

**RESPONSES TO PUBLIC COMMENTS
ON THE MAY 2011 DRAFT
RUSSIAN RIVER FROST PROTECTION REGULATION**

SEPTEMBER 2011

**DIVISION OF WATER RIGHTS
STATE WATER RESOURCES CONTROL BOARD
California Environmental Protection Agency**

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EXECUTIVE SUMMARY

The Draft Russian River Frost Protection Regulation was released for public comment in May 2011. Supporting documents, consisting of a Draft Environmental Impact Report and an Initial Statement of Reasons were also made available for public comment at that time. Over 70 comment letters were received from the public during and after the public comment period that ended July 5, 2011. This document contains responses to comments prepared by State Water Board staff. The responses are organized by topic categories. A table of contents is provided identifying the topics covered.

LIST OF AGENCIES AND INDIVIDUALS WHO SUBMITTED COMMENTS

Commenter Name and Affiliation	Date (s) Received
Al Cadd, Russian River Property Owners Association	7/3/2011
Alan Levine, Coast Action Group	6/28/2011
Alfred White, La Ribera Vineyards	6/29/2011
Allan Nelson	7/5/2011
Barbara Petersen	7/1/2011
Barbara Reed, Employers Council of Mendocino County	7/4/2011
Blake and Aubrey Mauritson	7/8/2011
Bob Anderson, United Winegrowers for Sonoma County	7/5/2011
Bob Baiocchi, California Fisheries and Water Unlimited	5/24/2011
Brian Johnson, Trout Unlimited	7/5/2011
Carl Wilcox, California Department of Fish and Game	7/1/2011
Carole Mascherini	7/2/2011
Chris Bowen, Hunter Farms	7/2/2011
Chris Shutes, California Sportfishing Protection Alliance	7/4/2011
Danny Piffero	7/7/2011
David and Joyce Fanucchi	6/27/2011
David Beckstoffer, Beckstoffer Vineyards	7/7/2011
David Keller, Friends of the Eel River	7/5/2011
Dermot and Darice Bourke	7/6/2011
Don and Joe Guadagni, Guadagni Brothers Welding	7/4/2011
Don Wallace, Dry Creek Vineyard	7/5/2011
Donald E. Butow, Butow Organic Vineyards	
Eric Foster, Elizabeth Vineyards	7/5/2011
Glenn McGourty, University of California Agriculture and Natural Resources	7/8/2011
Hank Wetzel	7/1/2011
Heath Dolan, Dark Horse Vineyards	6/29/2011
Jack Cox	6/27/2011
Jack Rice, California Farm Bureau Federation	7/5/2011
James Pedroncelli, Pedroncelli Vineyards	7/5/2011
James, John, David, and Michael Milovina	7/1/2011
Janet Pauli, Mendocino County Inland Water and Power Commission; with member agencies County of Mendocino; City of Ukiah; Redwood Valley County Water District; Potter Valley Irrigation District; Mendocino County Russian River Flood Control and Water Conservation Improvement District	7/1/2011
Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light	7/1/2011
Jason Dolan, Dark Horse Vineyards	7/5/2011
Jerry Reedy, Reedy Vineyards	7/1/2011

Jesse Barton, Gallery and Barton Law Corporation; on behalf of Williams Selyem; California Farm Bureau Federation; Fetzner Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; and Napa County Farm Bureau	7/5/2011
Jim Doerksen and Stephen Krimel, Save Mark West Creek	7/3/2011
Jim Lincoln, Napa County Farm Bureau	7/5/2011
Jim Newsome	7/5/2011
John and Patti Saini	7/5/2011
John Jordan, Jordan Winery	7/1/2011
Kate Wilson, Russian Riverkeeper	7/5/2011
Ken and Kathe Todd, Todd Brothers Vineyards	6/29/2011
Kendall Smith, County of Mendocino	7/7/2011
Larry Hanson, Northern California River Watch	7/3/2011
Lea and Harry Black	7/1/2011
Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District	6/27/2011
Lisa Correia, Sonoma County Office of the Agricultural Commissioner	7/5/2011
Louis Foppiano, Foppiano Vineyards	7/1/2011
Maria Potter	7/4/2011
Mark Houser	7/1/2011
Matthew Deitch, Center for Ecosystem Management and Restoration	7/5/2011
Michael Boer, Stipp Ranch	7/5/2011
Mike Anderson, Mendocino County Farm Bureau	7/5/2011
Nick Frey, Sonoma County Winegrape Commission	6/30/2011
Paul Foppiano, Foppiano Vineyards	7/5/2011
Paul Spaulding III, Farella Braun and Martel, LLP on behalf of Golden Real Estate, LLC ("Golden Vineyards")	7/5/2011
Pete Downs, Jackson Family Wines	7/5/2011
Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council	7/5/2011
Peter Chevalier, Chevalier Vineyard Management, Inc.	7/5/2011
Richard Lamalfa	7/5/2011
Richard Rued	7/5/2011
Richard Schaefers, Beckstoffer Vineyards on behalf of Sanford Ranch Vineyard, Ukiah Vineyards, Beckstoffer Russian River Vineyard, Beckstoffer Vineyard III, Mendocino 101 Vineyards, Vinifera Vineyard, Hopland Vineyard, Talmage Vineyard	7/5/2011
Richard Schaefers, Mendocino Vineyard Company	7/5/2011
Richard Schaefers, Mendocino Winegrape and Wine Commission	7/5/2011
Robert Dempel, Dempel Ranch Vineyard	6/13/2011, 6/30/2011
Rodney McInnis, National Marine Fisheries Service	7/5/2011
Russ Green	7/1/2011

S.J. Jahnke, Whistler Management, Inc.	7/5/2011
Stephen Fuller-Rowell, Sonoma County Water Coalition	7/5/2011
Stephen Hawkes	6/14/2011
T. Connick	7/4/2011
Thom Mauritson, Thomas Mauritson Vineyards	7/5/2011
Tim Schmelzer, Wine Institute	8/4/2011, 8/10/2011
Vicki Michalczyk, Hawk Hill Vineyard	7/5/2011
Wendel Nicolaus, Middleridge Vineyard	7/5/2011

LIST OF ACRONYMS AND ABBREVIATIONS

AB 2121 Policy	Policy for Maintaining Instream Flows in Northern California Coastal Streams
ACL	Administrative Civil Liability
AES	Analytical Environmental Services
AF/year	acre-feet/year
APA	Administrative Procedure Act
AWEP	Agricultural Water Enhancement Program
BLM	Bureau of Land Management
BMP	Best Management Practices
CAG	Coastal Action Group
CCR	California Code of Regulation
CDEC	California Data Exchange Center
CDF	California Department of Forestry
CDF&G	California Department of Fish and Game
CDFG	California Department of Fish and Game
CDO	Cease-and-Desist Order
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CPI	Consumer Price Index
CRLF	California Red-Legged Frog
CSPA	California Sportfishing Protection Alliance
CWA	Clean Water Act
DCA	District Court of Appeal
DEIR	Draft Environmental Impact Report
DFG	California Department of Fish and Game
EBRR	East Branch Russian River
EF Russian River	East Fork Russian River Tributary
EIR	Environmental Impact Report
ESA	Endangered Species Act
EWRIMS	Electronic Water Rights Information Management System
FERC	Federal Energy Regulatory Commission
FPRs	Forest Practice Rules
GIS	Geographic Information System
IMPLAN	Impact Analysis for Planning
IRS	Internal Revenue Service
IS	Initial Study
ITP	Incidental Take Permits
KRIS	Klamath Resource Information System
MMWD	Marin Municipal Water District
MOU	Memorandum of Understanding
NCRCD	Napa County Resource Conservation District

NCRWQCB	North Coast Regional Water Quality Control Board
NFMA	National Forest Management Act
NGO	Non-Governmental Organizations
NHI	Natural Heritage Institute
NMFS	National Marine Fisheries Service
NMWD	North Marin Water District
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRC	National Research Council
NRCS	Natural Resources Conservation Service
OAL	Office of Administrative Law
POD	Point of Diversion
PRC	Public Resources Code
QA/QC	Quality Assurance/Quality Control
RCD	Resource Conservation & Development Program
RIMS II	Regional Input-Output Modeling System II
RRFP	Russian River Frost Program
RRWA	Russian River Watershed Association
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Soil Conservation Service
SCWA	Sonoma County Water Agency
SCWC	Sonoma County Water Coalition
SDU	Small Domestic Use
SEP	Supplemental Environmental Project
SFBWQCB	San Francisco Bay Regional Water Quality Control Board
SRCD	Sotoyome Resource Conservation District
SWPPP	Stormwater Pollution and Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
TU	Trout Unlimited
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
WDMP	Water Demand Management Program
WDR	Waste Discharge Requirement

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1.0 Regulation Approach

Topic 1.1 Regulation Approach - General

Comment 1.1.1: The regulation is overbroad. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL.

Comment 1.1.2: The regulation is too narrow. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL.

Comment 1.1.3: The administrative record lacks the factual and legal basis necessary to adopt and implement the proposed regulation. The SWRCB has also failed to adequately disclose the environmental and economic impacts associated with the regulation. As a result, the proposed regulation threatens to put many wine grape and pear growers out of business, impose substantial unnecessary costs on those who can remain in business, create unmitigated environmental impacts, generate reams of unusable "scientific" data, and not save a single fish. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL.

The DEIR addresses all reasonably foreseeable direct and indirect impacts of the proposed regulation and alternatives.

Comment 1.1.4: It is not clear what is meant by "open exchange of information". Does this require public notice and the right of the non-grape growing and or wine industry public to provide meaningful and timely input? Or are the public and other stakeholders excluded from timely participating in inter-agency correspondence? The ability of the wide range of stakeholders to participate in a meaningful and effective development of regulations, oversight, reporting and the values for this program can easily lead to distorted and invalid conclusions about the programs' effectiveness and protection of listed salmonids and their habitat. Exclusion of the public and stakeholders (including downstream water rights holders, fisheries,

recreational and tourism interests, other non-grape agricultural interests, property owners, tribal, local, state and federal agencies, municipal water customers and ratepayers) from an active, timely and transparent participation in the WDMP process, implementation, reporting, administration, review and modifications will very likely lead to deteriorated conditions for listed salmonids, and likely lead to increases in stranding mortality and other damages to protected habitat. The DEIR fails to recognize and address these inherent problems and environmental impacts. Given the likelihood of additional harm to salmonids if the process and oversight is limited as proposed, the DEIR must analyze these impacts in a Revised and recirculated DEIR. *(David Keller, Friends of the Eel River)*

Response: The proposed regulation requires, for some aspects of a WDMP, “an open exchange of information,” however the proposed regulation does not require that consultation with NMFS and DFG be publicly noticed. The proposed regulation also does not preclude the governing body from allowing other parties to participate.

The Board recognizes the importance of transparency, and public participation, and for this reason, the proposed regulation does provide for annual reporting to the Board which will be available to the public. The proposed regulation requires that the annual report “shall document consultations with DFG and NMFS regarding the stream stage monitoring program and risk assessment and shall explain any deviations from recommendations made by DFG or NMFS during the consultation process.” This annual report is required to be submitted to the Board on September 1 of each year and the Board may require changes to the WDMP, including but not limited to the risk assessment, corrective and schedule of implementation, at any time. Therefore, public review of a WDMP will be available from the Board, and the public may contact the Board to provide input to any changes to a WDMP recommended by the Board.

Comment 1.1.5: Individual and cumulative diversions of water from critical habitat, for frost protection of wine grapes, harm and harass endangered coho salmon and threatened steelhead trout and threatened chinook salmon. The federal agency responsible for the protection and recovery of these fish species, the National Marine Fisheries Service, has indicated many times that the destruction of these species is widespread. Highly respected scientists that specialize in these issues agree that such diversions have the affect of causing rapid and harmful dewatering events in numerous tributaries (Merelender, Deitch, and Kondolf-2007-2008). Essential behavioral patterns, in addition to "stranding mortalities", are impaired and thousands of individuals continue to be sacrificed by the industry and the state in this protracted process of regulating frost diversions. The state's duty is clear, and it must use all the tools in its toolbox to finally ensure, as opposed to just lessening risks, that no individuals in the protected categories are sacrificed due to frost pumping activities. If the state should make changes to the draft proposed regulation, thus pushing out the timeline for certifying the DEIR, it would need to institute emergency rules to avert "take" in the interim period. Such emergency rules were recommended in February of 2009, and the state chose not to act on that recommendation and fish kills have continued. *(Larry Hanson, Northern California River Watch)*

Response: Comment noted. The Board is pursuing the proposed regulation in lieu of the emergency regulation process.

Comment 1.1.6: The regulation of frost pumping and diversion activities is welcome and the time the agencies have devoted to this task is greatly appreciated. The public urges the state to

resist all efforts to place administration in the hands of an unaccountable body or individual, to resist efforts to allow delays in reporting, and resist approval of diversions before impacts are fully analyzed and threats to listed species eliminated. Non-compliance with any part of the regulation must be considered serious and subject to swift and significant mandatory penalties or in the alternative, characterized by the state as contributing to "take". A regulation that ignores activities that harm or harass protected species or that seeks a political compromise will be inadequate to the task of avoiding "take", and the time to adopt effective regulation is now. *(Larry Hanson, Northern California River Watch)*

Response: Comment noted.

Comment 1.1.7: Mendocino County Farm Bureau (MCFB) encourages the Board to reconsider the regulatory approach. The proposed regulation is based on a number of claims that have not been substantiated and the February 2009 NOAA letter lists two incidents that have both been addressed. In terms of enforcement, current law such as the Endangered Species Act and Fish and Game Code exists that can be used if necessary. MCFB instead supports the development of non-regulatory collaborative, cost effective and productive solutions to allow for Russian River water to be used both for farming and the fishery. *(Mike Anderson, Mendocino County Farm Bureau)*

Response: The Board recognizes and commends the mitigation measures accomplished to date by the local efforts. However, we agree with NMFS and believe that while these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem. The Board has monitored the efforts by the Mendocino County Farm Bureau and local growers and recognizes the success this cooperative effort has achieved on the mainstem of the Russian River. However, there is evidence that salmonids are present throughout the watershed, including diversions from tributaries in Mendocino County. The Board concludes that participation by growers using water from tributaries should be included in any effective management program to protect salmonids. The proposed regulation is necessary to ensure participation.

Comment 1.1.8: Limiting the Season of Diversion is necessary (and should be consistent with State Policy to Manage Flows in Northern California Streams (AB-2121 policy). Under the WDMP - storage should be filled by diversion during high flow periods - only. The period of allowable diversion should meet with standards set in SWRCB Stream Flow Maintenance Policy. The structure of any policy and rule making for diversion of water for frost protection should fall under State Water Resources Control Board Policy for Maintaining Flows in Northern California Streams. Diversion for frost protection, and issues related to such diversion, logically should fall under the general stream flow maintenance policy (this would include and not be limited to: Diversion season, cumulative effects analysis, group and sequenced diversion planning). Specific rules for controlling water use for frost protection are appropriate. However, the specific requirements and full context of the WDMP must be completely enumerated. Coast Action Group is re-submitting comments on flows policy (by attaching previous comments on flow maintenance policy - Comment: Instream Flow Policy - Northern California Streams, April 15, 2008) for your consideration in the rule making process. The EIR process should consider these documents and related discussion in the rule making process. *(Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch)*

Response: New appropriative water rights for frost diversion will need to comply with the Policy for Maintaining Instream Flows in Northern California Coastal Streams and with the

proposed frost regulation. Existing frost diverters will need to comply with the proposed frost regulation, which would require diversions to be managed to prevent salmonid stranding mortality.

Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 1.1.9: The SWRCB has failed in setting Stream Flow Objectives on north coast streams. Stream flow objectives are necessary for managing the SWRCB Policy to Maintain Flows in Northern California Streams and also to effectively manage diversion of water for frost protection. This failure is one aspect of how SWRCB, as responsible agency, has not met the flow management obligations that are responsible for “Take” under the Federal Endangered Species Act. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: New appropriative water rights for frost diversion will need to comply with the Policy for Maintaining Instream Flows in Northern California Coastal Streams and with the proposed frost regulation. Existing frost diverters will need to comply with the proposed frost regulation, which would require diversions to be managed to prevent salmonid stranding mortality.

Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 1.1.10: We support the adoption of the proposed Russian River frost protection regulation, with some minor suggestions for change as noted below, because it constitutes a significant action to reduce a substantial threat to the recovery of federally threatened and endangered salmonids. (*Rodney McInnis, National Marine Fisheries Service*)

Response: Comment noted.

Comment 1.1.11: NMFS supports the proposal to regulate vineyard frost protection practices in the Russian River basin, and we would like to highlight aspects of the regulation that are essential to its success. The SWRCB determination that frost diversions are an unreasonable use of water is important. However, this categorical determination does not imply that all frost diversions, under all conditions, are unreasonable. Rather, it acknowledges the risk of such diversions to salmonids and allows for water users to continue their practices as long as they are able to demonstrate, with reasonable certainty, that they are not having an adverse effect. In so doing, the SWRCB effectively shifts the burden of proof from resource agencies to water users. This is an important and prudent conservation strategy that will reduce the risk of harm to salmonids. (*Rodney McInnis, National Marine Fisheries Service*)

Response: Comment noted.

Comment 1.1.12: NMFS supports the proposal to regulate vineyard frost protection practices in the Russian River basin, and we would like to highlight aspects of the regulation that are essential to its success. To be consistent with the ESA, it is imperative that final approval of the water demand management programs, and the flow recommendations within them, remain with the SWRCB. This stipulation keeps the liability for take, if it occurs, with the WDMP groups and

the SWRCB. Our recommendations are technical assistance only and do not constitute federal regulatory action. (*Rodney McInnis, National Marine Fisheries Service*)

Response: The proposed regulation clearly provides that the Board, and not NMFS or DFG, has authority to approve a WDMP, and the components, thereof. The proposed regulation does not limit or restrict the authority of any state or federal agencies.

Comment 1.1.13: As drafted, the regulation is counterproductive and will stifle local grower efforts to cooperatively identify and manage resource conflicts. (*Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission*)

Response: The Board disagrees. The existing local efforts may become WDMPs pursuant to the proposed regulation.

Comment 1.1.14: Similarly, the Board contrives an argument that all frost water use is presumptively unreasonable under the reasonable and beneficial use doctrine in the absence of evidence of actual impact. The sole biological basis for the regulation is two cases of stranding that, if in fact were caused in whole or part by frost diversions, have been fixed. The Council is not stating that there is no potential for frost water diversions to impact stage; instead, the Council is stressing that water use, stream flow, and salmonids habitat impacts are too complicated to dismiss as a singular problem (frost water use) with a singular solution (regulation). (*Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission*)

Response: The Board is charged with making difficult decisions on complicated public trust matters. In this case, the Board has examined the evidence concerning a threat to listed and endangered species and the growers' need for the continued beneficial use of water for frost protection purposes in the Russian River watershed. Based on the available evidence, the Board has determined that the proposed regulation is necessary. The proposed regulation provides the continuation of using water for frost protection purposes provided that use is managed under an appropriate Water Demand Management Program.

Comment 1.1.15: Proposed Phased Implementation Plan. The State Board's proposed regulation does not include a timeline for compliance with its numerous requirements. It would be impossible for a water user to comply with the proposed regulation upon enactment because certain preliminary steps, such as water diversion inventory and stream gaging, must occur before developing a complete WDMP. The State Water Board should adopt the following phased implementation approach to allow water diverters, the WDMPs, and resource agencies the opportunity to implement the regulation's components in an orderly and step-wise fashion: 2012 - All growers participate in the Sonoma County Ordinance or URSA; collect frost protection system inventory; develop stream gaging plan to be implemented over a three year period; review 2012 data for existing stream gages; convene technical workshops to identify information needs and to prepare study plan. 2013 - Begin reporting frost water diversions to Sonoma County Ordinance monitoring and reporting body or URSA; review 2013 data for existing stream gages; begin installation of new stream gages; identify funding to implement study plan; convene workshops or prepare white papers on proposed water diversion and stream stage criteria; begin identifying high priority water management actions. 2014 - Identify and develop action plans for high priority water management actions; continue installation of stream gages; begin implementing study plan; identify water users that do not significantly

affect stream stage and that should be exempted from WDMPs; prepare and submit WDMPs to State Board. 2015 - State Board adopts water diversion and stream stage criteria; revise WDMPs if necessary and implement. (*Bob Anderson, United Winegrowers for Sonoma County; Lea and Harry Black; Chris Bowen, Hunter Farms; Nick Frey, Sonoma County Winegrape Commission; Mark Houser; Carole Mascherini; Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission; Barbara Petersen; Don Wallace, Dry Creek Vineyard; Kate Wilson, Russian Riverkeeper; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Russ Green; Don and Joe Guadagni, Guadagni Brothers Welding; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards; Allan Nelson; Hank Wetzal; Dermot and Darice Bourke; Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board's proposed regulation does provide for a phased implementation. As stated in the Initial Statement of Reasons, "The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The proposed regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment." This clearly identifies the Board's intent to allow a phased development and implementation of an approved WDMP.

The proposed regulation does not specify commencement or milestone dates for portions of a WDMP because the regulation must be effective now as well as in the future. In addition, individual WDMPs may be organized based on geographic location or number of participants and therefore different WDMPs may require different schedules for implementation. The Board recognizes that all required aspects of a WDMP cannot be implemented immediately. The intent of the Board is to have a phased approach to the WDMP. The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial WDMP that is submitted prior to February 1, 2012. The Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to a WDMP that reflect the data and information contained in annual reports.

Comment 1.1.16: DFG is supportive of the State Water Resources Control Board's (SWRCB) efforts to require diverters to develop a Water Demand Management Plan (WDMP) to control diversions from the Russian River stream system for purposes of frost protection from March 15 through May 15. The principal intent of the Frost Protection WDMP is to develop a strategy to comply with the federal Endangered Species Act (ESA) and CESA by ensuring that operation of frost protection diversions do not result in take of listed fish species: Chinook salmon (*O. tshawytscha*), coho salmon (*O. kisutch*) and steelhead (*O. mykiss*). DFG believes the Regulation, if implemented, is critical to prevent take of listed salmonids during frost events on the Russian River and, as such, is vitally important to have in place by the stated date of February 1, 2012. (*Carl Wilcox, California Department of Fish and Game*)

Response: Comment noted.

Comment 1.1.17: It is important to recognize that use of water for frost protection each spring is not unreasonable, but an allowable, permitted and established beneficial use of water by

agriculture. In fact, it is the proposed regulations, which ignore the significant efforts by the regional stakeholders, that are themselves unreasonable. (*Kendall Smith, County of Mendocino*)

Response: The requirement that all water be put to beneficial use to the fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable. The Board has recognized the progress made by local stakeholders. Contrary to the assertions of the commenter, the proposed regulation is reasonable and supported by adequate findings and documentation.

Comment 1.1.18: In the end, if this proposed regulation's only goal is to save the fish, and not to ultimately control the water, than it seems reasonable to me, to concentrate on the tributaries that dry up naturally, every spring, or in years of late rains or high water, that have eventually left fish stranded and died. The tributaries in the Russian River Watershed have dried up naturally for 100's of years and we should not be penalized for these naturally occurring springtime events. (*Lea and Harry Black*)

Response: It should be clear that the proposed regulation is intended to apply and does apply only to diversions of water, including diversions from tributaries. If natural stranding occurs, the proposed regulation does not place fault or responsibility on the frost protection diverters who are participating and complying with a Board approved WDMP or diverters exempted by the Board. However, the proposed regulation is drafted so that cumulative frost diversions do not exacerbate natural conditions that already cause stranding mortality.

Comment 1.1.19: In reviewing the SWRCB Proposed Regulations for frost protection water use and Rationale for the Proposed Regulatory Action, SWRCB staff cites studies and observations that connect instream diversions for frost protection with rapid declines in streamflow and fish mortality in the Russian River watershed. These observations are important for understanding the potential effects that instream diversions can have on streamflow during spring, when flows are already receding naturally. Empirical data suggest that these effects may not happen everywhere water is used for frost protection, and may not happen every time water is used for frost protection. Therefore, regulations that apply a broad brush to prohibit use of water for frost protection are misguided. Rather, regulatory actions can seek to maintain beneficial uses for agriculture as well as ensure the preservation of streamflow through data collection where streamflow recession could occur as a result of frost protection water use, and addressing the sudden changes in streamflow that can cause juvenile salmonid mortality where they occur. Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection water use or because of natural streamflow recession with the onset of the dry season. Though advocating for particular mechanisms to resolve documented recessions in streamflow from frost protection diversion between grape growers and regulatory agencies is beyond the objective of this letter, it is important that a framework is established to ensure that those changes in streamflow that do occur are addressed so that they do not occur in the future. (*Matthew Deitch, Center for Ecosystem Management and Restoration*)

Response: Comment noted.

Comment 1.1.20: On behalf of Trout Unlimited (TU), I submit the following comments on the Proposed Russian River Frost Reasonable Use Regulation ("Frost Rule" or "Rule"). Trout

Unlimited is a national trout and salmon conservation organization with 140,000 members, including more than 10,000 in California. It has been three years since fish kills attributed to frost diversions were first publicized. At that time, the federal government requested action from the State Water Resources Control Board to prevent future harm to salmon and steelhead. While the Board declined to adopt emergency rules for the 2010 frost season, Board members stated their intent to establish a long term management solution. Trout Unlimited urges the State Water Board to adopt the Frost Rule before another year passes. Since 2008, the State Water Board and many stakeholders have labored hard over the frost regulation and worked to put in place management programs to protect salmon and steelhead. While it is likely that the proposed Frost Rule will fully satisfy nobody, it provides a solid basis for moving forward. *(Brian Johnson, Trout Unlimited)*

Response: Comment noted.

