# **Groundwater Application Review Summary Form**

Application # G- 19243
GW Reviewer <u>Grayson Fish</u> Date Review Completed: <u>9/27/2023</u>
Summary of GW Availability and Injury Review:
Groundwater for the proposed use is either over appropriated, will not likely be available in the amounts requested without injury to prior water rights, OR will not likely be available within the capacity of the groundwater resource per Section B of the attached review form.
Summary of Potential for Substantial Interference Review:
$\square$ There is the potential for substantial interference per Section C of the attached review form.
Summary of Well Construction Assessment:
☐ The well does not appear to meet current well construction standards per Section D of the attached review form. Route through Well Construction and Compliance Section.
This is only a summary. Documentation is attached and should be read thoroughly to understand the basis for determinations and for conditions that may be necessary for a permit (if one is issued).

Version: 07/28/2020

# WATER RESOURCES DEPARTMENT

**MEMO** 

TO:		Application G- 19243
FRO	М:	GW: Grayson Fish (Reviewer's Name)
SUBJ	ECT: S	Scenic Waterway Interference Evaluation
	YES NO	The source of appropriation is hydraulically connected to a State Scenic Waterway or its tributaries
	YES NO	Use the Scenic Waterway Condition (Condition 7J)
$\boxtimes$	interfe	RS 390.835, the Groundwater Section is <b>able</b> to calculate ground water brence with surface water that contributes to a Scenic Waterway. The calculated brence is distributed below
	interfe <b>Depar propo</b>	RS 390.835, the Groundwater Section is <b>unable</b> to calculate ground water brence with surface water that contributes to a scenic waterway; <b>therefore</b> , <b>the</b> the
Calcul per cri	ate the per teria in 39	ION OF INTERFERENCE recentage of consumptive use by month and fill in the table below. If interference cannot be calculated 90.835, do not fill in the table but check the "unable" option above, thus informing Water Rights the is unable to make a Preponderance of Evidence finding.
Water	way by	the following amounts expressed as a proportion of the consumptive use by which flow is reduced.
l l	attached	Mar Apr May Jun Jul Aug Sep Oct Nov Dec d (Attachment 1) memo "Analysis of Groundwater Pumping Impacts on Enic Waterway Flows"; Dated February 19, 2013

\_9/27/2023\_

# PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO:				9/27/202	<u>23</u>									
FROM	:	Groun	dwater Se	ction		Graysor Review	<u>ı Fish</u> ver's Nam	e.						
SUBJE	CT:	Applic	cation G-	19243	S									
			_			•					D	ate of Revi	ew(s)	
OAR 69 welfare, to determ	00-310-130 safety and nine whet	<b>0</b> ( <b>1</b> ) <i>The health</i> her the	he Departm h as describ presumptio	<i>ped in ORS 5</i> on is establis	esume that 337.525. De hed. OAR	<i>a proposed</i> epartment s 690-310-1	d ground staff revi 40 allow	ew g	er use will en groundwater e proposed us agency polici	applica se be m	ntions un nodified	der OAR or condit	690-310 ioned to 1	-140 neet
A. <u>GE</u>	NERAL 1	INFO	RMATIO	<u>N</u> : App	plicant's N	ame: <b>T</b>	<u>'im Par</u> l	ks			Co	ounty:l	Klamath	
A1.	Applican	t(s) see	ek(s) 7.54	cfs from	1	well(s	) in the _		Klamath					Basin,
						subbas	sin							
A2.	Proposed	use <u>Su</u>	applemental	l Irrigation (	603.54 ac)	Seaso	nality:	Ma	rch 15 – Oct	ober 31	(231 da	ys)		
A3.	Well and	aquife	r data ( <b>atta</b>	ch and num	ber logs fo	or existing	wells; r	nark	k proposed v	vells as	s such ui	nder logi	<b>d</b> ):	
Well	Logic	ł	Applicant' Well #	s Propose	ed Aquifer*	Propo Rate(c			Location (T/R-S QQ-Q	<b>)</b> )			and bound fr NW cor	
1 2	KLAM 61	328*	1	Ве	edrock	7.54		40	0S/10E-36 SW-				W1/4 cor S	
	ım, CRB, B	Bedrock												
Well	Well Elev ft msl	First Water ft bls	r ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casir Interv (ft)	als	Liner Intervals (ft)	Or S	orations creens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	4074	10	62	5/24/2022	1365	154	154					1000		Air
Use data	from applic	cation fo	or proposed v	wells.								ı		
A4.	KLAM 6 attachme The prop 7.54 cfs f	53717. 5 61328 y nt to th osed Po	The review which match is review (ADA (KLAN well for sug	er reached on the sthe locate Attachment 2 1 61328) is 1	ut to the agion provide  2).  ocated appringation of	oplicant via ed on the a roximately	pplication 1.6 mile res. App	nd pon. A	the proposed hone and ver record of the orth of the Ci at proposes to	rified the is exchoder to the control of the contro	nat the in ange is i	tended poncluded a	roposed I as an ant reque	OA is
A5. 🗆	managem (Not all b	nent of oasin ru	les contain		ally connections.)	ted to surfa	ace wate	r 🗆	es relative to	are no	<b>t</b> , activat	ed by thi	s applica	tion.
A6. 🗆	Name of	admini	strative are	a:					s) an aquifer				ative restr	riction.

