

EMERGENCY DROUGHT APPLICATION: GROUNDWATER REVIEW

TO: Water Rights Section Date 4/29/2026  
 FROM: Groundwater Section Joe Kemper  
 Reviewer's Name

SUBJECT: Application G- 19528

**DROUGHT MITIGATION; GROUNDWATER**

This review is based on authorities laid out in OAR 690-019 Drought Mitigation rules. This is an expedited review to evaluate an emergency request for groundwater use for one season under a Governor’s drought declaration. Notwithstanding groundwater availability (OAR 690-300 and -310) and State Scenic Waterway considerations, the Department may issue a drought permit for short-term emergency use provided that there is no injury and that the use is within the public interest as per OAR 690-019-0040(3). **This review is based upon available information and agency policies in place at the time of evaluation.**

**A. GENERAL INFORMATION:** Applicant’s Name: Rainshadow Organics LLC County: Deschutes

A1. Applicant(s) seek(s) 0.34 cfs from 1 well(s) in the Deschutes Basin,  
Upper Deschutes subbasin

A2. Proposed use Supplemental Irrigation Seasonality: 4/1/2026 to 10/31/2026

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

Well	Logid	Applicant’s Well #	Proposed Aquifer*	Proposed Rate(cfs)	Location (T/R-S QQ-Q)	Latitude	Longitude
1	PROP0000839	1	Deschutes Fm	0.34	14S/12E-7 SW-NW	44.3735943	-121.3495599
2							
3							
4							

\* Alluvium, CRB, Bedrock

Well	Well Elev ft msl	First Water ft bls	SWL ft bls	SWL Date	Well Depth (ft)	Seal Interval (ft)	Casing Intervals (ft)	Liner Intervals (ft)	Perforations Or Screens (ft)	Well Yield (gpm)	Draw Down (ft)	Test Type
1	2791	NA	NA	NA	500	0-150	0-500	NA	400/500	NA	NA	NA

Use data from application for proposed wells.

A4. **Comments:** The applicant’s well is proposed. The POU is 27 acres, and the request volume is 81 AF. This application is supplemental to certificates 95971, 95972, and 97771.

**B. GROUNDWATER/SURFACE WATER CONSIDERATIONS:**

B1. Is there information that this drought groundwater use will **injure senior spring or surface water rights** during the duration of the drought declaration?  
 (Yes) (No) If yes, explain: The applicant’s well would access the Deschutes regional aquifer in the Lower Bridge area, where groundwater begins discharging to the Deschutes River. The applicant’s proposed well would be located between DESC 1957 and DESC 2067. These wells appears to access groundwater locally within the “rhyodacite SW of steelhead falls” (Tdrsf of Sherrod, 2004). Pumpage from these wells is likely to have the most impact on the Deschutes between RM 130.5 and 128.7 where Tdrsf forms the bedrock of the river channel Considering the high magnitude of groundwater inflow at this reach (estimated at 148 cfs in 1992 and 155 cfs in 1994), the stream depletion that results from this short-term emergency use is not likely to injure senior springs or surface water rights during the duration of the drought declaration.

B2. Is there information that this drought groundwater use will **injure senior groundwater rights** during the duration of the drought declaration?  
 (Yes) (No) If yes, explain: The target aquifer is highly transmissive and has a likely saturated thickness of 500-1000 feet. Any expected well-to-well interference is not expected to result in injury to adjacent groundwater users.

