

Groundwater Application Review Summary Form

Application # G- 18812

GW Reviewer Grayson Fish Date Review Completed: 3/9/2026

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.

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

MEMO

March 9, 2026

TO: **Application G- 18812**

FROM: **GW: Grayson Fish**
 (Reviewer's Name)

SUBJECT: Scenic Waterway Interference Evaluation

YES The source of appropriation is hydraulically connected to a State Scenic
 NO Waterway or its tributaries

YES
 NO Use the Scenic Waterway Condition (Condition 7J)

Per ORS 390.835, the Groundwater Section is **able** to calculate ground water interference with surface water that contributes to a Scenic Waterway. The calculated interference is distributed below

Per ORS 390.835, the Groundwater Section is **unable** to calculate ground water interference with surface water that contributes to a scenic waterway; **therefore, the Department is unable to find that there is a preponderance of evidence that the proposed use will measurably reduce the surface water flows necessary to maintain the free-flowing character of a scenic waterway**

DISTRIBUTION OF INTERFERENCE

Calculate the percentage of consumptive use by month and fill in the table below. If interference cannot be calculated, per criteria in 390.835, do not fill in the table but check the "unable" option above, thus informing Water Rights that the Department is unable to make a Preponderance of Evidence finding.

Exercise of this permit is calculated to reduce monthly flows in Rogue Scenic Waterway by the following amounts expressed as a proportion of the consumptive use by which surface water flow is reduced.

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 | 0.083 |

PUBLIC INTEREST REVIEW FOR GROUNDWATER APPLICATIONS

TO: Water Rights Section Date 3/9/2026
 FROM: Groundwater Section Grayson Fish
 Reviewer's Name
 SUBJECT: Application G- 18812 Supersedes review of 6/10/2019
 Date of Review(s)

PUBLIC INTEREST PRESUMPTION; GROUNDWATER

OAR 690-310-130 (1) *The Department shall presume that a proposed groundwater use will ensure the preservation of the public welfare, safety and health as described in ORS 537.525.* Department staff review groundwater applications under OAR 690-310-140 to determine whether the presumption is established. OAR 690-310-140 allows the proposed use be modified or conditioned to meet the presumption criteria. **This review is based upon available information and agency policies in place at the time of evaluation.**

A. GENERAL INFORMATION: Applicant's Name: David Lee, D Tiger Farm LLC County: Josephine

A1. Applicant(s) seek(s) 1.0 cfs from 2 well(s) in the Rogue Basin,
Applegate subbasin

A2. Proposed use Nursery (17.3 ac) Seasonality: Year Round

A3. Well and aquifer data (attach and number logs for existing wells; mark proposed wells as such under logid):

| POA Well | Logid | Applicant's Well # | Proposed Aquifer* | Proposed Rate(cfs) | Location (T/R-S QQ-Q) | Location, metes and bounds, e.g. 2250' N, 1200' E fr NW cor S 36 |
|----------|------------|--------------------|-------------------|--------------------|-----------------------|--|
| 1 | JOSE 60100 | 1 | Sediments | 1.0 | 38S/5W-24NWNW | 840' S, 6' E fr NE cor S 23 |
| 2 | Proposed | 2 | - | 1.0 | 38S/5W-23NENE | 900' S, 500' W fr NE cor S 23 |
| 3 | | | | | | |
| 4 | | | | | | |

* Alluvium, CRB, Bedrock

| POA Well | Well Depth (ft) | Seal Interval (ft) | Casing Intervals (ft) | Liner Intervals (ft) | Perforations Or Screens (ft) | Well Yield (gpm) | Drawdown (ft) | Test Type |
|----------|-----------------|--------------------|-----------------------|----------------------|------------------------------|------------------|---------------|-----------|
| 1 | 125 | 0-18 | 0-118 | - | 97-117 | 16 | - | A |
| 2 | -- | -- | -- | -- | -- | -- | -- | -- |
| 3 | | | | | | | | |
| 4 | | | | | | | | |

| POA Well | Land Surface Elevation at Well (ft amsl) | Depth of First Water (ft bls) | SWL (ft bls) | SWL Date | Reference Level (ft bls) | Reference Level Date |
|----------|--|-------------------------------|--------------|-----------|--------------------------|----------------------|
| 1 | 1280 | 110 | 125 | 5/23/2017 | Not set | Not set |
| 2 | 1278 | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |

Use data from application for proposed wells.

