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Promoting responsible watershed management through voluntary community stewardship and technical assistance since 1945

April 4, 2008

Karen Niiya Division of Water Rights State Water Resources Control Board 1001 I Street, 2nd Floor Sacramento, CA 95814 2008 APR 17 AM II: 45

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Subject: AB2121 North Coast Instream Flow Policy

Dear Ms. Niiya,

The Napa County Resource Conservation District (RCD) appreciates this opportunity to comment on the proposed Instream Flow Policy for North Coast Streams (Policy), which includes the Napa River watershed. For context, the RCD is a non-regulatory, apolitical local agency that serves the community through technical assistance, educational outreach, and scientific research. The RCD appreciates the challenges associated with developing a policy in a manner that fits into an integrated watershed management framework, where there are numerous tradeoffs among multiple beneficial uses and within each beneficial use category. It would be desirable to have these tradeoffs identified and considered in an explicit and upfront manner, to prevent any unintended consequences.

The RCD supports the intent of the Policy, but we are concerned that in its present form it may be counterproductive. Our comments are motivated by the preliminary results of a current RCD study, funded by the CALFED Bay-Delta Watershed Program and entitled *Water for Fish and Farms*. Our study concerns the relationships between instream flow conditions, agricultural water-use practices, and the needs of anadromous fishes in the Napa River watershed. One of our focus streams is Carneros Creek, a third order tributary in the lower portion of the Napa River basin with a watershed area of about nine square miles. Carneros Creek was also the location of one of the validation sites used by the Board to develop the Policy.

The validation site on Carneros Creek (coded CAS) is one where our agency has collected discharge information under a recent State grant (*Sediment and Stewardship*), and it happens also to be the approximate location of an existing point of diversion from the creek. Using the values of mean annual unimpaired flow and watershed drainage area in Appendix F and the corrected formula in your March 14, 2008 memorandum, we calculate a minimum bypass flow (MBF) at this location of approximately 22 cubic feet per second (cfs). The current bypass flow for this diverter (and generally for diverters in this reach of the creek) is 10 cfs, measured at a location considerably further downstream (site CAO). A flow of 22 cfs at site CAS would correspond to a considerably greater flow, perhaps 50 cfs, at downstream site CAO.

On the basis of this example, we believe that the new MBF would, if applied to existing water rights in this reach of Carneros Creek, drastically affect the ability of water right holders to continue to obtain the water they use for agricultural benefits. In our opinion, this difficulty in obtaining water will encourage water right holders to alter their water diversion practices in ways which might well have serious negative consequences for the fish, in effect doing more harm than good.

Flow restrictions under the Policy affect only diversions during the wet season, between October 1 and March 31. For our study, however, we focused on spring and summer flows, which have been suggested as the most significant flow-related limiting factor for the Napa River watershed by several recent studies (Stillwater Sciences Limiting Factors Analysis 2002, Stillwater Sciences Steelhead Growth Analysis 2007, RWQCB Sediment TMDL 2005). Passage and spawning opportunities for steelhead appear to be limited not by wet-season water diversions but rather by artificial barriers and the naturally flashy hydrology of the region. Implementation of a policy that focuses solely on maintaining the wet season hydrograph could be over-restrictive to water diverters, while not achieving the primary goal of protecting (and possibly restoring) steelhead populations. In fact, such a policy may give a false sense of protection for the species, while missing the real population bottlenecks during more limiting parts of the freshwater life-cycle.

As part of this study, we interviewed permitted agricultural water users in the Carneros Creek watershed to ascertain their actual diversion schedules (i.e. quantities, timing). We found that farmers pump almost exclusively on the receding limbs of storm events, once the water has sufficiently cleared. This is done primarily to prevent equipment damage and filling of reservoirs with suspended sediment. We incorporated this very site specific information into a hydraulic model (MIKE SHE) of the creek and found the peaks of any given storm hydrograph would be unaffected by this current pattern of diversion. Therefore, it appears that current diversion practices in Carneros Creek are consistent with the Policy's goal of maintaining natural high flow variability.

If, however, the Policy's proposed MBF requirements were imposed, water users would undoubtedly establish alternate diversion schedules that might be detrimental to the habitat. Our modeling efforts suggest that the new MBF might force diverters in this reach to pump during the peaks of storms to get sufficient water, thus muting the peaks that are desirable for maintaining habitat diversity. In addition, it seems certain that at least some of these diverters would not be able to pump the volume of water their operations currently consume, even if they were to pump right through all the winter storms. One predictable consequence is that groundwater pumping in the growing season would be greatly increased, with potentially negative effects on the spring and summer flows which are particularly critical for steelhead. Another predictable consequence is that those growers who maintain cover crops for soil retention under approved erosion control plans would have a powerful incentive to remove them; growing grass is a luxury when water is scarce, since it competes with the actual crop for water. Since the Napa River is under a TMDL for sediment, this last possibility is particularly troubling. For all these reasons, we believe that the MBF proposed in the Policy runs a great risk of damaging rather than safeguarding fish habitat.

In light of these potential risks, we urge the State to consider carefully the benefits which would be gained from requiring a high bypass flow. In the *Water for Fish and Farms* study we looked at fish passage in this reach. To examine upstream passage at three existing riffle transects in Carneros Creek, we compared the minimum passage criteria provided in Appendix G (at least 0.7 feet deep for 25% of the transect length with at least 10% being contiguous) with the MBF for each location. We found that all three cross sections were passable at a much lower flow of ~14 cfs than the proposed MBF of 22 cfs, indicating that the proposed MBF would be unnecessarily high for this stream. We

understand that the MBF criteria are intended to be conservative. However, in the light of the potential risks the criteria appear to us to be counterproductive.

We understand the rationale for making the Policy conservative, given the risk to the fisheries resource and uncertainty involved with such a varied geographic region. However, we feel that the Policy does not adequately address the key socio-economic side of the issue – namely that much of the landscape in our watershed is used for agriculture, and imposing stricter regulations upon these existing stakeholders will not necessarily achieve the intended goals. We have found that our results and observations vary significantly from the prescriptions of the Policy, suggesting that a more adaptive approach may yield more meaningful results – both socially and ecologically.

Sincerely yours,

Clinton Pridmore

Clinton Pridmal

President

cc:

Office of Senator Patricia Wiggins
Office of Assembly Member Noreen Evans