PROTEST (LATE)

PROTEST FEE PAID

\$15.00 23-05224

Fee Rec'd BY: ONLINE

November 1, 2023

Protestant: Living Rivers, Great Basin Water Network

PO Box 466 Moab, UT 84532

RE: Protest of Water Right Application (LATE) 92-695

NOV 01 2023 WATER RIGHTS

ONLINE

RECEIVED

A hearing is requested.

Please see the attached protest and consider that the proposed points of diversion in Grand County were not publicly noticed in Grand County.

Living Rivers, Great Basin Water Network

Enclosure

OFFICE OF THE STATE ENGINEER DIVISION OF WATER RIGHTS STATE OF UTAH

In the Matter of Water Right: 92-695 | PROTEST AND REQUEST FOR (A83862) | HEARING

November 1, 2023

INTRODUCTION

Living Rivers & Colorado Riverkeeper and Great Basin Water Network hereby submit a timely PROTEST and request for a HEARING, pursuant to Utah Code Ann. §73-3-7, regarding application to appropriate water, as stated above.

APPLICANT

The applicant is Blackstone Minerals, LLC (a subsidiary of Anson Resources) and located at 712 Proud Eagle Lane; Las Vegas, NV. 89144.

The administrative record for this application is located at: https://www.waterrights.utah.gov/asp-apps/wrprint/wrprint.asp?wrnum=92-695.

The purpose of the application is to extract lithium at depth (about 10,000 feet) from the underlying Pennsylvanian Paradox Formation, which consists of gypsum, anhydrite, and salt, interbedded with shale, sandstone, and limestone. The application is for 19 cfs from six points of diversion.

The location of the facilities are near the City of Green River, Utah, and the counties affected by this development are Grand, Emery and other downstream communities throughout the Colorado River watershed.

PUBLIC NOTICE

The points of diversions are in Grand County, Utah, yet no public notice was issued for the citizens of Grand County to read in its newspaper of record, which is the Times-Independent. For this reason, we were unable to file this protest on time. Consequently, we ask the State Engineer to accept this protest letter as valid and timely.

STANDING OF PROTESTANTS

Living Rivers, Colorado Riverkeeper is a public interest, non-profit organizations dedicated to the restoration of Colorado River Basin ecosystems that are presently damaged by excessive diversions, dams and pollution. Fifty percent of the base flows for the Colorado River main stem are provided by groundwater flows. Our cumulative stakeholder position includes owning whitewater boats and other regulatory equipment, patrolling our designated river corridors, initiating citizen science and education programs on the river, applying for whitewater rafting permits, and safely executing multi-day river rafting expeditions. Many of our members are employed by licensed outfitters as professional river guides and possess current certifications. The office of our organization is located in the Upper Basin state of Utah and in Grand County. Our members reside in all seven states of the Colorado River Basin. Members and staff are "persons interested" for the purposes of Utah Code Ann. §73-3-7.

Great Basin Water Network is a 501(c)(3) organization representing staff, board members, water users, residents and others in Utah who are intrinsically connected to the resources in the vicinity of the proposed points of diversion. We are "persons interested" per §73-3-7. GBWN also represents downstream users of the Colorado River who believe the application could harm existing rights and impact the public welfare in violation of §73-3-8.

THE APPLICATION DOES NOT COMPLY WITH 73-3-8(1)(a)(i) BECAUSE THERE IS NOT WATER AVAILABLE AND DOES NOT COMPLY WITH 73-3-8(1)(a)(ii) BECAUSE THE APPLICATION WILL CONFLICT WITH EXISTING RIGHTS. THEREFORE, THE APPLICATION DOES NOT COMPLY WITH 73-3-8(1)(a)(iii)(B).

The proposed points of diversion are in Water Rights Area 92 and would ultimately be siphoning water from the Green River. The State Engineer's website offers a detailed explanation for appropriations in this Water Rights Area:

The water resources of this area are considered to be limited. New appropriations are limited to small amounts of beneficial use sufficient to serve the domestic requirements of one family, the irrigation of one acre, and ten head of livestock (or equivalent livestock units). New diversions and consumptive uses that require more water than this must be accomplished by filing a change application on valid existing water rights owned or acquired by the applicant...¹

The applicant attests that its appropriation will be non-consumptive. However, the applicant makes no attempt at showing how its appropriations would not consume 19 cfs, leaving us to believe that a need for water would require consumptive uses and significant scrutiny by the Office of the State Engineer. Therefore the application is deficient and must be denied.

The Water Rights Area 92 page also explains the additional regulatory oversight that's necessary for an appropriation at this location:

¹ Utah Division of Water Rights. Water Rights Area 92 Web Page (Last Updated 2002). https://waterrights.utah.-gov/wrinfo/policy/wrareas/area92.asp



Because this area is part of the Colorado River basin, the conditions of the 1922 Colorado River Compact, the 1944 Mexican Treaty and the 1948 Upper Colorado River Compact and the <u>State Engineer's Colorado River Policy</u> apply. Applications to appropriate or change water are subject to conditions dealing with <u>Green River Endangered Species Protection</u>.²

The Green River system and the Colorado River System are over-allocated and over-appropriated, meaning that there is not sufficient water available to grant the application.³

There is nothing in the application that demonstrates the applicant meets the standards outlined on the Water Rights Area 92 page. Also, according to the Division of Water Rights' Colorado River Policy, the applicant is not in compliance with the State Engineer's in-house criteria regarding this important Colorado River tributary system.⁴ Moreover, the application does not comply with the Colorado River Storage Project because it will jeopardize existing water rights. Therefore, the application must be denied.

