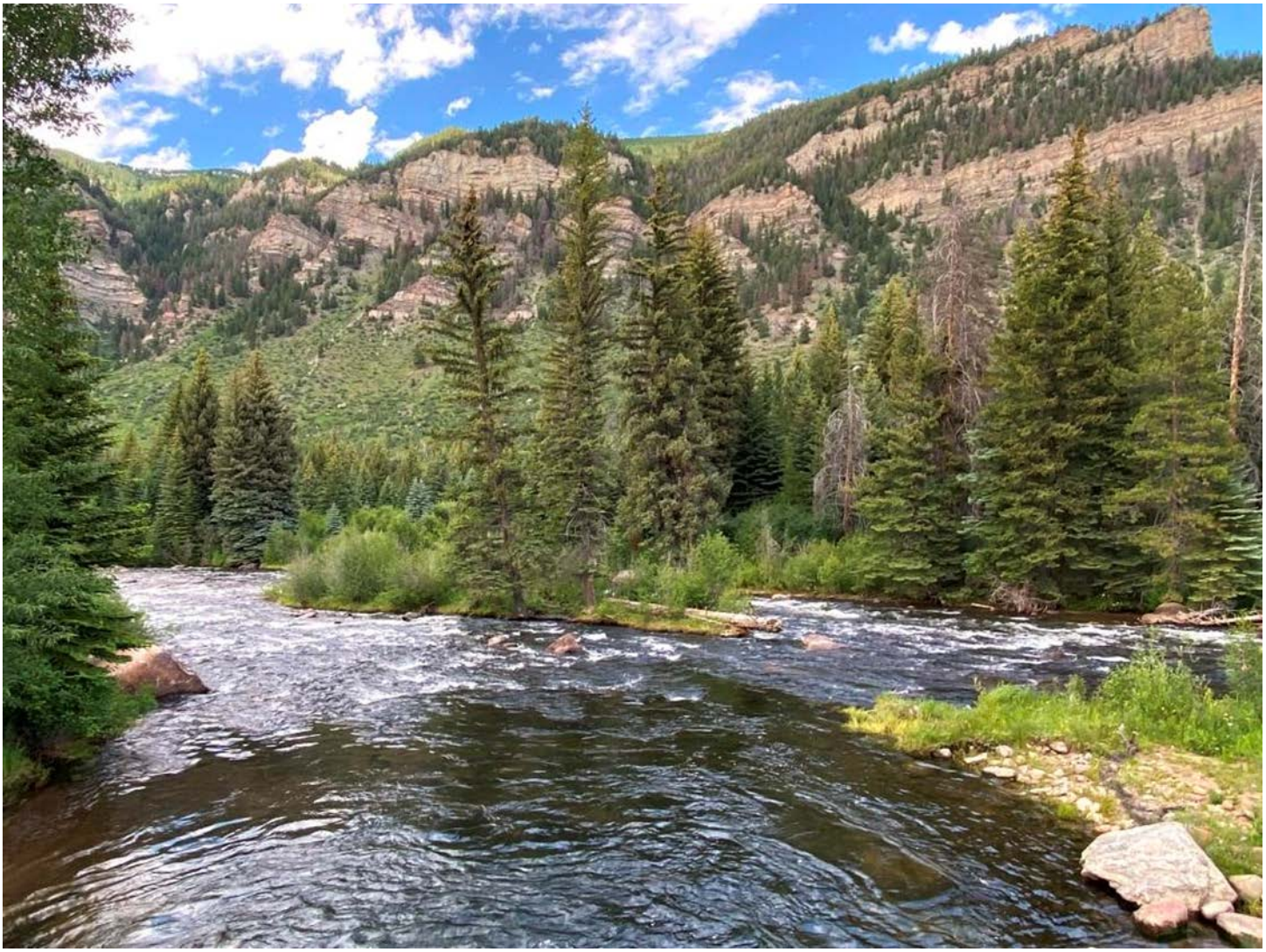


Eagle River weds Cross Creek, maintaining in-stream flow to counter pollutants remaining after Eagle Zinc Mine EPA .cleanup.

