Water in Vail

By Incorporate Vail AZ

While gold, silver, and copper are valuable, there is one natural resource more precious than that — WATER. All life on earth is contingent on fresh water and in the west, battles are fought over water rights. The fights aren't with guns anymore, but rather with checkbooks and lawyers. The big buyers of Arizona water rights today aren't ranchers, but rather New York investors and Arabian princes.

Water may be thought of in two parts: the sources and the uses. The source of most of our water is aquifer-based groundwater from two different watersheds: Rincon Creek and Cienega Creek. The aquifers are replenished with rainwater and snow melt. In addition, the Vail Water Company and Spanish Trail Water Company get 1,857 and 3,037 acre feet of water per year respectively from the Central Arizona Project (CAP). This CAP water is 'wheeled' to the Vail area via City of Tucson Water infrastructure. In drought, both water sources, ground water and cap water, have been negatively impacted.

Furthermore, access of all ground water in Vail is by way of privately-owned wells. There are water companies such as Spanish Trail Water, Saguaro Water, and Rincon Water that draw from the Rincon Creek aquifer, and the Vail Water Company that draws from the Cienega Creek basin. In the Vail area, there are also many water co-ops, well-shares, and individual wells – at least 358 of them! There is no coordinated ground water management of these 358 well owners in our area and it would challenging to do so.. Furthermore, private companies tend to be more profit motivated, not conservation motivated. The more water they sell, the more profitable they are.

Water usage is also inconsistent. New developments, lawns, pools, and irrigation are not subject to a coordinated set of rules. New developments must adhere to Arizona Department Water Resources' "100 year assured water" rules but often developers put in water intensive landscaping for aesthetic reasons. They want to sell more houses. Some neighborhoods require native plants while others landscape with palm trees! Some homeowners build pools and plant grass as if they lived in the tropics while others diligently adhere to xeriscape.

Ground water levels in Vail have been declining for two decades because of drought and growth. However, with the advent of CAP water (Vail Water Company) in 2021, water levels rose dramatically in some high volume 'non-exempt' wells (see hydrograph). 'Exempt wells' are restricted to pumping up to 35 gallons per minute, can only

Vail Area Water Companies (incomplete list)

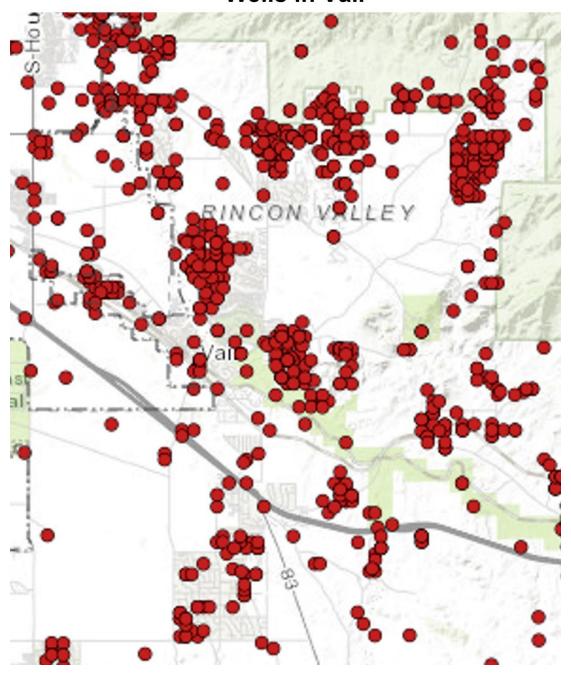
Vail Water Company
Colossal Cave Water
Spanish Trail Water
Saguaro Water
Rincon Water Company
Rainbow Water Association
Palo Verde Water Users Association
Nu Water Inc
Kahlua Well Co-op
Pocket Knife Co-op
Loma Water Corporation
Colossal Cave Water Group
Vail Road Community Well LLC

serve a limited number of residents, and are exempt from most water quality and reporting requirements. The vast majority of wells in Vail are exempt low volume wells.

What other desert communities are doing is interesting. Las Vegas has incentivized the removal of "non-functional (cosmetic)" grass -- more than 9,500 acres so far, Ventura County prohibits filling new pools, and Culver City rations irrigation. Many communities offer rebates for low water fixtures and appliances, rainwater recapture systems, or grey water irrigation. Municipalities also use reclaimed water (treated effluent) for construction purposes, industrial uses, and golf courses. The City of Tucson pioneered the use of excess reclaimed water to restore part of the perennial flow in the Santa Cruz River! Imagine if Vail restored the flow of the Pantano Wash!

With municipal government, water usage can be better managed. A coordinated effort of sources and uses no longer pits neighbor against neighbor or separates the haves and the have nots. Good water management could eliminate the "deepest well wins" syndrome. Incorporation levels the playing field and looks strategically at the future. It helps protect our most precious asset – water!

Wells in Vail



Drought Impact on a Vail Well



