

# PROTEST

**PROTEST FEE PAID**

\$15.00 22-02253

Fee Rec'd BY: ONLINE

April 27, 2022

Protestant: Ed Andrechak  
c/o Conserve Southwest Utah  
321 N Mall Dr., B202  
St. George, UT 84790

RE: Protest of Water Right Application 81-5491

Please see attached PDF for the reasons for protesting the above application.

Conserve Southwest Utah

Enclosure

**RECEIVED**

**APR 27 2022**

**WATER RIGHTS**

**ONLINE**

**SCANNED**

April 27, 2022

Teresa Wilhelmsen, P.E.  
Utah State Engineer  
Utah Division of Water Rights

**RE: Protest to Application to Appropriate A83170**

**I. Introduction**

As a regional non-profit working to protect the public interest and welfare in Washington County, Conserve Southwest Utah (CSU) submits this protest with regards to **Application A83170**.

Utah Code 73-3-8 (1)(a), states:

It shall be the duty of the state engineer to approve an application if there is reason to believe that: (i) for an application to appropriate, there is unappropriated water in the proposed source; (ii) the proposed use will not impair existing rights or interfere with the more beneficial use of the water; (iii) the proposed plan: (A) is physically and economically feasible, [...]; and (B) would not prove detrimental to the public welfare[...].

In accordance with Utah Code, for the reasons stated below, the Utah State Engineer must deny Application A83170.

**II. Substantive Issues for Protest**

**A. Hydrologic Connection Uncertainty**

Withdrawing ground water supply at a rate beyond the reasonably anticipated average rate of future natural recharge poses substantial risks to water availability and rights. Understanding the hydrologic connection with respect to the aquifers at issue informs each element under the 73-3-8 (1)(a) analysis. Some critical areas to improve understanding include, among others: whether the basin-fill and alluvial aquifer and deeper aquifers are in any way hydrologically connected; whether withdrawal will cause a cone of depression impacting hydrologically connected sources; and whether there is a hydrologic connection between surface and ground water (including the Virgin and Colorado Rivers).

Currently, there remains high uncertainty about the disposition and function of the aquifers at issue, and the applicant has failed to produce sufficient data and models to simplify

the hydrologic system into its salient characteristic so that the important functions and behaviors of the system can be assessed sufficient to comport with the requirements under 73-3-8 (1)(a). Until the applicant produces an uncertainty assessment and improved understanding and reliability of the model forecasts, the Utah State Engineer must deny Application A83170.

### **B. Water Availability for Appropriation**

Utah Code 73-3-8 (1)(a)(i) requires that water be available for appropriation. The reports submitted by applicants punctuate the scarcity of data regarding Aquifers C and R. There is no clear answer as to whether there is enough water to support the 12,900 AF per year withdrawal, especially when contemplating pumping rate sustainably over time. In fact, information is lacking with regards to what is the actual technical basis for 12,900 AF in the absence of any exploratory well in the proposed well field area at the depths of Aquifers C and R.

This quantity issue is inextricably tied to the hydrologic connectivity issue. On the one hand, if there is no hydrologic connection, then water depletion is inevitable and the withdrawal is unsustainable. On the other hand, if there is a hydrologic connection, then the extent and source needs to be further understood before withdrawal occurs to prevent a myriad of issues regarding hydrologically connected groundwater level decline.

With respect to groundwater quality, contamination limits the availability of groundwater for potable water. The question arises concerning whether the groundwater quality is brackish, briny, or otherwise in need of significant treatment. If the groundwater sources and surface water are hydrologically connected, drilling and withdrawal may lead to the contamination of hydrologically connected (previously uncontaminated) sources. Water availability in terms of both quantity and quality is uncertain, and concerns regarding both water right holders and the public welfare are compelling to prevent this current application from approval.

### **C. Water Rights Injury**

Utah Code 73-3-8 (1)(a)(ii) requires that the proposed use will not impair existing rights or interfere with the more beneficial use of the water. The proposed wells are located in Area 81, which has been fully appropriated by the Division of Water Rights. Regardless of whether the aquifers at issue are deemed not part of Area 81 full appropriation, if the aquifers at issue are hydrologically connected with other fully appropriated sources, withdrawals would most likely

result in a cone of depression and otherwise impair nearby existing rights. Water right holders and the public interest and welfare alike will benefit from an improved understanding of this groundwater source before this application is approved.

### **III. Conclusion**

For the reasons stated above, and in accordance with Utah Code, the Utah State Engineer must at this time deny Application A83170.

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