Comment 1.1.21: The proposed Frost Rule is generally sound. The final Frost Rule should contain the following elements: 100% Participation: Chairman Hoppin and other Board Members identified this as a priority, and TU wholeheartedly agrees. Without the Frost Rule, a voluntary program could never achieve 100% participation, and the cooperating growers would be at an unfair disadvantage to non-cooperators. *(Brian Johnson, Trout Unlimited)*

Response: Comment noted.

Comment 1.1.22: There are several aspects of the proposed frost control amendment that are to be commended. Fish kills in the Russian River watershed that result from frost protection diversions have been recognized as an important problem worthy of regulatory action; they must never be allowed to occur again. Participation by Russian River watershed frost protection diverters is appropriately compulsory. *(Chris Shutes, California Sportfishing Protection Alliance)*

Response: Comment noted.

Comment 1.1.23: Russian Riverkeeper urges the Board to adopt the Frost Regulation without further delay. In addition, we suggest the following: The rule must ensure 100% participation by people who use water for frost protection. *(Kate Wilson, Russian Riverkeeper)*

Response: Comment noted. The proposed regulation applies to all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County and requires participation in a Board-approved water demand management program. The proposed regulation does, however, provide that groundwater diverters may be exempted from the requirements of the proposed regulation if they can demonstrate to the satisfaction of the Deputy Director for Water Rights that their diversion does not contribute to a reduction in stream stage to any surface stream in the Russian River watershed during a frost event.

Comment 1.1.24: Russian Riverkeeper urges the Board to adopt the Frost Regulation without further delay. In addition, we suggest the following: Above all, the program must ensure that fish kills from frost protection never happen again. Thank you for your hard work and we hope to see these regulations in place by next spring. *(Kate Wilson, Russian Riverkeeper)*

Response: Comment noted.

Comment 1.1.25: SCWC members, representing a large segment of the concerned public in Sonoma County, are looking to the state for regulations that will both 1) finally ensure no endangered coho, threatened steelhead trout, or threatened chinook salmon are sacrificed due to vineyard frost pumping activities, and 2) contribute significantly to their recovery. In contrast, the proposed regulation's stated goal is only to prevent "Salmonid Stranding Mortalities due to Instantaneous Demand for Frost Protection." Clearly, this focuses the regulation less on protecting fish than on minimizing the regulation's impacts on grape growers' use of water for frost protection. Coalition members see the problem as much broader than limiting stranding mortalities, and urge the state to pursue a regulation that recognizes unnatural and rapid dewatering of the Russian River stream system as threatening to all life stages of salmonid species, and severely impairs their ability to recover from the current stages of population collapse. An aim to merely lessen the risk of further population reductions for the protected categories will not suffice. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). The proposed regulation only addresses the causes of the identified problem based on the information provided in this rulemaking process.

Comment 1.1.26: Maintaining adequate stream flows is essential. The regulation must be cleansed of components that allow continued diversions in critical habitat, until and unless any and all diversions are determined to be individually and cumulatively harmless to the listed fish species. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). The proposed regulation only addresses the causes of the identified problem based on the information provided in this rulemaking process.

Comment 1.1.27: The draft proposed regulation contains important improvements, but then weakens them with: 1) a local governance plan; 2) an implementation schedule that allows diversions without previous risk assessment, monitoring plans, or inventories; 3) a corrective process that could take up to three years; and 4) delayed reporting. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The Board retains authority to initially approve a WDMP, and can require any changes to a WDMP.

Comment 1.1.28: SCWC members insist that WDMPs must err on the side of conservation, if they err at all. Corrective measures must be identified and rectified as soon as possible. The regulations must be crafted to avoid "take" related to frost diversions and pumping, in the broadest sense of the word. The use of the phrase "prevent stranding mortalities" suggests that

the state is looking at the potential for species harm in an overly narrow manner. Although stranding mortalities are the most dramatic form of harm and harassment from frost protection diversions, the courts and scientists have recognized for decades that "harm and harassment" include impairment of breeding, sheltering, and feeding, which lead to mortalities over longer time frames. A narrower focus will doom the regulation to failure, and the listed fish species to extinction. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State's public trust resources.

As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. The proposed regulation only addresses the causes of the identified problem based on the information provided in this rulemaking process

Comment 1.1.29: A DEIR statement under Project Description (DEIR page 10): "[the proposed regulation would ensure that tributaries are 'protected,' in addition to the main stem of the Russian River. . ." is inaccurate. "Protected" means "not harmed". The proposed regulation does not propose to protect critical watersheds and listed species from "harm" as defined under the ESA, as we have explained in the foregoing. The proposed draft regulation only proposes to prevent stranding mortalities, a significantly lower standard and narrower purpose. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. The Board made changes to the DEIR and supporting documents to clarify what was meant by "protected".

Comment 1.1.30: The [January 2010] proposed regulations do not limit withdrawals for frost protection to direct diversion for frost protection but seemingly include pumping into an offstream storage reservoir. That means no pumping from March 15 to June 1 unless there is an approved "water demand management program". This program is undefined, and given the Division of Water Rights history of moving forward on plans of any sort, will probably take a decade or more to implement. Meanwhile, no diversions will be allowed. I think you know the economic repercussions of that to individuals and to the counties. (*Rudolph Light; Rudolph Light*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.1.31: The proposed regulation does not recognize or provide for enhanced storage in times of high-flow for use during frost season, despite significant commentary about its importance in both the Draft EIR (pg 11) and Statement of Reasons. Despite being broadly recognized as an important part of the solution to unnecessary mortality of salmonids due to stranding, the regulation is silent on provision for enhanced storage to alleviate the demand for in-stream water during frost protection season. There is little controversy about the need and effectiveness of enhanced offstream storage to mitigate demand on stream flows during frost

season. The concept of storing water in times of high flow for use in times of low flow is not only self-evident but endorsed by the materials attendant to the draft regulation. The Draft EIR even identifies it as a significant "Potential Action by Affected Party" and devotes substantial pages to the concept. Programs for enhanced storage are proven and feasible. The Draft EIR cites the Napa regulatory system's focus on offstream storage as a practical and effective solution, saying "[t]he Napa regulation has been successful and is an example where diverters have used offstream storage and coordinated their diversions in order to reduce instantaneous demand on the stream system." Despite the recognition of the need for enhanced offstream storage and the utility of pre-frost season diversions for the purpose of storing water for frost protection, the regulations are completely silent on the issue of storage. This needs to be corrected, and a reasonable plan for implementing a program for storing frost protection water needs to be incorporated into the regulation itself. (*Pete Downs, Jackson Family Wines*)

Response: As discussed and analyzed in the Draft EIR, the proposed regulation anticipates increased offstream storage as one potential method of compliance with the proposed regulation.

Comment 1.1.32: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, there are better alternatives which have not been analyzed. One alternative the SWRCB should review and consider is actually a relatively simple, but fundamental, modification of the proposed regulation. Currently, the proposed regulation is a prohibition which declares that all diversions for frost protection are unreasonable and thus prohibited unless certain conditions are met. As described below, this amounts to an unjustified conditional extinguishment of certain water rights. To resolve this problem, the SWRCB should consider restructuring the proposed regulation from a declaration of what is not reasonable, to a statement of what is reasonable. (e.g., "Any diversion for frost protection from the Russian River watershed that is diverted in accordance with a board approved WDMP is reasonable.") Like the regulation adopted for the Napa River, this type of regulation would be a policy statement, leaving determinations of reasonableness for the proper judicial or quasijudicial proceeding. (see *People ex rel. State Water Resources Control Bd v. Forni* (1976) 54 Cal.App.3d 743, 752 holding that, "Properly construed, section 659 amounts to no more than a policy statement which leaves the ultimate adjudication of reasonableness to the judiciary.") While the supporting documents argue that the proposed regulation (with its blanket declaration of unreasonableness) is preferred because it would be too difficult to enforce anything else, such a desire for administrative convenience does not justify an abrogation of due process. Such a policy statement would be factually and legally more supportable. Instead of making basin-wide declarations and forcing water users to prove their innocence by compliance with as yet unknown standards, a policy statement about what is reasonable would provide water users with information about how to achieve important improvements for the benefit of salmonids, without an unjustified regulatory declaration of unreasonableness. (*Jack Rice, California Farm Bureau Federation*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to "consider in detail each and every conceivable variation of the alternatives stated." (*Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287-288.) Furthermore, the commenter's proposed alternative of a declaration of what use of water is reasonable serves only to restate existing law, and therefore would not meet the objectives of the proposed action. Contrary to the assertions of the commenter, the declaration of unreasonableness is necessary to ensure

the efficacy of the regulation.

Contrary to the assertions of the commenter, there has been no “abrogation of due process”; the Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Comment 1.1.33: The proposed regulation and supporting documents do not clearly describe the objective of the proposed regulation or establish any clear standards for the achievement of that objective. To judge by the proposed regulation, the apparent purpose is to “prevent stranding mortality.” However, in the Draft Statement of Reasons the purpose of the WDMP is to ensure that cumulative diversions will not result in a reduction in stream stage that is “harmful to salmonids.” While it appears that in most instances the phrase “harmful to salmonids” was struck in favor of the slightly clearer objective to “prevent stranding mortality,” there remains confusion in the supporting documents as to which standard would be actually used. (*Jack Rice, California Farm Bureau Federation*)

Response: The proposed regulation and supporting documents clearly describe the objective of the proposed regulation. The reference to “harmful to salmonids” in the Initial Statement of Reasons was erroneously left unchanged after the Board’s April 2011 workshop and it will be corrected to be consistent with the proposed regulation.

Comment 1.1.34: Rule making should encourage other solutions for controlling frost damage - without the need to use water. (*Alan Levine, Coast Action Group*)

Response: The proposed regulation does not limit corrective actions to continued use of water for frost protection. The DEIR analyzes the costs of using wind machines and other non-water frost protection methods. The Board will allow the governing body and grower to determine the best acceptable type of system to be used, consistent with the terms of the proposed regulation, if corrective action is determined necessary.

Comment 1.1.35: The period of allowable diversion should meet with standards set in SWRCB Stream Flow Maintenance Policy. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 1.1.36: Regulatory Action should start with the premise that all water diversion for the purpose of frost protection is not legal - unless the following occurs: The diverter must unequivocally demonstrate that diversion will cause no harm. No harm can be demonstrated by demonstration of item #1 and any (or all) of the following conditions: 1- The landowner possesses water rights license for such diversion 2- The landowner has offstream storage sufficient to carry out activity with sufficient backup (or guarantee) to eliminate the immediate need to refill storage. 3 -The landowner is participating in a planned program of diversion rotation or scheduling that is demonstrated to assure maintenance of stream flow. 4 - The landowner can demonstrate that well use is not diversion from surface flows or under flow in a defined channel Burden of proof is to be on the landowner. The SWRCB should consider the above noted regulatory constraints within the framework of short term emergency regulations

until the Board has time to address and integrate a more comprehensible long term program considering diversion for frost protection and stream flow maintenance. (*Alan Levine, Coast Action Group*)

Response: The Board cannot start with the premise that all water diversions for frost protection are not legal. The Board has records showing that many of the growers using water in the Russian River for frost protection purposes have valid permits and licenses. Additionally, frost protection is recognized as a beneficial use of water. (Cal. Code Regs., tit. 23, § 671.) The Board has considered the available evidence regarding listed or endangered salmonids and the growers' beneficial use of water for frost protection, and determined that the proposed regulation is necessary at this time. The Board is pursuing the proposed regulation in lieu of the emergency regulation process.

Comment 1.1.37: The final (long term policy) for flow maintenance and frost protection must consider: * The relationship of frost protection diversion issues with flow maintenance policy * Analysis of Cumulative Watershed Effects (cumulative diversion) related to planned diversion policy - with limitations of loopholes that would subvert regulation * Impoundment facilities that block migration and access to habitat must be removed * By-pass flow numbers must be sufficient to support salmonids in all life stages * Monitoring and reporting programs must be sufficient to assure success of regulations. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 1.1.38: Our operation has used some form of frost protection measures since the 1950's. Our experience is that each vineyard has different conditions and needs that you just can't use one method of frost protecting. (*John and Patti Saini*)

Response: The proposed regulation anticipates varying needs and situations of diverters for frost protection and therefore provides flexibility for each WDMP to appropriately address the specific problems and needs of the participating growers.

Comment 1.1.39: We currently farm approximately 300 acres and use both wind machines in places where they work and over head frost protection where it works. We feel our current frost protection ordinance is adequate. My family has farmed in Sonoma County since 1917, with my two sons making the 4th generation. We respect the land, the environment, the fish, and feel that we are good stewards of the land. Asking us to make changes that aren't necessary to our farming practices would be a harsh blow, and may make our continuation of farming impossible. (*John and Patti Saini*)

Response: The current Sonoma County Vineyard and Orchard Frost Protection Ordinance was a timely response by the County and its growers to the frost issue in the Russian River watershed. The Ordinance includes certain components of a water demand management program (WDMP) required by the proposed regulation and nothing prohibits the County, or another governing body from submitting a WDMP based on the Ordinance's existing program. It is likely more specific details on the Ordinance's proposed stream and diversion monitoring program, transparency of data, and assessment of risks to salmonids and corrective action program would likely be necessary for Board approval as a WDMP.

The proposed regulation will not require all growers to implement changes, or corrective

actions, to their existing operation.

Comment 1.1.40: I am a farmer who has used water from the Russian River Watershed to provide frost protection for my vineyard for nearly forty years. When I was looking for land to plant a vineyard in 1971 water for frost protection was recommended by the Sonoma County Ag Advisor as an excellent way to deal with a potentially devastating threat to my crop, and I chose to buy land adjoining Maacama Creek partly because it offered abundant water which could be used for this purpose. It has been obvious over the years that overhead irrigation is pretty much foolproof frost protection, and the riparian right to the water for this use is an important factor in determining the value of the vineyard. (*Stephen Hawkes*)

Response: Comment noted. The proposed regulation does not prohibit the diversion of water for frost protection under riparian water rights, but requires the diversion to be managed in a Board-approved WDMP.

Comment 1.1.41: I am at a loss to understand your position on how sprinkler frost protection can be considered a non-beneficial use of a public trust resource without a robust scientific investigation on the negative effects on salmonids, and a concurrent economic analysis of the wine grape industry in our region. My own experiences and understanding of frost protection reaches a completely opposite view. Furthermore, there is still the lingering question as to whether these changes in regulations are going to produce the desired outcome of improved salmonid numbers in the Russian River watershed. There is considerable information that there are numerous other factors that would have to be addressed before salmonid populations have a reasonable chance of recovery. (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: Contrary to the comment, the Board considers the use of water for frost protection purpose in the Russian River as a beneficial use of water. (Cal. Code Regs., tit. 23, § 671.) The proposed regulation would allow for the continued diversion and use of water for frost protection, so long as the diversion and use are managed by a local water demand management program. The program will monitor and assess the potential risks to salmonids caused by existing and new frost diversions, and recommend and implement necessary corrective actions to prevent salmonid mortality. Many diverters will not be required to change current operations, but only to report diversions on an annual basis to allow the governing body to assess cumulative risks based on existing and future demands, variable stream stage conditions, and presence of salmonids.

The Board has considered the available evidence regarding listed or endangered salmonids and the beneficial use of water for frost protection, and determined that the proposed regulation is needed at this time.

Comment 1.1.42: Before these proposed regulations are implemented, I recommend that your agency considers the following: (1) Peer review of the science behind the changes in the proposed recommendations by qualified fisheries biologists, hydrologists and frost protection experts. If you are unsure of who to request for this assistance, I can provide you with names both within the UC system and other land grant schools. (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: The rulemaking process has been open for public review and comment, including

peer review and comment on all supporting documents. The Board is considering all relevant information, consistent with the APA and CEQA, before acting on the proposed regulation.

Comment 1.1.43: Proposed Draft Russian River Frost Regulation (3) Risk Assessment - The removal of the phrase "based on sound science" underscores the "never mind the data" tenor of the entire Frost Regulation process. If the regulation and its supporting processes are to have any credibility, the District believes that the language needs to be returned to its original form. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The use of the phrase "using sound science" was removed from the regulation because that phrase added no more clarification or restriction to the proposed regulation. The Board still intends that any WDMP developed and implemented pursuant to proposed regulation and submitted for Board approval shall be based on the best available "sound science".

Comment 1.1.44: Please accept these observations and comments as part of the March 18, 2010 Frost Regulation Working Group process. Northern California River Watch welcomes regulation of frost activities in Sonoma and Mendocino Counties. Much valuable time has elapsed with tragic result. River Watch urges the state to approach this process not as a time to negotiate but as the time to finally exert its authority and carry out its duty. (*Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 1.1.45: The growers must be required to produce for public scrutiny, now and in the future, information to verify their claims. During the formulation of a regulation, the standards must include reliable parcel maps of acreages dependent upon frost protection measures. All acres that have historically relied on overhead sprinkling, in addition to those acres utilizing micro-sprinklers, must be known. Accurate and complete maps of frost ponds and pond capacity must be made available during this formulation phase. Such information strengthens management models but also effective enforcement efforts. (*Larry Hanson, Northern California River Watch*)

Response: The proposed regulation requires that the governing body maintain an inventory of frost diversion systems participating in the WDMP. Identification of water right claimed is not required by the proposed regulation. The Board maintains records of all known water rights so requiring water right information in the proposed regulation is unnecessary.

Comment 1.1.46: The burden is on the growers to establish that their efforts, necessarily embodied in a final regulation, will not adversely affect in stream flows, individually or cumulatively, and are sustainable in a watershed context. In this manner, demand may be reduced to a "reasonable" level. Redefining reasonable and beneficial uses cannot be done with a stroke of a pen or by fiat. These are terms meant to have a basis in reality - that is, based upon what the protected species need to survive including cold clean water supply year round throughout the designated critical habitat. Legal precedents matter, as do biological principles. There are potential impacts of redefining terms of art in this manner; therefore an initial study would be required. (*Larry Hanson, Northern California River Watch*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.) Contrary to the assertions of the commenter, the Board has based its determination of unreasonableness on the facts and circumstances of this case. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

Comment 1.1.47: The issue of water being diverted for private economic gain that harms the usage of the resource for all other entities has to be resolved. The use of water that comes from any stream for frost protection is to be banned and in effect immediately. This will only affect some growers that have planted their vines in low-lying areas. Those growers will need to have alternatives to stream diversions, whether it be fans, reservoir fed water, or taking a hit which would be covered by insurance. Mistakes have been made. It is a mistake to plant vineyards in areas of frost impacts unless a calculation of frost damage has been economically evaluated. It is a mistake for Sonoma County to be approving any vineyards in some areas. It is a mistake for the applicable State Water Board to NOT oversee the legality and the quantity of stream water diversions. (*Larry Hanson, Northern California River Watch*)

Response: The use of water for frost protection within the Russian River watershed does not need to be banned, but rather coordinated and managed consistent with the proposed regulation. Requiring alternative methods for current frost diversion systems may be necessary, when a determination has been made that the particular diversion causes or contributes to stranding mortality of salmonids. The proposed regulation does not affect the State Water Board's existing authority over the legality of many types of water diversions or its authority over appropriative rights issues after 1914. The proposed regulation also does not delegate the Board's authority to the individuals or governing bodies administering WDMPs; the ultimate authority remains with the Board.

Comment 1.1.48: In 1972, the SWRCB determined that diversion of water for frost protection, when watercourses contain insufficient flows to meet all needs, represented an unreasonable method of diversion and use in Napa County. A water master was appointed. The SWRCB is now taking steps to responsibly accommodate frost diversions from the Russian River watershed by way of Water Demand Management Plans (WDMPs). Such an effort on the part of the SWRCB is in many ways commendable. What is relevant and very helpful but not expressly addressed in the proposed revisions to the frost regulation is the manner in which water in the past has been deficiently accounted. Given the rapid expansion of vineyards throughout Sonoma and Mendocino Counties in the last 40-years and given the precarious situation in which the present and future populations of wild anadromous fish find themselves, the state must begin to err on the side of conservation, and literally account for not only authorized diversions, but also known unauthorized diversions, estimates of riparian use, and reasonably foreseeable illegal diversions (vineyards with no pond storage and vineyards with no legal right to divert or store water). (*Kimberly Burr, Northern California River Watch*)

Response: Comment noted. Regarding potential illegal diversions, the Board retains its separate enforcement authority provided by Water Code.

Comment 1.1.49: The last sentence in the preamble to the revised regulation creates unnecessary confusion. The harm to listed species due to a diversion for frost protection is not reasonable. The state must retain its authority and duty to call for no diversions when water supplies may be insufficient to meet all needs and refrain from condoning harm based upon a notion of inability to manage diversions. (*Kimberly Burr, Northern California River Watch*)

Response: The proposed regulation does not condone harm to listed species. The proposed regulation should benefit listed species by requiring coordination, monitoring and management of diversions for frost protection as identified in the proposed regulation and Initial Statement of Reasons.

Comment 1.1.50: The main objective of the proposed regulation is to avoid take of federally protected species of salmon and steelhead facing extinction in the foreseeable future. To this end, strict, timely, and meaningful measures are required. (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The purpose of the proposed regulation is to prevent salmonid mortality in the Russian River watershed due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops in Sonoma and Mendocino Counties.

Comment 1.1.51: How would the regulation adequately evaluate and address existing uses, and time of use, in order to ensure no harm to listed anadromous fish? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The proposed regulation provides for an annual risk assessment of stream conditions in the Russian River watershed based on a complete inventory of frost diversions, and stream stage monitoring program with identified levels determined to prevent stranding mortality of salmonids. The Board will annual evaluate the effectiveness of the WDMP.

Comment 1.1.52: Will this regulation require peer reviewed verification that there will be adequate water supply to protect the grapes without threatening harm to listed species? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The proposed regulation requires that the individuals or governing bodies administering WDMPs consult with DFG and NMFS as to development of a stream stage monitoring and risk assessment. The governing body may include its own expert scientists and engineers in the consultation if desired.

Comment 1.1.53: The industry and the state have had many years to acknowledge and address the impacts posed by mass frost protection activities on rivers and streams. In the Russian River, such impacts were identified as least as early as 1997. In the Napa River basin, such impacts were identified and corrected in the 1970's. Absent government autonomy from industry, state and public enforcement is critical to effective environmental protection. The entity responsible for protecting public trust resources, avoiding take, and managing the use of water in California must embrace its duty and institute meaningful and timely regulation of frost

protection impacts on listed salmonids and affirmatively reject yet another attempt by powerful local interests to delay such needed and, unfortunately, overdue regulation. (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: Comment noted.

Comment 1.1.54: The draft regulation the SWRCB proposes to adopt suffers from legal and practical flaws. Specifically, this regulation is overbroad, in that it proposes to regulate activities that have no appreciable impact on salmonid habitat. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL.

Comment 1.1.55: The draft regulation the SWRCB proposes to adopt suffers from legal and practical flaws. Specifically, this regulation is too narrow, in that it fails to address non-frost-related diversions that do have an appreciable impact on salmonid habitat. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL.

The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). The proposed regulation only addresses the causes of the identified problem based on the information provided in this rulemaking process.

Comment 1.1.56: Our next concern is with the definition of "significant," which is defined in section (b) of the regulation [January 2010 draft]. This requires every single diverter to be involved in the program unless they prove, on an individual basis, that they will have a "negligible" impact on flows in "any portion of the Russian River stream system." Proving a "negligible" impact without a definition is an impossible standard. Furthermore, the SWRCB does not have the resources available to analyze and decide whether each and every diversion on the Russian River stream system has a "negligible impact" on Russian River flows. Thus, this is an impossible standard for two reasons. Moreover, the goal of the regulation is not to protect riverflows for their own sake, but to protect salmonid habitat by maintaining adequate river stage. Therefore, the regulation as currently written is advancing the wrong goal. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.1.57: The phrase "any portion of the Russian River stream system" [January 2010 draft regulation] is ambiguous. Does the Board truly mean "any portion" of the stream system, or only that portion downstream from the diversion point? (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.1.58: It is not clear why the regulated period is from March 15 to June 1 [January 2010 draft], when frost protection activities generally cease by May 15. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.1.59: Once it makes these disclosures [described in Government Code sections 11350 and 11346.5 (a)], the SWRCB must then consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. There are many alternatives that can reduce these costs: Eliminate the requirement that every diversion and stream gage report, on an instantaneous basis, measurement data. The costs associated with telemetry, and then the management burden of compiling and transmitting the data are extremely high and unnecessary. In order to review the data and address any possible problems, perhaps a dozen or more people will have to be hired to monitor several hundred (836 + 77 = 913) locations during a frost event. Water diverters can still install water meters and gages, but the data collected can be made available when necessary. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.1.60: In contrast [to the Sonoma County Ordinance], the regulation being proposed by the SWRCB may prove to be unworkable, at least in the form circulated in January 2010, for various reasons. First, it could take years to fully implement the regulation. During this time vineyards will go out of business, grape prices will go up, and California wines could permanently lose market share. Consider that the regulation prohibits all frost water diversions from the entire Russian River watershed until: (a) a water demand management program is developed, and (b) the water demand management program is approved by the SWRCB, and (c) all of the elements of the water demand management program are implemented, or (d) the diversion will have a "negligible effect on flows in any portion of the Russian River stream system that provides habitat for anadromous fish." With respect to (a), a water demand management program is being developed for use by Sonoma County, but this plan is being developed for the County ordinance, not the SWRCB regulation. Unless the SWRCB adopts a regulation that mirrors the County ordinance (in which case it begs the question as to why the SWRCB regulation is needed at all), a new water demand program will have to be developed. What this program will look like is unknowable at this point because we do not know what the regulation will require. The development of a new water demand program would likely take several months. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The commenter is referencing the January 2010 draft version of the regulation but the latest publically available version is dated April 6, 2011. Neither version, however, is a prohibition on frost diversions. The proposed regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed if the grower

participates in a Board-approved Water Demand Management Program (WDMP). If a grower elects not to participate, the proposed regulation provides that his diversion is unreasonable, not illegal.