Superfund clean-up of tailing ponds from Eagle Zinc Mine south of Minturn. Local leaders have been diligently working for decades to clean pollution from streams that flow through the upper Eagle River valley which include Vail's Gore Creek.

VAIL HOMEOWNERS ASSOCIATION

Letters to Vail

Water Planning – Bridge Over Troubled Waters

July 19, 2024

Water issues in the West are big and complicated. This newsletter offers a glimpse into what area communities and lands are facing.

For possibly the first time in over 100 years, the Colorado River Basin has been the topic of serious discussion among interstate water authorities regarding modifying western water distribution agreements. The Water Compact of 1922 assumed stream flows equal to or even greater than what was measured at the time. With climate change, commitments and downstream demands have proven to be unrealistic. Today the discussion includes modifying the means of measuring the flow and storage of Colorado River water.

Under new agreements, the river basin would be required to maintain the steady flow and distribution of river water for agricultural, industrial, recreational, residential uses and aquatic life. The discussion centers on heightened upstream conservation sufficient to refill Lakes Powell and Mead, located downstream in the deserts of Arizona and Nevada. Simply put, intensifying conservation in the upper reaches of the drainage basin is a scheme to collect larger quantities of stream water for lower basin use.

Plans being laid by local water conservation entities make similar demands on Vail's water in order to maintain in-stream flow to sustain the multiple downstream water uses.

Altering the hydrology of the Vail Valley by draining its water resources to support development in arid regions downstream appears to be counterproductive on several fronts, including increased desertification which is already occurring with greater frequency within the basin. Drying up water resources in verdant climates through aggressive conservation can heighten the potential and frequency for wildfire and h water pollution. Drying out California's forest lands has contributed to massive wildfires there.

The present doctrine of "use it or lose it" is a motivating factor for changing allocation of river water as the practices under current circumstances do not provide adequate water to fill Lakes Powell and Mead. These massive reservoirs supply ever increasing demand for urban development in arid climates. Proposed policy changes at the global level raise larger questions about the wisdom of expanding human settlements in arid regions.

Laws governing the right to impound and distribute natural running stream and river water in the West are highly resistant to change. Changes in climate patterns have set developers, of all types, on the prowl to capture distant water resources and move them closer to urban consumers. Their eyes have landed on the water abundant regions of the upper Colorado River Basin. Developer's tactics involve draining down water resources in the alpine regions of the upper basin and storing these reserves in reservoirs in the lower basin nearer to the urban centers in the desert southwest.

Arizona, Nevada, and California in the lower basin are critical suppliers in the global food chain. Food distribution has become a weapon of modern warfare. It is in the national interest to maintain natural resources and habitability of both the upper and lower regions of the Great Basin. River irrigated land in the lower basin is essential to the maintenance of America's contribution to global food security.

The current water discussion is a high stakes shell game that has significant implications for water abundant microclimates. So-called conservation practices being advocated by downstream interests could affect the well-

being of communities and the ecosystem in the upper basin. The infrastructure is in place to modulate the flow of water within the basin through artificial means.

In Vail's circumstance, proposed conservation measures could reduce the amount of water in the streams and deplete water table levels in the valley's aquifers. The same effect would occur in other locations throughout the drainage.

