



TO: Mayor and Council
 FROM: Water Conservation and Drought Management Advisory Board
 DATE: June 18, 2019

On May 14th at the City Council Workshop, the Moab Water Conservation and Drought Management Advisory Board (Water Advisory Board) was asked to work with the City Engineer to provide information regarding water availability to the Mayor and City Council. Based on discussions with the City Engineer, Chuck Williams, the Water Advisory Board submits the following information regarding the amount of water currently accessible to the City of Moab and what may be assumed for the future.

All of the culinary water available to the City, at present, is groundwater. This groundwater comes to us from the Glen Canyon Aquifer by way of the City's springs and wells. In recent years, the City has used about 2200 acre feet of that water annually.

Ken Kolm Report: Water Volume, High and Low Estimates-- Current Use		
CURRENTLY AVAILABLE WATER	Low Estimate	High Estimate
Estimated total volume of water available in Mill Creek & Glen Canyon Aquifer	9172 acre feet	11050 acre feet
Estimated Surface Water	5317 acre feet	5317 acre feet
ESTIMATED GROUNDWATER AVAILABLE	3855 acre feet	5733 acre feet

The Future

The Environmental Protection Agency estimates that April snowpack has reduced in the La Sal Mountains over the past 60 years by 20 percent. If that same reduction rate continues into the future the water volume available for use can be anticipated to be lower by at least that amount.

Ken Kolm Report: Water Volume, High and Low Estimates-- Use for 2060		
ANTICIPATED AVAILABLE WATER IN 40 YEARS	Low estimated use	High estimated use
Estimated total volume of water available in Mill Creek & Glen Canyon Aquifer	7337 acre feet	9126 acre feet
Estimated Surface Water	5317 acre feet	5317 acre feet
ESTIMATED GROUNDWATER AVAILABLE	2020 acre feet	3809 acre feet

The Kolm report shows that currently approximately 4,600 acre-feet is available (average of high and low estimates). In 40 years, the average falls to about 3,000 AF.

Why does this matter?

Groundwater is the easy-to-access (inexpensive) water available in the Valley. City water use is groundwater, and the rights associated with it are also groundwater rights. Surface water (water flowing in Mill Creek) is potentially useable, but at significant cost. In addition, shifting to using surface rights would require a change in the point of diversion, and Spanish Valley is currently closed to further allocation of surface water rights. Finally, extraction of groundwater from critical locations linked to the Glen Canyon Aquifer upstream of the City springs and wells could reduce both ground and surface water available in the system.

Further, the San Juan Spanish Valley Special Services District (SJSVSSD) recently drilled a well on the fringe of the upper part of the Glen Canyon Aquifer reportedly producing 400 gallons per minute, or approximately 646 acre feet a year; SJSVSSD holds a 500 acre foot water right. The impact of this production on the water volumes outlined above is not yet clear.