The Initial Statement of Reasons states “The Board recognize that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment.” This clearly identifies the Board’s intent to allow participating growers to continue to divert water for frost protection, under a Board-approved WDMP, while developing and implementing the ultimate requirements of a WDMP over time.

Comment 1.1.61: In contrast [to the Sonoma County Ordinance], the regulation being proposed by the SWRCB may prove to be unworkable, at least in the form circulated in January 2010, for various reasons. First, it could take years to fully implement the regulation. During this time vineyards will go out of business, grape prices will go up, and California wines could permanently lose market share. Consider that the regulation prohibits all frost water diversions from the entire Russian River watershed until: (a) a water demand management program is developed, and (b) the water demand management program is approved by the SWRCB, and (c) all of the elements of the water demand management program are implemented, or (d) the diversion will have a "negligible effect on flows in any portion of the Russian River stream system that provides habitat for anadromous fish." With respect to (c), once approved by the SWRCB, it could take years to obtain the necessary monitoring devices, obtain the permits to install them, and create the network for sharing the information. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The commenter is referencing the January 2010 draft version of the regulation but the latest publically available version is dated April 6, 2011. Neither version, however, is a prohibition on frost diversions. The proposed regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed if the grower participates in a Board approved Water Demand Management Program (WDMP). If a grower elects not to participate, the proposed regulation provides that his diversion is unreasonable, not illegal.

The Board has stated in its Initial Statement of Reasons that “The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment.” This clearly identifies the Board’s intent to allow participating growers to continue to divert water for frost protection, under a Board-approved WDMP, while developing and implementing the ultimate requirements of a WDMP over time.

Comment 1.1.62: In contrast [to the Sonoma County Ordinance], the regulation being proposed by the SWRCB may prove to be unworkable, at least in the form circulated in January 2010, for various reasons. First, it could take years to fully implement the regulation. During this time vineyards will go out of business, grape prices will go up, and California wines could

permanently lose market share. Consider that the regulation prohibits all frost water diversions from the entire Russian River watershed until: (a) a water demand management program is developed, and (b) the water demand management program is approved by the SWRCB, and (c) all of the elements of the water demand management program are implemented, or (d) the diversion will have a "negligible effect on flows in any portion of the Russian River stream system that provides habitat for anadromous fish." With respect to (b), it is very difficult to put projects on the SWRCB calendar. It is common to experience a full year delay in getting projects in front of the SWRCB. Once in front of the SWRCB, it is likely the plan will be modified in response to questions. It could then require another hearing in front of the Board. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The commenter is referencing the January 2010 draft version of the regulation but the latest publically available version is dated April 6, 2011. Neither version, however, is a prohibition on frost diversions. The proposed regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed if the grower participates in a Board approved Water Demand Management Program (WDMP). If a grower elects not to participate, the proposed regulation provides that his diversion is unreasonable, not illegal.

The Board has stated in its Initial Statement of Reasons that "The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment." This clearly identifies the Board's intent to allow participating growers to continue to divert water for frost protection, under a Board-approved WDMP, while developing and implementing the ultimate requirements of a WDMP over time.

Comment 1.1.63: In contrast [to the Sonoma County Ordinance], the regulation being proposed by the SWRCB may prove to be unworkable, at least in the form circulated in January 2010, for various reasons. First, it could take years to fully implement the regulation. During this time vineyards will go out of business, grape prices will go up, and California wines could permanently lose market share. Consider that the [January 2010] regulation prohibits all frost water diversions from the entire Russian River watershed until: (a) a water demand management program is developed, and (b) the water demand management program is approved by the SWRCB, and (c) all of the elements of the water demand management program are implemented, or (d) the diversion will have a "negligible effect on flows in any portion of the Russian River stream system that provides habitat for anadromous fish." With respect to (d), the regulation requires every single diverter to be involved in the program unless they prove, on an individual basis, that they will have a "negligible" impact on flows in "any portion of the Russian River stream system." Proving a "negligible" impact without a definition is an impossible standard. How does one prove a negative? Would our justice system work if we required people to prove they did not do something? (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The commenter is referencing the January 2010 draft version of the regulation but the latest publically available version is dated April 6, 2011. Neither version, however, is a prohibition on frost diversions. The proposed regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed if the grower

participates in a Board approved Water Demand Management Program (WDMP). If a grower elects not to participate, the proposed regulation provides that his diversion is unreasonable, not illegal.

The Board has stated in its Initial Statement of Reasons that “The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment.” This clearly identifies the Board’s intent to allow participating growers to continue to divert water for frost protection, under a Board-approved WDMP, while developing and implementing the ultimate requirements of a WDMP over time.

Comment 1.1.64: In contrast [to the Sonoma County Ordinance], the regulation being proposed by the SWRCB may prove to be unworkable, at least in the form circulated in January 2010, for various reasons. First, it could take years to fully implement the regulation. During this time vineyards will go out of business, grape prices will go up, and California wines could permanently lose market share. Consider that the [January 2010] regulation prohibits all frost water diversions from the entire Russian River watershed until: (a) a water demand management program is developed, and (b) the water demand management program is approved by the SWRCB, and (c) all of the elements of the water demand management program are implemented, or (d) the diversion will have a "negligible effect on flows in any portion of the Russian River stream system that provides habitat for anadromous fish." Until (a), (b), and (c), or (d) are met, water for frost use will be prohibited. The SWRCB has asserted in various venues that this regulation is not a prohibition on frost water protection. This is flat wrong. This regulation will operate as a complete and total ban on frost water diversions unless and until those diversions take place under an undefined "water demand management program." Such a "water demand management program" will not materialize out of thin air upon the adoption of this regulation. As discussed immediately above, it will take months, perhaps years, to develop a plan and implement it. In the meantime, all frost water diversions shall be prohibited. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The commenter is referencing the January 2010 draft version of the regulation but the latest publically available version is dated April 6, 2011. Neither version, however, is a prohibition on frost diversions. The proposed regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed if the grower participates in a Board approved Water Demand Management Program (WDMP). If a grower elects not to participate, the proposed regulation provides that his diversion is unreasonable, not illegal.

The Board has stated in its Initial Statement of Reasons that “The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment.” This clearly identifies the Board’s intent to allow participating growers to continue to divert water for frost protection, under a Board-approved WDMP, while developing and implementing the ultimate requirements of a WDMP over time.

Comment 1.1.65: The third reason the regulation may prove to be unworkable is that the blanket prohibition on frost diversions, even in times of an advective frost, could prove to be fatal to many vineyards. "Advection frosts occur when cold air blows into an area to replace warmer air that was present before the weather change. It is associated with cloudy conditions, moderate to strong winds, no temperature inversion and low humidity. Often temperatures will drop below the melting point (0 °C) and will stay there all day. Because many of the active protection methods work better in the presence of an inversion, advection frosts are difficult to combat." (<http://www.fao.org/docrep/008/y7223e/y7223e07.htm> (Food and Agriculture Organization of the United Nations)) With no inversion layer, fans will not provide any frost protection. In this case, the only effective frost protection measure is water, which will be prohibited under this regulation. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The proposed regulation is not a "blanket prohibition on frost diversions." The proposed regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed if the grower participates in a Board-approved WDMP.

Comment 1.1.66: Attached as Exhibit G is an economic study commissioned by my client by Prof Robert Eyler of Sonoma State University. This study shows that even if the [January 2010] regulation were to result in a minimal 10% crop loss, it would cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. First, the SWRCB regulation will operate as a complete prohibition on water use for frost protection until a water demand management program is developed, approved, and implemented. These steps will take several months to complete, perhaps even years. Therefore, in the meantime, vineyard owners will be unable to use water to protect their crops and would be expected to suffer extreme wine grape losses until alternative forms of frost protection could be acquired. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board has stated in its Initial Statement of Reasons that "The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment." This clearly identifies the Board's intent to allow participating growers to continue to divert water for frost protection, under a Board-approved WDMP, while developing and implementing the ultimate requirements of an approved WDMP over time.

Comment 1.1.67: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 6. Modify the regulation to allow use of water for frost when the local weather service issues a warning for a possible advective frost event. This could prevent damage to nearly all of the 16,400 acres in Mendocino County and 15,581 acres in Sonoma County. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.)

Comment 1.1.68: We appreciate being given the opportunity to comment on the SWRCB proposed Russian River Frost Regulation [January 2010 version]. We would also appreciate the SWRCB taking these comments seriously and incorporating them into a new draft of the regulation, one that allows the Sonoma County ordinance to operate without interference from the SWRCB, one that is more narrowly tailored to prevent any future stranding events from occurring, and one that effectively mitigates what could otherwise be enormous impacts on the agricultural resources of Sonoma and Mendocino counties. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation.

The proposed regulation does not restrict the continuation of the Sonoma County Vineyard and Orchard Frost Protection Ordinance. The Board recognizes that the Ordinance was a timely response by the County and its growers to the frost issue in the Russian River watershed. The proposed regulation incorporates many of the Ordinance’s requirements.

Topic 1.2 Regulation Approach - Anadromous Fish Population Decline

Comment 1.2.1: The use of the phrase "prevent stranding mortalities" is, as explained above, curious and suggests that the state is looking at the problem of harm to listed species in an overly narrow manner which dooms the regulation to failure. Stranding mortalities are not the only harm and harassment to which listed species are subjected from massive diversions from frost protection activities. Strandings may be the most dramatic, however, harm and harassment are broader and include impairment of breeding, sheltering, and feeding which ultimately do lead to mortalities but may take longer to manifest. This concept is not new and must be acknowledged. Industry does not accept this principle of biology, although courts and scientists have recognized it for decades. Regulation must be crafted to avoid "take" related to frost diversions and pumping, in the broadest sense of the word. (*Larry Hanson, Northern California River Watch*)

Response: The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State’s public trust resources.

As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include prevention of conditions that would allow exposure to air and mortality of juvenile salmonids and desiccation

of redds due to inadequate flow in the active channel.

This approach is consistent with Hunter's (1992) recommendations that for all projects, biologists should identify a critical flow or stage to minimize stranding. Hunter also recognizes that the behavioral effects of flow fluctuations on juvenile salmonids requires further study, especially as applied to small streams. At this time the Board is not aware of published studies or scientific research that indicates that flow fluctuations, as distinguished from the rapid decrease in stream stage from frost diversions, results in behavioral effects on juvenile salmonids when the effects of stranding and redd desiccation have been mitigated for.

Comment 1.2.2: After review of the revised regulation, the statement of reasons and the draft EIR, we find no response to the Board's clearly stated request for a performance standard. The old language, "harm to salmonids," has been replaced by a new term "stranding mortality." The stated purpose of the Regulation "is to prevent stranding mortality due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops" (Statement of Reasons, page 3). However, no definition is provided describing where, when, and how "stranding mortality" may occur. And, equally important, those conditions when it does not. The Board should follow NOAA Fisheries' direction that such determination is best made by those with knowledge of actual on-the-ground conditions, leaving implementation and interpretation of "stranding mortality" to the local governing body or send the regulation back until such time a definition is provided. (*Bob Anderson, United Winegrowers for Sonoma County*)

Response: Contrary to the commenter's assertion the proposed regulation, Initial Statement of Reasons, and the Notice of Proposed Rulemaking do adequately define and describe where, when, and how stranding mortality may occur. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include prevention of conditions that would allow exposure to air and mortality of juvenile salmonids and desiccation of redds due to inadequate flow in the active channel. This approach is consistent with Hunter's (1992) recommendations that for all projects, biologists should identify a critical flow or stage to minimize stranding.

Implementation of the stream stage monitoring program will be site specific and carried out by the governing body in consultation with NMFS and DFG.

Comment 1.2.3: When SMWC co-chair Jim Doerksen acquired his 500 acre ranch on St. Helena Road, which included 9/10 of a mile of Mark West Creek flowing through it, the CDFG gave him a monitoring summary that recorded the number of fish in his major tributary into the Russian River. The summary showed the 28 mile long Mark West Creek averaged 9,500 fish per mile, with a profusion of steelhead, many coho, and even a substantial population of Chinook. Now 44 years later, monitoring reflects a basically salmonid-dead creek, with an average of less than 1 fish per mile. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted.

Comment 1.2.4: It should be pointed out that stranding is not the only limiting factor aggravated by such diversion at low flows. The policy, regulation, and environmental document should address all cumulative effects and related aggravated limiting factors of cumulative diversion for frost protection. The Proposed regulation acknowledges problems with the fishery, listings, and responsibility to protect the beneficial use - cold water fishery. There is a failure to acknowledge the effect of diversion (for frost protection and other reasons) during low flow periods on limiting factors other than fish stranding (which results in direct mortality). Diversion during low flows affects the habitat, health, and growth values associated with salmonid survival in all life stages. Limiting or reducing low flows can have the following adverse affects: limited flows can subject fish to predation, limited or low flows may be temperature impaired, limited or low flows may limit salmon migration and spawning needs, limited and low flows may reduce food production needed for salmon survival. Thus, all limiting factors related to flow reduction from diversion for frost protection should be noted. The language on purpose should re- enstate the words "prevent harm" as diversion effects go beyond the effect of use leading to stranding. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The objective of the proposed regulation is to prevent cumulative diversions for frost protection from causing the rapid reduction in stream stage that causes stranding mortality in salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The proposed regulation addresses the effects to salmonids from unnatural flow fluctuations associated with frost protection diversions and does not address natural low flow conditions or the natural recession of flows. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include prevention of conditions that would allow exposure to air and mortality of juvenile salmonids and desiccation of redds due to inadequate flow in the active channel.

This approach is consistent with Hunter's (1992) recommendations that for all projects, biologists should identify a critical flow or stage to minimize stranding. Hunter also recognizes that the behavioral effects of flow fluctuations on juvenile salmonids requires further study, especially as applied to small streams. At this time the Board is not aware of published studies or scientific research that indicates that flow fluctuations, as distinguished from the rapid decrease in stream stage from frost diversions, results in behavioral effects on juvenile salmonids when the effects of stranding and redd desiccation have been mitigated for.

Comment 1.2.5: The Draft EIR and related documentation did state that the purpose of the Regulation was to preclude or avoid "TAKE" or stranding of fish. CAG recommends language to protect salmonids from "harm" be added to the purpose discussion. The Draft EIR notes that administration of Regulation by Authority other than a State Responsible Agency may not fit with the described purpose (this is a finding in the Draft EIR). It is added that the State, or the State Water Resources Control Board, may not relinquish its authority to Non-Governmental Organizations (there have been recent court cases on this). (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The Draft EIR and ISOR do not contain statements that mention avoiding "take" is a purpose of the regulation. Comments that do not address the current proposed regulation or draft EIR require no response here. The objective of the proposed regulation is to prevent

cumulative diversions for frost protection from causing the rapid reduction in stream stage that causes stranding mortality in salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include prevention of conditions that would allow exposure to air and mortality of juvenile salmonids and desiccation of redds due to inadequate flow in the active channel.

This approach is consistent with Hunter's (1992) recommendations that for all projects, biologists should identify a critical flow or stage to minimize stranding. Hunter also recognizes that the behavioral effects of flow fluctuations on juvenile salmonids requires further study, especially as applied to small streams. At this time the Board is not aware of published studies or scientific research that indicates that flow fluctuations, as distinguished from the rapid decrease in stream stage from frost diversions, results in behavioral effects on juvenile salmonids when the effects of stranding and redd desiccation have been mitigated for.

The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State's public trust resources. Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs.

Comment 1.2.6: SCWC members are concerned about impacts on endangered coho salmon, threatened steelhead trout and threatened chinook salmon from water diversions for vineyard frost protection. The National Marine Fisheries Service (NMFS) has documented the cumulative harm that human land and water uses have had on the species' critical habitat, which impairs essential behavioral patterns. The result is severely declining salmonid populations in all of California's north coastal streams and rivers. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimek, Save Mark West Creek*)

Response: Comment noted.

Comment 1.2.7: The use of water from the Russian River may be found to be a part of a series of factor affecting the decline of endangered species. There is however, credible evidence that this use is but a player in a very complex ecosystem. As an example, I will credit Al White (Upper Russian river Sustainability Alliance aka. URSA) with making the observation that the dept of Fish and game reported in March of 2011 (<http://cdfgnews.wordpress.com/2011/03/23/endangered-coho-salmon-return-to-russian-river/>) that counts of returning Coho salmon were the "best they had seen in more than a decade". Understanding that there is variability in the life cycles of the various species, the average cycle from river to return is three years. Mr. White adeptly pointed out that record returns coincided with the unfortunate circumstances of 2008. The DFG article goes on to say that while this return represent an improvement, it is far below historic returns. However, the fact that it improved suggests that there are likely other factors impacting efforts to restore this valuable resource. (*Richard Schaefer, Mendocino Vineyard Company*)

Response: The Board recognizes that uncoordinated frost diversions are a contributing factor

to the salmonid population decline; not the sole reason for population decline.

The Don Claussen Warm Springs Hatchery spawns Coho salmon and steelhead broodstock. Coho are reared at the hatchery until they are fingerlings and are then released each year into 5 select tributaries in late spring (May-June). A smaller number of advanced fingerlings are released in 5 select tributaries in late fall (Oct-Nov). Steelhead are reared in the hatchery until they are yearlings and are released between January and April in Dry Creek and the East Fork Russian River. The Coho overwinter in the tributaries and then migrate out to the ocean and the steelhead migrate out to the ocean when they are released. The hatchery program's target is to release approximately 88,000 Coho salmon fingerlings and 500,000 steelhead yearlings. The goal of the hatchery program is to conserve the genetic resources of a fish population currently at extremely low population abundance and at risk of extinction, using captive propagation methods until a time that the fish population is self-sustaining in the wild. (Fishpro, 2004.) According to the Coho salmon Captive Broodstock Program's adult return summary for 2011, 81 adult Coho Salmon returned to the Russian River Watershed this spring. 3 of these were considered wild. Based on this summary the Program estimates that a total of approximately 190 adult Coho returned this year. (<http://ucanr.org/sites/RussianRiverCoho/files/66271.pdf>.) According to the NMFS Southwest Regional Office's website the recovery target for a self-sustaining population of Coho salmon is around 10,000 returning adults. (http://www.swr.noaa.gov/recovery/coho/Chapter_10_Recovery_Actions_Russian.pdf.)

Comment 1.2.8: The regulation [January 2010 draft] does not explain why "anadromous" fish are being protected, when the only listed species are salmonids. The regulation should be amended to cover only salmonids, rather than anadromous fish, as anadromous fish would include striped bass, a non-native species. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.2.9: As summarized by many courts and as the state no doubt fully understands, the Endangered Species Act (ESA) requires that states must ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The ESA also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife. "Take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Through regulations, the term "harm" is defined as "an act which actually kills or injures wildlife". Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined as an intentional or negligent act, whether through and a action or omission, that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, and sheltering. Rapid dewatering of critical fish habitat is unequivocally impairing essential behaviors, breeding, and feeding of listed species and is thus harming and harassing endangered coho salmon, and threatened steelhead trout and chinook salmon. Taking an overly narrow view of the problem, for example, limiting the regulation to stranding mortalities is to adopt the industry's view. The concerned public and many resource agencies see the problem as much broader and urge the state to pursue a regulation that accepts that the unnatural and rapid dewatering of the Russian

River stream system impairs all life stages of salmonids and severely impairs their ability to recover from their collapsed status and that contributes significantly to the recovery of the anadromous fish who overcome many natural challenges but who do finally succumb to the unnecessary and improper dewatering of their historic habitat. (*Larry Hanson, Northern California River Watch*)

Response: The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State's public trust resources.

As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include prevention of conditions that would allow exposure to air and mortality of juvenile salmonids and desiccation of redds due to inadequate flow in the active channel.

This approach is consistent with Hunter's (1992) recommendations that for all projects, biologists should identify a critical flow or stage to minimize stranding. Hunter also recognizes that the behavioral effects of flow fluctuations on juvenile salmonids requires further study, especially as applied to small streams. At this time the Board is not aware of published studies or scientific research that indicates that flow fluctuations, as distinguished from the rapid decrease in stream stage from frost diversions, results in behavioral effects on juvenile salmonids when the effects of stranding and redd desiccation have been mitigated for.

Comment 1.2.10: With respect to the statement in the DEIR under Project Description, that reads, "The proposed regulation would ensure that tributaries are "protected", in addition to the main stem of the Russian River." (DEIR page 10), that statement is inaccurate. The state has an opportunity and duty to regulate diversions related to frost protection of wine grapes in a manner that avoids extinction is inaccurate. "Protected" means not harmed. The proposed regulation does not propose to protect critical watersheds and listed species from "harm" as harm is defined under the ESA and explained above. The proposed draft regulation only proposes to prevent stranding mortalities - a significantly lower standard and narrower purpose. (*Larry Hanson, Northern California River Watch*)

Response: Comment noted. The Board made changes to the DEIR and supporting documents to clarify what was meant by "protected".

Topic 1.3 Regulation Approach - Water Demand Management Program

Comment 1.3.1: Maintaining adequate flows is the bottom line and the regulation must be cleansed of any components that allow continued diversions in critical habitat until such diversions are determined to be authorized and individually and cumulatively harmless to endangered coho and threatened steelhead trout and chinook salmon. The WDMP unfortunately contains components that allow potentially harmful diversions at least for another

frost season if not for a much longer time. The regulation states that use of diverted water and pumping of hydraulically connected ground water for frost protection is unreasonable in the absence of a Water Demand Management Program approved by the board. Unfortunately, approval of a WDMP can occur before inventory of the frost diversions in the watershed is complete, before the stream stage monitoring strategy is developed (with no timeline on when stream stage plan must be completed), and apparently before the risk assessment is complete. Timelines for completion are protracted if they exist at all. This regulation is in effect allowing for diversions next spring by simply allowing diverters to send in a form that can be approved before substantive steps are completed. If the industry has not taken appropriate steps over the last many years to complete needed inventories and monitoring of diversions before yet another frost season, they should not be given license to divert in the spring of 2012, and the board needs to consider adopting interim measures until such time as effective and strictly enforceable measures are in place to protect listed species. (*Larry Hanson, Northern California River Watch*)

Response: Continuation of the diversion of water for frost protection purposes in the Russian River watershed is a portion of the Board's objective for the proposed regulation. The proposed regulation does not authorize an unauthorized diversion of water for any purpose. The Board has separate discretionary enforcement authority provided by the Water Code that does not need restatement in the proposed regulation.

The proposed regulation provides the Board with the necessary authority to approve or make changes to a WDMP, or its schedule to ensure programs are timely. The Board, however, also realizes that if the proposed regulation is first approved in January, 2012, complete implementation of the components of a WDMP requires time.

Comment 1.3.2: The large numbers of plans that one would anticipate will be filed, with the expectation of approval, between adoption of a regulation and March 2012, will put state board staff in a position to approve WDMPs without adequate time to review them and verify content. To avoid placing staff in an untenable position between the high pressure industry groups and protected species, strong interim measures are indicated to protect listed species while allowing the state board staff as much time as it needs to properly and carefully review the hydrology, inventories, stream stage monitoring and reporting plans, and thorough risk assessments. (*Larry Hanson, Northern California River Watch*)

Response: The Board is aware of the potential for a large number of WDMPs that may be submitted for approval and will address this matter in any resolution adopting the proposed regulation.

Other state and federal agencies' authorities to protect listed species are not limited by the proposed regulation.

Comment 1.3.3: According to the draft regulation, the Water Demand Management Program (WDMP) is the principle method of administering the frost regulation. A local governing body, which cannot demonstrate that it is an effective watchdog of the fishery, is nonetheless the body called out to determine if diversions have the potential to harm the fishery (862 (c) (1) (4)). The good parts of the regulation are severely undermined by such a structure. In addition, the amount of time, as much as three years, provided for instituting corrective measures in the event corrective measures are seen as necessary by the local stakeholders, is equivalent to the three-year life cycle of endangered coho salmon. Three years of a poorly conceived WDMP

that affects the ability of coho to survive in a tributary, could result in wiping out that population. WDMPs must be developed that err on the side of conservation, if they err at all, and corrective measures must be identified and rectified as soon as possible. And given the crisis in the fishery, such corrections must be instituted, in any case, prior to the next diversion season. Annual reporting is unacceptable. Reporting needs to be in real time and publicly accessible if the regulation is going to rise to the level of effectiveness demanded by the perilous condition of the listed species that are the subject of the regulation. As explained above, such monitoring and reporting is known to be the most effective at protecting the species. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek; Larry Hanson, Northern California River Watch*)

Response: The comment is noted. The Board considered all information regarding the growers' beneficial use of water for frost protection and the risk to salmonid mortality from the cumulative diversion for frost protection and determined the proposed regulation is the appropriate recommended alternative.

