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M E M O
September 24, 2021

TO: Johnsville Board of Directors

FROM: Daniel B. Bastian, District Engineer

RE: Drain Gallery Report (relates to the ongoing USFS Special Use Permit)

Melissa Sheets received an email from Evelyn Breedlove, Acting Recreation Mgmt Specialist for the US Forest Service, Plumas National Forest, Beckwourth Ranger District on September 2, 2021, which stated:

*"I think the most important things is to see if you can scrounge up any additional information pertaining to the maintenance and upkeep of the water transmission lines in the previous years. Are there any old photos, or reports? I need to make sure that everything is up and running as it's supposed to before renewing. Obviously I don't expect anyone to be digging up a buried line or anything, **but I do think that walking the lines in their entirety is important.** I still am wondering about if the lines are transporting the water correctly since there is a little creek running parallel to the pipes." (Emphasis added).*

Shortly after this email, John LaTourette reached out to me about this request and asked if I had any ideas. Between my discussions with Melissa & Barry Sheets, I felt that the best approach to moving this renewal application along would be to visit the site and provide the Board with a recommendation for JPUD's response to the USFS.

On September 16, 2021, I was given permission to visit the site as USA lands were closed to public use. I observed the two diversion structures as noted on Exhibit A and cleaned the screens to better observe the catchment basin. I did not see anything notable that would affect their function or performance.

The catchment basins are fed spring water from surface channel(s). The ends of the drain galley are visible and show very little water flow. I estimate that more than 95% of the water entering the catchment basins is surface water.

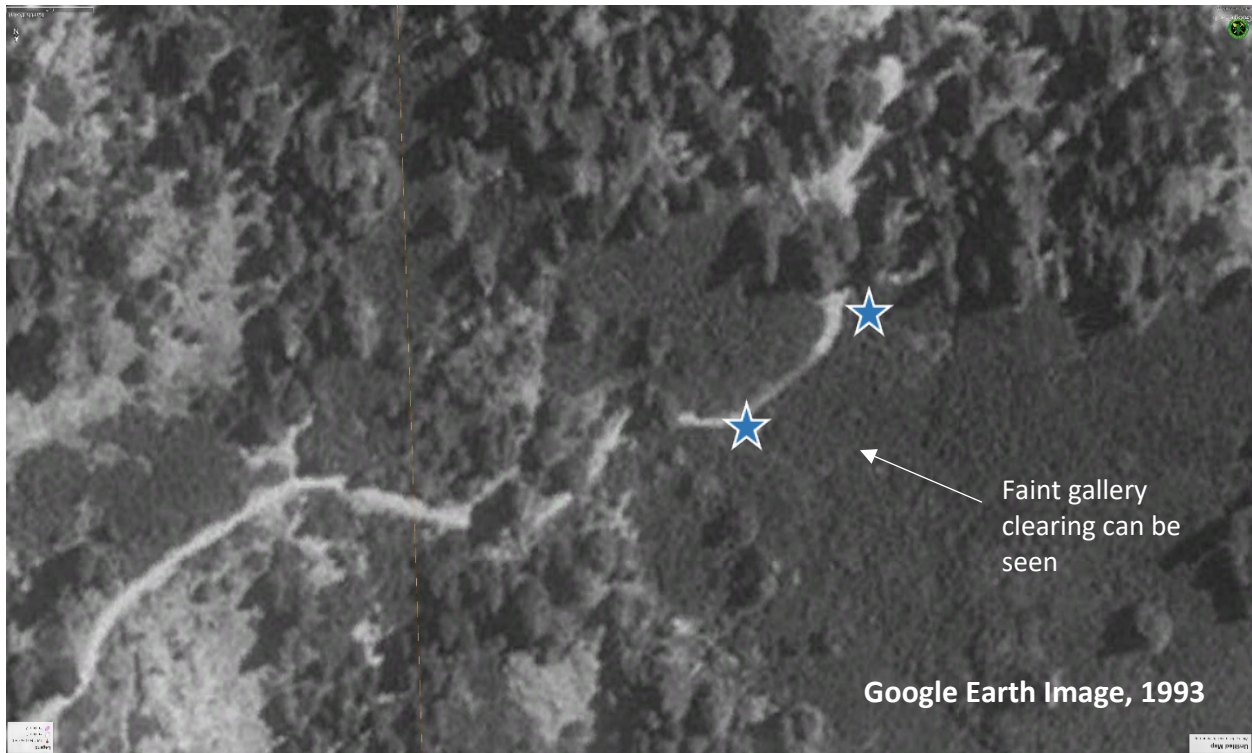
I endeavored to crawl my way through the brush to observe the springs and possible drainage gallery clearing (which was constructed in 1983). I was unsuccessful due to the density of the vegetation.

I sent a drone up to take an overhead photograph to see if there might be an

alternate way in. The photo is attached below, and I highlighted the existing diversion structure locations with a star symbol.



There is no apparent access to the drain gallery through the dense vegetation. By way of reference, the Google Earth 1993 historical file image for the same area is shown on the next page. On close inspection, the 1983 drain gallery clearing can be seen, as noted.



RECOMMENDATION

The drain gallery is nonfunctioning and should be abandoned in place. The drain's useful purpose no longer exists as the district's water is treated to the current state standards, regardless of whether the source is surface or from the subsurface drain gallery. There is no benefit to JPUD or the USFS to rehabilitate the system.

I recommend that the district approach Evelyn Breedlove of the USFS and indicate that the drain gallery is nonfunctioning, is not needed, and the drain gallery should be excluded from the Special Use Permit.