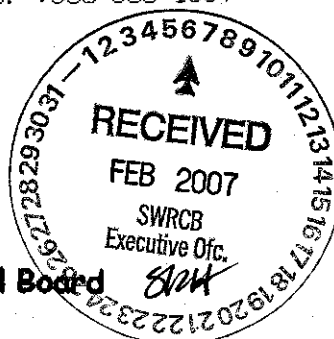


2/20 BdMtg Item 8
Squaw Creek
Deadline: 2/8/07 1 pm



February 5, 2007

Song Her, Clerk of the Board
State Water Resources Control Board
Sacramento, CA 95812-0100

Subject: 2/20/07 Board Meeting - Comment letter - Squaw Creek Sediment TMDL. Comment on resolution to approve an amendment to the Water Quality Control Plan for the Lahontan Region (Basin Plan) to establish a Total Maximum Daily Load for sediment in Squaw Creek

Dear Board of Directors,

I am a 30 year resident of Squaw Valley (Olympic Valley, CA) and have actively participated in watershed issues since 1983 when the community was threatened by a golf course being developed over the sole source aquifer for our drinking water. I entered into a lawsuit against this board in 1986 when it approved a prior Lahontan Region Basin Plan amendment (9/13/85) that accommodated the developer at the jeopardy of our creek and aquifer. At that time the public alarm was the fear of golf course chemicals posing a public health risk to our water. Accepted environmental reports of the day estimated the aquifer to contain 4,000 acre feet. We concluded more than adequate water quantity was available and so water quality became the focus of all mitigation. Today, we know that only 1500 AF of acceptable groundwater is available and Squaw Creek is in its worst condition since records have been kept.

I attended the Lahontan Regional Board April 2006 public hearing where this proposed amendment was adopted. Overall, I agree with the environmental document as approved. However, as I commented at that hearing, I regret it does not go far enough to address and remedy the problems which adversely impact Squaw Creek. The current TMDL and implementation plan focuses too narrowly on sediment and hillslope erosion controls. While physical and biological instream monitoring of numeric targets begin to address beneficial uses of the stream, in my opinion, the stream will not recover by simply requiring a 50% reduction in overall controllable sediment loading over the next 20 years.

I have observed degradation in Squaw Creek over the past 17 years. In the meadow reach across from my house, I have witnessed less flow, more algae, and smaller and fewer fish stranded in late season pools that are drying up earlier and more often. I suspect this is due to a multiple of factors, both natural and man-made. Recent studies have concluded that the largest factor contributing to stream flow is the amount of precipitation (snow and rain) as well as the rate of snow melt. However, man's land use has severely impacted this watershed. Historic disturbances include roads, cattle and horse ranching, sheep grazing, farming, and logging. The two biggest adverse impacts to the creek have been land disturbances in preparation for the 1960 Olympics and the 1990 construction of the hotel and golf course for the Resort at Squaw Creek. Fifty years ago, grading and paving turned the western wetlands into an impervious surface for a skier parking lot and channeling the meandering creek through the Army Corp's trapezoidal ditch further dewatered the area. Twenty years ago, the meadow was converted to a golf course and the undisturbed southern hillside was developed into a hotel complex. Not surprisingly, the creek was placed on the Clean Water Act Section 303(d) list of impaired waters in 1992.

Squaw Creek is indeed impaired: it is unable to perform its natural function, not only because of excessive sediment, but also because of low stream flows. I understand completely that the Lahontan Regional Board can only address water quality issues and has begun to do so with the targets in this proposed TMDL analysis. But, lack of stream flow has an even greater impact on stream health. And this water quantity deficit lies within the purview of the State Water Board. Why is the creek so impaired when the watershed averages 20,000 acre feet of annual precipitation and the aquifer holds 4,000 AF? Even in relative drought years, precipitation is adequate. My opinion is that this creek is dysfunctional because of two processes: (1) land use has altered infiltration patterns (as well as caused the above identified sediment sources) and (2) development and population growth has required additional well pumping for domestic use. Fundamentally, the creek is not only being clogged with sediment, it is also not being recharged due to blocked subsurface flows (i.e., creek and groundwater infiltration is diverted by roads, ski runs, golf course, and buildings). Additionally, the creek is having the "bottom sucked out" of it (by well pumping for consumptive use of the human population). My conclusions are meant to be a complaint and a challenge to this State Water Board.

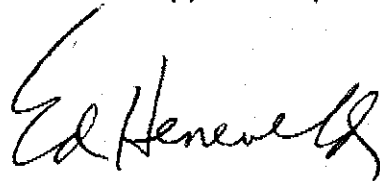
Returning to the consideration of amending the Lahontan Basin Plan to establish a TMDL for sediment in Squaw Creek, I support the document. I applaud the effort by the scientists and staff that created this plan. However, I do not think the targets reach far enough. The community of Squaw Valley wants a viable creek, one that supports a healthy fish population as it did historically. According to attachment 2 of the staff report for this TMDL environmental document, Squaw Creek supported a fish hatchery in the 1800s. "In 1972 the California Department of Fish and Game reported an average resident population of 50 pounds of trout per acre (JARA, 1974), while a stream survey conducted by the US Forest Service in 1973 noted an average of six to ten trout per 100 feet in the meadow reach of Squaw Creek (USFS - Tahoe National Forest, 1973)." This TMDL limits its goals to adopting desired condition targets of physical habitat (measuring of stream substrate quality) and biological parameters (measuring benthic macroinvertebrates). I suggest a third measure of stream health: a self-sustaining, viable fish population. That will require not only sediment reduction but also enhanced infiltration and stream flows.

Lastly, I think this TMDL plan should acknowledge and incorporate data contained in the Squaw Valley Ski Corp's Facility Assessment which summarizes historic impacts as well as current conditions. The TMDL should also include the 2003 ECORP bioassessment as a further data point in determining baseline status of benthic macroinvertebrates in Squaw Creek.

There is no doubt that Squaw Creek is impaired. All one has to do is observe the creek after a summer rainstorm and see the clear stream turn to a "chocolate milkshake". This current TMDL plan to control erosion by seeking best management practices is a starting point to improve the condition of Squaw Creek. Adaptive management principles and addressing water quantity must be added to the strategy before the creek can achieve desired objectives and the community can enjoy a viable stream.

Thank you for the opportunity to comment on this Basin Plan amendment.

Respectfully,
Ed Heneveld



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