The Board considered requiring real-time reporting of all data and the public posting of such data but the economic cost of real-time posting of data was found excessive for the limited benefits obtained from that requirement. The proposed regulation requires the governing body to monitor stream stage data every 15 minutes and gather growers' hours of operation and volume of water diverted for each frost event. That data would be available to the governing body to assess risks and consider corrective actions on a timely basis. The proposed regulation provides that the Board would receive all of this data by September 1 of each year, and the Board's records are available for public review and analyses before the next frost season.

Comment 1.3.4: The clear direction is to have growers participate in a local program. Yet, it is not clear what authority the Board intends to grant the group to take action and what requirement, beside that of participation, each individual participant will hold. The group is tasked with a broad range of assignments from monitoring to report writing to determining relative water right priorities. However, the very same problems that has the Board concluding it lacks the time and resources to do this work is simply being passed to the local groups to resolve. Our recommendation is to pursue a phased approach that will collect needed data, improve all parties understanding and allow local experimentation and determination yielding a set of corrective actions which will actually work. (*Bob Anderson, United Winegrowers for Sonoma County*)

Response: The Board's proposed regulation does provide for a phased implementation. As stated in the Initial Statement of Reason, "The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment." This clearly identifies the Board's intent to allow a phased development and implementation of an approved WDMP.

The Board is providing that the growers can select an individual or governing body to develop and manage their diversions under a WDMP consistent with the proposed regulation. Success of the governing body's ability to satisfy the requirements of a WDMP is dependant upon grower cooperation. Overall, it is the growers' diversions that would be unreasonable, if

compliance is not satisfied. The Board and not the governing body will enforce the proposed regulation.

The existing local programs, such as the Sonoma County Ordinance, could be submitted to the Board with nominal changes as a proposed WDMP under the proposed regulation.

Comment 1.3.5: The regulation declares that water diversions for frost protection are unreasonable unless performed in a coordinated manner through a Board approved WDMP. The requirements of the WDMP have been in question over the last year or so and have been expanded in the latest draft regulation language. Although the language in the current draft regulation has clarified some concerns, the burden to quantify the water needed to satisfy the "no salmonid stranding" component of the regulation still remains with the agricultural industry. The fisheries agencies have not provided performance standards in which diverters or a WDMP can determine what stream stage in each tributary is necessary to prevent salmonid mortality. The mainstem of the Russian River has guidelines under D-1610. The main goal of this regulation is to prevent salmonid stranding mortality, but the research has not been adequately performed to develop standards for such a complex watershed. In fact, on page 3 of the regulation, the words "sound science" were removed when describing what the risk assessment component of the WDMP should be based on. The WDMP, and therefore the agricultural industry, is being asked to quantify the extent of the possibility for salmonid stranding, develop a standard for preventing salmonid mortality, provide self-policing of violations to a standard that has yet to be created and financially support this entire process. The Board is looking to enforce non-compliance, when there are very grey compliance standards available. This is a guilty until proven innocent approach that will be very difficult to satisfy. *(Mike Anderson, Mendocino County Farm Bureau)*

Response: The proposed regulation provides that the governing body, in consultation with the NMFS and DFG will make the determinations of the stream stage that should be maintained at each gage to prevent stranding mortality. The commenter considers this a burden, but the Board considers it an opportunity for growers, through the governing body, to be involved.

The Initial Statement of Reason for the proposed regulation identified an approach for determining the required stream stage. It also identifies that if that approach is too restrictive on frost diversions, a lower stage could be established if coupled with management of diversions. This management of diversions may be limited to control the rate at which the stream stage is reduced. The NMFS and DFG continue to analyze potential alternative methodologies.

Comment 1.3.6: In the past several years, the County has actively worked with growers, the National Marine Fisheries Service, the California Department of Fish and Game, and other interested stakeholders on ways to protect listed salmonid species from harm by use of water by growers for frost protection, while recognizing the significant importance of water use in the protection of valuable crops during the frost season. This work led to the adoption by the County of a first-of-its-kind ordinance, requiring growers operating frost protection systems within the Russian River watershed that use water to register with the County's Agricultural Commissioner, and provide information about their frost protection systems. The ordinance also allows for the imposition of fees on growers to support a monitoring program, which would include the installation of gauges in critical tributaries to measure stream stage during the frost protection season, the gathering of information about frost water use, and creation of a science panel to evaluate data. The County's ordinance will allow the County, if the proposed regulation is adopted, to be the governing body for purposes of administering a water demand

management program (WDMP) as referenced in proposed state regulation (section 862 (b) of Division 3 of Title 23). (*Lisa Correia, Sonoma County Office of the Agricultural Commissioner*)

Response: The Board recognizes Sonoma County's and its growers' collaborative effort in developing the County's Frost Ordinance. The ordinance has many components required by the proposed regulation for a WDMP. The proposed regulation provides that any individual, or governing body, can manage a WDMP, and if desired, Sonoma County could submit its ordinance as a proposed WDMP for the frost diverters participating. Some changes may be necessary for the ordinance to be a Board-approved WDMP.

Comment 1.3.7: Asserting a Water Demand Management Program to control and monitor such diversion is necessary and should be managed solely by a State Responsible Agency (State Board, Regional Board, or Department of Fish and Game). (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Depending upon geographical area, number of participants, and number of streams, a WDMP can be successfully managed by a local governing body, or individual. The Board is the responsible state agency that will review WDMPs for diligence and compliance with the proposed regulation.

Comment 1.3.8: The requirements and limitations required by the WDMP as set forth in the proposal, at a minimum, are justified and necessary. These requirements are currently not articulated in a precise manner - and thus, could use further refinement and definitions. The monitoring requirement should specify real time stream gauge monitoring as well as public access to all monitoring data. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The proposed regulation does not articulate completion dates in a precise manner, but allows the Board to approve a schedule for compliance due to the expected number and variety of proposed WDMPs that may be submitted. WDMPs will have different geographic areas, number of participants, and number of streams potentially requiring project-specific consideration for implementation schedules. It is important to provide for this implementation variety and flexibility now, and for potential WDMPs to be submitted in the future.

The proposed regulation does provide for 15-minute monitoring of stream stages, and that data must be submitted to the Board in September 1 of each year. Data submitted to the Board is available for public review. The proposed regulation provides transparency.

Comment 1.3.9: Allow only coordinated diversion - sequenced to protect minimum flows necessary to protect fish. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The proposed regulation provides for many alternatives to correct potential risks to salmonids that may be identified. Specifying one type of corrective action may reveal that it does not solve the problem where an alternative solution would. Converting a direct diversion frost system to a diversion to offstream storage is a potential solution, as is a wind machine, or groundwater pumping.

Comment 1.3.10: We request that language be added to the regulation that allows for NMFS

(and possibly CDFG with their consent) and the SWRCB to cross-train and share responsibility for WDMP consultations in a manner that meets clearly defined standards. This will distribute the consultation workload more widely and facilitate a more efficient process. (*Rodney McInnis, National Marine Fisheries Service*)

Response: The proposed regulation currently provides that both NMFS and DFG must be consulted for determination of stream stages that are needed to prevent salmonid mortality and for the risk assessment process. The proposed regulation does not prohibit the NMFS or DFG, from delegating its consultation activity to the other agency, if the workload and resources become an issue. The Board supports any cross-training of Board, DFG and NMFS staff but such support does not need to be articulated in the proposed regulation.

Comment 1.3.11: We have also noticed an apparent inconsistency in the WDMP approval process that should be corrected. Section C3 of the draft on page 2 states that WDMPs must contain "an assessment of the potential risk of stranding mortality due to frost diversions". The WDMPs must also be submitted by February 1 each year i.e. prior to the frost season. However, a required component of the risk assessment portion of the WDMP is the inventory of frost diversion systems, yet the diversion system inventory is not due until 3 months after the WDMP is submitted i.e. May 1. In order to ensure a valid risk assessment is produced in a timely manner, we request the inventory of frost diversion systems be made due prior to the frost season and integrated with the WDMP by the time it is submitted. (*Rodney McInnis, National Marine Fisheries Service*)

Response: The proposed regulation is drafted to be applicable for future WDMPs as well as WDMPs to be submitted in 2012. The Board recognizes that all required aspects of a WDMP cannot be implemented immediately. The intent of the Board is to have a phased approach to the WDMP. The State Water Board will include clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial WDMP that is submitted prior to February 1, 2012. The Board will also include, in the Resolution, a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to WDMP that reflect the data and information contained in annual reports.

Comment 1.3.12: What is most frustrating about the proposed regulation and the draft EIR is that the growers efforts are summarily dismissed as inadequate (despite their real accomplishments) and that the proposed regulation, a proposal that lacks objective performance standards and clear process, is declared as the only solution acceptable to the Board. The proposed regulation is not self-executing. Growers have no idea what an acceptable water demand management plan (WDMP) is because the standard, "a reduction of stream stage that causes salmonid stranding mortality", is undefined. The standard and WDMP requirements are vaguely worded because the Board does not know what they mean either. The lack of standards and overbroad presumption of harm and unreasonable use (discussed below) are direct attacks on growers that will elicit legal challenge rather than resource management. (*Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission*)

Response: The growers efforts were not summarily dismissed. The Board and its staff recognized the progress and important contributions made by local efforts. Unfortunately, many growers in the watershed area affected by the proposed regulation do not participate in these programs. It is also likely the existing local programs could be submitted for approval as

WDMPs under the proposed regulation.

The commenter states that the proposed regulation statement of “a reduction of stream stage that causes salmonid stranding mortality” is not clearly defined. This standard is not specifically defined because it will vary for each stream segment geometry and flow conditions. The Initial Statement of Reason for the proposed regulation identified an approach for determining the required stream stage. It also identifies that if that approach is too restrictive on frost diversions, a lower stage could be established if coupled with management of diversions. This management of diversions may be limited to control the rate at which the stream stage is reduced. In a comment to the proposed regulation dated July 5, 2011, the NMFS confirms that it will provide technical assistance that effectively defines a site-specific stream flow regime that will approximate a natural hydrograph when hydrologic conditions are conducive to stranding. The NMFS will assist in determining the upper flow limit that defines conducive conditions. They will also consider habitat conditions such as low-gradient channel benches and the distribution of spawning habitat to set the threshold or stage. The Board acknowledges the potential for legal challenge.

Comment 1.3.13: The only rational solution to this problem is to restructure the regulation around logical phases, such that the Board utilizes existing local efforts that are acquiring the information of water use, stream flow and salmonids requirements before the Board imposes prescriptive regulatory requirements on growers. The monitoring and reporting program of the Sonoma County Ordinance negotiated with the resource agencies is a phased approach that the Board should adopt in a regulation. (*Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission*)

Response: The Board's proposed regulation does provide for a phased implementation. As stated in the Initial Statement of Reason, “The Board recognizes that it may take time for aspects of the WDMP to be completed, such as the identification of all sensitive stream reaches, installation of stream gages, completion of a comprehensive risk assessment, and implementation of any necessary corrective actions. The regulation would require any WDMP to include a schedule for conducting the frost inventory, developing and implementing the stream stage monitoring program, and conducting the risk assessment.” This clearly identifies the Board's intent to allow a phased development and implementation of an approved WDMP.

The existing local programs, such as the Sonoma County Ordinance, could be submitted to the Board with nominal changes as a proposed WDMP under the proposed regulation.

Comment 1.3.14: The SWRCB should assure the WDMP measures meet all applicable statutes and regulations applicable to frost protection diversion, and establish program goals based on regulatory compliance. Compliance with ESA, CESA, Fish and Game Code Section 1600, and all applicable sections of the California Water Code should be included as goals of each WDMP. To comply with Fish and Game Code Section 1602, all participants should be required to submit to DFG a notification package for a Lake and Streambed Alteration Agreement (LSAA). The WDMP should clearly state that water not be diverted until an LSAA is fully executed by the participant and DFG. (*Carl Wilcox, California Department of Fish and Game*)

Response: The proposed regulation does not need to restate other federal, state and local law that may apply to certain corrective actions that may be taken in response to risk assessments by the governing body. All existing diversions using water for frost protection are subject to

existing law and the proposed regulation does not authorize any actions to the contrary.

Comment 1.3.15: The WDMP should include specific requirements to ensure that it meets the stated ESA and CESA compliance goals that will provide adequate assurances that frost protection activities will not result in mortality of salmonids. The WDMP needs to contain an assessment of the potential risk of stranding mortality from frost diversions and the identification and implementation of any corrective actions necessary to prevent stranding mortality. As mentioned in our previous comments, the WDMP must include a robust element for establishing minimum instream flows and the associated stream stage to ensure frost protection diversions do not reduce stream flows below the flows necessary for listed salmonids and other aquatic species. (*Carl Wilcox, California Department of Fish and Game*)

Response: The proposed regulation does provide for protection of salmonids through setting of stream stages determined necessary to prevent salmonid stranding mortality, monitoring of the stream stage and frost diversions, and risk assessment and corrective actions when determined necessary.

During consultation with NMFS and DFG to determine the stream stage that will prevent salmonid stranding mortality, it is possible that the stage determined to be protective will be too restrictive on frost diversions. Further consultation can provide for a lower stage provided cumulative frost diversion rates are more closely monitored to restrict the rate that stream flow is declined as a result of frost diversions.

Comment 1.3.16: The NOP states that diversions must be in accordance with an approved water demand management program (WDMP) that ensures that the diversion does not result in "a reduction in stream stage that is harmful to salmonids". The EIR should provide a definition of this objective in order to evaluate how this requirement would be achieved. How does an entity prove it is having a 'negligible impact'? Clear-cut definitions of what constitutes an acceptable WDMP should be identified in the EIR. (*Paula Whealen, Wagner and Bonsignore*)

Response: The Initial Statement of Reason for the proposed regulation identified an approach for determining the required stream stage. It also identifies that if that approach is too restrictive on frost diversions, a lower stage could be established if coupled with management of diversions. This management of diversion may be limited to control the rate at which the stream stage is reduced. In a comment to the proposed regulation dated July 5, 2011, the NMFS confirms that it will provide technical assistance that effectively defines a site-specific stream flow regime that will approximate a natural hydrograph when hydrologic conditions are conducive to stranding. The NMFS will assist in determining the upper flow limit that defines conducive conditions. They will also consider habitat conditions such as low-gradient channel benches and the distribution of spawning habitat to set the threshold or stage.

Comment 1.3.17: There are several key components that should be made a requirement of the WDMP in order to ensure that it meets the goals outlined in the NOP and will provide adequate assurances that take of listed salmonids will not occur due to frost protection. The WDMP should include: 1) establishment of specific goals and objectives, 2) assurances that the plan will meet other statutes and regulations, 3) avoidance of take and adverse effects to listed species by establishing, complying and monitoring minimum bypass flows; 4) avoidance of adverse effects by use of alternative BMPs in-lieu of surface flow, and 5) a method to make program data readily available to agencies and the public. (*Scott Wilson, State of California Department of Fish and Game; Paula Whealen, Wagner and Bonsignore*)

Response: As stated in the DEIR, the Board's objective is to establish a regulation that will prevent salmonid stranding mortality while minimizing the impacts of the regulation on the use of water for purposes of frost protection. In support of this objective, the Board's goals are to (a) promote local development and governance of programs that prevent stranding mortality during the frost season, (b) provide transparency of diversion and stream stage monitoring data, (c) ensure that the Board can require any changes to WDMPs that are necessary to ensure that WDMPs are successful and implemented on a timely basis, (d) provide for Board enforcement against non-compliance, and (e) develop a comprehensive regulation that includes all diverters of water for frost protection use, including diverters who pump groundwater that is hydraulically connected to the stream system. The proposed regulation does not have to restate obligations to comply with other state, federal or local laws.

Comment 1.3.18: DFG is supportive of the State Water Resources Control Board's efforts to develop a Water Demand Management Plan (WDMP) to control diversions from the Russian River stream system for purposes of frost protection from March 15 through May 15. The Environmental Impact Report (EIR) should include a full description of the WDMP as its measures will determine how implementation of the Regulation will affect instream resources. Without a full description of the proposed WDMP, DFG cannot provide complete comments on environmental issues, reasonable alternatives or mitigation measures that should be evaluated in the EIR. As such, DFG is providing comments to assist in the development of the WDMP and intends to provide additional comments after circulation of the WDMP. (*Scott Wilson, State of California Department of Fish and Game*)

Response: The comment is noted. The DEIR provides a full description of the WDMP, its requirements and the potential environmental impacts that are foreseeable if it is implemented.

Comment 1.3.19: The principal intent of the Frost Protection WDMP is to develop a strategy to comply with the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) by ensuring that operation of frost protection diversions do not result in take of listed fish species: chinook salmon (*O. tshawytscha*), coho salmon (*O. kisutch*) and steelhead (*O. mykiss*). The WDMP should assure that its measures meet all applicable statute and regulations applicable to frost protection diversion and establish program goals based on regulatory compliance. The requirements and compliance with CESA, Fish and Game Code Section 1600, and California Water Code should be addressed. At a minimum, all participants should be required to submit to DFG a Notification package for a Lake and Streambed Alteration Agreement (LSAA) pursuant to Fish and Game Code Section 1602 for any diversion of water within any streams. The WDMP should clearly state that water should not be diverted until an LSAA is executed by the participant and DFG. (*Scott Wilson, State of California Department of Fish and Game*)

Response: The proposed regulation does not need to restate other federal, state and local law that may apply to certain corrective actions that may be taken in response to risk assessments by the governing body. All existing diversions using water for frost protection are subject to existing law and the proposed regulation does not authorize any actions to the contrary. Full compliance with ESA is outside the Board's authority.

Comment 1.3.20: A draft WDMP should be included and circulated in the EIR to evaluate whether its measures meet the goals as outlined in the NOP. The WDMP should include at a minimum the following components: a robust element for establishing minimum in stream flows

suitable for salmonids to ensure that operation of frost protection diversions do not reduce flow below the necessary minimum suitable flows for listed salmonids and other aquatic species, specific measures that would require that all instream diversions bypass sufficient flow to maintain instream resources in good condition, detail how resources should be allocated to streams and focus on streams where frost protection is occurring, promotion of cultural Best Management Practices (BMPs) to reduce the need for direct diversion for frost protection. BMPs should focus on measures that substantially reduce water usage, require that each participant prepare a plan for implementing BMPs on their property and that these plans be made available to the agencies upon request, describe who is responsible for data collection and immediately reporting events that lead to take of listed species or adverse conditions for listed species or aquatic habitat, program data and reports should be furnished to agencies periodically and in response to a request, and a robust effectiveness monitoring program to determine whether measures are meeting prescribed goals and objectives. (*Scott Wilson, State of California Department of Fish and Game*)

Response: The Board cannot require submittal of a draft WDMP before the proposed regulation is adopted and then approved by the Office of Administrative Law and Secretary of State.

The proposed regulation does provide for protection of salmonids through setting of stream stages determined necessary to prevent salmonid stranding mortality, monitoring of the stream stage and frost diversions, and risk assessment and corrective actions when determined necessary.

During consultation with NMFS and DFG to determine the stream stage that will prevent salmonid stranding mortality, it is possible that the stage determined to be protective will be too restrictive on frost diversions. Further consultation can provide for a lower stage provided cumulative frost diversion rates are more closely monitored to restrict the rate that stream flow is declined as a result of frost diversions.

Comment 1.3.21: TU still has significant questions about how the local water demand management programs will function. Depending on how the Frost Rule is implemented, the program could work very well for both salmon and the industry - or it could fail. But that is probably true for any regulation. Some of our questions could be addressed with changes to the text of the Rule, but under the circumstances we think the best course of action is for the Board to adopt the proposed Rule as is. We believe we can address our remaining questions by working with grape growers, conservation organizations, and other stakeholders and agencies on the Rule's implementation. Although some grape growers and trade associations have what I consider ideological objections to the Frost Rule, a large number of the individual farmers that we know are similarly focused on practical considerations. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 1.3.22: The proposed frost rule is generally sound. The final Frost Rule should contain the following elements: Frost Inventory: Most stakeholders agree that the first step is to inventory frost protection diversion practices. The Draft Rule and the Sonoma County Ordinance both address this critical step. It should remain in the final Rule. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 1.3.23: The proposed Frost Rule is generally sound. The final Frost Rule should contain the following elements: Transparency: The Board and many stakeholders have stressed the need for transparency. We agree. The Draft Frost Rule includes important language mandating publicly available reports. We still have questions about the composition of the "governing body," and its interaction with stakeholders and even other growers who are not represented on its board. We also believe the composition and governance of the "Science Advisory Panel" proposed as part of the grower draft plan will be incredibly important. We do not suggest additional changes to the Draft Rule at this point to address those concerns, but we do believe that there are important questions that have not yet been answered and will be need to be answered as part of the review of the WDMP. (*Brian Johnson, Trout Unlimited; Kate Wilson, Russian Riverkeeper*)

Response: The proposed regulation does not require the governing body to include a science panel, but it also does not restrict that opportunity. The reason for not requiring such a panel is due to the additional costs to growers and the potential lack of need of such a panel for small WDMPs that may include a limited number of growers on a small tributary.

Comment 1.3.24: Unfortunately, during a drawn-out regulation-writing and review process the wine industry has continued to sacrifice thousands of fish. Several components of the Water Demand Management Plan (WDMP) process allow continued damaging diversions for at least another frost season, and perhaps for a much longer time. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. The rulemaking process is necessary to provide public comment and the Board must comply with that process.

Comment 1.3.25: The regulation states that use of diverted water and pumping of hydraulically connected groundwater for frost protection is unreasonable in the absence of a board-approved WDMP. Yet WDMP approval can come before completing a frost diversions inventory of a watershed or developing a stream stage monitoring strategy, and apparently before doing a risk assessment. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The proposed regulation is drafted for current and future WDMPs. If the proposed regulation is adopted, the Board's resolution will clarify the requirements for a WDMP to be submitted in February 2012.

Comment 1.3.26: Timelines for completion of all these elements are protracted if they exist at all. As a result, the effect of this regulation is to permit 2012 diversions if diverters submit a form. The form's content has not been verified, completed, or deemed protective in the short term. SCWC members object that, if the industry has not yet completed the necessary inventories and diversion monitoring before the 2012 frost season, they should not be allowed to divert in spring 2012. In addition, the SWRCB needs to adopt interim measures until they put effective and strictly enforceable measures in place to protect listed species. Given the fishery crisis, such corrections must be instituted prior to the next diversion season. A large number of WDMPs will most likely be filed between adoption of a regulation and March 2012, pressuring State Board staff to approve them without adequate time for review and verification. Staff will

come under intense political pressure unless the SWRCB adopts strong interim measures, which effectively protect listed species while allowing staff to carefully review the hydrology, inventories, stream stage monitoring and reporting plans, and risk assessments. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Timely completion of the elements of a WDMP will be based on a schedule and diligence approved by the Board. The number of participants, streams and salmonid habitats will be factors influencing an approved schedule.

The Board cannot require submittal of elements of a WDMP before the proposed regulation is adopted and then approved by the Office of Administrative Law and Secretary of State. The Board recognizes that all required aspects of a WDMP cannot be implemented immediately. The intent of the Board is to have a phased approach to the WDMP. The State Water Board will include clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial WDMP that is submitted prior to February 1, 2012. The Board will also include, in the Resolution, a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to WDMP that reflect the data and information contained in annual reports.

The Board is aware of the potential for a large number of WDMPs that may be submitted for approval and will address this matter in any resolution adopting the proposed regulation.

Other state and federal agencies authorities to protect listed species are not limited by the proposed regulation.

Comment 1.3.27: SCWC members welcome State regulation of frost pumping and diversion activities, and greatly appreciate the time the agencies have devoted to this task. But we urge the state to resist all efforts to yield regulatory administration to publicly unaccountable bodies or individuals, to resist reporting delays, and resist any framework that approves diversions before full analyses of impacts and elimination of threats to listed species. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted.

Comment 1.3.28: The proposed regulation is incomplete to the point of failing to provide affected parties with sufficient notice of the true impact and significance of the regulation and fails to provide due process. The regulation is largely incomplete in many respects. The most meaningful part of the regulations, the Water Demand Management Plan (WDMP) has not yet been created. It is simply not possible to determine what the real-world impact of this regulation will be, what the costs of compliance will be or whether this regulation will actually further the stated goals of the regulation and the Board. Because of this, any assessment of how this regulation - prohibiting activity that is not in compliance with a non-existent plan - is speculative. Accordingly, the consequences of this regulation are almost entirely unknown and unknowable. Jackson Family Wines asserts that, in addition to being improper rule-making and bad regulatory practice, implementing this regulation without further development of the WDMP and other details is a denial of due process. Jackson Family Wines reserves all of its rights to object to and comment on developing consequences of this regulation. (*Pete Downs, Jackson Family*)

Wines)

Response: The Board recognizes that all required aspects of a WDMP cannot be implemented immediately. The intent of the Board is to have a phased approach to the WDMP. The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial WDMP that is submitted prior to February 1, 2012. The Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to WDMP that reflect the data and information contained in annual reports.

The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Comment 1.3.29: The proposed regulation is incomplete in every meaningful way. Section 862 (a): In addition to the failure to define the WDMP, there is no guidance on how to comply with the regulation prior to the implementation of the WDMP. In all likelihood the WDMP will take a long time to define and implement, and is likely to be challenged in legal proceedings and enjoined for that time. During that time, the regulation creates the unanswered question of how does one divert in accordance with a plan that does not exist? (*Pete Downs, Jackson Family Wines*)

Response: The Board recognizes that all required aspects of a WDMP cannot be implemented immediately. The intent of the Board is to have a phased approach to the WDMP. The Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial Water Demand Management Program that is submitted prior to February 1, 2012. The Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to the WDMP that reflect the data and information contained in annual reports.