Version: 07/28/2020

#### B. GROUNDWATER AVAILABILITY CONSIDERATIONS, OAR 690-310-130, 400-010, 410-0070

B1.	Bas	sed upon available data, I have determined that groundwater* for the proposed use:
	a.	□ is over appropriated, $\boxtimes$ is not over appropriated, $or$ □ cannot be determined to be over appropriated during any period of the proposed use. * This finding is limited to the groundwater portion of the over-appropriation determination as prescribed in OAR 690-310-130;
	b.	$\square$ will not $or$ $\square$ will likely be available in the amounts requested without injury to prior water rights. * This finding is limited to the groundwater portion of the injury determination as prescribed in OAR 690-310-130;
	c.	$\boxtimes$ will not or $\square$ will likely to be available within the capacity of the groundwater resource; or
	d.	<ul> <li>will, if properly conditioned, avoid injury to existing groundwater rights or to the groundwater resource:</li> <li>i.</li></ul>
B2.	a.	☐ Condition to allow groundwater production from no deeper than ft. below land surface;
	b.	☐ Condition to allow groundwater production from no shallower than ft. below land surface;
	c.	Condition to allow groundwater production only from the groundwater reservoir between approximately ft. and ft. below land surface;
	d.	☐ <b>Well reconstruction</b> is necessary to accomplish one or more of the above conditions. The problems that are likely to occur with this use and without reconstructing are cited below. Without reconstruction, I recommend withholding issuance of the permit until evidence of well reconstruction is filed with the Department and approved by the Groundwater Section.
		<b>Describe injury</b> —as related to water availability— that is likely to occur without well reconstruction (interference w/ senior water rights, not within the capacity of the resource, etc):
В3.	Win 200 sou	bundwater availability remarks: The proposed POA produces groundwater from the Tertiary aged volcanic rock of the nema Volcanic Field and is the most widely developed aquifer unit of the Klamath Valley (Jenks, 2007 and Gannett et. al., 17). OWRD observation well <b>KLAM 53717</b> located approximately 0.6 miles to the northeast of the proposed POA also reces water from tertiary aged volcanic rocks and is expected to exhibit similar groundwater trends as <b>KLAM 61328</b> .  AM 53717 has approximately 40 feet of groundwater level decline since 2004. The groundwater level
		AM 53717 has experienced approximately 40 feet of groundwater level decline since 2004. The groundwater level

