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Secretary for  
Environmental Protection

**California Regional Water Quality Control Board  
North Coast Region  
Geoffrey M. Hales, Chairman**

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**Arnold  
Schwarzenegger**  
Governor

November 29, 2010

Mr. Bill Cowan  
State Water Resources Control Board  
Division of Water Rights  
PO Box 2000  
Sacramento, CA 95812-2000

Dear Mr. Cowan:

Subject: Proposed Russian River Frost Protection Regulation Environmental  
Impact Report

Thank you for the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report for the Russian River Frost Protection Regulation (EIR). We appreciate the chance to participate early in the environmental review process. The North Coast Regional Water Quality Control Board (Regional Water Board) is a responsible agency for this project, with jurisdiction over the quality of ground and surface waters (including wetlands) and the protection of the beneficial uses of such waters.

The proposed Regulation would prohibit diversions from the Russian River stream system for purposes of frost protection from March 15 through May 15, unless they are in accordance with a Water Demand Management Plan (WDMP) approved by the State Water Board. The proposed Regulation would apply to all diversions, including hydraulically connected groundwater, regardless of the diverter's basis of right, unless a diversion is exempted by the Board. In order to be approved, a WDMP would be required to ensure that the instantaneous cumulative diversion rate does not result in a reduction in stream stage that is harmful to salmonids and would be required to include stream and diversion monitoring and reporting.

We have reviewed the NOP and offer the following recommendations and comments:

**General Comments**

The mission of the State Water Resources Control Board (State Water Board) and Regional Water Board is to preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. The quality of surface and ground waters in the North Coast Region of California is governed by the Water Quality Control Plan for the North Coast Region (Basin Plan) as developed and implemented by the Regional Water

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Board. The Basin Plan identifies the existing and potential beneficial uses of water within the North Coast Region and the water quality objectives necessary to protect those uses. Together water quality objectives, beneficial uses, and the anti-degradation policy are known as water quality standards. The Russian River Frost Protection Regulation EIR must ensure that the regulation is consistent with the Basin Plan's water quality standards.

The NOP identifies hydrology and water quality as specific areas of analysis for the EIR, including an analysis of potential cumulative impacts related to the Project. The intended purpose of the project is to regulate the diversion of water for the purpose of frost protection to prevent harmful impacts to salmonids. The Regional Water Board agrees that the regulation is necessary for the protection of beneficial uses and supports the development of the Russian River Frost Protection Regulation.

### Impaired waters

Section 303(d) of the federal Clean Water Act and 40 CFR §130.7 require states to identify water bodies that do not meet water quality standards and are not supporting their beneficial uses. These waters are placed on the Section 303(d) List of Water Quality Limited Segments (also known as the List of Impaired Waterbodies). The List identifies the pollutant or stressor causing impairment and establishes a schedule for developing a control plan to address the impairment. On August 4<sup>th</sup>, 2010 the State Water Board adopted the California 2010 303(d) List. This list includes the following three impairments for the Russian River within the Project area: sedimentation/siltation, temperature, and indicator bacteria.

### Water Quality Issues of Concern

The NOP identifies impacts to water quality that may result from the adoption and implementation of the Russian River Frost Protection Regulation:

“Adoption and implementation of the Regulation may also lead to changes in management practices, which could affect hydrology and water quality. Management practices for frost prevention that may be used as a result of the Regulation include, but are not limited to, the usage of copper compounds or non-ice nucleating bacteria to reduce the incidence of frost injury. Increased levels of copper in the water could cause a decline in water quality.”

The use of copper compounds to reduce frost damage is of particular concern to the Regional Water Board. Copper is an element that is known to be toxic at extremely low levels. We request that the State Board evaluate the risk of surface and ground water contamination that may result from the use of copper compounds and incorporate appropriate restrictions into the Regulation for the protection of water quality.

The regulation of surface diversions for frost protection is likely to result in the increased use of recycled water for the purposes of frost protection. However, the use of recycled waste water for frost protection presents issues and challenges that must be addressed

before this resource can be used without posing a threat to the beneficial uses of water. The current best management practices (BMPs) used to ensure the safe use of recycled water for irrigation may not be effective for protection of water quality when recycled water is used for frost protection. Those BMPs are based on the application of recycled water at agronomic rates to prevent runoff to surface waters and deep percolation to ground water. The State Board's Recycled Water Policy does not explicitly address the use of recycled water for frost protection purposes. Guidance to address the use of recycled water for frost protection such as the guidance provided by the Policy for landscape irrigation projects would greatly aid in permitting recycled water use for frost protection. For instance, the regulation could recognize that frost protection is an application of water that is not done at agronomic rates and require up-front demonstration that the system is designed to minimize the potential for over application of recycled water (e.g., use of appropriate application methods that allow the operator to control rate and location of spray to where it is needed, define maximum application rate and timing, etc). Guidance describing appropriate setbacks to receiving waters, BMPs appropriate to land slope, and the use of cover crops would also be helpful.

If you have any questions regarding these comments, you may contact me at (707) 576-2065 or [jshort@waterboards.ca.gov](mailto:jshort@waterboards.ca.gov)

Sincerely,

**Original signed by**

John Short  
Senior Water Resource Control Engineer

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