In summary, due to the application's many deficiencies, the proposed water right, 92-695, is not in the public welfare and must be denied.

THE APPLICATION DOES NOT COMPLY WITH 73-3-8(1)(b) BECAUSE OF INFORMATION AVAILABLE TO THE STATE ENGINEER:

The availability of water in the Green River and Colorado River system is significantly lower than what is on paper. In the past three years, the federal government has declared multiple shortage declarations on the beleaguered river system. That trend is likely to continue in coming years.⁵ The issues of scarcity are well known to the State Engineer and the Division of Water Rights. Therefore, an applicant must make extraordinary efforts to demonstrate availability for the lifespan of its project. Indeed, the onus in this case is on the applicant to demonstrate availability in a system that is recognized globally as being in a severe crisis of over-appropriation.

The State Engineer has the authority via 73-3-8-(1)(b) to withhold any approval of an application of this kind. The hydrology in the Colorado River System and its tributaries like the Green River demonstrate that any appropriation — especially one of 19 cfs per year — warrants significant caution and investigation of existing literature by the State Engineer. It is reasonable to believe that the likelihood of conflict with this provision in Chapter 73 is high.

² Id

³ Schmidt, J. C., Yackulic, C. B., & Kuhn, E. (2023). The Colorado River water crisis: Its origin and the future. WIREs Water, e1672. https://doi.org/10.1002/wat2.1672

⁴ Utah Division of Water Rights. Memorandum of Water Appropriation Policy, Colorado River Drainage. (Revised: February 25, 2009). https://waterrights.utah.gov/wrinfo/policy/wrareas/colorado.asp

⁵ Supra at 3

THE APPLICATION DOES NOT COMPLY WITH 73-3-8(1)(a)(v) BECAUSE IT IS SPECULATIVE:

The applicant's plan submitted to the Division of Water Rights is a speculative attempt at receiving a water rights permit because the proposed points of diversion are not qualified in the places of use in the application. We do not know where the applicant will drill for brine, drill for freshwater for processing, and drill for re-injection.

Moreover, the applicant is throwing spaghetti at the wall and seeing what sticks in the region via multiple companies. The company has yet to receive meaningful and significant permit approvals to begin its regional effort in a way that would provide a return on investment to its shareholders.

- 1. A-1 Lithium Incorporated Mineral Exploration Project, DOI-BLM-UT-Y010-2021-0068-EA.⁶ And the A1 Applications filed under Water Right Number 01-1233 within the Utah Division of Water Rights.
- 2. The applicant's sister or parent company is likely to file change applications regarding water right 95-434.⁷ Any change application for these water rights would be related to waters in a different Water Rights Area.

Lastly, the applicant is, in effect, proposing a Direct Lithium Extraction (DLE) project. DLE involves using chemical, physical, and/or electric processes to selectively extract lithium ions from brine. DLE is seen as environmentally favorable to traditional lithium brine extraction, which is usually done via evaporation, in part because it theoretically will consume less water. However, that has yet to play out in practice. DLE has never been developed at commercial scale, and as such DLE technologies still need to be considered speculative.

A recent paper in the journal *Nature Reviews*⁸ found that most DLE technologies analyzed had some freshwater consumption, and a quarter of those analyzed consume more freshwater per ton of lithium carbonate than even evaporation methods. The paper also found that, for the technological processes surveyed, the lithium concentration in the processed brine still is not enough to directly crystallize lithium salts, and will require supplemental evaporation, resulting in more water consumption.

In a recent analysis prepared by the BLM, the agency concluded that a different but similar two-well lithium brine extraction project—also proposed by a Blackstone Minerals subsidiary—

⁸ Vera, M.L., Torres, W.R., Galli, C.I. et al. Environmental impact of direct lithium extraction from brines. Nat Rev Earth Environ 4, 149–165 (2023). https://doi.org/10.1038/s43017-022-00387-5



⁶ Additional information available at https://eplanning.blm.gov/eplanning-ui/project/2014014/510.

⁷ Staff Report. Anson Resources Secures Water Rights for Paradox Lithium Project in Utah. NS Resources. January 23, 2023. https://www.nsenergybusiness.com/news/anson-secures-water-rights-for-paradox-lithium-project/

in this same region of Utah would consume at least 24,190 gallons for the drilling process alone.9

There are no existing DLE projects in the United States. In fact, the only comparable example we have is another water rights application. In 2021, 3PL Operating Inc. applied for 101,400 acre-feet per year of water from Railroad Valley in Nevada (Basin 173B)3 for a DLE project and stated that their project would consume 18% of the appropriation, or some 18,500 acre feet per year.

Based on this information, we believe assertions that Blackstone Minerals will employ a zero-consumption DLE process to be highly speculative and unsupported by the evidence.

CONCLUSION

We appreciate the State Engineer's office for its consideration of this protest. Please electronically and physically send all correspondence to John Weisheit and Kyle Roerink.

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⁹ Bureau of Land Mgmt., A1 Lithium Incorporated Mineral Exploration Project, DOI-BLM-UT-Y010-2021-0068-EA, at 20 tbl. 6 (Sept. 2023), available at https://eplanning.blm.gov/public_projects/ 2014014/200525822/20083379/250089561/21-0068-EA_A1%20Lithium_Mineral%20Exploration%20Project_Updated20230726_highlighted.pdf.