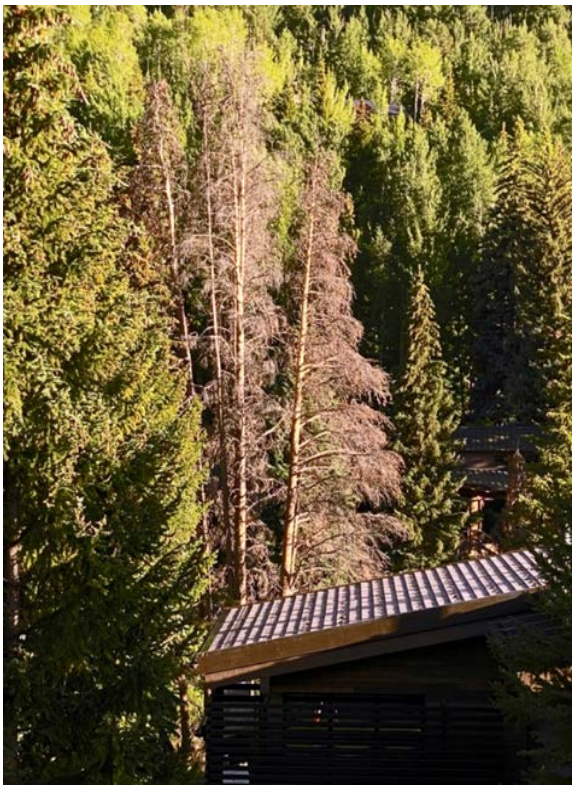
An innovative water management concept for the Continental Divide regions could be tested using snowmaking technology to increase the volume and duration of the region's high-altitude snow pack by creating artificial glaciers during the winter. Ice slows meltdown thus benefitting in-stream flows throughout the summer and into the fall.

Slowing the meltdown could extend runoff by weeks or even months. In years with greater natural snowfall plus artificial augmentation, the residual flow could steadily replenish stores for power production and recreation in Lakes Powell and Mead. Steady water flow within the basin could harden the dependability of hydroelectric production at dam sites. However, there remains a myriad of complications and collateral obligations to be discussed at all levels of governance. Water rights, paper or liquid, are fungible currencies allowing trade-offs to be negotiated among the effected regions. Additional highly advanced water flow monitoring will be required.

Science is the most effective tool to apply to arrive at "steady-flow" solutions. Advanced water flow monitoring technology is being installed in certain areas of the system that will need to be expanded in tandem with the increased installation of hydro-micro-electric generators. Standardized design guidelines for scalable noninvasive conservation-based power and water grids can help generate a mutually beneficial model to insure the well-being of the water in the West.

For its part, Vail must learn to effectively manage its urban landscape. A highly qualified local arborist describes the essential role that trees play in maintaining the balance of the valley's micro-climate. There is a healthy mix of deciduous and conifer trees throughout the townscape, augmenting the valley's native forest that has grown into a lush urban alpine forest. The mix of native and human planted forest aids in reducing air pollution, shelters wildlife, cools during high temperature episodes and slows the runoff, allowing ground water to recharge the extensive aquifer that forms an underground river beneath the valley floor.

The arborist suggests that thinning between 40 and 60 percent of the trees within the urban forest of is advisable. Thinning and pruning the trees will make the landscape more disease and fire resistant. Groves of deciduous trees (Aspens) have higher moisture content and serve as firebreaks.



Untended dead conifers are a fire hazard.

The plan to restore the Bolts Lake Reservoir, south of Minturn, is an example of using up-valley water to spawn additional development down-valley. The plan uses hyper-invasive conservation via restrictive water use standards and higher water fees in Vail to finance the reservoir's development. There has been no conclusive study that indicates that such a scheme will not ultimately lead to a drying out of Vail's water abundant microclimate.

Should Vail sacrifice its resources andburden its property owners and residents with restrictions and fees that foster more concentrated development in arid areas down valley and down river to the extent that it puts the Vail community at risk and in peril?

Meeting Notice:

Vail Homeowners Annual Membership Meetings
July 24,25 and 26, 2024
1:00 p.m.-3:00 p.m.
Vail Public Library – Community Room
July 24, 2024: State of the Vail Community.
July 25, 2024: Wedding Vail Mountain and Town of Vail Master Development Plans.
July 26, 2024: Preservation of Recreational and Native Habitat Open Spaces.Prior registration is required.
Registration: ***vailhomeownersassoc@gmail.com***

Zoom access available.

vailhomeownersassoc@gmail.com
Post Office Box 238 Vail, Colorado 81658
Telephone: (970) 331-2099 Email: vha@vail.net Website: https://www.vailhomeowners.com