



October 24, 2022

*Submitted via electronic mail to:* [planning@gallatin.mt.gov](mailto:planning@gallatin.mt.gov)

Gallatin County Planning Department  
Ms. Regan Fruh, County Planer  
311 W. Main St #108  
Bozeman, MT 59715

Re: Comment in Opposition to Hyalite Creek Major Subdivision Preliminary Plat Application and Urging Denial As-Proposed

Dear Gallatin County Planning Department:

Upper Missouri Waterkeeper submits this letter in opposition to the proposed Hyalite Creek Major Subdivision Preliminary Plat (hereinafter the "Subdivision"). As outlined herein the County's evaluation of this subdivision is lacking material data and/or an adequate analysis in several critical water resource aspects. At the same time data provided to support the preliminary plat application by the applicant is deficient or misleading and unable to provide the County a sound evidentiary basis to approve the plat application. These unresolved issues individually and in the aggregate provide a clear basis for the County to deny the requested application as-proposed.

### **About Us**

Upper Missouri Waterkeeper (hereinafter 'Waterkeeper') is a 501(c)3 not-for-profit membership-based advocacy organization that defends fishable, swimmable, drinkable water, promotes sound land use, and supports community health throughout the 25,000 sq. miles of southwest and west-central Montana's Upper Missouri River Basin. Gallatin County is centrally located within our geographic focus and we have a particular focus of identifying new development in this region that threaten disproportionate, negative impacts on local water resources.

Our staff collectively possess over 20 years of professional experience and scientific expertise in natural resources management, water rights, water quality protection, and government decisionmaking. Our members and supporters live, recreate, work, and enjoy the natural resources and unique outdoors heritage of this river basin, many of which reside within Gallatin County. Our comments here are written on the organization's and our members' behalf to inform Gallatin County decisionmaking on a proposal which has the potential to cause or contribute to potentially significantly negative effects on the local environment.

### **Subdivision Review Requirements**

The Subdivision and Platting Act provides authority to Counties, and rules under MCA 76-3-501 require, among other things, that county decisions avoid subdivision "that would involve **unnecessary environmental degradation** and danger of injury to health, safety, or

welfare by reason of natural hazard, including but not limited to fire and wildland fire, or the **lack of water**, drainage, access, transportation..." (emphasis added).

The Subdivision Act requires that the applicant prepare a detailed environmental assessment as part of the application package. Among several items, this application must include "a summary of the probably impacts of the proposed subdivision based on the criteria described in 76-3-608."

Then, in reviewing a subdivision, the County must itself evaluate many of the specific elements and impacts arising out of a development proposal, including but not limited to the "specific, documentable, and clearly defined impact on agriculture, agricultural water user facilities, local services, the natural environment, wildlife, wildlife habitat, and public health and safety..."

Waterkeeper has identified several shortcomings in the application, and the Planning Staff's review of the Hyalite Creek Major Subdivision in Gallatin County.

### **The Subdivision Unlawfully Relies on Aggregated Exempt Wells**

The developer is proposing the use of 16x "exempt" domestic groundwater wells at 10 ac/ft-yr each, for a total of 160 ac/ft-yr, to address criteria concerning water supplies and usage under the Montana Subdivision and Platting Act. To be clear, the applicant's and county's reliance on exempt wells to supply the Subdivision as-proposed is misplaced and unlawful.

The Water Use Act allows for exempt groundwater appropriations without a permit as long as the well is "35 gallons a minute or less, and does not exceed 10 ac/ft a year, except that a combined appropriation from the same source by two or more wells or developed springs exceed 10 ac/ft, regardless of flow rate, requires a permit." Thus, all subdivisions that create one or more parcels under 20 acres in size are limited to a single exempt well appropriation with a total, maximum depletion of 10 acre-feet/year from a single source, and anything additional requires a water rights permit. *See also Clark Fork Coalition v. Tubbs*, 2016 MT 229 at ¶ 24; MCA § 85-2-306; ARM 36.12.101(12); 2016 DNRC Combined Appropriations Guidance.

The applicant attempts to evade this limitation on exempt wells by aggregating several wells within the Subdivision. But nothing in the statutory or regulatory framework permits a subdivision to avoid the exempt well issue simply by aggregating wells of a project. As explained in the definition of combined appropriation, as long as the water is from the same source, the "wells and springs need not be developed simultaneously." ARM 36.12.101(12).