- B3. Has the requested groundwater reservoir or part thereof **Declined Excessively**?  
 Yes  No If yes, explain: Water level declines in this part of the Deschutes regional aquifer are approaching 25 feet total.
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- B4. Groundwater levels **do NOT meet the definition of Reasonably Stable Groundwater Levels** (including insufficient data):  
 Yes  No If yes, explain: There are six long-term observation wells within 4 miles that have similar water level elevations. One well does not pass the rate-of-decline definition of Reasonably Stable Groundwater Levels. DESC 1957 is located 1850 feet from the proposed POA and meets the definition of RSGL.
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- B5. Will the total requested rate of groundwater allocation **exceed what is obtainable by the expected yield of the well(s)** proposed in the application given best available information?  
 Yes  No If yes, explain: \_\_\_\_\_
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- B6. There is the **Potential for Substantial Interference** with surface water (if yes, list nearest or likely most-impacted stream)  
 Yes  No If yes, explain: Per OAR 690-505-0600(1) the Department has determined that ground water appropriations within the Deschutes Ground Water Study Area have the potential for substantial interference with surface water rights.
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- B7. 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 **State Scenic Waterway**.  
 Yes  No If yes, explain: OAR 690-505-0600 states that “ground water appropriations within the Deschutes Ground Water Study Area...will measurably reduce scenic waterway flows as defined in OAR 380-835...”.
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- B8. **Proposed Permit Conditions: If a permit is issued, include:**
- Condition 7B (Interference Condition): Drought permits are junior to existing water rights and are subject to regulation**
- Condition 7P (Well Tag): If there is no existing OWRD Well ID Tag on the well, one shall be attached**
- Large Water Use Reporting Condition: totalizing flowmeter and reporting required. Include condition that “the readings must be reported to the Department by December 31, 2026.”**
- Special Condition - Regulation: “Groundwater pumping under this permit shall discontinue or be reduced if area wells with permanent primary and/or supplemental groundwater rights are being regulated off due to groundwater level decline or interference with senior water rights unless the Department determines no action is necessary (pumping under this permit can continue) because the groundwater resource can sustain continued groundwater pumping without causing substantial interference with senior water rights.”**
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- Special Condition – Static Water Level Measurement Access: The permittee shall allow Department staff, upon reasonable notice, to access the permitted well(s) during the period of use to take static water level measurements to monitor the impact of use on the resource. To ensure accurate measurements, the permittee may be required to stop use of the well for up to 24 hours before a water level measurement.**
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- Special Condition – Dedicated Measuring Tube - If the applicant is constructing one or more new wells for this requested use, the well(s) with shall be equipped with a minimum 3/4-inch diameter, unobstructed, dedicated measuring tube pursuant to figure 200-5 in OAR 690-200.**
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B9. **References Used:**

Gannett, M. W., Lite Jr, K. E., Morgan, D. S., and Collins, C. A., 2001, Ground-Water Hydrology of the Upper Deschutes Basin, Oregon, USGS Water-Resources Investigations Report 00-4162, 74 p., <https://pubs.usgs.gov/wri/wri004162/pdf/WRIR004162.pdf>

Lite, K. E. and Gannett, M. W., 2002, Geologic Framework of the Regional Ground-Water Flow System in the Upper Deschutes Basin, Oregon. USGS Water-Resources Investigation Report 02-4015, 44 p., <https://pubs.er.usgs.gov/publication/wri024015>

Gannett, M. W. and Lite, K. E., 2004, Simulation of Regional Ground-Water Flow in the Upper Deschutes Basin, Oregon, USGS Water Resources Investigation Report 2003-4195, 84 p., <https://pubs.er.usgs.gov/publication/wri034195>

