

Stock Use

The source of water claimed is springs tributary to sinks. Using NHD and DRG data and aerial imagery, these springs are in fact tributary to the Bear River. The recommendation will reflect this.

Review of aerial imagery covering the claimed POU and POD's consistently shows all three earthen embankments from as early as 5/15/1966 (Image 1). The two images available prior to this in 6/25/1953 (Image 2) and 7/17/1947 (Image 3) do not clearly show all three embankments: only the lower two. From 5/15/1966 on to present day imagery on 7/23/2024 (Image 4), three embankments clearly exist. Because of this, an accomplished transfer of POD to add the northernmost POD will be recommended.

On 9/4/2012 (Image 5), the northernmost embankment begins to erode from the west end where the overflow around the embankment is occurring. By 7/23/2024, the embankment is completely washed out, and the spring flow has reverted to its natural state. Whether this is a recurring issue or not, the stock water use here has remained consistent.

The middle embankment lies directly perpendicular to a stream channel. The amount of water impounded behind it varies from year to year in review of aerial imagery. The vegetation upstream shows a pattern of manmade influence. The water does not appear to flow around one side of the embankment; instead, a culvert must allow the water to pass through the middle. In the 9/4/2012 image, it becomes clear that there is a bridge crossing over this stream as a part of the embankment. By 10/12/2022 (Image 6), this middle embankment has also been breached and washed out to the north. Cattle can be seen accessing the water near the two northernmost embankments throughout several years of aerial imagery.

The southernmost embankment has not changed throughout the review of available aerial imagery. It has pushed the water north out of its natural channel.

I am comfortable recommending a diverted stock water use with a priority date of 12/31/1949, as supported by aerial imagery and the claimant's personal knowledge in the supplied affidavit.

During the initial claim filing, the number of stock claimed was 500 sheep and 400 cattle. The affidavit supplied after the claim was filed describes 2500 sheep, 120 horses, 150 beef, and 1100 cattle. The claim fee paid does not include the variable fee for making a historical determination of stock water use. This also means that the stock water portion of the claimed use cannot exceed 13,000 gpd. If the total number of stock described on the affidavit is used, the use will exceed 13,000 gpd.

The recommendation will only include the number and kind of stock filed on the claim form, as the affidavit answered the question about all-time historical use. The quantity of cfs for stock water will be recommended as claimed, as it is the department standard rate for this number and kind of stock.

Irrigation Use

It is unclear how the earthen embankments aid in the irrigation of any land across the claimed POU. The description of diversion works says that the dams disperse water across the meadows. For the entire 147 acre claim POU to be irrigated, there would need to be more substantial irrigation infrastructure. This POU is naturally wet, as seen on aerial imagery and the NHD and DRG data. If the impoundments were not in place, would the vegetation across the POU look any different? The irrigation benefit that the embankments provide is not convincing. Furthermore, this POU is irrigated primarily by shares in the Preston Montpelier Irrigation Company, as stated in the claim. The actual irrigated acres map provided by Preston Montpelier Irrigation Company completely covers the claimed POU. I do not have enough supporting evidence to recommend an irrigation use from this claim.

Aerial Imagery



Image 1. Source: USGS Earth Explorer.



JUNE 25 1953

Image 2. Source: USGS Earth Explorer.



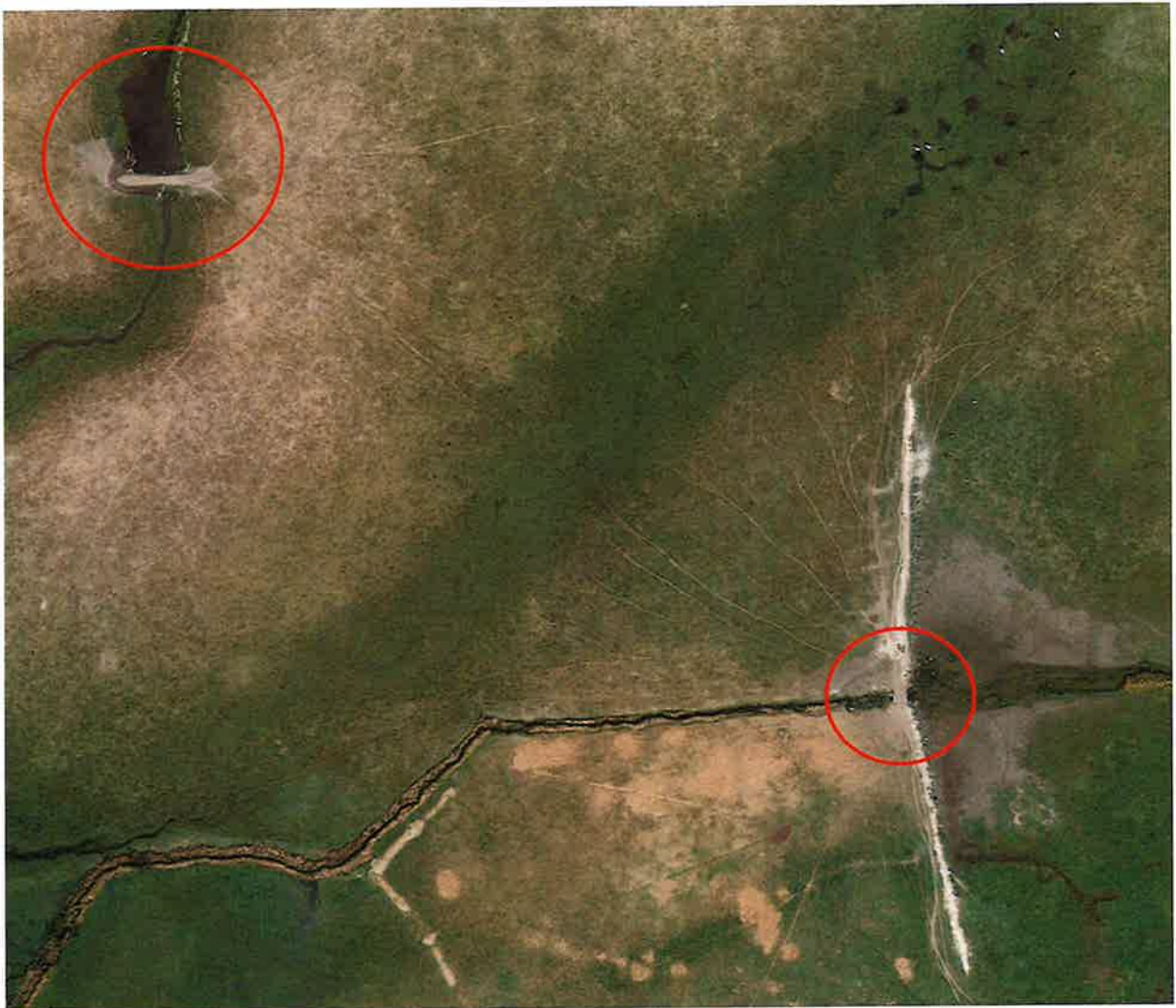
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Image 3. Source: USGS Earth Explorer.



