the new point of diversion or appropriation than is legally available to that right at the original point of diversion or appropriation”* (OAR 690-380-0100(2)(d)). From-POA **KLAM 15111** has likely exceeded its trigger level, which could be interpreted as meaning water is no longer *“legally available”* to that point of appropriation.

Given (1) the overall declining groundwater trends in this area and (2) the likelihood of a triggered certificate condition in the authorized POA, if this proposed transfer is approved, then it is recommended that it contain a provision that allows the proposed use of the To-POA KLAM 53738 *only* if it can be proven that the specific decline conditions for the From-POA KLAM 15111 have not been triggered. It is understood that a similar provision was included in T-8496 (see related Final Order 59-569 approving T-8496).

References

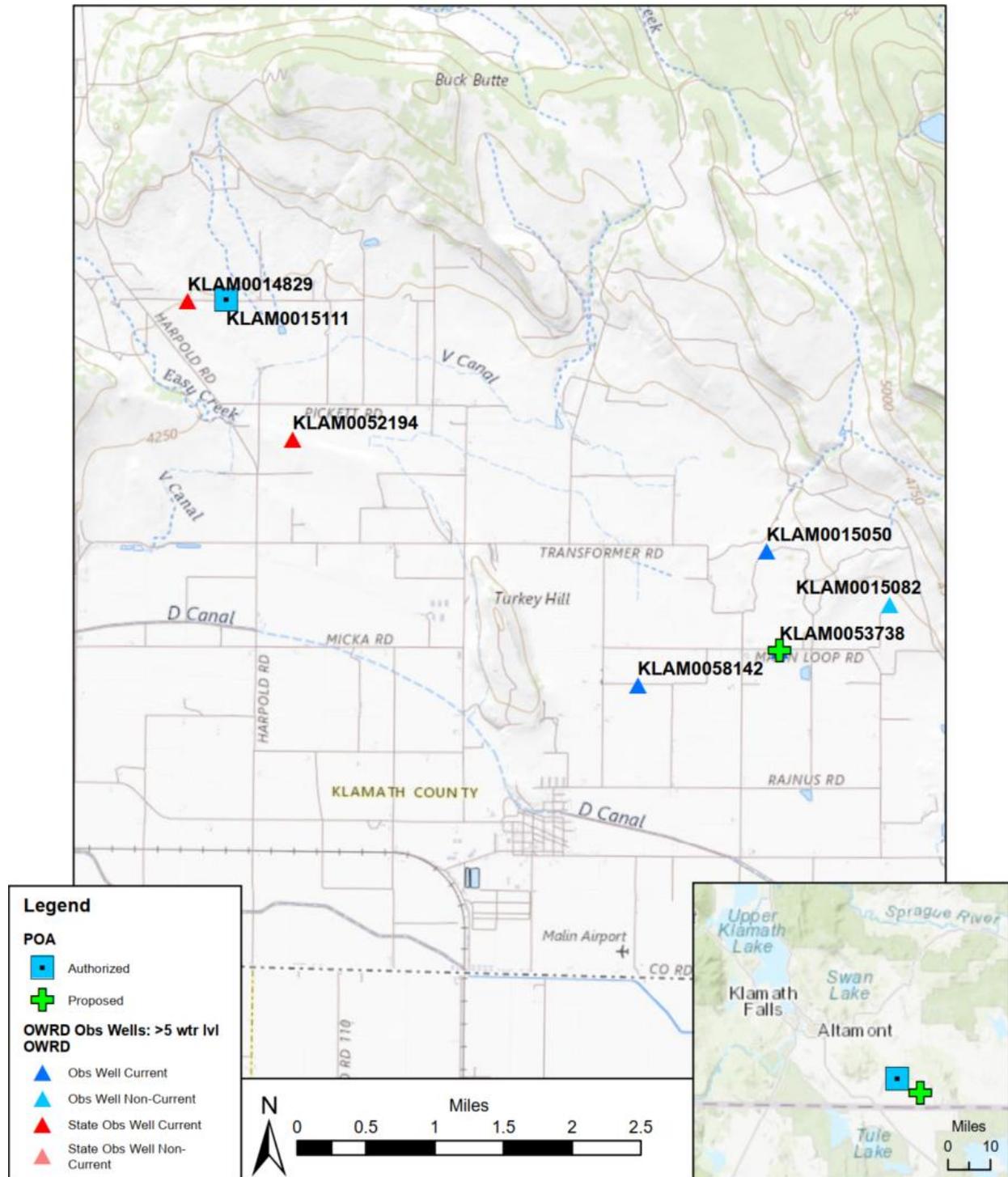
Jenks, M.D., unpublished, Geologic compilation map of part of the Upper Klamath Basin, Klamath County, Oregon: Portland, Oreg., Oregon Dept. of Geology and Mineral Industries, scale 1:100,000.