Comment 1.3.30: The vagueness [in the objectives of the regulation [either prevent stranding mortality or prevent harm to salmonids] and the standards that will be employed to achieve the objectives] means that the five components of the WDMP do not provide enough detail to analyze the project under CEQA, to justify the need for the regulation under Government Code section 11350, to support a declaration by the Board that diversions for frost protection are unreasonable, to provide to the regulated community adequate knowledge of what must be done to comply with the regulation, or to comply with due process. (*Jack Rice, California Farm Bureau Federation*)

Response: The remaining reference to “prevent harm to salmonids” was left in unintentionally from the previous version of the proposed regulation and supporting documents, and will be changed to consistently reflect the standard of the proposed regulation, which is to prevent stranding mortality.

Comment 1.3.31: Rule making should allow only coordinated diversion - sequenced to protect

minimum flows necessary to protect fish. Allow for storage filled by diversion during high flow periods - only. (*Alan Levine, Coast Action Group*)

Response: The proposed regulation provides for many alternatives to correct potential risks to salmonids that may be identified. Specifying one type of corrective action may reveal that it does not solve the problem where an alternative solution would. Converting a direct diversion frost system to a diversion to offstream storage is a potential solution, as is a wind machine, or groundwater pumping.

Comment 1.3.32: Rule making should include the following precondition to diversion - there should be real time flow stage monitoring and pump timing monitoring with public and agency access to the data. Any monitoring plans submitted by growers, groups of growers, or any County or Agency should be assessed as to its effectiveness and transparency. (*Alan Levine, Coast Action Group*)

Response: The Board considered requiring real-time reporting of all data and the public posting of such data but the economic cost of real-time posting of data was found excessive for the limited benefits obtained from that requirement. The proposed regulation requires the governing body to monitor stream stage data every 15 minutes and gather growers' hours of operation and volume of water diverted for each frost event. That data would be available to the governing body to assess risks and consider corrective actions on a timely basis. The proposed regulation provides that the Board would receive all of this data by September 1 of each year, and the Board's records are available for public review and analyses before the next frost season.

Comment 1.3.33: I agree that we may need a better understanding of how our water is used. But I think that the proposed Water Demand Management Plans (WDMP) is more complicated than it need be. Before we seek intensified reporting from compliant users, we need to engage non compliant diverters. From what I have read and know about the issues in this specific subject, the challenge is to manage the use and supply of available water to minimize the impact on the environment and specifically on endangered species. I don't think there is anyone engaged in this process that cannot understand the importance of this and isn't interested in participating in the effort. I suspect that the problem may lie with those who are not engaged. I will credit Kim Burr (Northern California River Watch) for her comments to the board with regard to the regulation, stating that "identification of the problem makes solving it so much more straight forward" In regard to the development of Water Demand Management Plans (WDMP), She goes on to say: "Water budgeting based only on known legal diverters is a tragically failed mode..." The "calculation of cumulative diversion rate must utilize reliable estimates of riparian uses, known illegal diversions, and reasonably foreseeable, unauthorized diversions in the subject watershed this will improve the accuracy with which the SWRCB and other resource agencies design protection levels". The question is how significantly do the users in this "unknown" category contribute to the problem? Based on CURRENT use reporting to the SWRCB, how much of the recorded drawdown (problem) is attributable to known (reporting) diverters? Similarly, could known and compliant diverters alone cumulatively have this potentially undesirable impact? If not, then it seems to me that the current reporting system (with some technologically appropriate improvements) is a sufficient WDMP, and that identification and enforcement within the unknown/un reported category is potentially a more effective (and equitable) solution. (*Richard Schaefer, Mendocino Vineyard Company*)

Response: The Board has held several workshops and stakeholder meetings over the past

years and considered all information regarding the growers' beneficial use of water for frost protection and the risk to salmonid mortality from the cumulative diversion for frost protection. Based on that public process, the Board determined the proposed regulation is the appropriate recommended alternative.

For this proposed regulation, the Board did not rely on its known water right information to identify the acreage frost protected with the Russian River watershed because many diversions from the watershed utilize groundwater. Therefore, the Board's analysis is not restricted to authorized water rights.

The Board has separate authority to investigate potentially unauthorized diversions and use of water. All existing diversions using water for frost protection are subject to existing law and the proposed regulation does not authorize any actions to the contrary.

Comment 1.3.34: A water demand management person, or body, must be completely independent of agricultural interests. The growers can participate only to the extent the independent water demand management person, or entity, deems necessary for informational purposes. Subjecting the management of the water to a stakeholder process is tantamount to continuing to place the protection of the last salmon and steelhead behind the interests of a politically powerful well-funded lobby. This is the current problem, and it is opposite of what is required to satisfy current law. The Board is not well suited to be the final arbiter of what makes up a satisfactory demand management plan. Independent or Resource Agency professional staff is much better suited to verify that individual or cumulative impacts of demand are acceptable. (*Larry Hanson, Northern California River Watch*)

Response: The Board disagrees that the governing body managing the WDMP must be independent of agricultural interests. The Board retains authority to initially approve a WDMP, and can require any changes to a WDMP. Using a local governing body, including agricultural interests to work with growers is effective use of non-state resources and allows Board resources to be used for monitoring for compliance.

Comment 1.3.35: Identification of the problem makes solving it much more straightforward. The opportunity now exists to incorporate the best available science and information gained over the intervening 40-years into a proper accounting of water use. By requiring meaningful data in WDMPs, there is the potential to create credible water budgets and to achieve substantial protections in a timely manner. (*Kimberly Burr, Northern California River Watch*)

Response: Comment noted.

Comment 1.3.36: Under Section 862 (b) and (c), the regulation must state, in order to make clear that the state's past practice of only accounting for known legal diversions is not what is being proscribed, that calculation of cumulative diversion rate must utilize reliable estimates of riparian uses, known illegal diversions, and reasonably foreseeable unauthorized diversions in the subject watershed. Such disclosure on the part of diverters will increase the accuracy with which the SWRCB and the resource agencies design protection levels. A meaningful analysis of all diversions will result in more accurate calculation of water budgets in critical habitat areas. Water budgeting based only on known legal diversions is a tragically failed model and not supported by science. There is abundant information available, and it must be provided to the SWRCB by the diverters in any analysis of cumulative diversion rates. For example, diverters often know or can easily learn about the amount of cultivated acreage in a specific sub-

watershed. Diverters must be required to utilize GIS, personal knowledge, and state and county records when conducting the inventories of ownerships that may need water for frost protection. Such information is basic to an adequate analysis of cumulative diversion rate. *(Kimberly Burr, Northern California River Watch)*

Response: For this proposed regulation, the Board did not rely on its known water right information to identify the acreage frost protected with the Russian River watershed because many diversions from the watershed utilize groundwater. Therefore, the Board's analysis is not restricted as suggested by the comment and any further disclosure is not necessary.

The proposed regulation's requirements for the information submitted for a WDMP inventory provides necessary grower information. The Board has its water right information to check for known water rights.

Comment 1.3.37: Will a water demand management plan (WDMP) ensure that no more listed species will be sacrificed for frost protection activities? If not, why not? Are best management practices adequate to avoid take? If not, why not? *(Larry Hanson and Jeff Miller, Northern California River Watch)*

Response: Unfortunately, the proposed regulation, nor any other action taken by the Board, can ensure that no more listed species will be sacrificed. Mortality to listed species can result from causes other than frost protection diversions. Causes may be unrelated to the diversion of water. The proposed regulation will however, require that diversions of water for frost protection in the delineated geographic area and during the delineated time period be managed to prevent salmonid stranding mortality.

Comment 1.3.38: Diverters must be required to show that no potential cumulative impacts will result from their operations in "dry" and "critically dry" years. These are the exact times that Kondolf and Moyle warned about in 2001, when the temptations to exceed safe diversion amounts in order to protect capital investments are very strong. These real pressures must be fully anticipated and planned for. Growers will benefit from making the appropriate management changes now. *(Kimberly Burr, Northern California River Watch)*

Response: The proposed regulation provides that stream stages be identified that will prevent salmonid stranding mortality in consultation with NMFS and DFG. This determination would apply in all types of water years and could be variable for the type of year.

Comment 1.3.39: The WDMP §862 (c) must require diverters and appropriators to show a valid water right to use and store the state's waters. A WDMP that implicitly provides permission i.e. requires no proof of a water right, to continue an illegal or unauthorized diversion is improper. It is unfair to legal water rights holders and continues to place trespassers on the state's water above the protection of federally listed species. *(Kimberly Burr, Northern California River Watch)*

Response: The proposed regulation does not authorize or condone the unauthorized diversion and use of water. The Board has records of all known basis of right for surface diversions, and retains its separate authority to prevent the unlawful diversion and use of water.

Comment 1.3.40: The proposed regulation lacks the transparency necessary for effective

enforcement. Delayed reporting §862 (c) (5) unnecessarily squanders the ability of the SWRCB to carry out its mandate and to prevent harm to listed species. Adequate monitoring, as determined by the science applied by the resource agencies with expertise in fisheries protection, must be required and made publicly accessible in real time. The resource agencies have been calling for transparency for at least two years. It is an important part of an effective approach aimed at obtaining the compliance necessary to bring the last of the once magnificent coho and steelhead back from the brink of extinction. The likelihood of success, for which we all strive, increases substantially by requiring timely and meaningful monitoring. In addition, the public must receive Notice of all WDMPs submitted for approval §862 (b) with a reasonable opportunity to comment. *(Kimberly Burr, Northern California River Watch)*

Response: The proposed regulation has transparency. The annual reporting requirement of the proposed regulation, including submittal of all stream monitoring data and diversion reporting data is transparent.

Comment 1.3.41: The individual or governing body, in which administration and enforcement powers will be vested, is not described. Such a person or entity must be independent of industry. Private mutual benefit corporations, Resource Conservation Districts, and the local governments do not qualify. *(Kimberly Burr, Northern California River Watch)*

Response: The proposed regulation envisions that the individual or governing body identified to manage the WDMP will be selected by the growers. The proposed regulation does not prohibit any individual, corporation, or governing agency from becoming the governing body.

Enforcement authority for the proposed regulation is held by the Board.

Comment 1.3.42: The following are some changes that can be made to limit the effects of this regulation without impairing its effectiveness: (1) Extend the deadline date to March 14, 2013. Based upon Exhibit V, obtaining the necessary permits to install the stream gauges takes a minimum of one year. (2) Enroll all water diverters, including domestic and municipal, into the program. *(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)*

Response: The commenter recommends a deadline date for the proposed regulation be expanded to 2013 to limit the effects of the proposed regulation without impairing its effectiveness. Delaying implementation of the proposed regulation by one year will delay its effectiveness should 2012 be a high demand frost year. The proposed regulation provides for a schedule of implementation of a WDMP with an inventory to be completed within the first year. Specifying a deadline date of March 14, 2013, would not be more effective, if existing local efforts become an approved WDMP, or if smaller WDMPs are immediately initiated.

The commenter identifies that a minimum of one year is required to get necessary permits for stream gage installations. The economic analysis for the proposed regulation assumes that the stream gage monitoring installation would be staged over three years. The analysis also identified that two types of gages could be installed, and the water level logger type of gages can be installed without alteration of the stream channel.

If the proposed regulation was to enroll all water diversions, including domestic and municipal,

as proposed by the commenter, such inclusions would expand, not limit, the effects of the proposed regulation.

Topic 1.4 Regulation Approach - Governing Body

Comment 1.4.1: The Sonoma County agencies have approved dozens of projects even though competent scientific evidence clearly showed that regulatory responsibility required the rejection of the projects submitted. To put local regulators in charge of SWRCB's water and salmonid protection plan (when river, stream and groundwaters are used to avoid frost damage to grapes) is self-defeating as Sonoma County agencies have long-served as the lackey, "yes man" apologists for the very worst aspects of the vast wine industry of Sonoma County. The agencies of Sonoma County have been tested as environmental watchdogs, and they have failed miserably. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. Pursuant to the proposed regulation, WDMPs must be approved by the Board and the Board can require any changes to a WDMP. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs.

Comment 1.4.2: SMWC emphatically urges the Board to maintain control over (1) which is the lead agency, and (2) efforts by other responsible agencies, private concerns, etc., to take control of the project and plan. The future existence of fish life in the Russian River watershed, and more specifically the upper Mark West Creek, is in the balance of the success of the Frost Protection Plan. In years of dealing with Sonoma County agencies in matters of similar concern, SMWC has yet to find a local agency we consider honest, committed and not co-opted by corporate winery interests. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. Pursuant to the proposed regulation, WDMPs must be approved by the Board and the Board can require any changes to a WDMP. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs. The Board has the authority to monitor for compliance and enforce against any unreasonable use of water under the proposed regulation.

Comment 1.4.3: The State of California must recognize the authority of fisheries regulators who are doing their best under extremely challenging circumstances to protect biological resources habitat. It should also be noted that elected officials in the County of Sonoma have a predictable history of favoring the concerns of the vineyard industry over natural resource protection and cannot be relied upon to craft their own regulations on this issue. A water demand management program sounds good on paper, but it is unclear whether good intentions at sound science will translate into actual protection of streams and waterways that are home to wild salmon, steelhead trout and other aquatic species in the "wine country" formerly known as the Redwood Empire! (*Maria Potter*)

Response: Comment noted. The proposed regulation currently provides that both NMFS and DFG must be consulted for determination of stream stages that are needed to prevent salmonid mortality and for the risk assessment process. Consultation with the fishery agencies allows for collaboration between the diverters, NMFS, and DFG so that sound science can be applied to practical solutions that translate into protection of the resource.

Comment 1.4.4: CSPA is concerned that "governing bodies" will not enforce requirements. Growers are often reticent or simply unwilling to report other growers. (*Chris Shutes, California Sportfishing Protection Alliance*)

Response: The annual report required by the regulation requires the governing body to report any instances of noncompliance with the WDMP or with a corrective action plan. The proposed regulation is clear as to the Board's authority to enforce against those who do not comply with the WDMP.

Comment 1.4.5: Does the state consider a local grape industry-effort, involving the creation of a private mutual benefit corporation to gather monitoring data, an alternative or partial alternative to the state regulation? If so, on what basis would the state involve an industry whose aim is to defeat the state regulation, which fights against reasonable ground water management, and that pressures regulators and politicians to prevent meaningful regulation of water use for habitat needs? Will the state regulation rely on local government to implement any portion of the regulation? If so, on what basis would this be justified? Will the state regulation rely on any local government enforcement of the regulation? If so, on what basis would this be justified? Does the state regulation delegate or carve out a role for local government participation in regulation of water use for frost protection activities? Does the state regulation uphold the principle of public participation in environmental review at the earliest possible phase of the permit process? Does the state regulation provide for comprehensive real-time publicly accessible stream monitoring data? The regulation of stream flow in salmon streams in the near future is of course of critical concern for the endangered coho, which have fallen to record-low population numbers in the central California coast - some have estimated that remaining spawning coho are less than 800 fish (Sonoma West Times and News, November 10, 2010). (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: Local growers have demonstrated that a local program can be effectively organized and implemented. The Sonoma County Frost Ordinance demonstrates that local agencies can implement many portions of the components of the proposed water demand management program (WDMP). The Board believes that if required by the Board, the growers will effectively implement the necessary components of the WDMP and report its progress to the Board. The Board also retains the authority to require changes to any WDMP and the proposed regulation is clear as to the Board's authority to enforce against those who do not comply with the WDMP.

The proposed regulation does not provide for enforcement by the governing body or by any local governmental agency. Authority for enforcement of violations of the regulation is solely retained by the Board. Any current authority of Sonoma County or other governmental agencies is neither enhanced nor restricted by the proposed regulation.

The Board considered requiring real-time reporting of all data and the public posting of such data but the economic cost of real-time posting of data was found excessive for the limited benefits obtained from that requirement. The proposed regulation requires the governing body to monitor stream stage data every 15 minutes and gather growers' hours of operation and volume of water diverted for each frost event. That data would be available to the governing body to assess risks and consider corrective actions on a timely basis. The proposed regulation provides that the Board would receive all of this data by September 1 of each year, and the Board's records are available for public review and analyses before the next frost

season.

Comment 1.4.6: The WDMP concept relies heavily upon a local governing body or individual for administration and implementation. The qualifications, independence, structure, accessibility, funding, among other important information has not been developed in the regulation and leaves large gaps in the WDMP structure undermining its ability to be timely, effective, and protective. Local administration and implementation of a frost regulation is far from the best strategy for avoiding harm to listed species. This is demonstrated by the minimization of frost problems by the local Farm Bureaus, the local Wine Institute, the Russian River Flood Control and Water Conservation District, large numbers of local growers that insist the problems of the fish are caused by nature, the large number of growers that resist regulation at all, and the code of silence among the growers that perpetuates a diversion problem that could otherwise be solved. There is no need for a local stakeholders group to administer the regulation. This is a state issue and can be administered economically by requiring real time publicly accessible monitoring prior to diversion for frost. Such a structure costs the state virtually nothing, places the costs on the appropriate parties, and opens up the process in order that success is not dependent upon whether or not the state is well funded or is in a funding crisis. (*Larry Hanson, Northern California River Watch*)

Response: Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board and the Board can require any changes to a WDMP. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs. Using a local governing body, including agricultural interests to work with growers is effective use of non-state resources and allows Board resources to be used for monitoring for compliance.

The Board considered requiring real-time reporting of all data and the public posting of such data but the economic cost of real-time posting of data was found excessive for the limited benefits obtained from that requirement. The proposed regulation requires the governing body to monitor stream stage data every 15 minutes and gather growers' hours of operation and volume of water diverted for each frost event. That data would be available to the governing body to assess risks and consider corrective actions on a timely basis. The proposed regulation provides that the Board would receive all of this data by September 1 of each year, and the Board's records are available for public review and analyses before the next frost season.

Topic 1.5 Regulation Approach - Stream Stage Monitoring

Comment 1.5.1: The regulation being offered by the SWRCB is not necessary because the regulation, in its current form, is not workable. The methodology and the requirements imposed show that they were drafted by someone with little scientific understanding, and the data collected, if the methods required by the SWRCB are employed, will be worthless. Some of these methods are described on pages 6 and 7 of the Statement of Reasons. These pages describe the method to be used when preparing the stream stage monitoring program. Generally, this method depends upon the placement of stream flow gauges in numerous locations where NMFS determines a potential for stranding could occur. This approach requires site specific transects at potential stranding locations and stream flow gauging. While the Statement of Reasons and the regulation discuss establishing a stream stage monitoring program, the site specific transect approach will require that the gauge be at the transect site.

Otherwise the stream stage stations will need to be rated for discharge as are most stream flow gauging sites. This additional work will easily increase the costs of the gauging by 100%. Furthermore, it is highly unlikely that these locations will have the features required to produce reliable high quality stream flow datasets. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The stream stage monitoring program in the proposed regulation requires the governing body to determine the locations of critical reaches and associated gage sites to monitor the stream stage at a location where data can be correlated to the stream stage at the critical reach. The economic analysis supporting the proposed regulation includes a \$16,700 cost per gage for a study to determine the protective levels at each gage. The cost estimate for the study includes the site specific transect measurements, determination of protective stage at the critical reach, and the correlation of that stage to the stage at the gage site. The economic analysis also includes a separate installation cost for each gage. Furthermore, NMFS and DFG will assist the governing body in making these determinations and site selections. Contrary to the commenter's assertions the estimated costs are reasonable based on the expected scope of work.

The majority of the gages are anticipated to be placed in the Russian River tributaries or the headwater reaches of the mainstem. In general tributary and headwater reaches have higher frequencies of mesohabitat types per mile than large rivers. This results in a higher number of locations where the morphological features necessary to reliably measure stage exist as compared to locating USGS rated gages on large rivers, such as the mainstem of the Russian River. Contrary to the commenter's assertion it is likely that gage sites can be located in close proximity to the critical stream reaches and be reliably correlated to measure stage.

Comment 1.5.2: Page 6 of the Statement of Reasons requires a detailed site-specific approach "for determining the stream stage that would prevent stranding mortality on gravel bars, side channels and pocket pools along river margins." This approach requires site specific transects at potential stranding locations and stream flow gauging. If this level of site specific evaluation is required to demonstrate stranding potential, how is it that NMFS can judge this feature of the Russian River channel with no site specific field work? Further, how is it that NMFS can determine stranding potential using GIS layers with a 10-meter resolution? (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Comments that do not address the DEIR, proposed regulation, or Initial Statement of reasons do not need to be addressed here. The use of the NMFS GIS layer titled "Potential Stranding Sites" in the DEIR and Economic Analysis is adequately described in the related documents and addressed in multiple responses in this document.

Comment 1.5.3: In alluvial reaches [of tributaries], the method of defining transects and stream stage to avoid stranding [in the Initial Statement of Reasons] does not include surface and groundwater interactions or river stage, all essential features affecting stream stage. It is very likely that even if all vineyard use of water for frost control could be stopped, stream flow could still be interrupted and fish stranded due to these preexisting conditions. The regulation

and EIR need to recognize that the Russian River system has geomorphic features and non-agricultural water uses which also affect stream flow and that changes to frost water uses will not ensure the idealistic flow regime described in the EIR. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Natural stranding, due to the natural recession of seasonal flows, occurs each year. However, diversions for frost protection can create an unnatural flow recession that can be detected through monitoring. (See Deitch et al, 2009.) In addition, Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

The objective of the proposed regulation is to prevent stranding mortality to salmonids due to the cumulative instantaneous effect of diversions for frost protection. Habitat conditions for salmonids will improve, during the frost season, through coordination and management of diversions and maintenance of a protective stream stage that protects salmonids from incidences of stranding due to frost protection activities.

Comment 1.5.4: The regulation is asking for diverters of frost water to be transparent in any monitoring that occurs. This transparency needs to work both ways. Currently, it seems that the monitoring is being used for enforcement purposes only without actually analyzing the best locations for gauging to occur for the fishery. The gauges that were placed in the tributaries in the Upper Russian River by NMFS and the SWRCB were not discussed with the RRF and often were placed in stream conditions not conducive to quality control standards. The gauges placed in the Upper Russian River were monitored by diverters during the 2011 frost season and there were no obvious signals seen that showed frost protection having a negative impact on the stage of the tributary. If additional monitoring is to take place it needs to be done to develop a base line to determine the scope of the "problem" and to determine what the flows and stage levels need to be to support the various stages of the salmonid life cycle. Monitoring for the sake of monitoring is not going to benefit the fishery and will only create unnecessary financial burden on the agricultural industry. (*Mike Anderson, Mendocino County Farm Bureau*)

Response: The proposed regulation provides transparency of data for growers and the Board. The selection of stream stage monitoring gage type and location pursuant to the proposed regulation is to be made under consultation with the NMFS and DFG and specifically for the purpose of assessing the risk of salmonid stranding mortality caused by frost diversions. Because frost diversions vary in occurrence and intensity each year, baseline conditions can be identified during those years of limited frost. The governing body should take advantage of the stream gages installed by other parties to assess existing conditions. It should be noted there is no assurance of the quality of the data from those gages, or that those gages will remain installed. Board staff did install stream gages in both Mendocino and Sonoma County to monitor stream stage conditions of tributaries during the 2011 frost season. The Board has enforcement authority and will continue to investigate instances of unauthorized diversion and waste and unreasonable use. Curtailment of unauthorized diversions for frost protection uses should assist the governing bodies in identifying and prioritizing corrective actions that may be needed in affected reaches.

Monitoring is not being required “for the sake of monitoring.”

Comment 1.5.5: Critical Stream Stage analysis is appropriate. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 1.5.6: I would suggest that NMFS, DFG, and the SWRCB work towards a definition of what a "Comprehensive" monitoring program might look like - while making sure that such a program uses protocol that will provide useful results and that all monitoring data be available to responsible agency and the public on a real time basis. Validation of such a "Comprehensive" Monitoring Program must assure consistency with State Water Resources Control Board Policy for Maintaining Flows In Northern California Streams. Such process and consistency considerations should be considered by the EIR process. Please note that any local rule making would be subject to requirements of CEQA - with participation by the State Board. As a precondition to diversion, there should be real time flow stage monitoring and pump timing monitoring with public and agency access to the data. Any monitoring plans submitted by growers, groups of growers, or any County or Agency shall be assessed as to its effectiveness and transparency. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The proposed regulation provides the elements necessary for a stream monitoring program and an inventory of frost diversion systems. The proposed regulation also requires the governing body to perform an annual assessment of the risk to salmonid mortality based on these data sets and any other pertinent information in consultation with NMFS and DFG. The Board will receive an annual report with all the data and can make an independent determination and make recommended changes. This is a comprehensive monitoring program.

The proposed regulation applies to all diversions of water for frost protection, including hydraulically connected groundwater, regardless of basis of water right. The Instream Flow Policy only applies to applications to appropriate water by permit, or petitions for change of permits and licenses issued by the Board. Additionally the Instream Flow Policy criteria only allows for a season of diversion of December 15th through March 31st. The regulation applies to frost diversions from March 15th through May 15th. Consequently, the proposed regulation does not need to assure consistency with the Instream Flow Policy.