A4. **Comments:** This re-review addresses the finding in section B1a in accordance with the 1/18/2023 clarification memo on the current policy for determining over-appropriation for new groundwater applications.

A5. **Provisions of the** Rogue (690-515) Basin rules relative to the development, classification and/or management of groundwater hydraulically connected to surface water **are, or** **are not**, activated by this application. (Not all basin rules contain such provisions.)
 Comments: _____

A6. **Well(s) #** _____, _____, _____, _____, _____, tap(s) an aquifer limited by an administrative restriction.
 Name of administrative area: _____
 Comments: _____

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

B1. **Based upon available data**, I have determined that groundwater* for the proposed use:

- a. is over appropriated, 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. will not or 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. will not or will likely to be available within the capacity of the groundwater resource; or
- d. will, if properly conditioned, avoid injury to existing groundwater rights or to the groundwater resource:
 - i. The permit should contain condition #(s) _____;
 - ii. The permit should be conditioned as indicated in item 2 below.
 - iii. The permit should contain special condition(s) as indicated in item 3 below;

- 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. Well reconstruction 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.

Describe injury –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): _____

B3. **Groundwater availability remarks:**

The proposed POAs are within the POU served by GR 200 which originally authorized the use of 1.34 cfs from 3 sumps for irrigation of 190 acres but has been the subject of transfers lately which has added POAs and divided up the POU into smaller areas. All three of the original POAs on GR-200 are within 1500 ft of the proposed POAs as well as POAs for 2 other existing water rights (Cert. 51526 and Cert. 29717). Hydrologic interference (i.e., drawdown at a nearby well caused by pumping of another well) at a distance of 1500 ft and a rate of 1.0 cfs is likely to be over 20 ft, which would result in injury to existing water rights GR-200, Cert. 51526, and Cert. 29717, as well as Cert. 27481 which is approx. 1700 ft from the applicant’s nearest POA.

The applicant proposes a maximum rate of appropriation of 1.0 cfs. Median well yield in this aquifer system is approx. 20 gpm and wells producing over 60 gpm are unlikely. Therefore, the proposed rate of 1.0 cfs, even from 2 wells (est. 220 gpm from each well), would not be available without potentially causing over-appropriation or impairing the character of the aquifer and the proposed use is found to not be within the Capacity of the Resource.

The available water level records from nearby wells do not meet the Division 8 definition of excessively declining or declined excessively for the storage portion of the source of water to wells. Given the available information, a preponderance of evidence does not exist to find that groundwater is currently over appropriated in the aquifer to be accessed.

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 | Alluvium | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 | Alluvium | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> |

Basis for aquifer confinement evaluation: Many well logs in the area for wells over 100 ft depth report ‘SWL’ above ‘First Water’ indicating the aquifer is under some level of confinement.

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) | Hydraulically Connected? | | | Potential for Subst. Interfer. Assumed? | |
|------|------|--------------------|----------------|----------------|---------------|-------------------------------------|--------------------------|--------------------------|---|-------------------------------------|
| | | | | | | YES | NO | ASSUMED | YES | NO |
| 1 | 1 | Williams Creek | 1280 | 1260-1275 | 2040 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2 | 1 | Williams Creek | 1280 | 1260-1275 | 1540 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Basis for aquifer hydraulic connection evaluation: Groundwater elevations are above surface water elevations implying that groundwater is flowing towards and discharging to surface water.

Water Availability Basin the well(s) are located within: Williams Cr > Applegate R – At Mouth (ID# 70981)

C3a. **690-09-040 (4):** Evaluation of stream impacts for each well 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 < ¼ 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 | <input type="checkbox"/> | <input type="checkbox"/> | IS70981A | 2.37 | <input checked="" type="checkbox"/> | 1.89 | <input checked="" type="checkbox"/> | <10% | <input checked="" type="checkbox"/> |
| 2 | 2 | <input type="checkbox"/> | <input type="checkbox"/> | IS70981A | 2.37 | <input checked="" type="checkbox"/> | 1.89 | <input checked="" type="checkbox"/> | <10% | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> |

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? |
|--|------|--|--------------------------|-------------------------|------------------------------|--------------------------|------------------------|------------------------------|----------------------------|---|
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | | | <input type="checkbox"/> | | <input type="checkbox"/> | | <input type="checkbox"/> |

Comments: Stream-depletion was estimated using the Hunt (1999) stream-depletion model with model parameter values reflecting a range expected for this type of aquifer system.