The applicant's proposed POA is located within the Bureau of Reclamation's Klamath Project area of the Upper Klamath Basin. Wells throughout this area have experienced long term-water level declines associated with increased groundwater pumping during drought years when Project surface water deliveries have been shut off or reduced. The nearby observation well **KLAM 53717** has experienced approximately 40 feet of groundwater level declines since measurements began in 2004, with 26.15 feet of decline observed between 2020 and 2023 when comparing annual high-water levels. These year-over-year declines associated with drought years and annual highs that do not recover to previous levels suggest that groundwater storage in the area is being depleted. Given the rate of decline observed during the drought years of 2020, 2021 and 2022, and the expected rate of recovery during non-drought years, it is likely **KLAM 53717** would exhibit a total groundwater level decline of 50 feet or more from the highest known water level (meeting the definition of "declined excessively" per OAR 690-008-001 [4]) within the next one or two drought years. Additionally, **KLAM 53717** has triggered the 25 feet of total

690-008-001 (4) and (6). Additionally, Basin-wide hydrologic budget estimates suggest that recharge to groundwater is approximately 2 million acre-feet per year which likely greatly exceeds the total appropriation of groundwater in any given year and groundwater would not be "Over-Appropriated" as defined in OAR 690-400-0010 (11)(a) (Gannett et. al., 2007).

Therefore, groundwater in the vicinity of applicant's proposed POA is not considered over appropriated.

decline permit condition on Certificate 96331 which requires the discontinuation or reduction of water use until groundwater levels recover above the Certificate's reference level. If proposed groundwater use were to commence as described in this application, it would further contribute to observed groundwater level declines in this portion of the basin and potentially lead to declined excessively groundwater levels and additional permit decline conditions triggering on existing rights. This would preclude the perpetual use of the aquifer by limiting the use of existing water right holders and, therefore, groundwater for the proposed use will not likely be available within the capacity of the resource.

The closest POA for a senior water right is **KLAM 53717** under **Certificate 96331** with a priority date of 2003 located 0.6 miles to the northeast of the proposed POA **KLAM 61328**. The applicant has requested a rate of 7.54 cfs from one well to water 603.54 acres at a duty of 2.5 af/ac. However, it is unlikely that the applicant would pump at the maximum requested rate for the entirety of the irrigation season as their maximum volume of 1508.85 AF (603.54 ac multiplied by a duty of 2.5 af/ac) would be achieved in 101 days. Therefore, a prorated rate 3.30 cfs for 231 days is considered to be a more realistic use case and is the rate used for evaluating the potential for injury. A Theis distance drawdown model along with bulk aquifer transmissivity and storativity values (Gannett et. al, 2007) was used to estimate the magnitude of well-to-well interference that may result from the proposed us (Theis 1935). Results indicate that the proposed use could produce 4 to 10 feet of drawdown in senior point of appropriation **KLAM 53717**, however, given the well depth and the estimated amount of water column available to the senior POA, there is not a preponderance of evidence to determine that injury is likely to occur. If this water right were to be issued, permit conditions should be applied as reference in B1(d)(i) of this review form.

### C. GROUNDWATER/SURFACE WATER CONSIDERATIONS, OAR 690-09-040

C1. **690-09-040** (1): Evaluation of aquifer confinement:

Well	Aquifer or Proposed Aquifer	Confined	Unconfined
1	Bedrock	$\boxtimes$	

Basis for aquifer confinement evaluation: Static groundwater levels in the applicants proposed POA as well as other wells in the area are above depth first encountered in the boreholes indicating at least somewhat confined aquifer conditions due to overlaying lower-permeability units.

C2. **690-09-040** (2) (3): Evaluation of distance to, and hydraulic connection with, surface water sources. All wells located a horizontal distance less than ¼ mile from a surface water source that produce water from an unconfined aquifer shall be assumed to be hydraulically connected to the surface water source. Include in this table any streams located beyond one mile that are evaluated for PSI.