Comment 1.5.7: The regulation charges NMFS and the California Department of Fish and Game (CDFG) with the task of consulting with organized groups of winegrape growers to determine the stream stage that should be maintained to prevent stranding mortality beyond natural background levels. Our intent is therefore to provide technical assistance that effectively defines a site-specific stream flow regimen that will approximate a natural hydrograph when hydrologic conditions are conducive to stranding. This recommendation will likely begin with determining the upper flow limit that defines "conducive conditions". To do this, we will examine the stream flow record during the most recent spawning season to estimate the maximum elevation in the stream reach where redds could have been successfully constructed. We will also consider habitat conditions such as low gradient channel benches and the distribution of spawning habitat. This threshold will define the flow above which limits to diversions can be substantially relaxed. Below that flow, the goal will be to avoid any exacerbation of background stranding while allowing for limited water diversions. The result will be a recommendation that

scales diversions to flow conditions and minimizes cumulative acceleration of the flow recession limb. For example, limiting diversions to a percentage of instantaneous flows would prevent abrupt drops in stage while allowing for greater volumes of water to be diverted with higher flows. *(Rodney McInnis, National Marine Fisheries Service)*

Response: Comment noted.

Comment 1.5.8: With any management recommendation, there is always a risk that unintended harm to the resource in this case salmonids may still occur. It is therefore essential to adequately monitor relevant conditions and modify the management parameters to refine the recommendation. The take of endangered species is not authorized or implied with the State frost consultation process. If take is likely to occur, diverters should seek federal permits to authorize such activity per Section 10 of the federal Endangered Species Act. *(Rodney McInnis, National Marine Fisheries Service)*

Response: Comment noted.

Comment 1.5.9: Page 4 of the draft regulation under Section C4 Corrective Actions, contains the following sentence: "Corrective actions also may include revisions to the number, location and type of stream stage monitoring gages, or to the stream stages considered necessary to prevent stranding mortality," As stated, these revisions would be made by "the governing body, in consultation with the diverters". We are willing to consider changes to the location and type of stream gages, such as phased or prioritized approaches. However, it is unacceptable to NMFS because it allows protective stream flow recommendations to be changed without input from resource agencies: We therefore request that language to be omitted or that NMFS and CDFG be consulted on any revisions. *(Rodney McInnis, National Marine Fisheries Service)*

Response: The commenter is misinterpreting subdivision (c)(4) of the regulation. Corrective actions related to the stream stage monitoring program must meet all requirements detailed in subdivision (c)(2), which includes consultation with NMFS and DFG.

Comment 1.5.10: Develop Specific Diversion Criteria and Stage using Results from Monitoring Results. The DEIR and proposed regulation do not define what "a reduction of stream stage that causes salmonid stranding mortality" actually is. The Board's Draft EIR acknowledges that protective stream stage information is not currently known and varies from stream to stream. (DEIR p. 15.) The Board is correct that information will be obtained through studies of actual streams conducted by the growers. (DEIR p. 15.) The Board dedicates so little discussion of the stream stage stranding standard that the implication is that this information is readily known or ascertainable; in fact, it will require considerable study over multiple years to obtain a meaningful baseline of stream flow and salmonids information to even begin discussion of appropriate stream stage standards. Natural flow recession and stranding, hydrogeomorphic factors, and non-frost diversion effects are a few of the unknown factors that are crucial for management of our streams. The regulation must also acknowledge that cooperative grower efforts are already underway to acquire the baseline information and that these efforts should be supported rather than impeded by conflicting requirements. Only once this baseline information is acquired and interpreted can we develop specific water diversion criteria. This substantial effort is anticipated to span a period of at least three years. *(Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission)*

Response: Contrary to the commenter's assertion the DEIR, proposed regulation, and Initial Statement of Reasons do adequately define and describe where, when, and how stranding mortality may occur. As explained in the DEIR, proposed regulation, and Initial Statement of Reasons do adequately define and describe where, when, and how stranding mortality may occur. As explained in the DEIR, proposed regulation, and Initial Statement of Reasons, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include maintaining a continuously wetted channel to prevent exposure to air and mortality of juvenile salmonids and desiccation of redds. This approach is consistent with Hunter's (1992) recommendations that for all projects, biologists should identify a critical flow or stage to minimize stranding

The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the stream stage monitoring program in the proposed regulation to be implemented. Contrary to the commenter's assertion, a successful stream stage monitoring program can begin before baseline information is acquired and interpreted. The identification of critical stage levels is not dependent on baseline monitoring. Furthermore because frost diversions vary in occurrence and intensity each year, baseline conditions can be identified during those years of limited frost.

The Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to the WDMP that reflect the data and information contained in annual reports.

Comment 1.5.11: The WDMP must address flows in critical stream reaches that will maintain fish in good condition and prevent actions that could cause stranding mortality. DFG is generally supportive of the approach for determining stream stage that would prevent mortality as detailed in the draft Initial Statement of Reasons. However, it is unclear how the "inflection point" will correlate with specific habitat needs or whether it will result in the prevention of dewatering events that cause salmonid mortality. DFG and the National Marine Fisheries Service should be consulted when selecting transects and when determining the appropriate inflection point that might be considered protective. *(Carl Wilcox, California Department of Fish and Game)*

Response: The inflection point refers to the stage level at the selected transect sites where the reduction of wetted area versus reduction of stream stage approaches a one to one relationship. This would indicate the stage level where small reductions in stage result in large reductions in wetted area. However, the Board recognizes that this approach cannot be applied universally due to the site specific morphological features of each stream and critical reach. Any methods used to determine the location of transect sites and determination of critical stream stage shall be developed and implemented in consultation with NMFS and DFG.

Comment 1.5.12: Flows in each stream will vary during different water year types and the

WDMPs may need to include development of separate inflection points for each water year. To achieve this, the SWRCB needs to consider that the risk assessment may require a series of transect locations and the need for multiple assessments to evaluate the effectiveness of the proposed measures. DFG staff remains available to consult with the SWRCB and the governing bodies to develop appropriate assessment methodology to assure that frost protection activities do not cause stranding mortality. *(Carl Wilcox, California Department of Fish and Game)*

Response: The proposed regulation requires an annual risk assessment to evaluate the potential for frost diversions to cause stranding mortality. This would include reevaluating the critical reach location, reevaluating the critical stream stage level, and checking the stream stage correlation of the critical reach to the gage. As part of the risk assessment and corrective actions the proposed regulation allows for a series of transect locations, determination of a series of critical stages, or management of the cumulative diversion rate. The risk assessment and any modifications to the stream stage monitoring program shall be conducted in consultation with NMFS and DFG.

Comment 1.5.13: The EIR states it is required only during March 15 to May 15 and it is unclear that it would even regulate any frost activities related to its use, which could just as easily be achieved with a float switch and flow meter. If water cannot be used for frost protection, why does anyone need this real-time data collection system at all? This looks like someone's unfunded scientific experiment unrelated to the issue of frost protection and is a tax on the few. *(T. Connick)*

Response: The proposed regulation is only applicable from March 15 through May 15. This season is consistent with the season of diversion of water for frost protection and certain critical life stages of salmonids. The proposed regulation does not curtail the use of water for frost protection during this season, nor does it require real-time monitoring of diversions. Frost diverters are required to participate in a board-approved WDMP that annually assesses the risk to salmonid mortality caused by the diversion of water for frost protection. If the stream gage monitoring suggests that cumulative frost diversions may cause stranding mortality, some diverters will need to take corrective actions to reduce that risk.

Comment 1.5.14: The proposed frost rule is generally sound. The final Frost Rule should contain the following elements: Stream Gaging: The Draft Rule includes measures recommended by TU and many other stakeholders for a comprehensive stream stage monitoring program. We have several remaining concerns. We do not suggest additional changes to the Draft Rule at this point to address those concerns, but we do believe that there are important questions that have not yet been answered and will be need to be answered as part of the review of the WDMP. For instance, the Rule is silent on whether the gages should be online. It is important for most (if not all) gages to be online in real time for many reasons. The Rule should be about preventing harm as well as identifying problems after they occur. Therefore, if gage data reveals problems in the middle of the season, the governing body, the grower, and SWRCB need to know it and be able to respond accordingly. *(Brian Johnson, Trout Unlimited)*

Response: The Board considered requiring real-time reporting of all data and the public posting of such data but the economic cost of real-time posting of data was found excessive for the limited benefits obtained from that requirement. The proposed regulation requires the governing body to monitor stream stage data every 15 minutes and gather growers' hours of operation and volume of water diverted for each frost event. That data would be available to

the governing body to assess risks and consider corrective actions on a timely basis. The proposed regulation provides that the Board would receive all of this data by September 1 of each year, and the Board's records are available for public review and analyses before the next frost season.

Comment 1.5.15: Comprehensive streamflow gauge data must be integral to the amendment. This at least must be uploaded automatically to the internet in real time. *(Chris Shutes, California Sportfishing Protection Alliance; Kate Wilson, Russian Riverkeeper)*

Response: The Board considered requiring real-time reporting of all data and the public posting of such data but the economic cost of real-time posting of data was found excessive for the limited benefits obtained from that requirement. The proposed regulation requires the governing body to monitor stream stage data every 15 minutes and gather growers' hours of operation and volume of water diverted for each frost event. That data would be available to the governing body to assess risks and consider corrective actions on a timely basis. The proposed regulation provides that the Board would receive all of this data by September 1 of each year, and the Board's records are available for public review and analyses before the next frost season.

Comment 1.5.16: At the previous meeting, Board Member Doduc gave the specific instructions to the staff that they provide clear targets for the stages, that there be a clear mechanism to arrive at them, and that they be based on sound science. In the revised version, staff has struck out the phrase "based on sound science" that was in the original version, and it no longer appears anywhere in the regulations. Now these targets can simply be made up. Do Ms. Doduc's instructions carry no weight whatsoever? *(Alfred White, La Ribera Vineyards)*

Response: Contrary to the commenter's assertion the Initial Statement of Reasons on pages 6 - 7 describes adequate methods for selecting transect sites and determining the critical stages. The use of the phrase "using sound science" was removed from the regulation because that phrase added no more clarification or restriction to the proposed regulation. The Board still intends that any WDMP developed and implemented pursuant to proposed regulation and submitted for Board approval be based on "sound science."

Comment 1.5.17: The proposed frost rule is generally sound. The final Frost Rule should contain the following elements. Stream Gaging: The Draft Rule includes measures recommended by TU and many other stakeholders for a comprehensive stream stage monitoring program. We have several remaining concerns. We do not suggest additional changes to the Draft Rule at this point to address those concerns, but we do believe that there are important questions that have not yet been answered and will be need to be answered as part of the review of the WDMP. The rule is silent on whether the gages will be rated for flow, although the section is called "stream stage monitoring." Without a flow rating, it would be impossible to project how much a given diversion or set of diversions is capable of changing stage, so it would be impossible to assess risk. *(Brian Johnson, Trout Unlimited)*

Response: The proposed regulation does not require that each stream gage be rated for flow. Once the stage determined to prevent salmonid stranding mortality is determined in consultation with NMFS and DFG, the diverters would be aware of the stage that needs to be maintained. There would be no need to determine the flow at the gage, unless the protective level is determined to be too restrictive on frost diverters, and in consultation with NMFS and DFG a lower stage is identified with a limitation on the rate of reduction in stage. In such

circumstances a flow rating at the gage would likely be necessary as a corrective action.

Comment 1.5.18: The proposed frost rule is generally sound. The final Frost Rule should contain the following elements. Stream Gaging: The Draft Rule includes measures recommended by TU and many other stakeholders for a comprehensive stream stage monitoring program. We have several remaining concerns. We do not suggest additional changes to the Draft Rule at this point to address those concerns, but we do believe that there are important questions that have not yet been answered and will be need to be answered as part of the review of the WDMP. The Rule could be interpreted to indicate that there is a single stage that must be maintained to prevent stranding. In fact, stranding is a function of both stage and the rate of change of stage. While it is true that fish are more vulnerable to stranding at certain levels of stream stage, the management program might do better to focus on maintaining acceptable changes in stage at different flows rather than maintaining a single minimum stage. *(Brian Johnson, Trout Unlimited)*

Response: During consultation with NMFS and DFG to determine the stream stage that will prevent salmonid stranding mortality for a particular stream reach, it is possible that the stage determined to be protective will be too restrictive on frost diversions. Further consultation can provide for a lower stage provided cumulative frost diversion rates are more closely monitored to restrict the rate that stream flow is reduced as a result of frost diversions.

Comment 1.5.19: The proposed regulation is incomplete in every meaningful way. Section 862 (b): The most critical aspects of this paragraph, the stream stage and the composition and operation of the "governing body," are completely undefined. This results in a near complete lack of guidance for compliance and a lack of guidance and clarity on nearly every issue attendant to the regulation, such as the placement, implementation and operation of the stream gauge network. In addition, the methodology for determining target stream stages, a methodology which would be the basis of any punitive or corrective action directives to landowners, is only vaguely described in the Draft Initial Statement of Reasons and is full of qualifying terms and comments that completely undermine the ability to read and meaningfully understand what is actually being presented in the regulation. This leads to the possible conclusion that the regulation is being kept purposefully vague to at this stage to limit criticism and scrutiny from those that it seeks to regulate. *(Pete Downs, Jackson Family Wines)*

Response: Contrary to the commenter's assertion, the proposed regulation and Initial Statement of Reasons adequately define the composition and operation of the governing body. The Board is providing that the growers can select an individual or governing body to develop and manage their diversions under a WDMP consistent with the proposed regulation. Success of the governing body's ability to satisfy the requirements of a WDMP is dependant upon grower cooperation. The Board and not the governing body will enforce the proposed regulation.

Contrary to the commenter's assertion, the Initial Statement of Reasons and DEIR describe adequate methods for selecting transect sites, selecting gaging sites, and determining the critical stream stage to be monitored at these sites.

Comment 1.5.209: The proposed regulation is also unclear in regard to the standard or standards which will be employed to achieve the objective of "preventing stranding mortality" or "preventing harm to salmonids." The most significant problem this poses is that the SWRCB has apparently rejected the existing science (namely the Hunter criteria from the 2000

Biological Assessment for the Operation of Warm Springs Dam and Coyote Valley Dam and elsewhere), without any clear indication of the standard that will replace it (or, for that matter, why some different standard is needed, if such is the case). It is likely that the reason no such standard has been set is because there has been no appropriate factual inquiry. In addition to the due process problems such a failure presents (described below), this presents the practical problem of requiring compliance to achieve an objective without any idea of what measure will be used to determine whether that objective has been achieved. Adding to the uncertainty regarding what standard or objectives are expected, the Fact Sheet, in answer to the question "Why are frost protection regulations necessary on the Russian River?" answers that it is because frost diversions "can lower stream levels to the point fish become stranded," This is strange because it is not clear that the alleged problem was a "point," but rather was a "rate of change." Clarification is needed here. (*Jack Rice, California Farm Bureau Federation*)

Response: In the Russian River Biological Assessment Interim Report 1, 2000, NMFS determined that ramping effects are assumed to be attenuated on the mainstem Russian River by about 5 miles or less downstream of Coyote Dam near the Perkins Street bridge crossing in Ukiah. The ramping rates referred to in the 2009 Biological Opinion of 25 cfs/hr are "Interim Ramping Rates" and are designed specifically for the channel characteristics from Coyote Valley dam to Ukiah. They are not designed to be universally applied on the mainstem of the Russian River.

Hunter (1992) recommends down-ramping rates of 2.54 cm/hr, based on studies on the Sultan River (Olson, 1990) that determined ramping rates of 2.54 cm/hr were adequate to protect steelhead fry. However, Hunter notes that this determination was made in a confined river transect, whereas actual stranding was observed on lower gradient bars further downstream. Thus, the effective ramping rate at actual stranding locations in Hunter's analysis was less than 2.54 cm/hour. Hunter also states that stranding increases dramatically when flows drop below a critical stage level, typically defined in hydropower settlements as the minimum operating discharge, or the upper end of a flow range where more restrictive operational criteria are applied. This indicates that ramping rates alone will not protect fish from stranding mortality and that stage levels also play a critical role in protecting salmonids from stranding.

Comment 1.5.21: The period of allowable diversion should meet with standards set in SWRCB Stream Flow Maintenance Policy. (*Alan Levine, Coast Action Group*)

Response: The proposed frost regulation applies to all water right types. The Instream Flow Policy is only applies to applications to appropriate water by permit and petitions for changes to Board-issued permits and licenses. The proposed regulation will allow continuation of the diversion of water for frost protection from March 15 through May 15, in compliance with the proposed regulation. The Policy season, in general, does not allow diversions after March 31.

Comment 1.5.22: Rule making should encourage other solutions for controlling frost damage - without the need to use water. (*Alan Levine, Coast Action Group*)

Response: The draft regulation does not limit the alternatives for corrective actions. Wind Machines are one of the potential alternatives that would not require the use of water.

Comment 1.5.23: Russian River Frost Regulation Draft EIR Summary. Consideration of Alternatives (page i)- Objective (b) is described "provide transparency of diversion and stream monitoring data" which implies that this is not the current condition. Past, current, and future

frost diversions monitoring in Mendocino County has been accomplished using long-standing USGS gages including the West Fork of the Russian River (USGS 11461000) and the mainstem at Hopland (USGS 11462500). In order to improve data resolution and river management during frost events, the District partnered with Redwood Valley CWD and the Sonoma County Water Agency to install the USGS gage at Talmage (USGS 11462080). All of the high-quality, real-time data from these gages is publicly available online. In addition, the District is in the process of updating all District PODs to state of the art data logging, telemetry-equipped meters. The District spent over \$50,000.00 in upgrades in 2010, and has budgeted an additional \$40,000.00 for FY2011-2012. *(Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District)*

Response: Comment Noted. Board staff acknowledges that flow data for the mainstem of the Russian River is maintained by the USGS and that data is publicly available on the USGS website. The Department of Water Resources also displays the USGS gage data on its CDEC website but the Department's data is not checked for accuracy. Diversions by customers to the Mendocino County Russian River Flood Control and Water Conservation Improvement District are also measured and maintained by that District, but diversion data for tributaries and non-customers is not readily available.

Comment 1.5.24: Once it makes these disclosures [described in Government Code sections 11350 and 11346.5 (a)], the SWRCB must then consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. There are many alternatives that can reduce these costs: Reduce the required number of stream gages. Requiring that each and every tributary be gaged is overkill, especially when there may be no diversions on a certain tributary. The SWRCB should identify sensitive tributaries as part of an instream study as a first step, gage them, and then if necessary expand the program to include others. *(Jesse Barton, Gallery and Barton Law Corporation)*

Response: The proposed regulation does not require that each and every tributary be gaged. The economic analysis performed in support of the proposed regulation identified the potential tributaries that will likely need monitoring due to the presence of salmonids. The selection and type of stream gages is made by the governing body in consultation with the NMFS and DFG.

Comment 1.5.25: Page 6 of the Statement of Reasons requires a detailed site-specific approach "for determining the stream stage that would prevent stranding mortality on gravel bars, side channels and pocket pools along river margins." This approach requires site specific transects at potential stranding locations and stream flow gauging. If this level of site specific evaluation is required to demonstrate stranding potential, how is it that NMFS can judge this feature of the Russian River channel with no site specific field work? Further, how is it that NMFS can determine stranding potential using GIS layers with a 10-meter resolution? *(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)*

Response: Comments that do not address the DEIR, proposed regulation, or Initial Statement of reasons do not need to be addressed here. The use of the NMFS GIS layer titled "Potential Stranding Sites" in the DEIR and Economic Analysis is adequately described in the related documents and addressed in multiple responses in this document.

Topic 1.6 Regulation Approach - Diversion Monitoring

Comment 1.6.1: The minimal requirement of real-time accessible monitoring as part of a Water Demand Management Plan is essential. Among the limited alternatives provided, Alternative Five, the regulation plus real-time publicly accessible monitoring, combines this essential tool with the draft proposed regulation. Such a requirement is feasible, of minimal expense, does not in and of itself disrupt frost protection activities, and is a preferred alternative to the regulation alone. Alternative Five best fits a robust Project Description, if there were one, and best achieves the purpose of the regulation. The DEIR states that real-time monitoring is effective at protecting rare species, the subject of this regulation. The state must not settle for half measures or label real-time monitoring as burdensome when "This alternative would be the most effective in terms of ensuring fast response to situations in which salmonids are at risk for mortality due to stranding. . . . This information may be used by growers to adjust diversions, restore stream stage, and protect salmonids as soon as the risk is identified." (DEIR p. 93). Various agencies and non-profits organizations (for example, California Land Stewardship Institute and Resource Conservation Districts) may have significant funds for meeting the minimal costs associated with properly monitoring and reporting diversions from critical habitat during times of the year when low flows are likely. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The element of real time monitoring was considered as part of one regulation alternative as the commenter suggests. However real time monitoring was not chosen as a requirement in large part because of cost. The State Water Board did not want the burden of this cost to be required in areas where there may not be a problem. The regulation is designed to require diverters in problem areas to take corrective action, which might require real time monitoring. Additionally nothing should stop the various agencies and non-profit organizations from offering up their available funds to further the desired monitoring and reporting if that is something those agencies or organizations support. The governing bodies administering the Water Demand Management Programs are not likely to turn away funding that would help carry out the Program.

Comment 1.6.2: The proposed Frost Rule is generally sound. The final Frost Rule should contain the following elements: Diversion monitoring and reporting: The Draft Rule includes measures to require growers to record the rate of diversion, hours of operation, and volume of water diverted during each frost event for the year, and it requires that information to be reported to SWRCB and be publicly available. This is critically important. The State Water Board and wildlife agencies, and the governing bodies all need to know not only supply (gaging) but also demand (diversion reporting) to develop a WDMP and to ensure compliance with it. Earlier drafts of the rule went further and required real time reporting of diversion data, which Trout Unlimited supports. While we still believe that information would be useful, we understand that it has been deleted in part out of concerns over cost. Trout Unlimited can support a final Frost Rule without real-time diversion reporting if our other concerns are addressed, but there are circumstances under which an annual report will not be adequate. SWRCB, the governing body and the wildlife agencies must have the ability to request diversion data on short notice if circumstances warrant. Such circumstances might include a case where stream gages show a signal after one frost event, weather forecasts predict a larger event later in the week, and the governing body and agencies want to contact growers. (For example, it would be helpful to know if the first event was a "worst-case" scenario in which all diversions that could have operated did operate, or whether only a few of them did.)

(Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek; Brian Johnson, Trout Unlimited; Chris Shutes, California Sportfishing Protection Alliance; Kate Wilson, Russian Riverkeeper)

Response: Comment Noted. The regulation is designed to require diverters in problem areas to take corrective action, which might require real time monitoring in the highest risk areas.

Topic 1.7 Regulation Approach - Corrective Actions

Comment 1.7.1: The proposed Frost Rule is generally sound. The final Frost Rule should contain the following elements: Respect for Water Right Priorities: Many industry commenters have stressed the need for the Frost Rule to respect the prior appropriation system. We agree, and we are pleased that the final Draft incorporates changes to that effect. Of course, the most junior possible diverters are those who have no valid basis of right. It is unfair to legal diverters to allow illegal diversions to threaten the legal diverters' ability to continue operations. For this reason, our prior recommendations included requiring disclosure of the basis of right as part of the Frost Inventory, and requiring valid water rights and Fish and Game Code permits to continue in good standing as part of the WDMP. We wish the Frost Rule required legal water rights for growers to be considered in good standing, but we believe that issue can be addressed in the approval of the WDMPs. Sonoma County did not include that recommendation in their Ordinance, but that is perhaps understandable since they are not the permitting agency. *(Brian Johnson, Trout Unlimited)*

Response: Comment noted. The Division of Water Rights Enforcement Section continually investigates illegal diversions and the authorized basis of right for a diversion.

Comment 1.7.2: Jordan Vineyard & Winery owns over 1400 acres in Alexander Valley located within the Russian River Watershed and proposed regulatory area. We farm approximately 225 acres of grapes on this property. Frost protection water is critical to our ability to grow and cultivate wine grapes in our area. We have been proactive in our approach to frost protection and have used alternative methods (wind machines) in the areas of our ranch where the topography would allow for alternative frost protection devices. We have been using both wind machines (since 2005) and water for frost protection (since 1973.). *(John Jordan, Jordan Winery)*

Response: Comment noted.

Comment 1.7.3: The proposed Frost Rule is generally sound. The final Frost Rule should contain the following elements: Accountability: Trout Unlimited expressed concerns over the previous draft that it was not always clear who would be accountable if a "corrective action" was not taken. Would it be the governing body or the individual grower? The final draft is much better in that it makes the governing body accountable for identifying corrective actions, and for reporting whether they were taken, and makes the grower accountable if they are not. In other respects, the devil will still be "in the details." *(Brian Johnson, Trout Unlimited)*

Response: Comment noted. The Division of Water Rights Enforcement Section plans to diligently enforce the regulation that is adopted and will hold parties accountable for their actions or lack thereof.

Topic 1.8 Regulation Approach - Annual Reporting

Comment 1.8.1: Annual reporting is unacceptable. Reporting needs to be in real time and publicly accessible if the regulation is going to rise to the level of effectiveness demanded by the perilous condition of the listed species that are the subject of the regulation. As explained above, such monitoring and reporting is known to be the most effective at protecting the species. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek; Larry Hanson, Northern California River Watch*)

Response: Within the Russian River watershed, there might be streams where the risk to salmonids is low due to flow conditions, channel morphology, or water demand. In these streams real-time monitoring may not be necessary to protect salmonids from stranding and it would therefore be unreasonable to require all frost diverters to install real-time diversion and stream stage monitoring systems. On stream systems where the frost diversion inventory, stream stage monitoring program, or risk assessment determines frost diverters have the potential to cause stranding of salmonids, real-time stream stage monitoring will occur. The WDMP can choose to implement real-time diversion monitoring systems as a corrective action to improve forecasting of frost diversion demand, manage the rule of priority, or manage the rate at which the cumulative diversions affect stream stage.