The DNRC's email correspondence in the record does not, as suggested by the staff packet, provide any confirmation of legal rights to the purported 160 ac/ft-yr of exempt domestic wells. Rather, the plain language of DNRC's email correspondence explicitly states that the Subdivision relies explicitly on the use of "controversial" exempt wells, and that no analysis has been done by DNRC to confirm the legal availability of water supplies as-proposed.

The County has an independent legal obligation under the Montana Subdivision and Platting Act to evaluate the impacts of the entire subdivision as-proposed on the aquifer, the water table, and water availability. Well withdrawals develop a cone of depression, particularly in shallow groundwater such as beneath the Subdivision, and the potential for adverse impacts of the cumulative impact of 16 exempt wells could be far reaching off the subdivision property to

potentially impact existing wells or nearby surface water and wetlands, such as nearby Hyalite Creek.

The staff report provides no evaluation whatsoever of the adequacy of the water supply of potential impacts to other users. The county should obtain a qualified third party independent study of the aquifer to determine the number of wells the aquifer can sustain without adversely impacts nearby existing domestic and irrigation wells, any impacts to Hyalite Creek, as well as the wells of each resident in that subdivision. Without sufficient, detailed information, a clear identification of potential impacts and mitigation measures, both the developer's evaluation and the County staff report are seriously lacking and have the potential for harm to existing landowners' water availability, to Hyalite Creek, and to far-reaching areas off-site. The developer's application materials fail to adequately address these issues under the law.

The applicant's intent to rely solely on exempt wells unreasonably construe the law, DNRC rules, and binding Montana Supreme Court precedent to support its application. The County should not blindly take the applicant at its word that it has the legal right to sufficient water supply for the Subdivision, particularly given the DNRC email correspondence admits that no evaluation of legal availability has been performed, and the only uncontested fact at-hand is that the proposed Subdivision is attempting to aggregate more than a dozen exempt wells for water supply within the administratively closed Upper Missouri River Basin.

The Commission and Gallatin County Planning Department cannot reasonably find that water supplies are available for the proposed project based on a lay reading of the law, the application, or supplemental information and public comment. On the basis of speculative water availability alone and in the interests of sound public policy conserving finite water resources, the Commission should deny the preliminary plat application.

### **Sanitation and Water Quality Issues**

As numerous studies have shown, there is a clear link between exempt well approval and individual septic development, as this development proposal demonstrates. In turn, individual septic systems are large contributors to water degradation in many Montana river valleys.

The developer relies on conclusory statements that because existing residences on surrounding properties utilize septic systems, soil and groundwater conditions are suitable for the proposed wastewater treatment and disposal systems. Available science and testimony, especially from the Gallatin Local Water Quality District, fail to support this statement.

Examination of local soil data shows that underlying cobble-soils are likely highly-transmissive in allowing the rapid movement of subsurface water. In addition, the local water table is quite high, anywhere from 20'-100' feet below surface, and public testimony has confirmed a broad sampling of nearby property owners within the same hydrologic subwatershed are already experiencing groundwater level depletion in their private wells, requiring re-drilling to deeper depths. The presence of shallow groundwater, highly-transmissive subsurface soils, and geographically nearby Hyalite Creek, including its floodplain, suggest that the Hyalite Creek Major Subdivision is not well-suited for the use of individual septic systems.

Indeed, the use of proposed individual septic systems will likely exacerbate existing, already concerning, water quality challenges. The causal relationship between septic systems and downgradient water quality degradation is well-established in scientific literature, known in

Montana, and should not be casually dismissed by the Commission.<sup>1</sup> Best available science from the Montana DEQ in the form of its numeric nutrient criteria<sup>2</sup> for wadeable streams indicate that the trigger level for potential negative nutrient pollution impacts to a downgradient surface water like Hyalite Creek exist at this Subdivision.

Traditional individual septic systems only remove approximately 50% of nitrogen wastes, and usually discharge concentrations of approximately 30-50 mg/L total nitrogen. By way of contrast nearby Hyalite Creek, which is potentially hydrologically connected to shallow groundwater underlying the Subdivision (a helpful evaluation that neither Staff nor the applicant has performed) possesses a water quality standard of .3 mg/L total nitrogen under rules set by the Montana Dept. of Environmental Quality. In short, protecting local water quality in Hyalite Creek would require more than 100x more stringent treatment levels than that offered by a traditional level one individual septic system.