Well	SW #	Surface Water Name	GW Elev ft msl	SW Elev ft msl	Distance (ft)	Čonne	alically ected? ASSUMED	Potentia Subst. In Assum YES	terfer.
1	1	Tule Lake Sump	4012	4033	*				

**Basis for aquifer hydraulic connection evaluation:** Tule Lake acts as a groundwater discharge point for this portion of the Klamath Basin, however, as Tule Lake is not located in Oregon, it is not subject to review.

Water Availability Basin the well(s) are located within: None

C3a. **690-09-040 (4):** Evaluation of stream impacts for <u>each well</u> that has been determined or assumed to be **hydraulically connected and less than 1 mile** from a surface water (SW) source. Limit evaluation to instream rights and minimum stream flows that are pertinent to that SW source, not lower SW sources to which the stream under evaluation is tributary. Compare the requested rate against the 1% of 80% *natural* flow for the pertinent Water Availability Basin (WAB). If Q is not distributed by well, use full rate for each well. Any checked ⊠ box indicates the well is assumed to have the potential to cause PSI.

Well	SW #	Well < 1/4 mile?	Qw > 5 cfs?	Instream Water Right ID	Instream Water Right Q (cfs)	Qw > 1% ISWR?	80% Natural Flow (cfs)	Qw > 1% of 80% Natural Flow?	Interference @ 30 days (%)	Potential for Subst. Interfer. Assumed?

Application G- 19243 Date: 9/27/2023 Page 6 C3b. **690-09-040 (4):** Evaluation of stream impacts by total appropriation for all wells determined or assumed to be hydraulically connected and less than 1 mile from a surface water source. Complete only if Q is distributed among wells. Otherwise same evaluation and limitations apply as in C3a above. Instream Instream 80% Qw > 1%Potential Ow > Interference SW Ow > Water Water Natural of 80% for Subst. @ 30 days 1% 5 cfs? Right Right Q Flow # Natural Interfer. ISWR? (%) ID (cfs) (cfs) Flow? Assumed? **Comments:** C4a. 690-09-040 (5): Estimated impacts on hydraulically connected surface water sources greater than one mile as a percentage of the proposed pumping rate. Limit evaluation to the effects that will occur up to one year after pumping begins. This table encompasses the considerations required by 09-040 (5)(a), (b), (c) and (d), which are not included on this form. Use additional sheets if calculated flows from more than one WAB are required. Non-Distributed Wells Well SW# Feb Mar Apr May Aug Sep Oct Nov Dec Well Q as CFS Interference CFS **Distributed Wells** Mar Well SW# Feb Jul Oct Nov Jan Apr May Jun Aug Sep Dec % % % % % % % % % % Well O as CFS Interference CFS % % % % Well Q as CFS Interference CFS (A) = Total Interf. (B) = 80 % Nat. Q(C) = 1 % Nat. Q(D) = (A) > (C) $(E) = (A / B) \times 100$ % % % % % % % (A) = total interference as CFS; (B) = WAB calculated natural flow at 80% exceed, as CFS; (C) = 1% of calculated natural flow at 80% exceed, as CFS; (D) = highlight the checkmark for each month where (A) is greater than (C); (E) = total interference divided by 80% flow as percentage. **Basis for impact evaluation:** C4b. 690-09-040 (5) (b) The potential to impair or detrimentally affect the public interest is to be determined by the Water Rights Section. C5. L If properly conditioned, the surface water source(s) can be adequately protected from interference, and/or groundwater use under this permit can be regulated if it is found to substantially interfere with surface water: i.  $\square$  The permit should contain condition #(s)

ii. The permit should contain special condition(s) as indicated in "Remarks" below;

C6. SW / GW Remarks and Conditions: The applicant's proposed POA would be producing from an aquifer where the nearest

Regardless, use from the proposed POA has the potential to draw water from parts of the regional Lost River aquifer system that would have otherwise flowed toward the Klamath River and supported flows in the Klamath State Scenic Waterway and so the attached memo titled "Analysis of Groundwater Pumping Impacts on Klamath Scenic Waterway Flows"; dated February 19, 2013, is applicable.