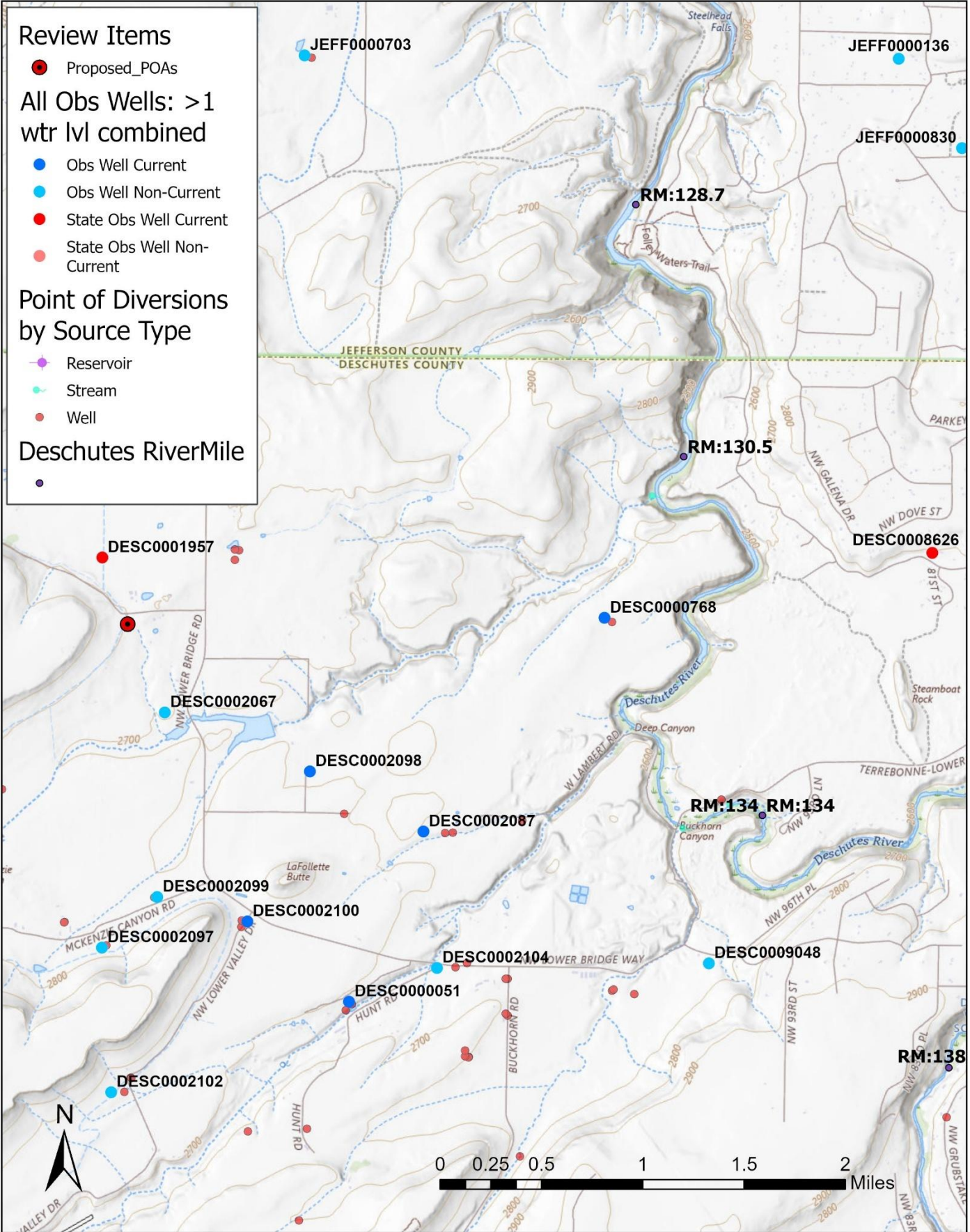
Gannett, M.W., Lite, K.E., Jr., Risley, J.C., Pischel, E.M., and La Marche, J.L., 2017, Simulation of groundwater and surface-water flow in the upper Deschutes Basin, Oregon: U.S. Geological Survey Scientific Investigations Report 2017-5097, 68 p., <https://doi.org/10.3133/sir20175097>.

Sherrod, D. R., Taylor, E. M., Ferns, M. L., Scott, W. E., Conrey, R. M. and Smith, G. A., 2004, Geologic Map of the Bend 30-x-60-Minute Quadrangle, Central Oregon. U. S. Geological Survey Geologic Investigations Series Map I-2683. 49p., <https://pubs.usgs.gov/imap/i2683/>

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# Well Location Map



Water-Level Measurements in Nearby Wells