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# | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| | | % | % | % | % | % | % | % | % | % | % | % | % |
| Well Q as CFS | | | | | | | | | | | | | |
| Interference CFS | | | | | | | | | | | | | |
| Distributed Wells | | | | | | | | | | | | | |
| Well | SW# | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| | | % | % | % | % | % | % | % | % | % | % | % | % |
| Well Q 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) x 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: No surface water sources were evaluated beyond 1 mile.

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. **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. 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 POAs would be producing from an aquifer that has been found to be hydraulically connected to surface water – specifically Williams Creek – at a distance of less than 1 mile. The proposed maximum rate of appropriation is **greater than** 1% of the pertinent adopted perennial streamflow and also **greater than** 1% of the adopted instream water right for the surface water source. Per OAR 690-009-0040(4) the POAs are assumed to have the **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

Oregon Department of Geology and Mineral Industries. *Geologic Map of Oregon*. <http://www.oregongeology.org/geologicmap/>

OWRD Well Log Database – Accessed 3/9/2026

Ramp, L. and Peterson, N. 2004. *Geologic Map of Josephine County, Oregon*. Oregon Dept. of Geol. and Mineral Industries, OFR O-04-13.

D. WELL CONSTRUCTION, OAR 690-200

D1. Well #: _____ Logid: _____

D2. THE WELL does not appear to meet current well construction standards based upon:

- a. review of the well log;
- b. field inspection by _____;
- c. report of CWRE _____;
- d. other: (specify) _____

D3. THE WELL construction deficiency or other comment is described as follows: _____

D4. Route to the Well Construction and Compliance Section for a review of existing well construction.

