

**Conditional Use Permit Application
Intended Use Description
Jackson Springs Water Treatment Plant
Raw Water Pump Station**

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The City of Rapid City is in the process of finalizing the design for the Jackson Springs Water Treatment Plant which will be constructed at 5200 Cleghorn Canyon Road. A component of this facility will be the construction of a Raw Water Pump Station on the parcel identified in the attached Exhibit A.

The function of the Raw Water Pump Station will be to take water from Rapid Creek and/or the Jackson Springs Gallery and pump the water to the Jackson Springs Water Treatment Plant. The Raw Water Pump Station will be a 2633 square foot single story building of masonry construction. Water from Rapid Creek and/or the Jackson Springs Gallery will flow by gravity to a wet well located below the Raw Water Pump Station. The Raw Water Pump Station will house six pumps which will extend into the wet well. Three of the pumps will pump the water collected from Rapid Creek and three of the pumps will pump water from the Jackson Springs Gallery.

The design production capacity of the Jackson Springs Water Treatment Plant is 8 million gallons per day (MGD) and the maximum production capacity is 10 MGD. Three of the Raw Water Pump Station pumps, in any combination, will be capable of providing the maximum production capacity for the plant.

The Raw Water Pump Station will contain interconnecting piping and valves necessary to transport the water to the Jackson Springs Water Treatment Plant. The Raw Water Pump Station will also contain a MCC Room which will house the electrical and control components necessary to operate the pumps and control valves.

After construction, the initial start up and the facility "shakedown" it is anticipated the Raw Water Pump Station will operate 24 hours a day 365 days per year. The facility will be visited at least once per day by a water production operator who will check the equipment and ensure the facility is functioning properly. Additional operators will be at the site to conduct scheduled or emergency maintenance as required.

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**Rapid City Growth
Management Department**