# **Groundwater Application Review Summary Form**

Application # G- <u>19403</u>
GW Reviewer Grayson Fish Date Review Completed: 3/1/2024
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:  There is the potential for substantial interference per Section C of the attached review form.
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).

# WATER RESOURCES DEPARTMENT

MEM	O							_1	March 1	, 2024_		
то:	1	Applica	tion G-	19403	-							
FRON	1:	GW: <u> </u>	i <b>rayson I</b> Reviewer	_								
SUBJ	ECT: Sc	enic Wa	aterway	Interf	erence ]	Evaluat	ion					
	YES NO		source o		-	is hydr	aulically	y connec	cted to a	a State S	Scenic	
	YES NO	Use	the Scer	nic Wate	erway C	Conditio	n (Cond	ition 7J	)			
	Per OR interfere	ence with	h surfac	e water	that con					_		
	Per ORS interfere Departi propose maintai	ence with ment is ed use	h surfac unable will me	e water to find easurab	that cor that the ly redu	ntributes ere is a ce the	to a sce prepone surface	enic wat derance e water	erway; e <b>of evic</b>	therefo	re, the at the	
Calcula per crite	RIBUTIC te the perc eria in 390 artment is	entage of 9.835, do 1	consump not fill in	tive use b the table	y month d but check	the "unc	ıble" opti					
	se of this way by tl	_				-					use by v	which
surface	e water fl	low is re	educed.			-					-	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	

# PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: FROM		er Rights Sect		Grayson l	Fich	Date _	3/1/2	.024		
TROM	. 0100	ilidwater Sect.			r's Name					
<b>SUBJE</b>	CT: Appl	ication G- 1	9403_	Supersedes	review of					
								Date of Rev	view(s)	
PUBLI	IC INTERES	T PRESUMI	PTION; GROU	NDWATER						
			nt shall presume th		groundwat	er use will en.	sure the pre	servation o	f the pi	ıblic
			d in ORS 537.525.							
			is established. OA							
the pres	umption criteria	a. This review	is based upon ava	ilable informa	tion and a	agency polici	es in place	at the time	of eval	luation.
<b>A.</b> <u><b>GE</b></u>	NERAL INFO	ORMATION	: Applicant's	Name: Mo	Kenzie C	ranberries Ir	nc.	County: _	Curry	
A1.	Applicant(s) s	eek(s) <u>0.09</u>	_cfs from1	well(s) i	n the	South Coast				Basin,
				subbasii	1					
A2.	Proposed use	Cranbe	erry	Seasona	ality: <u>Ye</u>	ar-Round				
A3.	Well and aqui	fer data ( <b>attac</b> h	and number log	s for existing v	vells: marl	k proposed w	ells as such	under log	eid):	
POA	Logid	Applicant's	Proposed Aquife	Dropose		Location	Loca	ation, metes	and bou	
Well		Well#		Kate(CI		(T/R-S QQ-Q		0' N, 1200' E		
2	PROP	6	Sediment	0.09	31	S/15W-33 NW-	NW 8	25' S, 100' E	Ir NE Co	or S 32
	ım, CRB, Bedroo	ek	<b>-</b>	<b>-</b>	<u> </u>		<b>,</b>			
POA	Well Depth	Seal Interval	Casing Intervals	Liner Intervals	Perforatio	ns Or Screens	Well Yield	Drawdov	vn _	1 . TD
Well	(ft)	(ft)	(ft)	(ft)		(ft)	(gpm)	(ft)	1	est Type
2	104	0-20	0-104		8	4-104	40		+	
POA	Land Surface E	levation at Well	Depth of First Wat	er SWL		SWL	Reference	Level	Referen	ce Level
Well	(ft a		(ft bls)	(ft bls)		Date	(ft b		Da	
2	10	54		17			TBI	,	11	BD
Use data	from application	for proposed we	ells.	<b>'</b>				<u> </u>		
A4.	Comments:	The applicant p	roposes to appropi	riate 0.09 cfs of	groundwa	ter from one	proposed w	ell (Well 6)	for 90	acres of
	Cranberry use	with an expect	ed annual volume	of 65.15 AF. It	should be					
			ate of 0.169 cfs) ar							
	The well is pro	oposed. SWL is	s estimated on app	lication and is s	imilar to n	ear by observ	ation wells	and well lo	gs.	
4.5 X	Duovisions of	the Couth Coo	ort (OAD 600 517)		Docim mul	na malativa ta t	ha darralam	mant alogaí	ifi aati a	a and/an
A5. 🖂			st (OAR 690-517)							
			hydraulically conr	nected to surfac	e water ∟	$\Box$ are, or $\boxtimes$ a	are not, acti	vated by th	is appli	ication.
			ich provisions.)							
	Comments. N	/A								
A6. ∐			,,							estriction.
	Name of admi	nistrative area:								
	comments:									
	•									

