

MEMORANDUM

DATE: 5/6/2026
FROM: Brian Wunsch, Senior Water Resource Agent
TO: Memo to File
RE: BRBA Claim 11-7051

Domestic and stock water use: The stock water use was not described separately on the license. Instead, it was described as a component of the domestic use. The licensed domestic use POU is the same as the irrigation POU. The stock water POU is being recommended as described in a phone conversation with the claimant.

The license describes the domestic use for 2 homes. Only one home is recorded by the county assessor and visible within the claim POU. This house built in 2022 has replaced the two mobile homes that were described on the license. The recommended domestic POU is around the existing house. This information was confirmed during a phone conversation with the claimant.

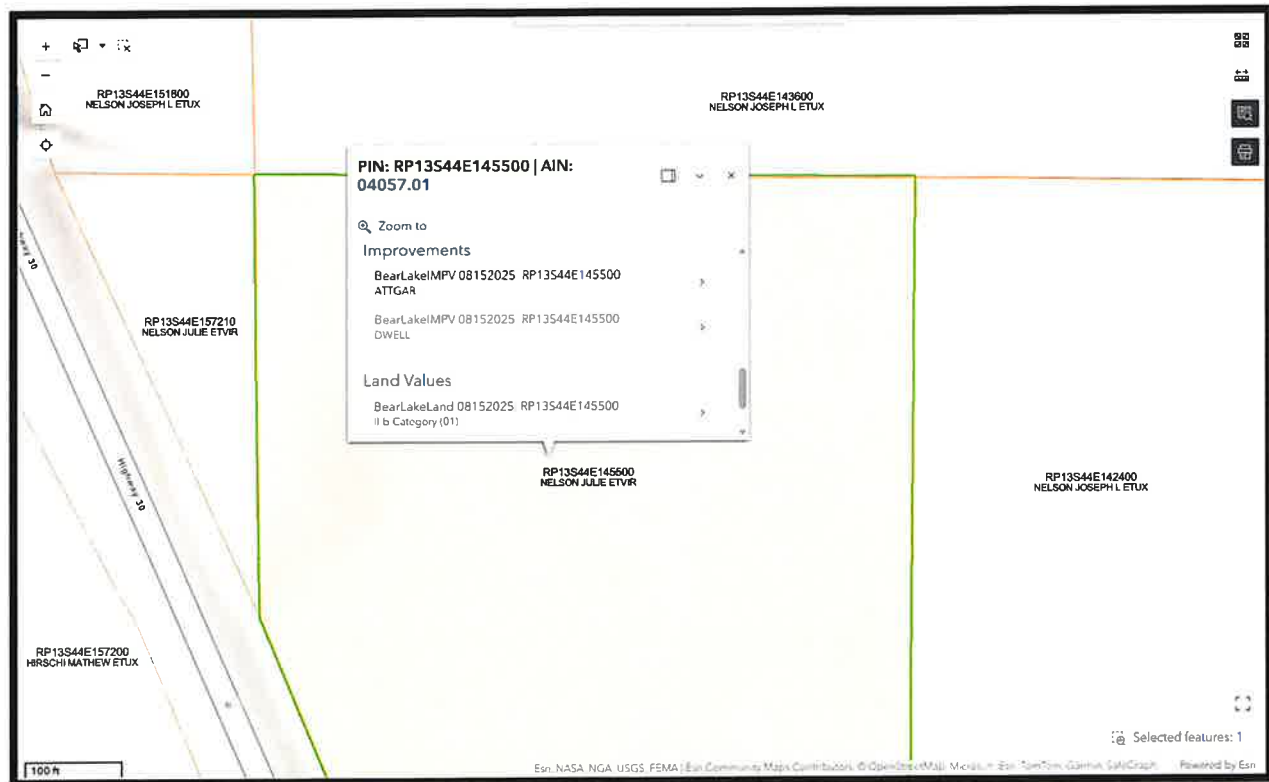
Domestic and stock quantity: The recommended domestic volume component is being reduced by 1.2 afa (one home). The diversion rate assigned to the domestic + stock water use was licensed separately from the irrigation diversion rate. Department standard rates were used to total the 0.08 cfs licensed. The recommended rate for domestic use for one home is 0.04 cfs.

The recommended diversion rate for the stock water use for 200 head of cattle is .04 cfs, as claimed.

The recommended volume for the stock water use is equal to the remaining volume allocated to the licensed domestic use.

These recommendations more accurately describe the use and are not in excess of the total licensed amount.

Irrigation POU: The POU shape being recommended is based on aerial imagery at the time of recommendation. The PLSS and aerial imagery layers are out of alignment when viewed in GIS software. The legal descriptions recommended will not reflect this inconsistency. The total acreage found to be irrigated is 205 acres. This is within the 5% margin of error, so the full 206 acre POU is being recommended.



Source: Bear Lake County Tax Parcel Viewer

Date Retrieved: 3/18/2026

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (59.0 \text{ Acres Irrigated}) \times (3.5 \text{ Irrigation Requirement}) = 206.5 \text{ acre-feet}$$

$$V_{DR} = [\text{Diversion Rate } 0.61 \text{ (cfs)}] \times (200 \text{ Days in Irrigation season}) \times 1.9835 = 242.0 \text{ acre-feet}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 206.5 \text{ acre-feet}$$

2. Volume Calculations for Other Uses:

Domestic use is for 2 homes and for 70 head of range cattle.

0.6 acre-feet for in-house use + 0.6 for ½ acre irrigation of lawn and garden.

12.0 gallons per day per head of range cattle.

$$1.2 \text{ af} \times 2 \text{ homes} = 2.4 \text{ af}$$

$$\frac{70 \text{ head} \times 365 \text{ days} \times 12.0 \text{ gal.}}{325850 \text{ gal./af}} = 0.90 \text{ af}$$

$$325850 \text{ gal./af}$$

$$2.4 \text{ af} + 0.90 \text{ af} = 3.30 \text{ af}$$

G. NARRATIVE/REMARKS/COMMENTS

Two pumps from the same well are used to divert water for irrigation and domestic purposes. A 75 hp pump diverts water to eight wheel lines. At the time of measurement only six wheel lines were in operation.

The domestic use under this right is for two mobile homes and 70 head of range cattle. A smaller pump is used to divert water to the two mobile homes and to five stock water troughs. The smaller pump was not present at the time of the field exam. No cows were on site during exam. Five stock water troughs are used to water cattle. At the time of the exam no mobile homes were on site. However, water delivery infrastructure for mobile homes still exists.

Source: 11-7051 Beneficial Use Field Report