References Used:

Gannett, M. W., K.E. Lite, J. L. LaMarche, B.J. Fisher, and D. J. Polette, 2007. *Ground-water Hydrology of the Upper Klamath Basin, Oregon and California*. USGS Scientific Investigations Report 2007-5050.

Jenks, M.D. 2007 (unpublished). *Geologic compilation map of part of the Upper Klamath Basin, Klamath County, Oregon*. Oregon Dept. of Geology and Mineral Industries. Open File Report O-07-05.

Oregon Water Resources Department: Groundwater Information System. Accessed 9/27/2023.

Oregon Water Resources Department: Well Report Query. Accessed 9/27/2023.

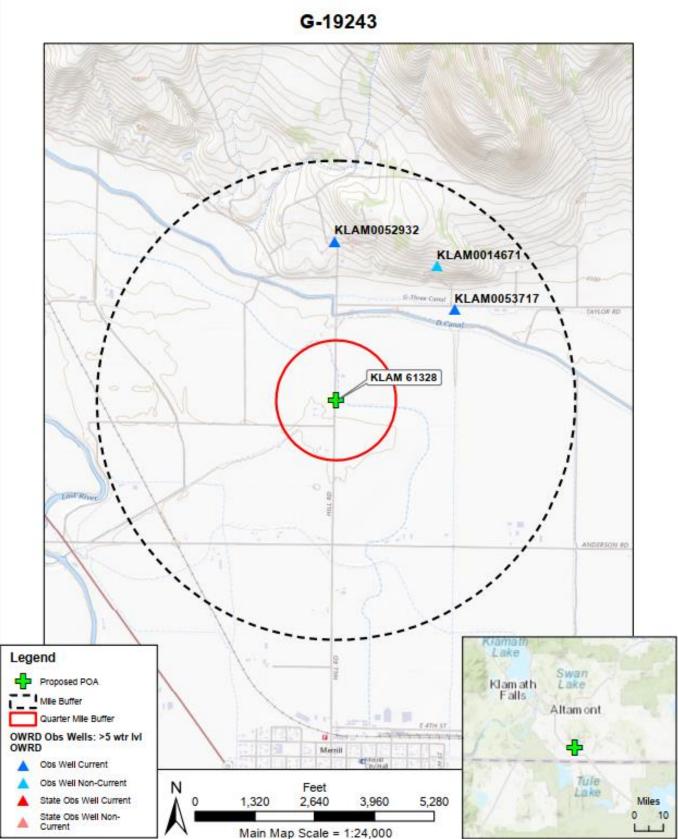
Theis, C.V., 1935. "The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage." *Am. Geophys. Union Trans.*, vol. 16, pp. 519-524.

Version: 07/28/2020

# D. WELL CONSTRUCTION, OAR 690-200

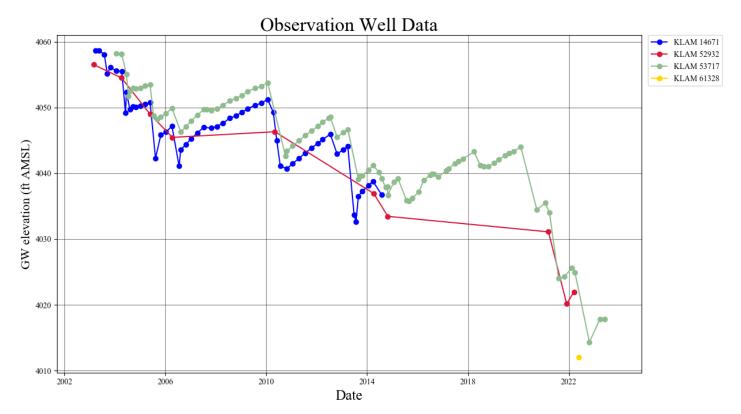
D1.	Well #:	Logid:	
D2.	THE WELL	does not appear to meet current well construction standards based upon:	
	a. $\square$ revie	iew of the well log;	
	b. $\square$ field	d inspection by	;
		ort of CWRE	
	d.  other	er: (specify)	
D3.	THE WELL	construction deficiency or other comment is described as follows:	
D4. [	☐ Route to the	ne Well Construction and Compliance Section for a review of existing well construction.	