# 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, $or$ $\square$ cannot be determined to be operiod of the proposed use. * This finding is limited to the groundwater portion of the 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 is limited to the groundwater portion of the injury determination as prescribed in OAR 6	
	c.	$\square$ will not $or$ $\square$ will likely to be available within the capacity of the groundwater resource.	ce; or
	d.	<ul> <li>i.</li></ul>	
B2.	a.	☐ <b>Condition</b> to allow groundwater production from no deeper than f	t. below land surface;
	b.	☐ <b>Condition</b> to allow groundwater production from no shallower than f	t. below land surface;
	c.	Condition to allow groundwater production only from the groundwater reservoir between approximately ft. and land surface;	ft. below
	d.	☐ <b>Well reconstruction</b> is necessary to accomplish one or more of the above conditions. T to occur with this use and without reconstructing are cited below. Without reconstruction issuance of the permit until evidence of well reconstruction is filed with the Department Groundwater Section.	n, I recommend withholding
		<b>Describe injury</b> –as related to water availability– that is likely to occur without well record senior water rights, not within the capacity of the resource, etc):	
		<del></del>	
В3.	<u>sedi</u> belo	roundwater availability remarks: The proposed well sources water from a shallow aquifer well-ments of the Pleistocene- aged Pioneer terrace. Static water levels observed in near by wells a low land surface with seasonal fluctuations between 5 to 25 feet. Groundwater levels trends in pear to be stable or rising, indicating that the groundwater resource is not over appropriated in	re generally 5 to 20 feet nearby observation wells
	The	the closet permitted groundwater POA that does not have "McKenzie Cranberries Inc." as the lis	tad avenaria 2,000 faat
	awa and	ray. The potential for significant interference is relatively low in this unconfined, moderately trade a preponderance of evidence is not available to indicate that injury is likely to occur. Standard applied to protect senior groundwater users and the groundwater resource.	ansmissive aquifer system

## 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	Sediments of the Pioneer Terrace		

Basis for aquifer confinement evaluation: The Pioneer terrace consists of unconsolidated sediments, primarily sands with some gravel and silt. Some areas of localized conferment are apparent from well logs, however, the aquifer system as a whole is unconfined.

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 ½ 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	ulically ected? ASSUMED	Potentia Subst. Int Assum YES	terfer.
1	1	Boulder Creek		62	4,420	$\boxtimes$				⊠
1	2	Unnamed trib. to Floras Lake	160-	90	6,190	$\boxtimes$				$\boxtimes$
1	3	Unnamed trib. to Sixes River	170	28	7,360	×				$\boxtimes$

**Basis for aquifer hydraulic connection evaluation:** Water levels in wells are higher than adjacent streams that have incised into terrace sediments. This indicates that groundwater is flowing towards and discharging to surface water.

Water Availability Basin the well(s) are located within:  $\underline{Sixes\ R > Pacific\ Ocean - At\ Mouth\ (ID\ \#70877)}$ And hydraulicly connected to:  $\underline{Boulder\ Cr > Floras\ L - At\ Mouth\ (ID\ \#31730607)}$  and  $\underline{Unn\ Str > Floras\ L - At\ Mouth\ (ID\ \#31730608)}$ 

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?
1	1			N/A	N/A		0.34	⊠	<10%	⊠

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.

	SW #	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?

Comments: Interference with surface water is estimated using the Hunt (1999) stream depletion model using a parameter range representative of the local geology. Requested pumping rate (0.09 cfs) is greater than 1% of 80% of natural flow of Boulder Creek during a majority of months during the year.

