



May 27, 2010

State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Transmitted by email: commentletters@waterboards.ca.gov

Re: 2010 Integrated Report: Federal Clean Water Act Section 303(d) - **Proposal to Delist San Vicente Creek**

Greetings:

There is a great deal of confusion in both your criteria for pollution thresholds regarding turbidity and for the constituent pollutant involved. This delisting cannot be legitimately considered until this alarming confusion is corrected.

The "pollutant" you are considering in this case is "**Sedimentation/Siltation**" and you are using records of **turbidity** measurement collected by a public water agency at its treatment plant.

In the Santa Cruz Mountains sedimentation/siltation is a pollution problem for two reasons. First suspended sediment in stream water prevents water suppliers from using surface water when it carries too much sediment. Water suppliers use turbidity measurements to tell them when they need to stop diverting surface water. Secondly sedimentation is destroying the habitat for our salmonid species, coho salmon and steelhead. Both animals are listed under both the State and Federal Endangered Species Acts.

Turbidity is only a surrogate indicator for sedimentation/siltation. It is not a measurement of either sedimentation or siltation. It is a measurement of the transmission of light through water, usually measured in NTUs.

In the case of San Vincente Creek, turbidity is caused only by suspended sediment in the water column and to a smaller extent by suspended plant debris. San Vincent is a steep gradient, fast moving mountain stream. In the case of these mountain streams, turbidity will **ONLY** be the result of suspended sediment and other debris that is mobilized directly by rainfall. Landslides, bank failures and direct human activity stimulate erosion but usually only rainfall events and the resulting high water flows will cause elevated turbidity to be observed.

If San Vincent Creek were a slow moving watercourse through a flat valley bottom, there might be the opportunity for a condition of elevated turbidity to be caused by microscopic algae or other plankton materials such as occur in agricultural areas as a result of fertilizers and other pollutants. **Your use of turbidity seems to be confused by this and other completely separate causes for elevated turbidity to indicate water pollution.**

The Water Board's criteria for the use of turbidity measurements in this case is deeply flawed. Your policy guidelines are nonsense. For the Water Board to know if San Vincent Creek is polluted by excess sediment, then you need to measure substrate embeddedness (D50) and V* measurements of the extent of pool filling with sediment. You have this kind of data but you have discarded it!

To assume that a stream is a candidate for de-listing based upon the number of days during which elevated turbidity is observed is highly speculative and unscientific. In San Vincent (and nearly all Santa Cruz Mountain streams) turbidity will only be elevated during and soon after rain events. Basing a de-listing decision upon a calculation of the percentage of days in a year when turbidity is observed, and including the summer months **when elevated turbidity is impossible to observe no matter how rapidly the watershed is eroding**, is highly illogical and absurd. This appears to be a fundamental error in you logic.

If turbidity in San Vincente Creek could occur because of planktoic algae or some other material, then the inclusion of the summer months in your calculations might have some validity. **The failure to observe elevated turbidity during the summer months says absolutely nothing about the extent of sedimentation/siltation in the watershed.** Instead you discard evidence that actually demonstrates the condition of the streambed; measurements actually used by the Department of Fish and Game and by private fisheries scientists to evaluate stream health and sedimentation.

“In addition, Habitat Typing data states that Fifty-seven of the 70 pool tail-outs measured had embeddedness rating greater than 50% (as summarized in LOE # 1838). This is not compared to any evaluation guideline (or Water Quality objective) and therefore cannot be assessed using the listing policy and the Binomial test.”

Quote from: Draft California 2010 Integrated Report(303(d) List/305(b) Report)
Supporting Information
Regional Board 3 - Central Coast Region

This is ridiculous. The Water Board apparently prefers to use junk criteria rather than to sort out the confusion in your own guidelines. You have direct evidence of “sedimentation/siltation” and you discard it!

San Vincente Creek has been stated as important to the NOAA-NMFS Coho Recovery Plan. The Water Board needs to support federal agencies that are attempting to restore endangered species. Sedimentation/siltation has been understood for a very long time to be destructive to salmonid species. To delist San Vincente Creek from the 303(d) list, in the face of substantial evidence of impairment is offensive in the extreme.

Most of your staff spend their time in office buildings processing piles of paper instead of actually studying the water resources of the State of California. This is part of the problem.

Sort out the confusion in you own pollution criteria. Send competent staff out to San Vincente Creek or hire an experienced hydrology contractor to actually measure this stream for sediment loading. Use V^* methodology that will actually measure the bedload of sediment in San Vincent Creek. Then and only then should you consider modifying your 303(d) list in regard to this waterbody.

Regards,

A handwritten signature in black ink on a light gray rectangular background. The signature is cursive and appears to read "Kevin Collins".

Kevin Collins