

of surface water within the Bitterroot Valley. The legal demand for surface water exceeds the physical availability of the surface water for several months of the year (Figure 8).

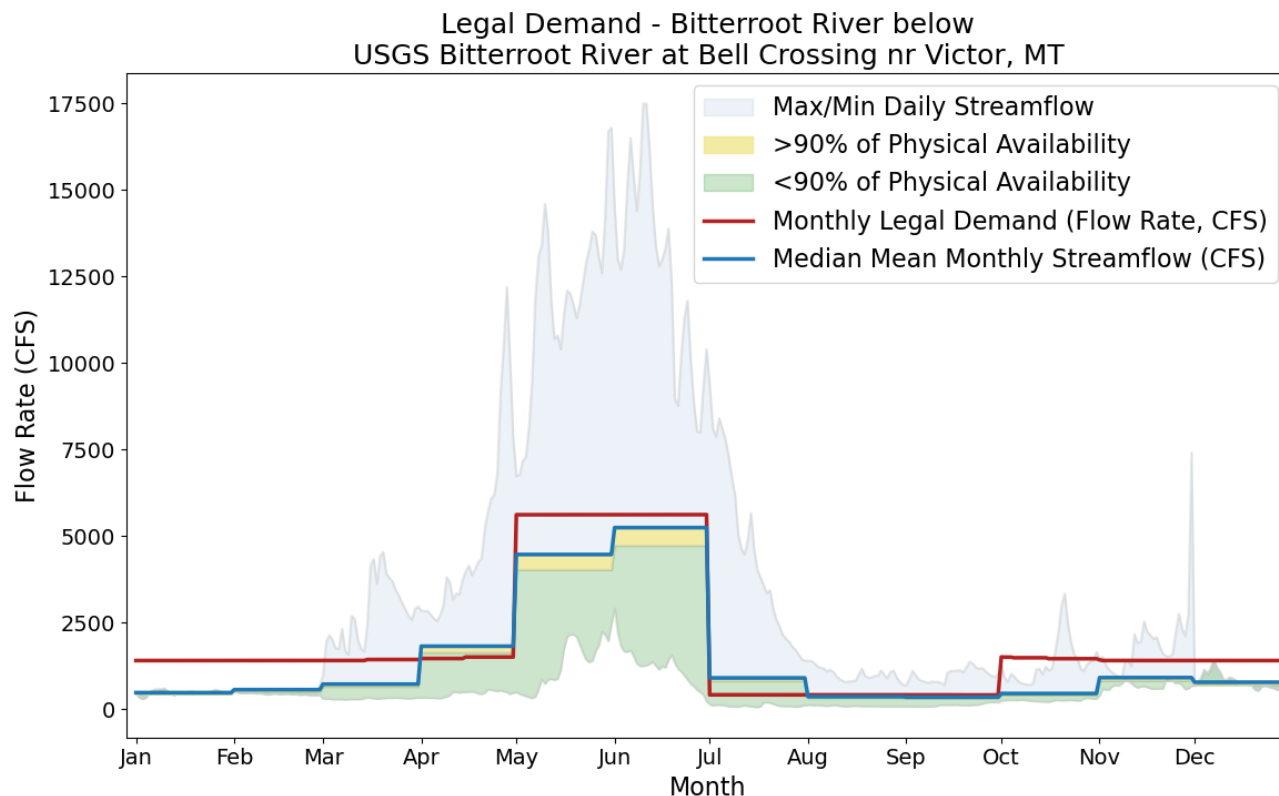


Figure 8. Physical availability and legal demand of surface water on the Bitterroot River.

Conclusion and Recommendation

1. Physical criteria are not suspected to be a problem in the Bitterroot Valley Aquifer based on previous hydrologic studies that have been conducted throughout the aquifer.
2. There is a large concentration of exempt well use in the Bitterroot Valley Aquifer, especially in concentrated pockets near population centers throughout the aquifer.
3. Groundwater in the Bitterroot Valley Aquifer is connected to surface water of The Bitterroot River which is a tributary of the Clark Fork River.
4. Surface water in the Bitterroot River is over appropriated, and any further exempt groundwater use would deplete surface water causing an adverse effect to senior water right holders.
5. DNRC recommends designation of the Bitterroot Valley Aquifer as an aquifer closure area.