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-Di	istributed	Wells -	Unname	d trib. to	Floras 1	Lake							
Well	SW#	Jan	Feb	Ma r	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1 %	1 %	1 %	2 %	2 %
Well Q	as CFS	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Interfere	ence CFS	0	0	0	0	0	0	0	0.0009	0.0009	0.0009	0.0018	0.0018
(A) = To	tal Interf.	0	0	0	0	0	0	0	0.0009	0.0009	0.0009	0.0018	0.0018
(B) = 80	% Nat. Q	1.38	2.23	1.89	1.02	0.36	0.15	0.09	0.06	0.04	0.04	0.23	1.18
(C) = 1	% Nat. Q	0.0138	0.0223	0.018 9	0.010	0.003 6	0.001 5	0.000 9	0.0006	0.0004	0.0004	0.0023	0.0118
( <b>D</b> ) = (	(A) > (C)	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	√	√
$(\mathbf{E}) = (\mathbf{A}$	/ B) x 100	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1.5 %	2.25%	2.25%	0.78 %	0.15%
Non-Di	istributed	Wells -	Unname	d trib. to	Sixes R	iver							
Well	SW#	Jan	Feb	Ma r	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	1 %	1 %	1 %
Well Q	as CFS	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Interfere	ence CFS	0	0	0	0	0	0	0	0	0	0.0009	0.0009	0.0009
(A) = To	tal Interf.	0	0	0	0	0	0	0	0	0	0.0009	0.0009	0.0009
(B) = 80	% Nat. Q	290	433	395	262	115	51.2	30.6	21.2	17	17.7	83.6	293
(C) = 1	% Nat. Q	2.9	4.33	3.95	2.62	1.15	0.512	0.306	0.212	0.17	0.177	0.836	2.93
( <b>D</b> ) = (	(A) > (C)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓	<b>√</b>
(F) - (A	/B) x 100	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0%	0%	0 %

(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: Interference with surface water sources beyond one mile is estimated using the Hunt (1999) stream depletion model using a parameter range representative of the local geology. The results of stream depletion modeling of row (A) are greater than (C) in August, September, and October for the Unnamed tributary to Floras Lake. It should be noted that these numbers are smaller than reasonable methods/certainty of measurement or calculation, and do not to represent a preponderance of evidence for the assumption of PSI.

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. 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 produce water from an aquifer that has been determined to be hydraulicly connected to surface water sources at distances of less than and greater than 1 mile. In the case of Boulder Creek (<1 mile from the proposed POA), the requested rate is >1% of 80% of the natural flow for multiple months in the year and results in a finding of potential for substantial interference. **References Used:** Hunt, B. 1999. Unsteady Stream Depletion from Ground Water Pumping. Journal of Hydrologic Engineering, Vol 8(1), pp 12-19 OWRD Groundwater Site Information System Database – Accessed 3/1/2024 Theis, C. V., 1935, Relation between the lower of the piezometric surface and the rate and duration of discharge of a well using ground-water storage: Am. Geophys. Union Trans., pt. 2, p. 519-524; dupl. as U.S. Geological Survey Groundwater Note 5. Wiley, t., McClaughry, J., Ma, L., Mickelson, K., Niewendorp, C., Stimely, L., Rivas, J. (2014). Geologic map of the southern

Oregon coast between Port Orford and Bandon, Curry and Coos Counties, Oregon (No. O-14-01). DOGAMI.

Date: 3/1/2024

Page

Application G- 19403

## D. WELL CONSTRUCTION, OAR 690-200

D1.	Well #:	Logid:	
D2.	THE WELL doe	es not appear to meet current well construction standards based upon:	
	a.   review o	of the well log;	
	b.   field inst	pection by	;
		f CWRE	;
		pecify)	
D3.	THE WELL con	nstruction deficiency or other comment is described as follows:	
D3.		istruction deficiency of other comment is described as follows.	
			_
			—
D4.	Route to the W	ell Construction and Compliance Section for a review of existing well construction.	
D4.	Route to the ***	th construction and comphance section for a review of existing wen construction.	

## Water Availability Tables

# Water Availability Analysis Detailed Reports

SIXES R > PACIFIC OCEAN - AT MOUTH SOUTH COAST BASIN

Water Availability as of 3/1/2024

Watershed ID #: 70877 (<u>Map</u>)
Date: 3/1/2024

Water Availability Calculation Consumptive Uses and Storages Instream Flow Requirements Reservations

Water Rights Watershed Characteristics

## **Water Availability Calculation**

Monthly Streamflow in Cubic Feet per Second Annual Volume at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	290.00	6.14	284.00	0.00	325.00	-41.10
FEB	433.00	6.58	426.00	0.00	325.00	101.00
MAR	395.00	6.36	389.00	0.00	325.00	63.60
APR	262.00	4.85	257.00	0.00	325.00	-67.80
MAY	115.00	2.37	113.00	0.00	322.00	-209.00
JUN	51.20	3.93	47.30	0.00	190.00	-143.00
JUL	30.60	5.73	24.90	0.00	125.00	-100.00
AUG	21.20	4.54	16.70	0.00	104.00	-87.30
SEP	17.00	2.82	14.20	0.00	74.90	-60.70
OCT	17.70	1.71	16.00	0.00	215.00	-199.00
NOV	83.60	2.28	81.30	0.00	325.00	-244.00
DEC	293.00	6.29	287.00	0.00	325.00	-38.30
ANN	265,000.00	3,230.00	262,000.00	0.00	180,000.00	121,000.00