### **Well Location Map**

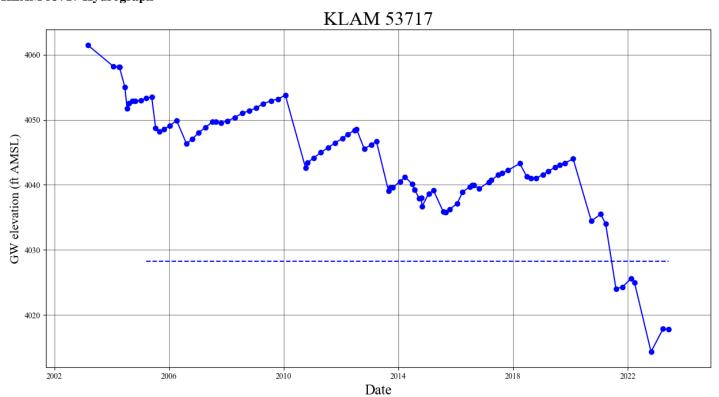


Service Layer Credits: Sources: Esrl, HERE, Garmin, Intermap, Increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esrl Japan, METi, Esrl China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State

### Water-Level Measurements in Nearby Wells



# KLAM 53717 Hydrograph



Drawdown, fee

#### Theis Drawdown

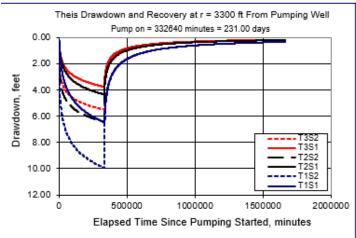
Theis Time-Drawdown Workshee v.5.00

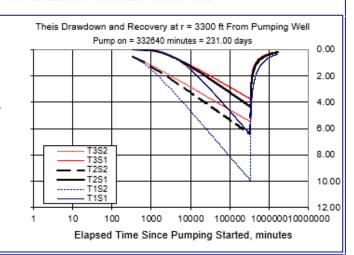
Calculates Theis nonequilibrium drawdown and recovery at any arbitrary radial distance, r, from a pumping well for 3 different T values and radial distance, r, from a pumping well for 3 different T values and 2 different S values.

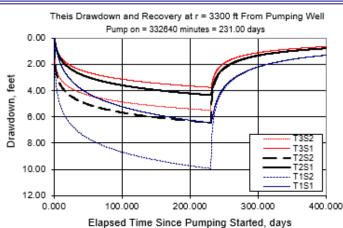
Written by Karl C. Wozniak September 1992. Last modified December 17, 2019

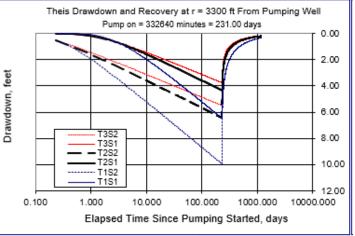
Input Data:	Var Name	Scenario 1	Scenario 2	Scenario 3	Units	
Total pumping time	t		231		d	
Radial distance from pumped well:	r		3300		ft	Q conversions
Pumping rate	Q		3.3		cfs	1,481.04 gpm
Hydraulic conductivity	K	15	25	30	ft/day	3.30 cfs
Aquifer thickness	b		1000		ft	198.00 cfm
Storativity	S_1		0.01			285,120.00 cfd
	S_2		0.001			6.55 af/d
Transmissivity Conversions	T_f2pd	15000	25000	30000	ft2/day	
	T_ft2pm	10.416667	17.361111	20.833333	ft2/min	Recalculate
	T_gpdpft	112200	187000	224400	gpd/ft	