Oregon Water Resources Department. Groundwater Information System (GWIS) – Accessed 8/25/2023

Oregon Water Resources Department. Water Rights Information Query – Accessed 8/25/2023

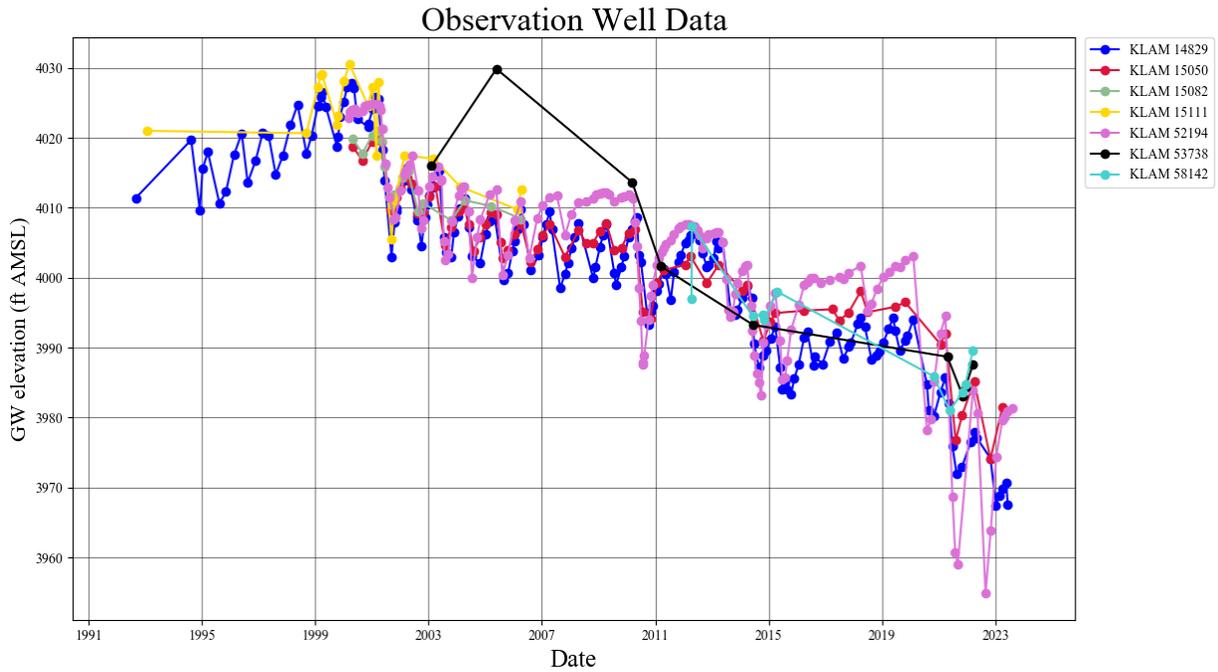
Location Map

T-14220

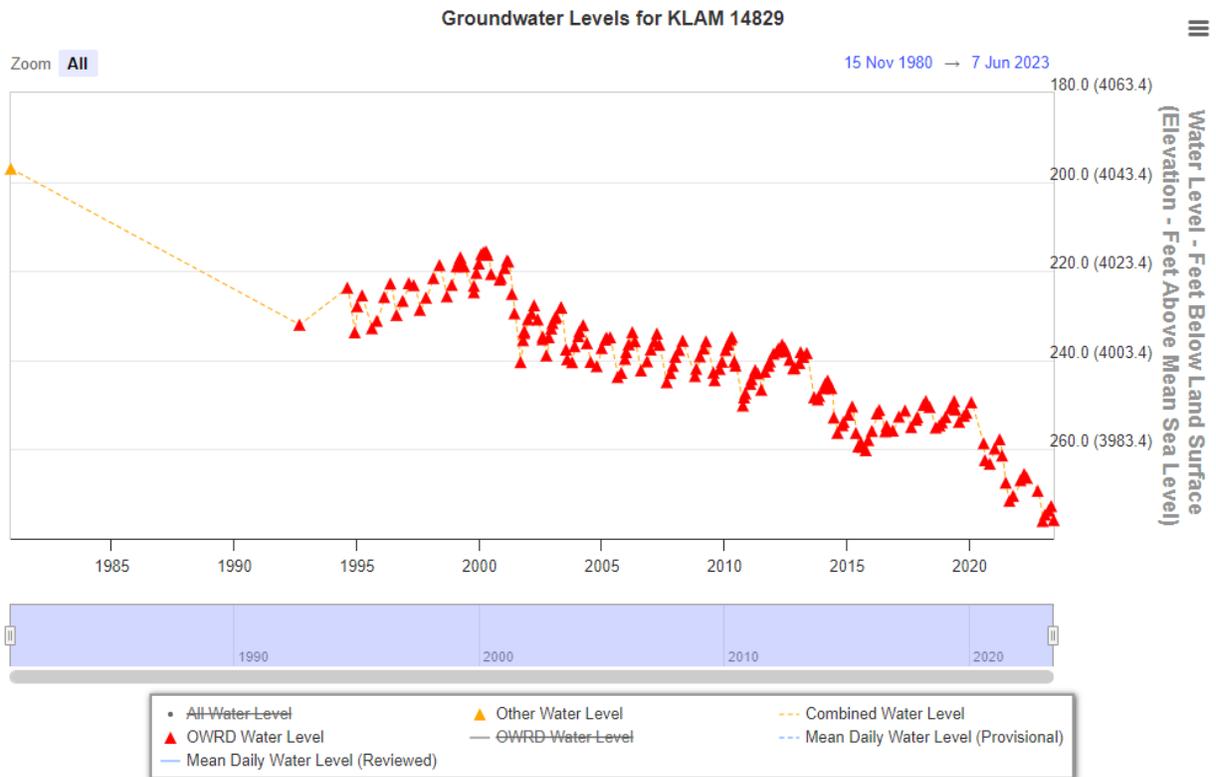


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Malin Area Hydrographs



KLAM 14829 Hydrograph



Source: Oregon Water Resources

POA Hydrographs