Version: 10/24/2023

Exceedance Level: 80% >

Time: 1:28 PM

# **Water Availability Analysis**

**Detailed Reports** 

#### BOULDER CR > FLORAS L - AT MOUTH SOUTH COAST BASIN

Water Availability as of 3/1/2024

Watershed ID #: 31730607 (<u>Map)</u> Date: 3/1/2024

Instream Flow Requirements Reservations

Exceedance Level: 80% V

Time: 3:11 PM

Water Availability Calculation Consumptive Uses and Storages

Water Rights

Watershed Characteristics

## Water Availability Calculation

Monthly Streamflow in Cubic Feet per Second Annual Volume at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	6.06	1.86	4.20	0.00	0.00	4.20
FEB	9.57	2.25	7.32	0.00	0.00	7.32
MAR	8.27	1.51	6.76	0.00	0.00	6.76
APR	4.66	0.91	3.75	0.00	0.00	3.75
MAY	1.72	0.43	1.29	0.00	0.00	1.29
JUN	0.86	0.27	0.59	0.00	0.00	0.59
JUL	0.61	0.42	0.19	0.00	0.00	0.19
AUG	0.46	0.34	0.12	0.00	0.00	0.12
SEP	0.35	0.26	0.09	0.00	0.00	0.09
OCT	0.34	0.13	0.21	0.00	0.00	0.21
NOV	1.63	0.45	1.18	0.00	0.00	1.18
DEC	5.49	1.72	3.77	0.00	0.00	3.77
ANN	5,890.00	633.00	5,250.00	0.00	0.00	5,250.00

# **Water Availability Analysis**

**Detailed Reports** 

UNN STR > FLORAS L - AT MOUTH SOUTH COAST BASIN

Water Availability as of 3/1/2024

Watershed ID #: 31730608 (Map)

Date: 3/1/2024

Exceedance Level: 80% V
Time: 1:30 PM

Water Availability Calculation Consumptive Uses and Storages

Water Rights

Instream Flow Requirements

nts Reservations
Watershed Characteristics

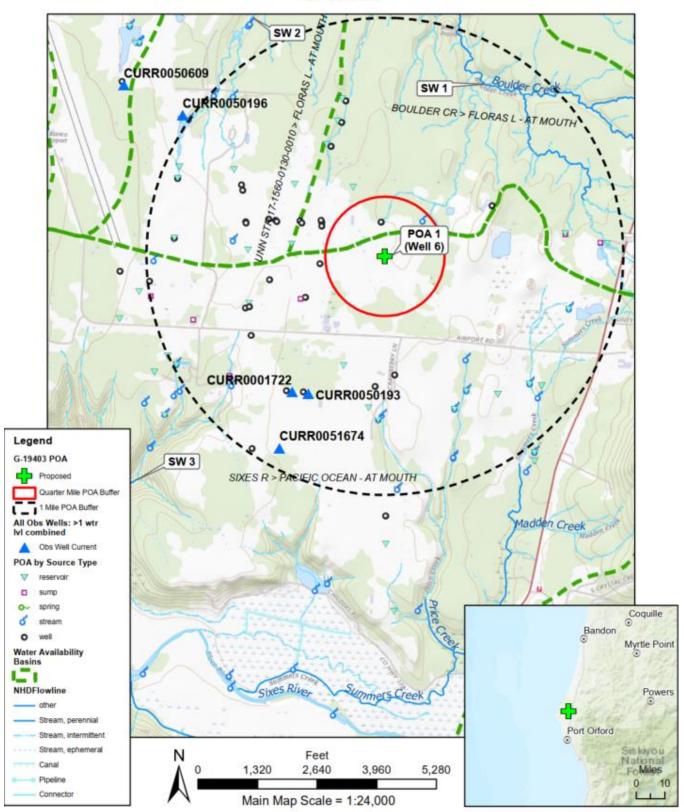
## Water Availability Calculation

Monthly Streamflow in Cubic Feet per Second Annual Volume at 50% Exceedance in Acre-Feet