Water Availability Tables

Water Availability Analysis
Detailed Reports

WILLIAMS CR > APPLGATE R - AT MOUTH
ROGUE BASIN

Water Availability as of 3/9/2026

Watershed ID #: 70981 ([Map](#))
Date: 3/9/2026

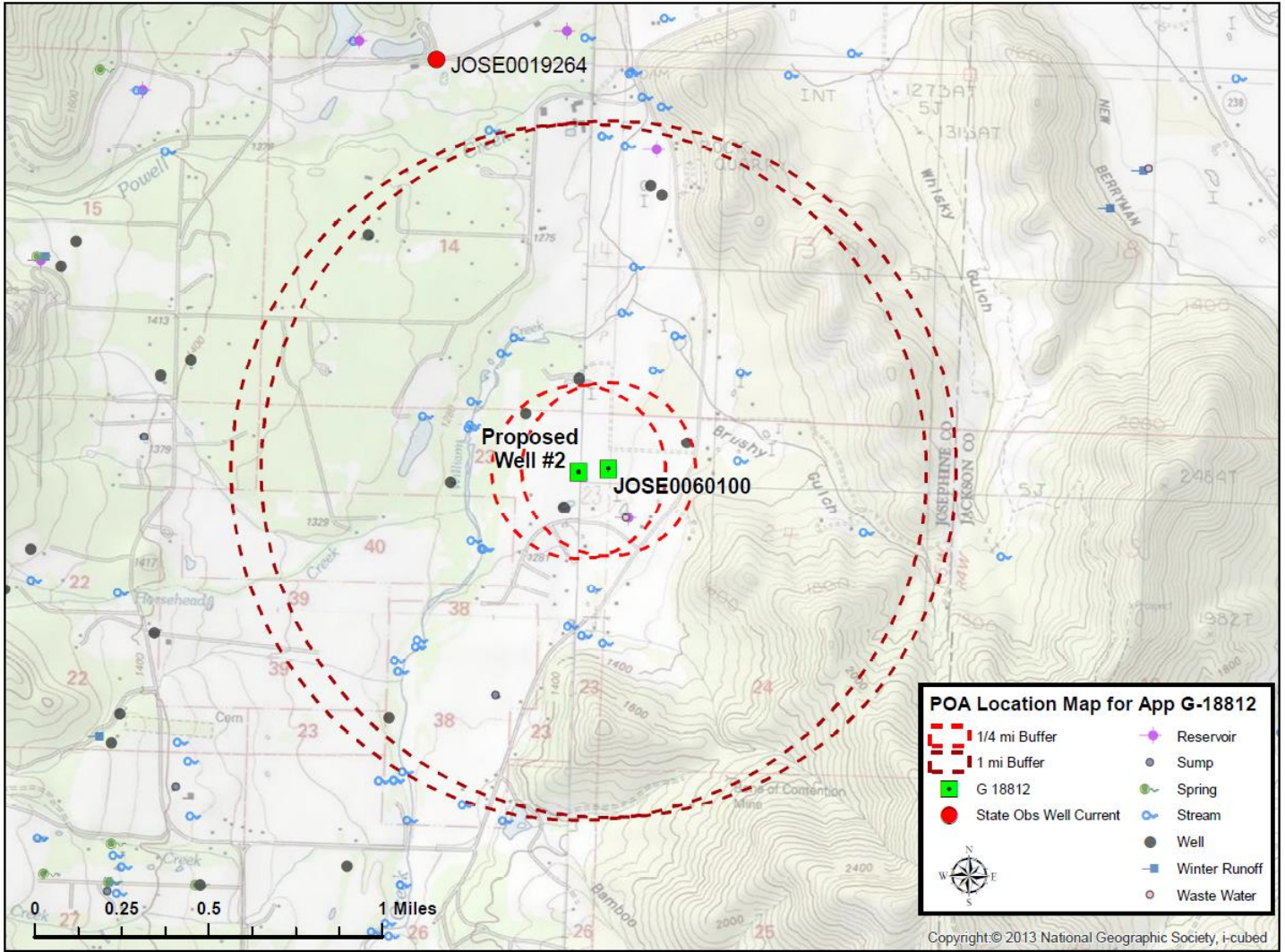
Exceedance Level: 80%
Time: 1:27 PM

Water Availability Calculation

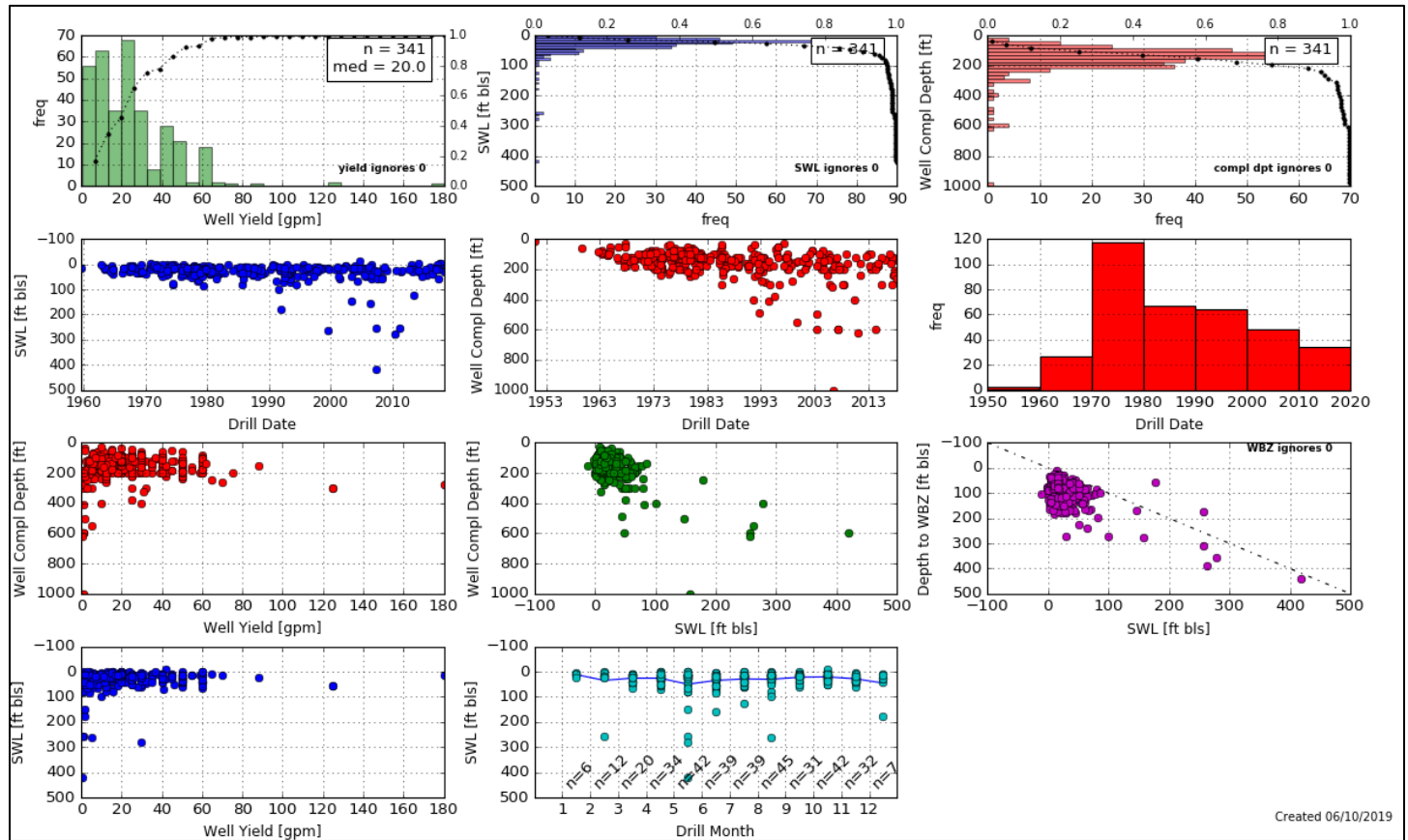
Monthly Streamflow in Cubic Feet per Second
Annual Volume at 50% Exceedance in Acre-Feet