Comment 1.8.2: Russian Riverkeeper urges the Board to adopt the Frost Regulation without further delay. In addition, we suggest the following: Both gage data and diversion data must be reported to the SWRCB and be publicly available. (*Kate Wilson, Russian Riverkeeper*)

Response: Comment noted. The regulation requires the submittal of a publically available annual report which will include gage data and diversion data.

Comment 1.8.3: The proposed regulation would: regulate all water used for frost protection in the Russian River Watershed including pre-1914, riparian, licensed, permitted and groundwater; would declare all diversions for frost protection unreasonable unless and until the water is diverted pursuant to a Board approved water demand management program. While we support efforts to insure adequate stream flow for fisheries, we believe that the proposed rule will require detailed data collection. (*Jim Lincoln, Napa County Farm Bureau*)

Response: Comment noted. The regulation requires adequate data collection and analysis that will determine where problem areas exist and lead to development of corrective actions in these areas.

Comment 1.8.4: Will the concerned public, intent on preventing take, be kept informed of the monitoring and diversions as they occur, and if so, how will that occur? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The regulation requires the submittal of a publically available annual report which will include gage data and diversion data.

Within the Russian River watershed, there might be streams where the risk to salmonids is low due to flow conditions, channel morphology, or water demand. In these streams real-time

monitoring may not be necessary to protect salmonids from stranding and it would therefore be unreasonable to require all frost diverters to install real-time diversion and stream stage monitoring systems. On stream systems where the frost diversion inventory, stream stage monitoring program, or risk assessment determines frost diverters have the potential to cause stranding of salmonids real-time stream stage monitoring will occur. The WDMP can choose to implement real-time diversion monitoring systems as a corrective action to improve forecasting of frost diversion demand, manage the rule of priority, or manage the rate at which the cumulative diversions affect stream stage.

Comment 1.8.5: Annual reporting makes it impossible for the regulatory agencies (including NMFS, EPA, USFWS, CDFG), other water users and other upstream and downstream water rights holders to effectively prevent, avoid, correct and end high, instantaneous, cumulative water demands from producing stranding mortality and other damages to protected fisheries and their critical habitats on a timely basis. Delayed reporting can and will continue to lead to damages to redds and instream habitat necessary for fish survival and recovery and protection of Public Trust resources. Compliance with the currently proposed Regulations in this respect could result in loss of a year class of juvenile salmonids in a particular tributary, yet there is no action to prevent that required. This significant adverse impact is not remedied in the Regulation or in the DEIR. (*David Keller, Friends of the Eel River*)

Response: Initial annual reporting will alert the Board to existing problem areas and lead to development of corrective actions in these areas. The annual reporting provides a necessary component that allows for Board review and public review of operations. In problem areas more extensive real time monitoring and reporting may be necessary. The element of real time monitoring was considered as part of one regulation alternative 5. However real time monitoring was not chosen as a requirement in large part because of cost. The State Water Board did not want the burden of this cost to be required in areas where there may not be a problem. The regulation is designed to require diverters in problem areas to take corrective action, which might require real time monitoring in the highest risk areas. Additionally nothing should stop the various agencies and non-profit organizations from offering up their available funds to further the desired monitoring and reporting if that is something those agencies or organizations support. The governing bodies administering the Water Demand Management Programs are not likely to turn away funding that would help carry out the Program.

Topic 1.9 Regulation Approach - Groundwater

Comment 1.9.1: The regulation makes the statement that all of the groundwater in the drainage is “hydrologically connected” to streams. This term is not defined particularly in regard to the temporal nature of the connection between groundwater and stream flow. Percolating groundwater in these large aquifers may be stored for months to years before reaching a surface stream channel. The term is vague and no one will be able to prove that a well is not extracting hydraulically connected groundwater unless both a spatial definition and timeframe are added to the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Board will consider adding language to the regulation to clarify what is meant by hydraulically connected groundwater for the purposes of the regulation.

Comment 1.9.2: It is unclear why “hydraulically connected groundwater” is being included in the regulation. Aside from the legal problems associated with this position (discussed below), there is no evidence, empirical or otherwise, that diversions from wells were the cause of the two alleged fish strandings. Generally speaking, pumping groundwater naturally results in the creation of a cone of depression over time around a well that ultimately reaches equilibrium. The time required to reach such equilibrium depends upon pumping capacity and strata permeability. Therefore, the effects of pumping groundwater, even from wells situated closely to a surface water body, are significantly less than what would be encountered from a direct diversion. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The effects on stream stage of pumping percolating groundwater can be less than the effects caused by direct surface water pumping at the same rate. However, the pumping of groundwater in close proximity to a surface stream to frost protect large acreage, especially wells that pump the subsurface stream, can have a larger effect on stream stage than a surface diverter frost protecting a small vineyard or orchard. Additionally, the cumulative effects of pumping multiple groundwater wells can be significant.

Comment 1.9.3: Page 9 of the Statement of Reasons states that groundwater moves laterally from alluvial deposits to the stream channel deposits and then is discharged to the stream baseflow. This document further states that wells in the alluvium intercept groundwater that would otherwise discharge to the stream. This is a generalized and simplistic description of groundwater movement that is not accurate. Groundwater moves along hydraulic gradients formed by topographic variations and to a far lesser degree localized gradients formed by pumping. Therefore, it is incorrect to characterize all groundwater wells in alluvium as depleting streams of flow with no evidence that the groundwater basin levels are declining or measurements or studies showing groundwater depletion effects on stream flow. Studies completed by Dr. Matthew Deitch for the Russian River Property Owners Association demonstrated no change in stream flow in either the Russian River in the Alexander Valley or two local creeks during groundwater pumping for frost control (see Exhibit P). (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The effects of groundwater pumping on surface flows can be more complex in certain areas of the Russian River watershed than indicated in the Initial Statement of Reasons. However, the Board believes that the cumulative pumping of hydraulically connected groundwater contributes to reductions in stream stages in the Russian River and its tributaries. The draft report prepared for the Russian River Property Owners Association did not include any of the specific data that was used to draw the conclusions of no impact on surface flows due to pumping. Locations, timing, and pumping rates for groundwater extraction in the area were not provided. From the graphs provided in the draft report, it is not possible for Board staff to draw the conclusion that Dr. Deitch has presented. There are other possible interpretations of the groundwater/surface water data.

Comment 1.9.4: The Stetson maps are identified as a source of information for determining

stream depletion areas. These maps do not depict groundwater basins but instead show surface geology. They were created by tracing areas of geologic maps onto 1:24,000 quad sheets. Some of the sources the geologic maps used were 1:250,000 scale, leading to potentially enormous error. The maps simply show alluvial deposits and there is an assumption that wells in these areas affect stream flow. The technical reports which accompany these maps, "Approach to Delineate Subterranean Streams and Determining Potential Stream flow Depletion Areas: Policy For Maintaining Instream Flows in Northern California Coastal Streams, February 28, 2008," states that stream depletion can be overestimated when: "The stream does not fully penetrate the aquifer (it can lead to errors >100%); There is recharge other than from the stream; The water level in the aquifer falls below the bottom of the streambed." All of these conditions occur in most of the Russian River alluvial groundwater basins. Additionally, this report states, "Stream depletion resulting from pumping is not necessarily instantaneous." The stated purpose of the regulation is to avoid instantaneous changes in stream stage. Therefore, it is clear that regulating all wells in alluvial deposits is unnecessary to avoid salmonid stranding. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The assumptions used in the "Approach to Delineate Subterranean Streams and Determining Potential Stream flow Depletion Areas: Policy For Maintaining Instream Flows in Northern California Coastal Streams, February 28, 2008," (Technical Memorandum) are similar to the assumptions used in many types of groundwater analytical solutions. Although the approach can overestimate stream depletion, the magnitude of the overestimation error can be small for most conditions in the Russian River watershed. There are many available groundwater analytical methods that could be used to evaluate the effects of groundwater pumping on stream stage during a frost, and the Board is not prescribing that groundwater pumpers use only the method cited in the Technical Memorandum.

In regards to instantaneous effects from groundwater pumping, the Technical Memorandum also state some instantaneous or near instantaneous responses can occur from the pumping of water of wells that are located immediately adjacent to a stream and that are producing water from deposits in hydraulic connection with the stream. Therefore, depending on many variables, a groundwater diversion's effect on stream stage can be instantaneous or near instantaneous, and can still cumulatively contribute to a decline in stream stage during a frost event.

Comment 1.9.5: The legal presumptions against water diverters that are built into the Draft Regulation are not legally appropriate or adequate. This regulation illegally attempts to shift the legal burden from the State Board to the diverter to demonstrate that pumped groundwater is not hydraulically connected to the Russian River. Instead of basing such a hydraulic connection determination on scientific evidence and having the State Board shoulder this burden, any pumping of groundwater is presumed to be from the Russian River unless the diverter "can demonstrate to the satisfaction of the board" (a legally imprecise and subjective standard) that the groundwater is not hydraulically connected. None of these presumptions and standards is legally appropriate and they should be excised from the Draft Regulation. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the Board has based its determination of unreasonableness on the facts and circumstances of this case consistent with

case law. The problem as currently understood is based on cumulative instantaneous demand for water for frost protection, necessitating a comprehensive response until further information is available to exempt parties whose diversions are determined to not contribute to the problem. At this time the information currently available supports the conclusion that the pumping of hydraulically connected groundwater contributes to the rapid drop in stream stage that impacts salmonids, and is therefore appropriate for inclusion in the regulation. The State Water Board will consider modifications to the proposed regulation to clarify what is meant by hydraulically connected groundwater for the purposes of the regulation.

Comment 1.9.6: The record cites a 2009 survey of growers in Sonoma County which found 85% of wells used to supply water for frost protection were pumping from depths greater than 60 feet. The "Economic Impact of the Proposed Russian River Frost Regulation" conducted by Board staff is based on an assumption that wells at that depth "may not have a significant effect on the stage of the Russian River during the critical period. For this reason, it may be possible for the State Water Board to approve a WDMP that allows diverters to continue to pump from those wells." (Section 4.4.5, page 23). It would appear that little positive is to be gained by the Board adding groundwater to the regulation. Additionally, in the Statement of Reasons, it describes a two-part test for what water to include. On page 3 the purpose of the regulation is discussed and concludes either that the Board may approve a Water Demand Management Program or "the Board determines that a groundwater diversion is not hydraulically connected to the Russian River." If groundwater stays, at least the Board should provide guidance that recognizes and accepts the 60-foot rule used in the economic report. However, we find no data in the record showing how pumping groundwater impacts the instantaneous demand for water during frost events. (*Bob Anderson, United Winegrowers for Sonoma County; Allan Nelson*)

Response: The Board's Economic Analysis identifies that pumping of groundwater wells for frost protection will be accepted in a WDMP and that deeper wells may be acceptable corrective action alternatives to reduce the effects of surface or shallow well diversions on stream stage. However, Board staff also believes that the cumulative impacts of many of the groundwater wells contribute to the effect on stream stage. Therefore, only those wells that can demonstrate a lack of an effect on stream stage should be excluded from the regulation. Using a "distance rule" for exempting groundwater wells also does not appear to fully address potential impacts from groundwater wells, as now being reported in the Scott River watershed in Siskiyou County. The Board anticipates that groundwater wells will be evaluated on a case by case basis.

Comment 1.9.7: The frost events of 2008 that are being used as the basis for the regulation were based on surface water diversions. The regulation has proposed to not only regulate the use of surface water for the purposes of frost protection, but has also included hydraulically connected groundwater. The first question that has to be asked is, "what is considered to be hydraulically connected groundwater?" The term hydraulically connected groundwater is vague and exceeds the jurisdiction of the Board to regulate. The regulation should exclude diversions from groundwater. Pumping groundwater does not result in an instantaneous effect on stream flow, and should be encouraged as a tool for reducing peak surface water demand during frost events. (*Mike Anderson, Mendocino County Farm Bureau*)

Response: The Board has no evidence to support that the reduction in stream flow and stage recorded at the USGS Hopland Gauge was the result of only surface diversions. The drop in stream stage and flow was a cumulative impact likely resulting from several diversions, including groundwater diversions. Although groundwater pumping may not have an

instantaneous impact on surface flows, under certain conditions the near instantaneous impact of this pumping could be significant. The Board does encourage groundwater pumping as an alternative to surface water diversions, but groundwater pumping needs to be evaluated along with surface water diversions as part of an overall Water Demand Management Program. The Board also acknowledges that the term “hydraulically connected” is broad and may include pumping wells that do not have a substantial effect on surface flows. The State Water Board will consider modifications to the proposed regulation to clarify what is meant by hydraulically connected groundwater for the purposes of the regulation.

Comment 1.9.8: NMFS supports the proposal to regulate vineyard frost protection practices in the Russian River basin, and we would like to highlight aspects of the regulation that are essential to its success. An essential component of the regulation is the inclusion of water users diverting from hydraulically connected groundwater. Because some wells draw water from the underflow of streams while others do not, it is important not to categorically exclude well water diversions and thereby miss a portion of the issue. A process for fairly discriminating between connected and not connected wells is essential to this portion of the regulation. *(Rodney McInnis, National Marine Fisheries Service)*

Response: Board staff agrees with this comment. Determining whether groundwater pumping poses a risk to surface flows requires detailed investigations or the application of reasonable assumptions about aquifer characteristics and modeling of the groundwater diversion based on those assumptions. The Board anticipates that groundwater pumpers will use a variety of available methods to determine whether their wells can impact stream stage. For many groundwater pumpers remaining in a Water Demand Management Program, the governing body may require little or no change in the way the diverters conduct their pumping for frost protection.

Comment 1.9.9: We suggest the addition of language that defines more specifically how wells will be determined to be hydraulically connected, or not, to streams. An accurate determination of hydraulic connectivity will help ensure natural resources are sufficiently protected. *(Rodney McInnis, National Marine Fisheries Service; Maria Potter)*

Response: There are a variety of methods that groundwater pumpers could use to determine whether their pumping could impact surface flows. The Board does not want to restrict groundwater pumpers by specifying a particular method for making this determination.

For groundwater pumpers who enroll in a Water Demand Management Program, there may be little or no changes to the way they conduct their frost protection operations. Under a Water Demand Management Program, groundwater pumping would be evaluated along with surface water diversions to ensure that pumping does not adversely impact surface flows.

Comment 1.9.10: Overbroad Regulation of Groundwater, Presumption of Unreasonable Use Must Be Deleted. The State Board’s early draft regulations would have applied to the diversion of “interconnected” or “closely connected” groundwater as delineated in the Stetson report that draws hydrologic conclusions using a jumble of geological maps. Commenters correctly cited flaws in an approach that would draw legal hydrologic presumptions from geologic maps, and instead of seeking better information about well pumping effects the Board proposes a regulation that would apply to all groundwater pumping in the watershed with no guidance on how a groundwater pumper can demonstrate pumping would not affect streamflow. This is an egregious example of a bureaucratic “dodge” of an important issue. The Board should embrace

watershed's ample groundwater resources as a solution for frost protection, and not a target of regulation. (*Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission*)

Response: Comment noted. The Board's Economic Analysis has recognized that groundwater pumping is a potential alternative to reduce impacts to stream stage caused by surface diversions. However, while groundwater pumping is a possible alternative, the Board cannot assume that groundwater pumping will result in no impact to surface flows. Many groundwater wells in the Russian River are in close proximity to the stream channel, are shallow, and divert the subsurface flows. Groundwater pumping may be adequate to avoid instantaneous or near instantaneous impacts to stream stage, but it needs to be coordinated and evaluated so that it does not simply delay the impacts to the surface stream. Including groundwater pumping as a component of a Water Demand Management Program will help to ensure that the groundwater pumping does not unreasonably impact stream stage.

Comment 1.9.11: We request a refrain from including groundwater from the regulation. Groundwater may be an effective solution if stream reaches are identified where direct diversions are impacting stream flows. (*Chris Bowen, Hunter Farms; Mark Houser; Barbara Petersen; Russ Green; Hank Wetzel; Dermot and Darice Bourke*)

Response: Groundwater pumping may be an effective solution to reduce the impacts of surface water diversions in some areas. However, the Board cannot make a blanket statement that groundwater pumping could not adversely impact stream stage. In some circumstances, groundwater pumping may have nearly the same impact as a direct surface water diversion. Therefore, the Board believes it is appropriate to include groundwater pumping in the proposed regulation.

Comment 1.9.12: The SWRCB staff in 1997 identified water consuming frost protection activities in the Russian River as "unreasonable and wasteful." The growers have largely ignored this fact and water use has only grown over the last twelve years. Fish kill in the last two frost seasons has been documented by the National Marine Fisheries Service. We do not have time for more experiments, pilot projects, and long-term studies that tend to stretch out for many years and rarely bring about positive results. The coho are on the brink of extinction and the steelhead close behind in our watershed. Now is the time to forcefully act to fulfill the intent of the ESA.

We support the NMFS recommendation that no diversions for frost protection involving surface or hydrologically connected ground water in the Russian River Basin be allowed. We feel that the wine industry needs to face its own responsibilities in improving this situation that they have largely created. While we support a landowner's need or desire to earn a livelihood from his or her property, and wish to work cooperatively to try to find a solution, the fishery will not survive without immediate action. We look to the SWRCB to fulfill its obligations under state and federal codes and take prompt regulatory action. (*John Roberts, Atascadero Green Valley Watershed Council*)

Response: Comment noted. The proposed regulation is intended to address the commenter's concern; however, it is not necessary or desirable to eliminate all diversions for frost protection.

Comment 1.9.13: The NOP states that the proposed regulation will apply to diversions from "hydraulically connected groundwater" and "interconnected groundwater", however, these

terms are not defined in the NOP and to our knowledge have not been defined by the SWRCB in any of its previous proceedings. The project location is also not well defined. The NOP makes reference to a 'region' as being "outside the area of hydraulically connected groundwater". The EIR should identify the geographical location of this 'area' and provide a scientific basis for how it was determined. (*Paula Whealen, Wagner and Bonsignore*)

Response: We recognize that the terms "hydraulically connected groundwater" and "interconnected groundwater" are very broad. However, it is not possible to draw a boundary between areas where groundwater pumping is unlikely to impact stream stage and areas where groundwater pumping can have a significant impact on stream stage. Areas where groundwater pumping can impact stream stage cannot be defined geographically, and the cumulative effects of multiple pumping wells must also be considered. For this reason, the Board must consider exemptions of groundwater wells from the proposed regulation on a case by case basis.

Comment 1.9.14: I have farmed at 4849 Hwy 128, Geyserville, CA in the Russian River Watershed for 30+ years. The ranch has Senior Water/riparian rights to the Russian River and also borders Gird Creek. We have been monitoring the Russian River, Gird Creek, and test wells, with several gauges for the past 3 years. Our wells for frost protection are in the Alexander Valley Aquifer, which has been reported to contain over 500,000 acre feet of water. By pumping out of the aquifer/ground water, we already are pumping "stored water" that has no effect on the Russian River or Gird Creek. (*Lea and Harry Black*)

Response: The quantity of water that is stored in a groundwater basin is influenced by the hydrologic cycle and can deplete or increase stream stage. Frost diversion from that groundwater storage volume is replaced by percolation and, in some areas, by direct conductivity to surface streams. The draft regulation, as modified, provides a means for a groundwater user to demonstrate that a diversion does not contribute to any reduction in stream stage during any single frost event. The Board believes it is necessary to initially include groundwater in the proposed regulation to adequately protect against cumulative impacts to stream stage.

For groundwater pumpers who elect to have their diversions included in Water Demand Management Programs, there may be little or no changes needed in their pumping for frost protection purposes.

Comment 1.9.15: By including ground water in your regulation, you are unjustly robbing many growers of a solution to their problem if one does exist. We already have proven through monitoring that hydraulically connected ground water in not affecting the main stem and nearby tributaries in Alexander Valley. (*David and Joyce Fanucchi*)

Response: The Board has recognized that groundwater pumping may be a reasonable alternative to surface water diversions for frost protection. The Board also has provided a means for a groundwater diverter to be exempted from the proposed regulation. The commenter has not provided evidence that pumping hydraulically connected groundwater in Alexander Valley does not impact stream stage.

Comment 1.9.16: The inclusion of groundwater is of major concern and the requirement to prove no hydraulic connection to a stream again adds financial burden to growers, most of whom likely have no impact on stream flows. (*Nick Frey, Sonoma County Winegrape*)

Commission)

Response: While many groundwater wells may ultimately be determined to have little or no impact on stream stage, the Board cannot simply assume that all groundwater pumping does not contribute to a cumulative reduction in stream stage during a frost event. The cost of providing the information necessary to demonstrate that a groundwater diversion for frost protection does not contribute to a reduction in stream stage bears a reasonable relationship to the need for the information.

Comment 1.9.17: SWRCB has repeatedly stated that the regulation would apply to groundwater hydraulically connected to the Russian River. I respectfully request that the groundwater language be removed. The appropriate language to be used for addressing the type of water rights to be regulated is riparian and appropriative. These are the only water rights involving surface water that could affect Coho, Chinook and Steelhead. I am sure the Board is well aware that riparian water may also be confused with groundwater, however using the terms in such a loose fashion leads to great confusion. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards; James Pedroncelli, Pedroncelli Vineyards*)

Response: The Board does not agree that only surface water diversions could affect the species referred to by the commenter. The Board has a very clear understanding of the terms “riparian water” and “groundwater” and believes it is necessary and appropriate to include hydraulically connected groundwater in the proposed regulation.

Comment 1.9.18: I am a grower in the Russian River valley. We do not have a frost problem and use water from a pond on our property for irrigation. The impact of your proposed regulations are enormous. Please do not include ground water in your regulations. Your latest proposals represent over regulation in the extreme. Please take a deep breathe and a step backward and consider the financial ramifications of all growers. (*Vicki Michalczyk, Hawk Hill Vineyard*)

Response: If the commenter does not use water from the Russian River watershed for frost protection, he or she is not subject to the proposed regulation. If he/she is using surface water or hydraulically connected groundwater for frost protection, he/she is affected by the proposed regulation. As a groundwater user with a pond, it is likely his/her participation in a WDMP would not require corrective actions. The Board has considered the financial ramifications of the proposed regulation and believes that the costs bear a reasonable relationship to the need for protecting salmonids.

Comment 1.9.19: It is important and correct that groundwater connected to surface flows will be regulated by the proposed amendment. (*Chris Shutes, California Sportfishing Protection Alliance*)

Response: Comment noted.

Comment 1.9.20: We support the regulation of any stream that is subject to dewatering by pumping, but one set of rules for the entire area is completely unfair. (*Al Cadd, Russian River Property Owners Association*)

Response: The Board appreciates the support of the specific need for proposed regulation. However, the Board does not agree that the watershed-wide regulation is unfair. Frost diversions occur throughout the watershed and salmonids have been shown to exist throughout the watershed, except for above Warm Springs Reservoir and Lake Mendocino, which are the areas the Board has excluded from the proposed regulation. The proposed regulation does not prohibit diversions for frost protection, but requires all diverters to participate in a WDMP. Inclusion in such a program does not necessarily mean that the same restrictions would apply to all diverters. It simply means that frost diverters must coordinate their diversions to avoid reductions in stream stage that cause salmonid mortality.

Comment 1.9.21: I respectfully request that the Board change the standard of determining surface versus groundwater from the "Board's satisfaction" to a more definite legal standard, such as a preponderance of the evidence. Using the "Board's satisfaction" is extremely vague. Should SWRCB continue to use this standard, I respectfully request a definition of the "Board's satisfaction" and how such a requirement could be met specifically in regards to determination of groundwater usage. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritsen; Thom Mauritsen, Thomas Mauritsen Vineyards*)

Response: Although the term "to the satisfaction of the Board" may sound vague, this standard provides flexibility in determining the level of detail that a groundwater pumper may be required to provide to demonstrate whether their diversion could impact stream stage. So that it is clear what must be shown to the Board's satisfaction, the State Water Board will consider modifications to the proposed regulation to clarify what is meant by hydraulically connected groundwater for the purposes of the regulation.

Comment 1.9.22: Finally, there is the issue of groundwater. The [January 2010] proposed regulations assume that all pumping within some distance of a stream (not necessarily the mainstem but any stream in the Russian River Watershed) is taking water away from that stream. The proposed regulations don't require there be a "subterranean connection" but merely that the water is "pumped from areas described as subterranean flow ..." The landowner or municipal body must prove (or as the proposed regulations say "demonstrate to the satisfaction of the Board") that there is no connection of the groundwater to the stream. This is an impossible task because it requires proof of the negative hypothesis. (*Rudolph Light*)

Response: The commenter's statement that the proposed regulation applies to "areas described as subterranean flow" is incorrect. The proposed regulation applies to all groundwater in the watershed, except for specified areas. In regards to the commenter's assertion that it is impossible to demonstrate there is no connection between groundwater and a surface stream, the State Water Board will consider modifications to the proposed regulation to clarify what is meant by hydraulically connected groundwater for the purposes of the regulation.