Month	Natural Stream Flow	Consumptive Uses and Storages	Expected Stream Flow	Reserved Stream Flow	Instream Flow Requirement	Net Water Available
JAN	1.38	1.51	-0.13	0.00	0.00	-0.13
FEB	2.23	1.64	0.59	0.00	0.00	0.59
MAR	1.89	1.47	0.42	0.00	0.00	0.42
APR	1.02	1.15	-0.13	0.00	0.00	-0.13
MAY	0.36	1.09	-0.73	0.00	0.00	-0.73
JUN	0.15	0.26	-0.11	0.00	0.00	-0.11
JUL	0.09	0.41	-0.32	0.00	0.00	-0.32
AUG	0.06	0.33	-0.27	0.00	0.00	-0.27
SEP	0.04	1.14	-1.10	0.00	0.00	-1.10
OCT	0.04	1.01	-0.97	0.00	0.00	-0.97
NOV	0.23	1.04	-0.81	0.00	0.00	-0.81
DEC	1.18	1.50	-0.32	0.00	0.00	-0.32
ANN	1,320.00	756.00	739.00	0.00	0.00	739.00

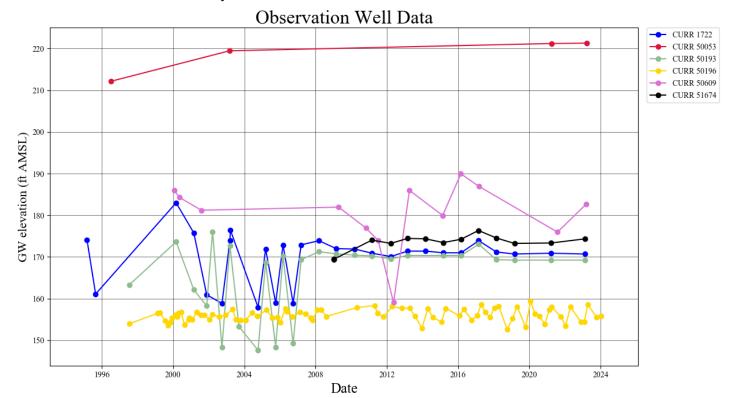
## **Well Location Map**

# G-19403



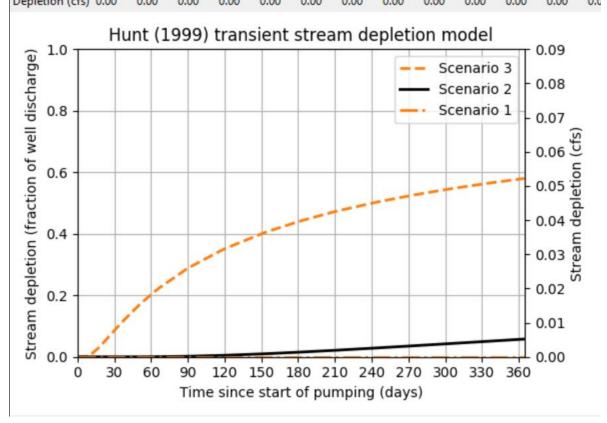
Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
USGS The National Major National Boundaries Dataset, 3DE 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



## Stream Depletion (Hunt) Model Analysis – Boulder Creek (SW 1)

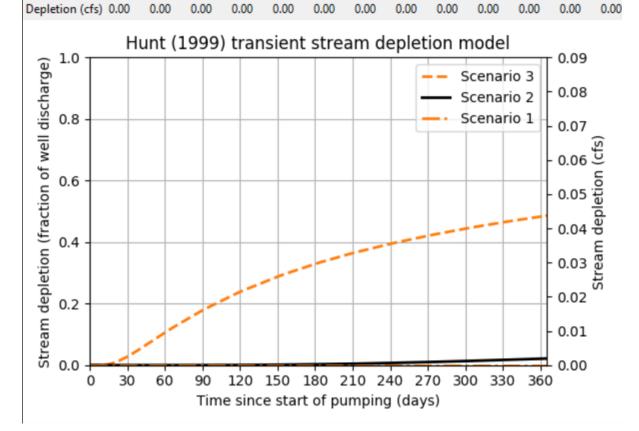
		Арр	lication	type:				G						
		Арр	lication	numbe	r:			194	03					
		Well	numbe	er:	1									
	Stream Number: Pumping rate (cfs):													
	Pumping duration (days):									365				
		Pun	nping st	art mon	th numb	er (3=N	March)	1						
	1,50	ramete			Symbo	-	Scenario 1		Scenario 2		io 3	Units		
Distance	Distance from well to stream Aquifer transmissivity Aquifer storativity						a 4420 T 100 S .1		1000			ft		
Aquifer to												ft2/day		
Aquifer st										0.01		-		
Aquitard	vertica	l hydrau	ılic cond	ductivity	/ Kva	Kva 0.01 0 babs 5		0.05		0.1		ft/day		
Not used								0		0				
Aquitard	thickn	ess belo	w strear	n	babs			4		3		ft		
Not used	Not used						0		0					
Stream w	Stream width					10	10		25			ft		
				Str	eam depl	letion f	or Scena	ario 2:						
Days	1	31	62	92	122	153	183	213	244	274	304	335	36	
Depletion (%)	0	0	0	0	1	1	2	2	3	4	4	5	6	
Depletion (cfs)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	