| Month | Natural Stream Flow | Consumptive Uses and Storages | Expected Stream Flow | Reserved Stream Flow | Instream Flow Requirement | Net Water Available |
|-------|---------------------|-------------------------------|----------------------|----------------------|---------------------------|---------------------|
| JAN | 67.30 | 1.12 | 66.20 | 0.00 | 110.00 | -43.80 |
| FEB | 110.00 | 1.52 | 108.00 | 0.00 | 110.00 | -1.52 |
| MAR | 107.00 | 1.12 | 106.00 | 0.00 | 110.00 | -4.12 |
| APR | 62.70 | 3.85 | 58.90 | 0.00 | 110.00 | -51.10 |
| MAY | 29.50 | 6.04 | 23.50 | 0.00 | 65.00 | -41.50 |
| JUN | 10.30 | 8.45 | 1.85 | 0.00 | 40.00 | -38.20 |
| JUL | 4.24 | 11.30 | -7.04 | 0.00 | 15.00 | -22.00 |
| AUG | 2.68 | 9.38 | -6.70 | 0.00 | 5.00 | -11.70 |
| SEP | 1.89 | 6.26 | -4.37 | 0.00 | 50.00 | -54.40 |
| OCT | 2.28 | 2.24 | 0.04 | 0.00 | 80.00 | -80.00 |
| NOV | 6.60 | 0.48 | 6.12 | 0.00 | 80.00 | -73.90 |
| DEC | 32.30 | 0.78 | 31.50 | 0.00 | 110.00 | -78.50 |
| ANN | 54,800.00 | 3,180.00 | 52,500.00 | 0.00 | 53,300.00 | 15,200.00 |

