

Viability of Squaw Creek, aquifer being studied

By Kathryn Reed

Those tasked with managing water in Olympic Valley, in particular Squaw Creek and the surrounding aquifer, are taking a more methodical approach to studying trends and potential impacts.

The Lahontan Regional Water Quality Control Board is one of the regulators of this body of water between Tahoe City and Truckee and had requested a workshop on the item; which occurred at the last meeting.

“The state board years ago when they approved our water quality restoration plan for Squaw Creek, which focused on reducing sediment coming from primarily the ski resort, and also the county roads and development in the valley, asked us to also look at the effects of groundwater pumping in the valley,” Lauri Kemper with Lahontan told *Lake Tahoe News*. “Residents had complained that the creek goes dry every fall and fish kills occur due to overpumping for drinking water supply in the valley. Because of the concern and the proposed increased development in the valley, the local water district conducted a study looking at ground and surface water interactions. Pumping does affect creek flows in late summer and wells could be relocated away from the creek closer to the mountain (canyon walls) and reduce chances of lowering creek flows.”

Mike Geary with Squaw Valley Public Services District went over the aquifer/stream flow interaction study at the November meeting.

In addition to SVPSD, the main groundwater pumpers in that basin are Squaw Valley Mutual Water Company, Resort at Squaw

Creek and Squaw Valley Ski Resort. The ski resort has four wells on the valley floor for snowmaking, while Resort at Squaw Creek has an irrigation well for the golf course. SVPSD has four active wells.



Squaw Creek and the surrounding aquifer are how the Olympic Valley gets its drinking and irrigation water. Photo/LTN file

There is plenty of snowmelt to recharge the aquifer each year. It takes eight hours to fill the SVPSD tanks, which uses about 4 percent of the water in the creek, according to Geary. Storage capacity, or the lack of it, is one of the main issues.

“We can’t store enough in the water tanks to be useful,” Geary said. “We struggle to capture some of the water that leaves the valley in the dry months. That is challenging.”

He doesn’t foresee a dam/reservoir being a viable storage alternative.

One thing being talked about is reconfiguring the creek to more of its natural route with the hope less groundwater is lost to the creek. Right now there is a trapezoidal channel that was built by the Army Corps of Engineers before the 1960 Olympics. It drains water from the shallow aquifer into Squaw Creek.

By modifying the trapezoidal channel it would reduce drainage from the shallow aquifer into the channel in spring and early summer.

Also being proposed is moving pumping as far west as possible and reducing or eliminating pumping on the east side of the valley. Developing a formal pumping management strategy has been proposed to map municipal water needs and minimize impacts on the creek.

SVPSD looks at what water usage may be 25 years from now. The big change would be the proposed development in the Squaw Valley Village that would create lodging, retail and recreational entities in what is now the parking lot. Two new wells will be paid for by the ski resort for that project.

Officials have an eye on climate change as well, especially with all the predictions that there will be less snow falling in the Sierra in the coming years. This would mean Squaw Creek would dry out sooner. On the flip side, more rain would mean the aquifer would recharge with those storms.

One thing SVPSD doesn't have that is a norm in the water business is interties with neighboring districts. It makes these water users a bit isolated and potentially cut off in an emergency.

This is why tying into the Martis Valley has been broached. That proposed \$25 million project would inevitably invite a political/environmental firestorm. Still, it's a battle the district is contemplating.

The Olympic Valley aquifer has a maximum depth of 150 feet and is one-half square mile. The Martis Valley aquifer has a depth of about 800 feet and is 15 square miles.

It is not possible to tap into Lake Tahoe because federal agreements prohibit entities downstream of the lake to use the water.