Use the Recalculate button if recalculation is set to manual









#### Attachment 1: Analysis of groundwater Pumping Impacts on Klamath Scenic Waterway Flows



## State of Oregon Water Resources Department

#### Memorandum

To:

Barry Norris - Administrator, Technical Services Division

Dwight French - Administrator, Waterights Division

Tom Paul - Deputy Director

Doug Woodcock - Administrator, Field Services Division

From:

Ivan Gall - Manager, Groundwater Section

Date:

February 19, 2013

Subject:

Analysis of Groundwater Pumping Impacts on Klamath Scenic Waterway Flows

In 1971 the Oregon Legislature created the Scenic Waterway Act, codified by Oregon Revised Statutes 390.805 to 390.925, to preserve for the benefit of the public Waldo Lake and selected parts of the state's free-flowing rivers. The Klamath Scenic Waterway was part of the Act and includes the Klamath River from the John Boyle Dam powerhouse downstream to the Oregon-California border. Under the Act, the Water Resources Commission is allowed to allocate small amounts of surface water for human consumption and livestock watering, as long as issuing the water right does not significantly impair the free-flowing character of these waters in quantities necessary for recreation, fish and wildlife, and the amount allocated may not exceed a cumulative total of one percent of the average daily flow or one cubic foot per second (cfs), whichever is less.

In 1995 the Scenic Waterway Act was modified to address the impact of groundwater uses that, based upon a preponderance of evidence, would measurably reduce the surface water flows within a scenic waterway. "Measurably reduce" means that the use authorized will individually or cumulatively reduce surface water flows within the scenic waterway in excess of a combined cumulative total of one percent of the average daily flow or one cfs, whichever is less.

In 2012 the United States Geological Survey (USGS), in cooperation with OWRD and the US Bureau of Reclamation, completed groundwater flow and management models for the Upper Klamath Basin. The 2012 groundwater flow model uses generally accepted hydrogeologic methods and the relevant field data to model the cumulative effects of groundwater pumping within the Klamath Scenic Waterway, and provides a comprehensive methodology for analyzing the relevant field data necessary to determine whether the cumulative use of groundwater in the Klamath Basin will measurably reduce the surface water flow necessary to maintain the free-flowing character of the Klamath Scenic Waterway.

In September 2012 the OWRD Groundwater Section conducted two model simulations. The two simulations used the 2012 USGS flow model, incorporating groundwater permits issued (61.96 cfs) since adoption of the 1995 Scenic Waterway Act amendment up through 2004. Each simulation was run to steady-state, where inflows and outflows for that model run balanced. An evaluation of the water budgets showed that groundwater discharge to the Klamath Scenic Waterway decreased by 5.88 cfs as a result of the 61.96 cfs of groundwater uses issued between 1995 and 2004. These results indicate to the OWRD that a preponderance of evidence exists to establish that groundwater development occurring in the Upper Klamath Basin in Oregon since 1995 has "measurably reduced" surface water flows within the Klamath Scenic Waterway.

In January 2013 the OWRD Groundwater Section conducted flow model simulations to evaluate impacts to streams from pumping groundwater within the Lost River subbasin. Groundwater pumping was simulated by placing wells in the model that correspond to the center of 39 townships in the southeast part of the Klamath Basin in Oregon. Each of the simulations was run to steady-state, where inflows and outflows for that model run balanced. These results indicate that the scenic waterway is impacted by pumping groundwater in all of the townships evaluated in Oregon in the Lost River subbasin. In summary, a preponderance of evidence exists to establish that groundwater development occurring in Oregon since 1995 in the Upper Klamath Basin and Lost River subbasin has "measurably reduced" surface water flows within the Klamath Scenic Waterway.

