EXPLANATORY TO APPLICATION TO DRILL A NON-PRODUCTION WELL IN COLLINSTON

March 15, 2022

RE.: Change Application a48040 (29-4812)

Teressa Wilhelmsen, P.E., State Engineer
c/o Will Atkin, P.E., Regional Engineer

Dear Madam and Sir,

This letter serves to provide background and justification for our request to drill a non-production well (NPW) in Collinston, Utah, at the site of the well proposed under Change Application a48040 (29-4812) (Proposed Well).

On June 7, 2000, the State Engineer approved segregated application 29-4020 (A71402a), in the name of Bear River Water Conservancy District (District) for 5.0 cfs OR 2500 acre-feet per year from two proposed well locations near Deweyville, Utah. The District has developed and/or is actively developing portions of this water right under additional segregated water right numbers including: 29-4020, 29-4703, 29-4741, and 29-4812.

The District has been purchasing surplus water from Deweyville Town since 2015 for use within the District's Collinston Water System. This system currently provides water to connections in Collinston, to Ukon Water Company, Tremonton City, Cedar Ridge Subdivision, and others. In January of 2020, the District and Deweyville entered into an updated "Water Facilities and Source Agreement" which allows the District to divert up to 250 acre-feet of water per year from any of Deweyville's sources, for use within the service area of the District. Change Application a45391 (29-4020) was approved December 3, 2020 to divert up to 250 acre-feet of water from the wells and springs owned and operated by Deweyville. However, less than two years later, on September 2, 2021, Deweyville provided the District with the required two-year notice of cancellation of the agreement, citing drought conditions. A copy of this notice has previously been submitted to the State Engineer under this application.

Change Application a46389 (29-4741) was approved on January 31, 2022 to divert up to 250 acre-feet of water per year from a well owned by the District at the mouth of Flat Canyon in Deweyville. This well is located approximately 1.3 miles south of the District's existing connection to Deweyville's water system. It is anticipated that Change Application a46389 will take the place of Change Application a45391 (29-4020) if the District cannot renegotiate with Deweyville for the use of Change Application a45391.

Change Application a48040 (29-4812) was filed on October 29, 2021 to divert up to 500 acre-feet of water per year from a well proposed to be drilled in Collinston on property owned by the District. This change application was later reduced to 210 acre-feet of water per year based on estimated recharge to the immediate area. This water is needed to supplement the existing

supply and to provide additional water to meet current and future contracts and obligations that the District has to supply water to Collinston and the surrounding areas.

Several local water right owners have protested Change Application a48040, which remains unapproved. A hearing has not been scheduled or held for the application. The District desires to drill a non-production well at this site in support of Change Application a48040 in order to provide the District, the State Engineer, and the protestants data regarding the quantity and quality of water drawn from the deep aquifer.

Drilling of the NPW will be combined with standard production well development and limited test pumping with monitoring to determine the impacts of the well on the surrounding ground and surface water sources, including the water rights owned by the protestants. The District believes this is a logical and useful step in the change application process and aligns with previous decisions issued by the State Engineer in the Collinston Area. The NPW application is based on the following facts and logic:

1. For a number of years, the District has been evaluating sources of water in the Collinston area that would allow the District to fulfill its obligations to supply water for current and future needs. The District has investigated water rights 29-1633, 29-3567, and 29-4623 (unapproved), as well as wells drilled within and for the Bear Hollow Subdivision. None of these sources have proven to be capable of meeting the District's needs in the Collinston area.
2. Based on this series of evaluations and efforts, the District believes that Change Application a48040 is the best option to develop additional water for the Collinston area.
3. The District has gathered available hydrogeologic data for the Collinston area and has developed a reliable characterization of the aquifer at the location of the Proposed Well. Hydrogeologic data for the area suggests that production of the aquifer and corresponding impacts are directly proportional to the depth of screened areas available at the site of the Proposed Well. It is important to discover what screened depths or lengths are needed so the District can more completely characterize the aquifer and accurately assess impacts to surrounding water sources. Gathering this data from the Proposed Well will allow the District to identify and distinguish between impacts to and impairment of other water rights, including what water rights require just compensation or adequate mitigation for the approval of Change Application a48040.
4. The data derived from the Proposed Well will help reduce uncertainty regarding the characterization of the aquifer and the impacts a production well may have, thereby decreasing conflicts over Change Application a48040.
5. The District has demonstrated successful outcomes following a pattern of test pumping and monitoring in the following applications:
   a. Change Application a45391 (29-4020): For this change application to use Deweyville's sources of water, the District presented pumping and monitoring data at the protest hearing. The State Engineer subsequently approved the application.
   b. 29-4225 (A75402): Protested application to appropriate water in the Harper Ward Area that the State Engineer approved with specific monitoring

requirements. The test well was drilled last year. This year, monitoring devices are being installed for Harper Spring Pond prior to test pumping.
     c. Change Application a46389 (29-4741): Non-protested change application that raised concerns about local interference. A test well was constructed. The well was developed and test pumped, with the resulting data supplied to the State Engineer in a report. The application was then approved.
  6. The District has received funding from multiple sources to be used specifically for development of a well and water right under Change Application a48040.

In summary, the District has the means and ability to drill a non-production well at the site of the proposed well under Change Application a48040. The District is willing to do so at its sole risk and expense in order to provide information that will be valuable to the protestants, the State Engineer, and the District. The District requests 14 months, from June 1, 2022 through July 31, 2023, to drill, develop, and pump the well while monitoring nearby ground and surface water sources as allowed by water right and property owners.

The District understands that approval of this request to drill a NPW does not constitute approval to beneficially use water from the Proposed Well, nor does it grant or guarantee approval of Change Application a48040. The District desires to be transparent throughout this process, including the open sharing of data gathered from the NPW. However, we expect at least some protestants will question the District's motives in drilling the NPW.

The District asks the State Engineer to approve our non-production well application request and to grant us the requested timeframe to develop and test pump the Proposed Well. We also request that the State Engineer hold Change Application a48040 until the requested timeframe lapses and the data has been gathered and distributed to the State Engineer and the protestants.

Thank you for considering our request.

Sincerely,

Carl W. Mackley, P.E.

Carl W. Mackley, P.E., General Manager