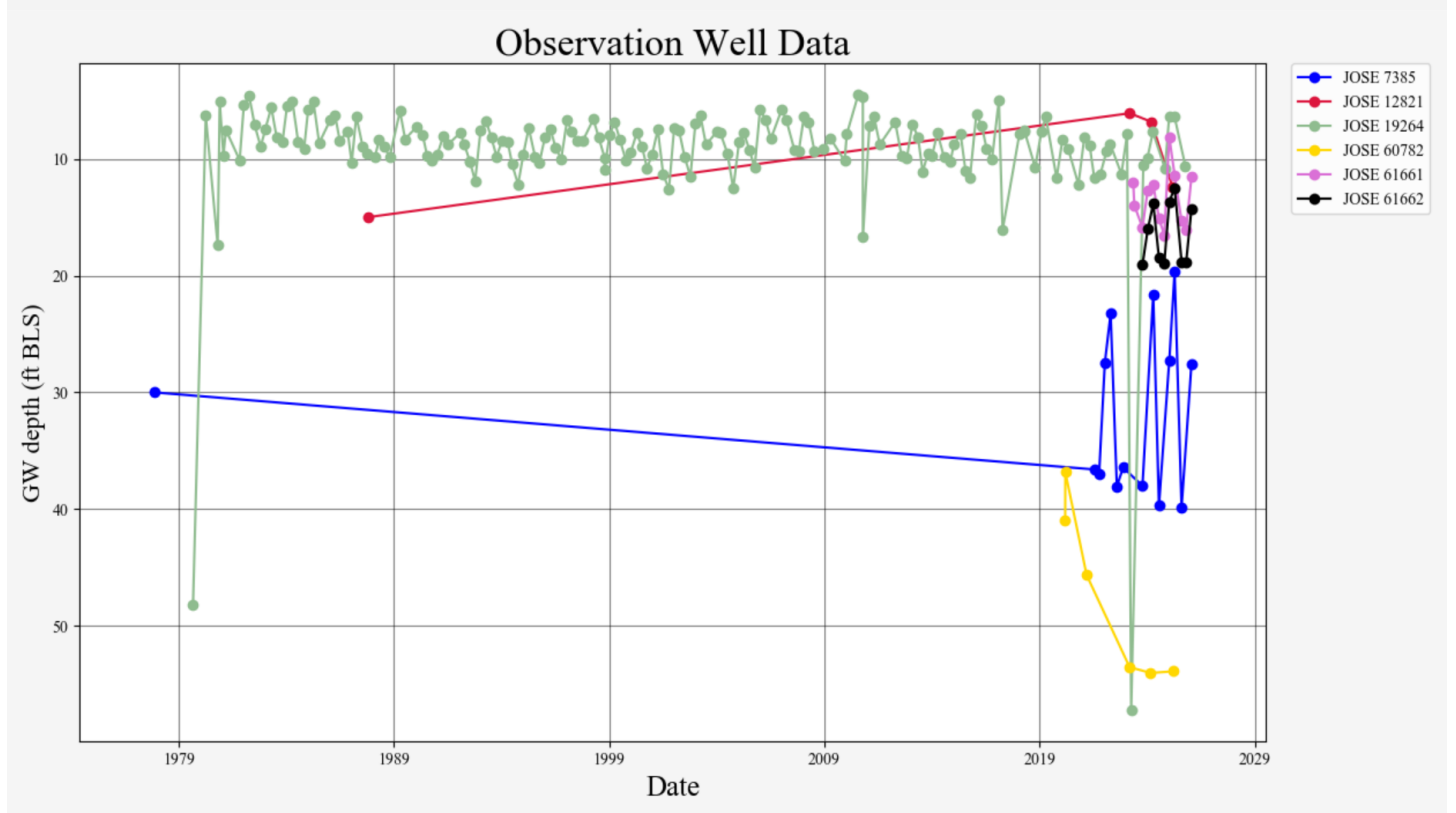
Well Location Map



Well Statistics



Water-Level Measurements in Nearby Wells



Stream Depletion (Hunt) Model Analysis

| | |
|--------------------------------------|-------|
| Application type: | G |
| Application number: | 18812 |
| Well number: | 2 |
| Stream Number: | 1 |
| Pumping rate (cfs): | 1 |
| Pumping duration (days): | 365 |
| Pumping start month number (3=March) | 1 |

| Parameter | Symbol | Scenario 1 | Scenario 2 | Scenario 3 | Units |
|--|--------|------------|------------|------------|----------------------|
| Distance from well to stream | a | 1540 | 1540 | 1540 | ft |
| Aquifer transmissivity | T | 500 | 300 | 100 | ft ² /day |
| Aquifer storativity | S | 0.01 | 0.005 | 0.001 | - |
| Aquitard vertical hydraulic conductivity | Kva | 0.0005 | 0.001 | 0.001 | ft/day |
| Not used | | 20.0 | 20.0 | 20.0 | |
| Aquitard thickness below stream | babs | 2 | 2 | 2 | ft |
| Not used | | 0.2 | 0.2 | 0.2 | |
| Stream width | ws | 30 | 30 | 30 | ft |

Stream depletion for Scenario 2:

| Days | 10 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 360 |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Depletion (%) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 |
| Depletion (cfs) | 0.00 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.06 | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 |