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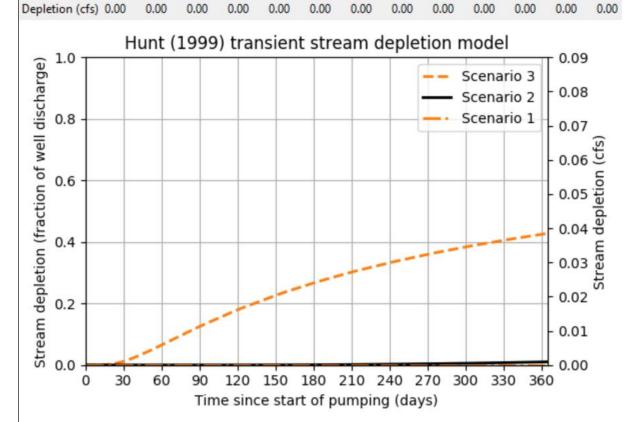
## Stream Depletion (Hunt) Model Analysis – Unnamed trib. to Floras Lake (SW 2)

		lication	type:		G											
			Арр	lication	numbe		19	1403								
	Well number:															
			Stre	am Nu	mber:	4										
	Pumping rate (cfs):									0.09						
	Pumping duration (days):									365						
		Pun	nping s	tart mon	th numb	oer (3=	March)	1								
		Pa	aramete	r		Symbo	ol Sce	nario 1	Scen	Scenario 2 S		rio 3	Units			
I	Distance from well to stream						619	90	6190		6190		ft			
,	Aquifer t	ransmi	ssivity			T	100	0	1000		2000		ft2/day			
,	Aquifer s	torativ	ity			S	.1	0.01 0 5		0.05 0.05 0			-			
,	Aquitard	vertica	l hydrau	ılic con	ductivity	Kva	0.0						ft/day			
1	Not used	d					0									
,	Aquitard	l thickn	ess belo	w strea	m	babs	5						ft			
1	Not used						0	0			0	0				
9	Stream width					WS	10	10		25			ft			
					Stre	am dep	letion f	for Scena	rio 2:							
Days		1	31	62	92	122	153	183	213	244	274	304	335	365		
Depletion (%) 0 0			0	0	0	0	0	0	0	1	1	1	2	2		



# Stream Depletion (Hunt) Model Analysis – Unnamed trib. to Sixes River (SW 3)

		Ap	plicatio	n type:				G										
		Ар	plicatio	n numb	er:			19	9403									
		We	ell numb	oer:				1										
		Str	eam Nu	ımber:				3										
		Pu	mping i	rate (cfs)	):			0.	0.09 365									
		Pu	mping	duration	(days):			36										
		Pu	mping :	start mo	nth numb	er (3	B=March)	1										
	-	Paramet	er		Symbo	Symbol Scenario		Scenario 2		Scenario 3		Units						
Distanc	e from	well to	stream		а	7	7360		7360		7360							
Aquifer	transn	nissivity			T S		T 100		1000		2000		,					
Aquifer	storati	vity					1	0.0	0.05		0.01							
Aquitar	d vertic	al hydra	aulic co	nductivi	ty Kva	Kva 0.01		0.0										
Not use	d					0	)	0		0								
Aquitar	d thick	ness bel	below stream			babs 5				3		ft						
Not use	d								0			0		0				
Stream	width				WS	1	10		25		50							
				Str	eam depl	etion	for Scen	ario 2:										
Days	1	31	62	92	122	153	183	213	244	274	304	335	365					
Depletion (%)	0	0	0	0	0	0	0	0	0	0	1	1	1					
D-1-1: (-C)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					



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