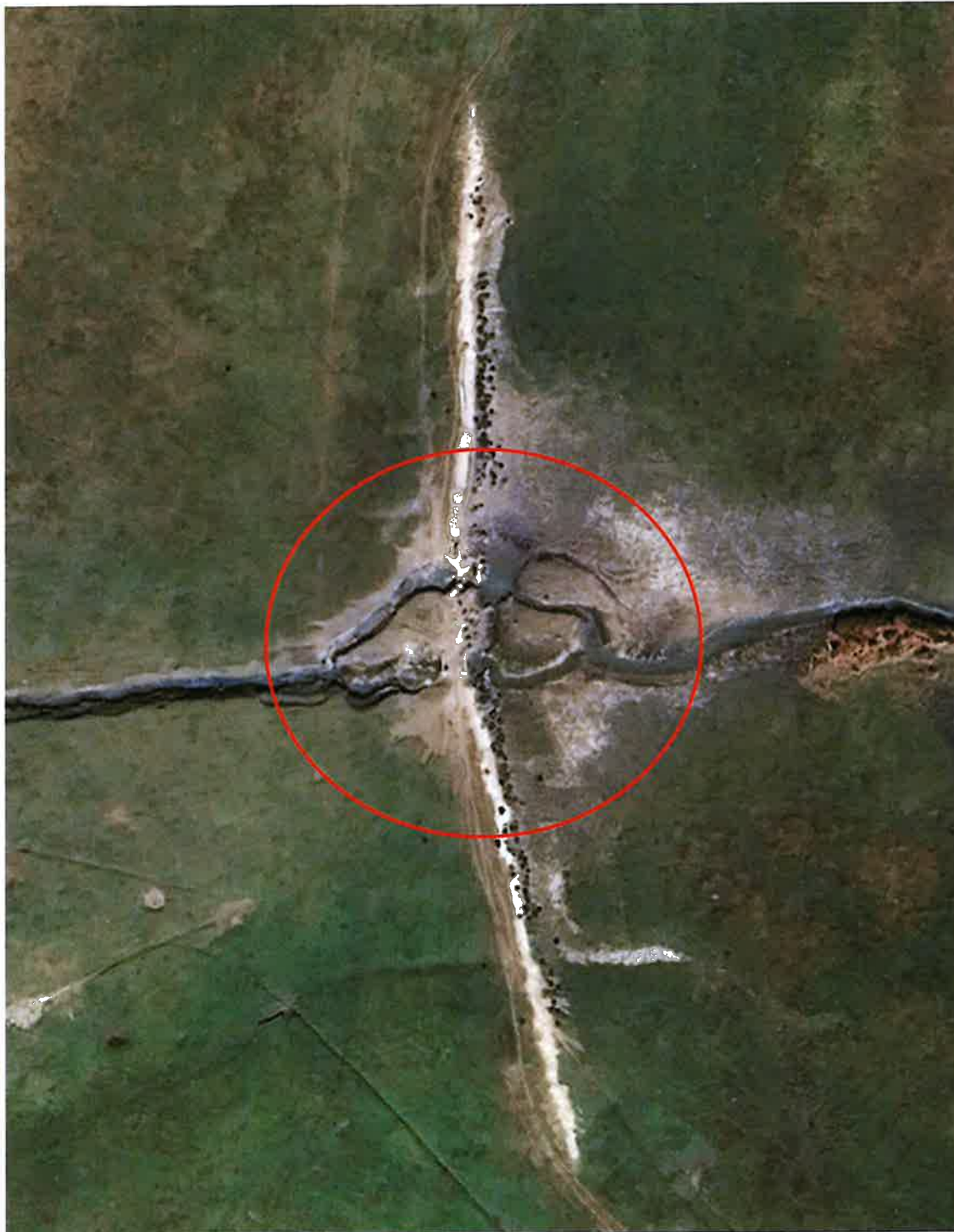
Imagery Date: 7/23/2024

Image 4. Source: Google Earth.



Imagery Date: 9/4/2012

Image 5. Source: Google Earth.



Imagery Date: 10/12/2022

Image 6. Source: Google Earth.