Friday June 20, 2025

Protect Our Water Jackson Hole

Kim Pierson - Forest Supervisor
% Jay Pence - Teton Basin District Ranger
Caribou Targhee National Forest
1405 Hollipark Drive
Idaho Falls, ID 83401

Submitted online at https://cara.fs2c.usda.gov/Public/CommentInput?Project=58258
Re: Grand Targhee 2018 Master Development Plan Projects #58258

Dear Forest Supervisor Pierson,

On behalf of Protect Our Water Jackson Hole (POWJH), we are grateful for the opportunity to present the following comments on the Grand Targhee Resort (GTR) Master Development Plan Draft Environmental Impact Statement (DEIS). POWJH is a nonprofit organization dedicated to serving as a powerful advocate and catalyst to protect and restore Teton County's water resources. Teton County is home to the Snake River Fine-spotted Cutthroat Trout, the most National Wild and Scenic River miles of any county in the U.S., and comprises much of the Source Area for the Eastern Snake River Plain Aquifer. Our county is also home to several impaired streams and contaminated drinking water for many residents, phenomena that indicate a stressed relationship with our water resources.

The deep snowpack that replenishes our watershed has also allowed for the ski and snowboard industry to thrive in the Tetons. However, given the changing management context and condition of our water resources, we must remain cognizant of water overuse and changing water quality. Due to the nature of the DEIS and its potential to negatively impact water resources, POWJH would like to offer the following comments for your consideration:

1- POWJH does not approve of Alternatives 2, 4, and 5.

GTR does not make an adequate case for expanding their Special Use Permit (SUP) in claiming that "GTR has identified a need to: Provide additional undeveloped, minimally maintained lift-served terrain and additional traditionally cleared alpine trails to enhance terrain variety and skiing experiences at GTR." (Section 1.3.1, p. 3)

On a ski resort spread across 2,602 acres of the Teton Range, GTR currently serves a third of the clientele that Jackson Hole Mountain Resort (JHMR) serves, on a SUP that is already 100 acres larger than JHMR's 2,500 acres. There's no physical need for such an expansion into public lands and vulnerable wildlife habitat, just a marketing interest, which is neither "in the public interest nor appropriate."

2- Water quantity and management concerns for Upper Snake River watersheds are mounting.

The October 2022 moratorium issued by the Director of the Idaho Department of Water Resources essentially states that surface waters and groundwater within Upper Snake River watersheds are fully appropriated except for a few limited circumstances. Does the approval of new consumptive uses (the portion of diverted water not returned to the watershed) of water for these proposed Projects align with broader water management goals for Idaho and Wyoming? This complex topic is growing in importance and requires further study and discussion. We recommend that the Forest Service coordinate with water managers from both states to clarify potential impacts to downstream water users and ensure compliance with existing water rights obligations.

3- The public lacks adequate information from which to evaluate the impacts of Alternative 3.

The DEIS describes potential impacts to groundwater and surface water. It also alludes to possible solutions for wastewater management and expanded snowmaking. However, the document fails to connect the dots regarding risks to drinking water contamination and omits critical details about groundwater resources, wastewater management, development monitoring and best management practices (BMP) enforcement.

3.1- What are the true risks to downstream drinking water supplies?

Section 3.15.3 of the DEIS describes how groundwater flow has been changing in/around the GTR area for decades due to increasing groundwater withdrawals and highlights the vulnerability of nearby drinking water systems. On p. 340 it states:

"(The 2022 map prepared by Rendezvous Engineering) shows the water table sloping west, 33 percent steeper than shown on the 1964 map. This is due to many private and municipal wells being drilled in the Targhee Towne area. The new wells started to dewater the aquifer below the mouth of Teton Canyon, which has in turn lowered the water table to the west and steepened the water table contours as compared to the 1960s."

This section goes on to describe the area's many distinct hydrogeologic formations and brings specific focus to Bighorn Dolomite:

"The recharge zone of the Bighorn Dolomite occurs in two places, a narrow outcrop east of GTR on very steep slopes and cliffs and in a 2,000-foot-long stretch of lower Papoose Creek, which drains the southern portion of the existing SUP area which is served by the Peaked Lift. A possible discharge point for the Bighorn Dolomite is Alta Spring, which lies 0.7 miles west of lower Papoose Creek. This spring provides water to the community of Alta, Wyoming and has the potential to impact the Alta Community Water System. In previous high rain events, Alta Spring has experienced high turbidity levels as water moves through the Papoose Creek watershed and over the Bighorn Dolomite. Given the large cavities, the Bighorn Dolomite does not filter water as effectively, and thus turbid water at Alta Spring can occur."

The DEIS makes clear that groundwater is already being affected by well withdrawals and that the nature of the area's unique geology can result in amplified transport of surficial contaminants to critical drinking water supplies. In Section 2.5.4, the DEIS appears to recognize these points but fails to connect community complaints, hydrogeology, and the likelihood for further drinking water contamination. On p. 55 it states:

"During the scoping period, issues were raised by members of the public about the potential deterioration of water quality in the communities downstream of GTR (e.g., Alta, Driggs, Victor and surrounding farms) resulting from ski area projects there, although no specific element of GTR's operation was identified as the cause behind water quality deterioration. As such, potential alternatives were discussed but ultimately eliminated from inclusion in the proposal because it was not clear that any particular alternative would respond directly to the issues that were raised."