The record also fails to note the already degraded health of nearby Hyalite Creek. This waterway is already listed as "impaired" for excessive contributions of nutrient pollution (the same pollutants that will be discharged by the proposed individual septic systems), yet a discussion of this issue or the propensity of the Subdivision to exacerbate this water quality challenge is completely absent from the developer's or staff materials. Nearly 10 years ago the Montana DEQ and the federal EPA recognized that subsurface wastewater treatment and disposal from septic systems and sprawl development within the lower Gallatin Valley and Hyalite Creek subwatershed were contributing to unhealth local water quality conditions.<sup>3</sup>

If it is approved at all, this Subdivision should be required to use readily available, advanced wastewater treatment alternatives, including potentially a centralized community wastewater treatment system with advanced treatment capabilities. Record evidence, including comments from the Local Water Quality District, corroborate publicly available data from the Montana Bureau of Mines and Geology indicating existing groundwater quality is already unnaturally elevated by nutrient pollution linked to existing development patterns. Although groundwater quality has not exceeded the human health criterion of 10 mg/L total nitrogen, the concentration at which human health is directly at-risk, available water quality data indicates a steady increase in nitrogen concentrations marching steadily upwards towards 10 mg/L. As decisionmakers with the unique authority to condition local development project's water quality impacts, the County should not ignore the Hyalite Creek Subdivision's likelihood to exacerbate negative water quality trends, and at a minimum should require further investigation and analysis of how the Subdivision may affect local ground and surface water quality.

The developer's application materials and Staff Report fail to contain or discuss these salient natural resource issues, despite the fact that the Montana Subdivision and Platting Act

---

<sup>1</sup> Suplee, M.W., and V. Watson, 2013, Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers—Update 1, *and addendums*. Helena, MT: Montana Dept. of Environmental Quality, available online at: <http://deq.mt.gov/wqinfo/standards/NumericNutrientCriteria.mcp> ; Tri-State Water Quality Council, "Septic System Impacts on Surface Water", A Review for the Inland Northwest, 2005, available online at: <https://clarkfork.org/wp-content/uploads/2016/03/septic-system-impact-surface-waters-2005.pdf>

<sup>2</sup> Montana Numeric Nutrient Criteria, Circular 12-A, available online: [https://deq.mt.gov/files/Water/WQPB/Standards/PDF/NutrientRules/CircularDEQ12A\\_July2014\\_FINAL.pdf](https://deq.mt.gov/files/Water/WQPB/Standards/PDF/NutrientRules/CircularDEQ12A_July2014_FINAL.pdf)

<sup>3</sup> See "[Lower Gallatin Planning Areas TMDLs & Framework Water Quality Improvement Plan](#)" Section 6.0 at 6-24.

requires their specific evaluation. Similar to the procedural flaws discussed above as regards groundwater availability, the application and Staff Report lack the water quality investigation and data necessary to reasonably evaluating the development's potential impacts on the natural environment.

Last but not least, the proposed Subdivision entails lawn and fertilizer practices, yet fails to adequately assess the runoff potential or impacts that use of herbicides or pesticides would have on local water quality, including adsorption into local shallow groundwater. The scale of another major subdivision, including one with the irregular density proposed at 1-ac or less scale lots, represents a significant change in land use that may incite, or exacerbate, negative consequences for local water quality, not the least of which is chronic new pollution inputs from stormwater, lawn care practices/fertilizers, pesticides, and herbicides. Given the landscape at-hand both on the subdivision property and adjacent regions contains shallow groundwater and is nearby to sensitive surface water resources in Hyalite Creek, there should be a thorough assessment of how irrigation practices and lawn care may affect local water quality.

## **Conclusion**

The application and staff reports fail to consider or evaluate several significant impacts. In particular, the proposed major subdivision has the potential to adversely impact local wells, aquifer and groundwater connectivity and availability, and add wastewater pollution to sensitive local water resources. Unless and until these issues are adequately assessed the preliminary plat application continues to be deficient and non-compliant with the Subdivision Act.

For these reasons we urge the Commission to deny the Hyalite Creek Major Subdivision's request for preliminary plat authorization.

Respectfully submitted-



Guy Alsentzer  
Executive Director  
24 S. Willson Ave, ste. 6-7  
Bozeman, MT 59715  
T: 406.570.2202  
[Guy@UpperMissouriWaterkeeper.org](mailto:Guy@UpperMissouriWaterkeeper.org)  
[www.UpperMissouriWaterkeeper.org](http://www.UpperMissouriWaterkeeper.org)