#### References:

Gannett, M.W., Lite, K.E., Jr., La Marche, J.L., Fisher, B.J., and Polette, D.J., 2007. Ground-water hydrology of the upper Klamath Basin, Oregon and California: U.S. Geological Survey Scientific Investigations Report 2007-5050, 84p.

Gannett, M.W., Wagner, B.J., and Lite, K.E., Jr., 2012. Groundwater simulation and management models for the upper Klamath Basin, Oregon and California: U.S. Geological Survey Scientific Investigations Report 2012-5062, 92p.

#### **Attachment 2: Email Correspondence with Applicant**

#### FISH Grayson C \* WRD

From: FISH Grayson C \* WRD

Sent: Wednesday, September 20, 2023 8:43 AM

To: 'ParksHickey@gmail.com'

Subject: RE: Proposed POA Question Regarding GW WR Application G-19243

Attachments: KLAM\_61328.pdf

Mr. Parks,

Thank you for taking the time to speak with me on the phone yesterday regarding this application.

As we discussed, you indicated the intended proposed point of appropriation (POA) is **KLAM 61328** (well report attached) as marked on the application map. I will include this email on the groundwater review form as a record of our discussion. A caseworker may reach out to you in the future for any application amendments that are required.

Publicly available documents related to this application can be found under the "Scanned Documents" section of the following webpage as your application moves though processing: <a href="https://apps.wrd.state.or.us/apps/wr/wrinfo/wr">https://apps.wrd.state.or.us/apps/wr/wrinfo/wr</a> details.aspx?snp\_id=212251.

Feel free to contact me with any additional questions.

Sincerely,

#### Grayson Fish, RG

Hydrogeologist – Groundwater Section

Oregon Water Resources Department

Mobile 971-283-1039 | grayson.c.fish@water.oregon.gov

Propouncy ho/him/his

Pronouns: he/him/his

From: FISH Grayson C \* WRD

Sent: Wednesday, September 6, 2023 2:48 PM

To: ParksHickey@gmail.com

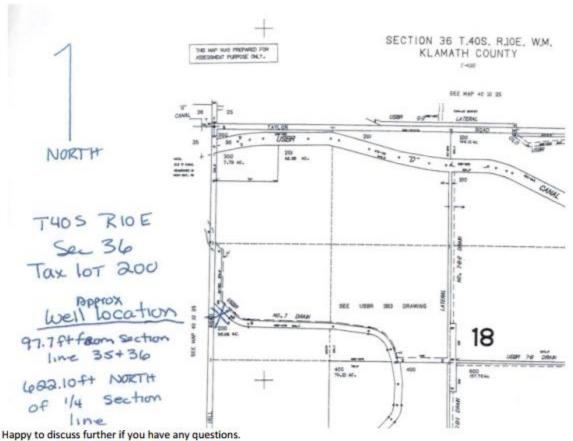
Subject: Proposed POA Question Regarding GW WR Application G-19243

Hello Mr. Parks,

I am starting my groundwater review of Water Right application <u>G-19243 (state.or.us)</u> and noticed that there was a discrepancy with the location of the provided well log (KLAM 53717) and the application map (attached). Our database indicates that <u>KLAM 53717 (state.or.us)</u> is located northeast of the location provided on the application map (Location of KLAM 53717 circled in red, location provided on the application map in blue):



The location on the provided application map appears to correlate to KLAM 61328 (well report attached with a site figure). Was KLAM 61328 the intended proposed POA for application G-19243?



Thank you,

### Grayson Fish, RG

Hydrogeologist - Groundwater Section Mobile 971-283-1039

Pronouns: he/him/his



Integrity | Service | Technical Excellence | Teamwork | Forward-Looking