Acknowledging a problem does not solve it. Residents downstream of the GTR SUP have already seen their water degraded by upstream construction and development, and their concerns went unaddressed. The Draft Hydrology Technical Report (p. 5-6) reinforces the susceptible hydrological situation described above:

"These areas are characterized by springs and underground caves, so the hydrogeology can be vulnerable to contamination due to runoff being primarily transported through subsurface channels. However, with the large distance between the possible nutrient contamination and the downstream public water systems (PWS), the nutrients would likely be taken up by the plants, air, natural bacteria, and soil with which it interacts and then be converted to different forms of nitrates and phosphates that are not threats to water quality and are considered part of the natural nitrogen and phosphorus cycles. Therefore, the likelihood of nutrient contamination being a threat to water quality downstream of the GTR existing and proposed expansion areas is low."

It's reasonable to conclude that development within the existing SUP was once the source of the downstream well contamination, recognized on p. 55 of the DEIS, and will be again. Recognizing that the risk of contamination is higher because of the area's karst geology, and then claiming the risk is lower because of distance, is a direct contradiction. It's the caves and channels in karst geology that make distance less relevant. Furthermore, no tracer study was conducted to determine vulnerability of downstream drinking water systems. Moreover, the DEIS addresses PWS but ignores the abundance of private wells or springs used for drinking water by many households in the area, which lack the protections and reporting requirements for public water systems.

3.2 Can extensive impacts to the Aquatic Influence Zone be avoided?

The 1997 Revised Forest Plan for Targhee National Forest describes the Aquatic Influence Zone (AIZ) as surface waters, wetlands, and riparian areas that provide unique functions and values to hydrologic, geomorphic, and ecological processes controlling aquatic and riparian ecosystem health and function. Table 3.16-6 in the DEIS denotes 158.12 acres of cumulative impacts to the AIZ. Any construction and ground disturbance activities are likely to increase sedimentation, nutrient loading, water temperatures and mobilization of contaminants such as PFAS,

microplastics and hydrocarbons. Rather than impacting these areas first and then mitigating afterwards (which fulfills CWA requirements for “no net loss” but does not make up for the realized loss of ecosystem services offered by existing ecosystems), we recommend avoiding impacts to the AIZ wherever possible. This is the best way of upholding the Fisheries, Water, and Riparian Resources Goals laid out in the 1997 Plan.

3.3 How will any development impacts be monitored and/or BMP’s enforced?

The DEIS does not include details pertaining to enforcement mechanisms for BMP implementation or monitoring. Given the risks of surface water and groundwater contamination from nutrients, sediment, and other pollutants mobilized by ground-disturbance activities associated with the DEIS proposed actions, we recommend that the Forest Service and GTR prepare a robust water quality monitoring plan containing specific thresholds for assessing project impacts and clear guidelines for any resultant response actions and public reporting. If downstream waters are being impacted how will those impacts be identified? How will the public know about it? What will be done to remedy the situation?

3.4 How will expanded snowmaking impact groundwater supplies?

The DEIS calls for an additional 57 acres of snowmaking at GTR. By our calculations, adding two feet of snow to 57 acres would require an additional 20 to 23 million gallons of groundwater per year (enough to supply about 200 homes with domestic water for that same span). The DEIS does not determine what the net consumptive loss of groundwater would result from this activity, but peer-reviewed studies have shown that snowmaking can result in 6-30% water loss (Grünewald & Wolfsperger, 2019). Concerning potential impacts to groundwater, the "Hydrology Technical Report" offers this tantalizing but elusive information:

GEO-HAZ Consulting prepared a technical report, "Impacts on Groundwater from the Proposed 2021 Expansion, Grand Targhee Resort, Teton County, Wyoming" which effectively addresses sufficiency of water determination as required by FSH 2709.11, Chapter 50. This report summarizes water usage required for culinary use and snowmaking and compares these uses to two existing and two proposed groundwater wells.

This report is not available online, in the DEIS, or the Hydrology Technical Report. A FOIA inquiry was denied (for lack of such a report). A request to GEO-HAZ for the report received no response. How can the public evaluate impacts from proposed new snowmaking activities (in addition to proposed new domestic water uses) without this report?

3.5 How will wastewater be managed?

GTR proposes adding on-mountain wastewater treatment facilities, though details of those facilities are unspecified. The DEIS also describes the underlying geology for the SUP area on p.341:

"The other threat to water quality is nutrient loading and contamination to the nearby PWSfrom the proposed wastewater treatment for on-mountain facilities. The City of Driggs PWS, along with the Alta Community Pipeline, are approximately 4.5 miles from the proposed wastewater treatment plants. As stated under the Groundwater Flow heading, the project area lies on Karst topography, which is composed of soluble rocks like limestone. Additionally, these areas are characterized by springs and underground caves in which the hydrogeology can be vulnerable to contamination due to runoff being transported through subsurface channels."

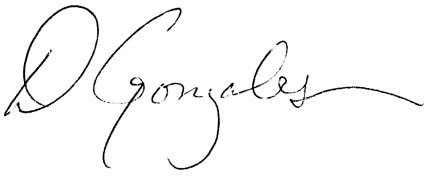
This is not the right area for septic tanks and leach fields. In spring 2025, the Bridger Teton National Forest approved JHMR's request to add sewer lines to on-mountain facilities and pipe wastewater to the Teton Village Wastewater Treatment Plant. GTR should follow this example and pipe any wastewater off the mountain and to their centralized treatment plant (WYPDES permit No. WY0024708).

Given the tremendous importance and fragility of water resources in the Tetons, it's crucial that large-scale development and construction projects located in the upper reaches of our watershed be thoroughly researched, communicated, reviewed, agreed upon, and monitored. In light of the comments presented in this letter, POWJH does not approve of Alternatives 2, 3, 4, or 5 at this time.

The public deserves sufficient and clearly communicated information from which to adequately review significant, resource-altering projects on public lands. We appreciate the diligence of the Forest Service in making these difficult decisions. We look forward to continuing to work together on projects that protect and restore our water resources. Thank you for the opportunity to offer our perspective.

Sincerely,

Matthew Bambach
Water Resources Program Manager



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