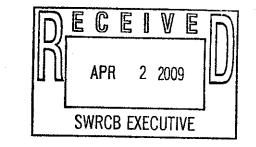


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April 2, 2009



Mr. Charles R. Hoppin, Chair c/o Ms. Jeanine Townsend, Clerk to the Board State Water Resources Control Board Division Of Water Rights P.O. Box 2000 Sacramento, CA 95812-2000

Re: 4/7/09 Russian River Frost Protection Workshop

Dear Mr. Hoppin:

Thank you for the opportunity to provide input for the State Water Resources Control Board's workshop on April 7, 2009, Need for and the Effect of Water Diversions for Purposes of Frost Protection in Sonoma and Mendocino Counties. As agents for numerous licensees, permittees, applicants, and claimants within the Russian River watershed we are acutely interested in this matter. Many of our clients use water as their principal means of protecting valuable wine grape crops from frost damage. Absent such protection, an entire crop could be destroyed in a single night. Over the broad geographic area supported by the Russian River, failure to adequately frost protect wine grapes could result in crop losses in the millions of dollars, as well as unknown third-party impacts.

Given what is at stake, implementation of emergency regulations or development of any regulations limiting diversions for frost protection should be based on scientific analysis supported by all available data. The Workshop Notice makes reference to fish kills in 2008, but provides no details or reference to any formal public disclosure by regulatory agencies, nor any indication of a scientific investigation into whether diversions for frost protection or any other purpose played a role.

Has the State Water Board or any other regulatory agency conducted a detailed investigation into hydrologic and hydraulic conditions during the 2008 frost season? Such an investigation, guided by the specific facts surrounding the reported fish stranding, would be useful for determining what may have caused it and for prevention of future occurrences. If there is currently no hydrologic investigation being conducted, at a minimum the following things should be considered if the State Water Board or another agency is investigating the cause of the reported fish stranding or proposing a future remedy:

- 1. It is our understanding that daily mean flow data published by the United States Geological Survey (USGS) for gages on the Russian River and Dry Creek are based on stage data sampled at 15-minute intervals. Have intra-day fluctuations in stage been evaluated for the period of concern?
- 2. According to the Workshop Notice, the fish kill was attributable to "fish stranding mortality," which implies that low river flows or sudden changes in flow resulted in corresponding changes in stage sufficient to strand fish, however no detailed information has been disclosed to support this conclusion.
 - Related to Item 1 above, has there been any investigation as to the magnitude and rate of change in stage at the gage locations?
 - Has there been any investigation of the channel geometry at the gage locations to assess whether changes in stage and flow were significant relative to the overall depth and velocity of flow at the gage sites?
 - Has there been any investigation as to how the channel geometry at the gage locations relate to channel geometry at the fish kill locations, whether the changes in stage and flow at the gage sites can be related to those locations, and whether those changes in stage could have caused fish stranding?
- 3. Is there evidence that supports the conclusion that the fish mortality was due to factors unrelated to diversions?
- 4. Has the State Water Board investigated the sources and amounts of water accruing to the Russian River during the 2008 frost season?

The above issues need to be investigated in order to determine the proper course of action, particularly with regard to the implementation of any emergency regulations limiting diversions for frost protection or any beneficial purpose. We trust that the State Water Board will request, and that the regulatory agencies will provide, a full disclosure of the 2008 fish mortality occurrences so that any investigation of the available hydrologic data for 2008 will be informative. Thank you for your consideration of our comments.

Very truly yours,

WAGNER & BONSIGNORE CONSULTING CIVIL ENGINEERS

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Robert C. Wagner, P.E.

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