Comment 1.9.23: The regulation seeks to improperly and massively expand the Board's regulatory authority over groundwater resources that are unrelated to the legitimate purposes of this regulation. The provisions of the regulation relating to groundwater are clearly, and improperly, overreaching. Section 862 (d) of the proposed regulation reads as follows: " (d) For purposes of this section, groundwater pumped within the Russian River watershed is considered hydraulically connected to the Russian River stream system unless the diverter can

demonstrate to the satisfaction of the board that the groundwater being diverted is not hydraulically connected to any surface stream within the Russian River watershed." This is a completely improper burden shift to the land holder to prove a negative proposition. Further, because wells are typically beyond the appropriate jurisdictional reach of the SWRCB this paragraph amounts to a massive territorial grab over water rights and resources that are beyond the role of the SWRCB to reach. Moreover, the science exists, and has been memorialized in maps cited in the Draft EIR itself, which identify suspected hydraulically connected groundwater. Draft EIR, p.16. This provision effects a legal taking - imposing regulatory and oversight authority and costs upon landholders using groundwater that is unrelated to anything the SWRCB does. (*Pete Downs, Jackson Family Wines*)

Response: The Board's existing regulatory authority under article X of the State Constitution includes all waters of the state, including groundwater. The proposed regulation is not an expansion of the Board's authority, and the Board has a duty to ensure that all water users, including groundwater diverters, do not cause unreasonable impacts. In the exercise of this authority, the Board has provided a public process, examined available evidence, proposed a draft regulation and provided for public comment, and is giving an opportunity for hearing. The proposed regulation does not amount to a territorial grab over water rights, especially since the proposed regulation specifically provides for continuation of frost diversions, so long as those diversions are managed under a WDMP to prevent salmonid stranding mortality.

Comment 1.9.24: The regulation seeks to improperly and massively expand the Board's regulatory authority over groundwater resources that are unrelated to the legitimate purposes of this regulation. The provisions of the regulation relating to groundwater are clearly, and improperly, overreaching. Section 862 (d) of the proposed regulation reads as follows: " (d) For purposes of this section, groundwater pumped within the Russian River watershed is considered hydraulically connected to the Russian River stream system unless the diverter can demonstrate to the satisfaction of the board that the groundwater being diverted is not hydraulically connected to any surface stream within the Russian River watershed." This provision creates regulatory problems. The enforcement mechanism in the regulation is contained in Paragraph (e), asserting that compliance is a condition of licensure and permitting. Many of the groundwater wells the regulation is attempting to assert dominion over are not within the SWRCB's regulatory scope and are therefore not permitted. As a result, this regulation creates a legal quagmire over what this means for properly unpermitted and unlicensed wells within the watershed. This aspect of the regulation must be changed to remove the presumption of "connection" (analogous to presuming "guilt"). A more reasonable regulation would create a presumption of connection only if the site of the well falls within the areas delineated in the maps prepared by Stetson Engineers, as referenced in the Draft EIR. (*Pete Downs, Jackson Family Wines*)

Response: The first sentence of subdivision (e) of the proposed regulation only pertains to persons diverting water for frost protection pursuant to permits and licenses issued by the State Water Board. This sentence does not pertain to any other frost diverters subject to the proposed regulation. Incorporating the proposed regulation as a permit or license term does indeed provide the Board with additional enforcement authority over permittees and licensees.

The proposed regulation does not expand the Board's authority over riparian, pre-1914 or groundwater diverters. The Board's existing authority under article X of the State Constitution includes all waters of the state, including groundwater. Therefore, the existing enforcement options available to the Board for a diverter whose diversion or use is determined to be a waste

or unreasonable use of water has not been changed or expanded by the proposed regulation. The proposed regulation does, however, establish that a frost diversion in the Russian River watershed not participating or complying with a Board-approved WDMP is an unreasonable diversion. This provision is needed to ensure participation.

Board staff considered limiting the proposed regulation to the area delineated in the Stetson Engineering Maps, but found the maps inconsistent for some areas of the watershed.

Comment 1.9.25: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, there is no evidence to support inclusion of groundwater extraction in the regulation. Another unsupported component of the proposed regulation is that it would apply to all groundwater extractions within the basin. However, there is no evidence in the record to demonstrate that groundwater extractions have the sort of instantaneous effect on stream flow that a direct diversion might have. In fact, there is evidence to the contrary that groundwater extractions, even if hydraulically connected, have a buffered effect on streamflow. (See the Williams Selyem et al. letter.) Furthermore, since the only evidence of stranding is allegedly connected to direct diversions, there is therefore absolutely no justification for extending the regulation to groundwater. This expansion is particularly unjustified in light of the SWRCB's obligation to review the facts and circumstances of each case when making a reasonable use determination. (*Jack Rice, California Farm Bureau Federation*)

Response: The proposed regulation needs to include groundwater pumping because regulating surface diversions alone could result in a significant shift to groundwater pumping as the primary means of complying with the proposed regulation. Additionally, many existing groundwater diversions in the Russian River watershed are in close proximity to stream channels, are shallow, and tap the subsurface flow of the stream. Both existing groundwater diversions, and the potential shift in diversions from surface water to groundwater pumping could ultimately have cumulative impacts to stream stage. Although the effects of groundwater pumping on surface flows may not be instantaneous, groundwater diversions could result in significant, though delayed, impacts to stream stage.

Comment 1.9.26: Presentation by Matt Deitch at the November 18, 2009 Workshop clearly demonstrated that near stream pumping from wells (in alluvial aquifer - of the Russian River) did have some effect on stream flow. State Board staff has indicated that they believe this to be the case. The effects noted by the Deitch presentation showed a much smaller diversion effect than that of direct diversion - but still there is an effect. This indicates that the degree of effect on flows by all near stream diversion pumping at the same time for frost protection purposes is unknown at this time - but may be significant. The implications of these unknown quantities and the related cumulative instantaneous withdrawal by all the near stream users that are hydrologically connected to the surface water flows are varied and many. Furthermore they should be licensed and regulated. None of the proposed diverters' voluntary plans considers the impacts of such use. Though the individual diversion of one near stream well for frost protection may have a de minimis impact of instream flow at a particular moment in time, cumulative diversion by many (hundreds) of near stream wells in the entire Russian River corridor in a similar time frame can have significant impacts on flow. However, since many of these near stream diverters claim "percolating ground water" and are not licensed or under a diversion permit or accounted for in any water budget (as the Board Chair notices, you must account for the water use), the SWRCB has no real data on total use or effects. While it is

probably a fact that the near stream diverters by well have a lesser affect on stream flow from their pumping than the instream diverters, the potential total use (accounting of all diversion) must be factored in to policy considerations. It should be pointed out that this factor is not considered in the Flood Control Districts timed release program to mitigate for frost protection use. Without such consideration, the efficacy of the timed release proposal as a total problem solution can be challenged. Mr. White has previously provided information indicating that guesswork and inaccuracy of releases and timing of releases may be a (significant) issue - yet to be resolved. Ill timed releases and over-release pulses not only may not solve the problem, such releases may cause damage. It must also be recognized the use of water for irrigation by the near stream diverters taking from the underflow may affect low flow issues in low flow periods of the late summer and early fall. It is suggested that many of these near stream diverters are subject to State regulatory control and should fall under State Water Code and licensing requirements - and - may be subject to build storage for frost protection and low flow uses. Though this should be a lower priority than dealing with the direct diverters. (*Alan Levine, Coast Action Group*)

Response: Comment noted. The proposed regulation is intended to address the types of concerns that are raised by the commenter.

This regulation is not intended to address late summer low flow conditions, and the Board has not considered extending the regulation beyond the frost protection season.

Comment 1.9.27: Ground water regulations are out of the question as the levels seem to remain stable. Again a scientific study with public results would be in order. (*Richard Rued*)

Response: Scientific studies will undoubtedly improve the understanding of the impact of groundwater pumping on stream stages and should assist in the effective implementation of a WDMP. However, Board staff believes that there is sufficient information available to conclude that groundwater pumping can contribute to the cumulative effect on stream stage during a frost event. Even if groundwater levels remain stable, the use of that groundwater depletes the supply supporting the groundwater basin and can contribute to a reduction in stream stage.

Comment 1.9.28: Stetson engineering maps need to be expanded to cover ground water areas that are heavily cultivated like on Felta Creek, the Gualala River, Green Valley Creek, etc. that are not currently mapped as having the potential to affect stream flows. (*Larry Hanson, Northern California River Watch*)

Response: The proposed regulation does not rely on the Stetson Engineering maps. The proposed regulation, with certain exclusions, applies to all groundwater in the Russian River Watershed.

Comment 1.9.29: Once it makes these disclosures [described in Government Code sections 11350 and 11346.5 (a)], the SWRCB must then consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. There are many alternatives that can reduce these costs: There would be cost savings by exempting those who pump from wells underflow or percolating. Groundwater pumping attenuates any possible direct impact on river flows or stage by supplying the water from the underground aquifer. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Any participant in a WDMP, including a pumper of hydraulically connected groundwater, is subject to the monitoring provisions of the proposed regulation. The Board's economic analysis has already considered the impacts of those costs to businesses and private persons. The method for recording and reporting diversion data is determined by the individual grower or governing body managing a Board-approved WDMP. If a groundwater diverter is exempted from the proposed regulation, there is no obligation to report diversions.

Comment 1.9.30: Including groundwater within the reach of the regulation riddles implementation of the regulation with problems and is based on poor, or nonexistent, science. For example, the vast majority of groundwater wells are located in the large alluvial valleys along the Russian River and several of the larger tributary creeks. As described in a number of reports by the US Geological Survey and by the Ca. Dept. of Water Resources (see Exhibit M), the groundwater in these large alluvial deposits is recharged primarily by storm runoff from surrounding slopes and through alluvial fans and surface channels where water percolates into alluvial material. The quantity of water stored in this alluvial material can be enormous. Exhibit O summarizes this information. For example, the Alexander Valley southern groundwater basin has 200 ft. of alluvium and a storage capacity of 762,000 acre-feet. With a storage capacity of 762,000 acre-feet, there is little point in dragging wells in this basin into the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The volume of water that can be stored in alluvial basins can be enormous. However, this does not mean that groundwater pumping cannot impair surface flows in the Russian River or its tributaries. If a pumping well induces recharge from a surface stream, the flow in the surface stream will be reduced. Although the reductions in surface flows may be small for some groundwater wells, other wells located in close proximity to surface streams, or the cumulative effects of pumping numerous groundwater wells at larger distances could result in reduced flows in the Russian River or its tributaries.

Comment 1.9.30: Including groundwater within the reach of the regulation riddles implementation of the regulation with problems and is based on poor, or nonexistent, science. For example, the vast majority of groundwater wells are located in the large alluvial valleys along the Russian River and several of the larger tributary creeks. As described in a number of reports by the US Geological Survey and by the Ca. Dept. of Water Resources (see Exhibit M), the groundwater in these large alluvial deposits is recharged primarily by storm runoff from surrounding slopes and through alluvial fans and surface channels where water percolates into alluvial material. The quantity of water stored in this alluvial material can be enormous. Exhibit O summarizes this information. For example, the Alexander Valley southern groundwater basin has 200 ft. of alluvium and a storage capacity of 762,000 acre-feet. With a storage capacity of 762,000 acre-feet, there is little point in dragging wells in this basin into the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The volume of water that can be stored in alluvial basins can be enormous. However, this does not mean that groundwater pumping cannot impair surface flows in the Russian River or its tributaries. If a pumping well induces recharge from a surface stream, the

flow in the surface stream will be reduced. Although the reductions in surface flows may be small for some groundwater wells, other wells located in close proximity to surface streams, or the cumulative effects of pumping numerous groundwater wells at larger distances could result in reduced flows in the Russian River or its tributaries.

Topic 1.10 Regulation Approach - Geographic Scope

Comment 1.10.1: The SWRCB has not explained why it is necessary to include any portion of the mainstem of the Russian River below Coyote Dam in the regulation. The SWRCB has already exempted the Russian River above Coyote Dam, but there is no reason to keep the mainstem below the dam within the regulation when diversions have been removed and the existing flows are regulated by the Sonoma County Water Agency (SCWA), unless of course the SWRCB is not interested in enforcing permit terms. As discussed below, SCWA is legally obligated to maintain certain flows in the river during the critical frost protection period. The same holds true for Dry Creek below Warm Springs Dam. Both of these river/stream systems are highly regulated, which makes them legally obligated to meet the requirements of all lawful users of water and instream beneficial uses. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation exempted the diversions for frost protection upstream of Warm Springs Dam in Sonoma County and upstream of Coyote Dam in Mendocino County because salmonid passage is blocked by these dams. The lower Russian River and Dry Creek channel are included in this regulation because frost diverters from these channels can contribute to the rapid reduction in stream stage even when the projects are satisfying release requirements. Based on data from the USGS website for the Russian River near Hopland stream gage, SCWA was in compliance with its instream flow requirements immediately preceding the April 20, 2008 fish stranding on the mainstem Russian River reported by NOAA. The fish stranding event coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. Even then, the available evidence supports the conclusion that it was not SCWA's temporary non-compliance that caused the fish stranding, but the rapid drop due to the uncoordinated diversions for frost protection. The information gathered by the WDMPs pursuant to the proposed regulation will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

Comment 1.10.2: The only evidence the SWRCB has justifies a greatly narrowed geographic scope for the regulation. Page 57 of the draft EIR, and Table 4-5 of Appendix D of the draft EIR (Economic and Fiscal Impacts of the Proposed Russian River Frost Regulation), both refer to a NMFS GIS layer called "Potential Stranding Sites" that depicts the watercourses most likely to experience stranding events during frost protection activities. Although the SWRCB has this information available, it refuses to narrow the scope of the regulation to target just those areas NMFS has identified where potential strandings are likely to occur. The SWRCB provides no explanation why the regulation must span 1,778 miles of stream systems, or 1,485 square miles in two different counties, and conservatively cost an estimated \$10 million dollars over

three years, when NMFS has provided a document that narrows the scope of the regulation to just those areas that may need attention. It appears that the only thing the SWRCB has used the "Potential Stranding Sites" GIS layer for is to reduce the estimated economic impact of the regulation, which is inconsistent with the text of the regulation that requires the entire watershed to be regulated. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation exempted the diversions for frost protection upstream of Coyote Dam in Mendocino County because Salmonid passage is blocked by these dams. The objective of the proposed regulation is to prevent cumulative diversions for frost protection from causing a reduction in stream stage that causes stranding mortality in salmonids. The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases.

The NMFS "Potential Stranding Site" layer is an office-level analysis that was created to examine the relationship between vineyard frost protection measures and salmonids. The criteria used to select these locations included proximity to vineyards, presence of salmonids, and presence of Intrinsic Potential Habitat. This layer has not been field-verified and was not developed for the application the commenter is asserting. In the DEIR and Economic Analysis the layers were used to establish conservative baseline estimates of vineyard and orchard acreage that could potentially require corrective actions.

Comment 1.10.3: The East Branch Russian River (EBRR) and Lake Mendocino are not part of a closed hydrologic system: in fact, the inflows from the Eel River through the Potter Valley Project to the EBRR are currently assumed to be an integral part of the water balance for the Russian River system. Under current management of the Russian River watershed, the Russian River is seasonally overdrafted and over-appropriated, and reaches would dry up or lose surface flows without supplemental inflows from the Eel River, which are stored and/or passed through Lake Mendocino to EBRR. Demands above Coyote Dam include the Potter Valley growers' uncoordinated diversions or rediversions of water for frost protection of crops including grapes. The withdrawal of waters from EBRR, primarily derived from the Eel River transfers via the Potter Valley Project, reduce important springtime inflows to Lake Mendocino. Lake Mendocino's water supply pool storage, augmented with Eel River water, has been deemed necessary for supplying flows to EBRR and the main stem Russian River. This stored water is used to maintain SWRCB's D-1610 minimum flows, instream and public trust values and uses, to make up for pumped drawdown and other losses to hydraulically connected groundwater, evaporation and transpiration, to make up for losses from water demands by downstream water rights holders and municipal potable water suppliers, as well as to make up for the thousands of acre feet of water diverted by the large number of the Russian River watershed's illegal and unpermitted water users. As the DEIR notes (pg 13), timed releases from Lake Mendocino can be made "in anticipation of a frost event to meet the increased demand downstream" as well. All of these components are cumulatively responsible for reduction of stream stage that can cause stranding mortality downstream of Lake Mendocino. Not including water withdrawals, timings and volumes from the EBRR above Lake Mendocino in the Russian River's water balance distorts the hydrological data, modeling and remedies

necessary to assure sufficient flows to prevent fish stranding mortality. The proposed Regulation must be revised to regulate any diversions of water from the EBRR above and from L. Mendocino from March 15 through May 15 as well, for such withdrawals to be recognized as reasonable and beneficial uses of water. (*David Keller, Friends of the Eel River*)

Response: The proposed regulation does not include the Eel River watershed because there was no information presented to the Board regarding stranding mortality caused by frost diversions in that watershed.

The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases.

Comment 1.10.4: Regulation should consider effects of diversion on tributaries and mainstem of the Russian River. Cumulative Diversion analysis (as stated in the Regulation) should include all diversions in the area being studied - including diversions from subsurface flows. For mainstem analysis of diversion practices, diversion by the urban contractors and the Sonoma County Water Agency must be considered. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The proposed regulation did consider the effects mentioned in the comment. The diversions by Sonoma County Water Agency, and other municipal diverters, are not specifically excluded from the regulation if the diversions are made for frost protection purposes from March 15 through May 15. However, municipal diversions along the mainstem Russian River are not included in the proposed regulation because these diversions are made at a rate that is known and accounted for by Sonoma County Water Agency's releases to maintain flows pursuant to Decision 1610.

Comment 1.10.5: I suggest that the State work with NMFS/ DFG to determine geographic areas where a diversion and/or overhead irrigation moratorium would be more appropriate. Agricultural operators need to be pressed to pursue alternatives to the use of sprinklers in these riparian critical habitat zones. (*Maria Potter*)

Response: The Board has worked with the NMFS, DFG and stakeholders during this rulemaking process. Several workshops and meetings were conducted prior to the notice of the proposed regulation. The proposed regulation is a preferred alternative to a moratorium on diversions for irrigation.

Comment 1.10.6: The [January 2010] proposed regulations do not distinguish between the mainstem of the Russian River, i.e., from below the dam of Lake Mendocino south and below Lake Sonoma where Dry Creek joins the mainstem, from all the tributaries. Instead, these regulations apply to the "Russian River Stream System", which apparently means the entire Russian River Basin, all 1,485 square miles of watershed. (*Rudolph Light; Rudolph Light*)

Response: Comment noted. Inasmuch as the comment does not address the current proposed regulation or draft EIR, it requires no response here.

Comment 1.10.7: It is similarly unclear why the regulation encompasses all frost protection diversions in the entire Russian River watershed, which drains an area of 1,485 square miles, when the only identified problems have been located on the main stem high in the watershed and on one small tributary. We recognize the SWRCB is adopting this regulation in order to prevent strandings from occurring in the future, but the regulation should be directed more toward those locations where strandings have been shown to occur, and where they are likely to occur based upon habitat requirements, rather than locations that are extremely unlikely to be involved in stranding events. A study entitled "Hatchery and Genetic Management Plans for Russian River Fish Production Facilities Coho Salmon and Steelhead," was produced for the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the California Department of Fish and Game. This study was performed to evaluate and select a hatchery program that could reduce any adverse effects on protected Central California Coast (CCC) coho salmon, CCC steelhead, and California Coastal Chinook in the Russian River Valley. As part of this evaluation, pages 2-15 through 2-18 discuss the various habitat requirements of each species. Briefly, all three protected species spawn and rear in Russian River tributaries and the main stem above Cloverdale. The main stem below Cloverdale is principally used for migration. In light of the habitat requirements of these protected salmonid species, the regulation should be amended to exclude the main stem Russian River below Cloverdale. There have been no documented stranding events in this area, and the protected salmonid species do not generally use this area for spawning or rearing. Thus, the economic impacts and management burdens of this regulation can be significantly diminished without impairing its effectiveness. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases. The lower Russian River and Dry Creek channel are included in this regulation because frost diverters from these channels can contribute to the rapid reduction in stream stage even when the reservoirs are satisfying release requirements.

It is not correct to suggest that "the only identified problems have been located on the main stem high in the watershed and on one small tributary" – only two fish strandings were reported by NOAA, with sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences.

The commenter's summary of the study is inaccurate. According to the study entitled "Hatchery and Genetic Management Programs for Russian River Fish Production Facilities Coho Salmon and Steelhead," produced for the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the California Department of Fish and Game (Fishpro, a Division of HDR, 2004), coho salmon spawning and rearing occur in tributaries to the Lower Russian River. The mainstem serves primarily as a passage corridor between the ocean and the tributary habitat. Steelhead spawn and rear in tributaries from Jenner Creek, near the mouth, to upper basin streams including Forsythe, Mariposa, Rocky, Fisher, and Corral creeks. Steelhead generally spawn in the tributaries, where fish ascend as high as flows allow. (USACE 1982.) Gravel and streamflow conditions suitable for spawning are prevalent in the Russian River mainstem and tributaries (Winzler and Kelly 1978), although gravel mining and sedimentation have diminished gravel quality and quantity in many areas of the mainstem. In the Lower and Middle mainstem (downstream of Cloverdale) and the lower reaches of tributaries, water temperatures exceed 55° F (13° C) by April in some years (Winzler and Kelly 1978), which may limit the survival of eggs and fry in these areas. Chinook salmon currently

spawn in the mainstem and larger tributaries, including Dry Creek. Chinook salmon spawning was observed well downstream of Dry Creek in November 2002.

The commenter's assertion that the mainstem Russian River downstream of Cloverdale should be excluded from the regulation because it is used principally for migration is not supported by the study.

Comment 1.10.8: Once it makes these disclosures [described in Government Code sections 11350 and 11346.5 (a)], the SWRCB must then consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. There are many alternatives that can reduce these costs: There would be significant cost savings by exempting growers on the mainstem Russian River south of Cloverdale. There are fewer frost events south of this area, there have been no reports of problems in this area, and fishery data shows that protected salmonids do not generally use this area for spawning or rearing. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Any participant in a WDMP, including a pumper of hydraulically connected groundwater, is subject to the monitoring provisions of the proposed regulation. The Board's economic analysis has already considered the impacts of those costs to businesses and private persons and determined that it is necessary for the health, safety and welfare of the people of the state that the proposed regulation apply to businesses and that no considered alternatives that could reduce or exempt the monitoring and reporting impacts on businesses and private persons would adequately meet the objectives of the proposed activity. The method for recording and reporting diversion data will be determined by the individual grower or governing body managing a Board-approved WDMP.

The Russian River south of Cloverdale is included because Board records show that frost protection diversions are prevalent between Cloverdale and Healdsburg and salmonids use this stream section for migration.

According to the study entitled "Hatchery and Genetic Management Plans for Russian River Fish Production Facilities Coho Salmon and Steelhead," produced for the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the California Department of Fish and Game (Fishpro, a Division of HDR, 2004), coho salmon spawning and rearing occur in tributaries to the Lower Russian River. The mainstem serves primarily as a passage corridor between the ocean and the tributary habitat. Steelhead spawn and rear in tributaries from Jenner Creek, near the mouth, to upper basin streams including Forsythe, Mariposa, Rocky, Fisher, and Corral creeks. Steelhead generally spawn in the tributaries, where fish ascend as high as flows allow. (USACE 198.2) Gravel and streamflow conditions suitable for spawning are prevalent in the Russian River mainstem and tributaries (Winzler and Kelly 1978), although gravel mining and sedimentation have diminished gravel quality and quantity in many areas of the mainstem. In the Lower and Middle mainstem (downstream of Cloverdale) and the lower reaches of tributaries, water temperatures exceed 55° F (13° C) by April in some years (Winzler and Kelly 1978), which may limit the survival of eggs and fry in these areas. Chinook salmon currently spawn in the mainstem and larger tributaries, including Dry Creek. Chinook salmon spawning was observed well downstream of Dry Creek in November 2002.

Comment 1.10.9: Once it makes these disclosures [described in Government Code sections 11350 and 11346.5 (a)], the SWRCB must then consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. There are many

alternatives that can reduce these costs: If the SWRCB is concerned that diversion directly from the main stem may still create a drop in river stage, it could exempt growers on the main stem Russian River south of Cloverdale who also pump from wells. This adds an extra layer of protection. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Any participant in a WDMP, including a pumper of hydraulically connected groundwater, is subject to the monitoring provisions of the proposed regulation. The Board's economic analysis has already considered the impacts of those costs to businesses and private persons and determined that it is necessary for the health, safety and welfare of the people of the state that the proposed regulation apply to businesses and that no considered alternatives that could reduce or exempt the monitoring and reporting impacts on businesses and private persons would adequately meet the objectives of the proposed activity.

The Russian River south of Cloverdale is included in the proposed regulation because Board records show that frost protection diversions are prevalent between Cloverdale and Healdsburg and salmonids use this stream section for migration.

The proposed regulation provides a method for groundwater diverters to be exempted from the proposed regulation.

Comment 1.10.10: Once it makes these disclosures [described in Government Code sections 11350 and 11346.5 (a)], the SWRCB must then consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. There are many alternatives that can reduce these costs: Exempt Dry Creek from the regulation provided wells are used. Dry Creek is highly regulated due to releases from Lake Sonoma and there has been no evidence to suggest diversions on this creek impair salmonid habitat. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Any participant in a WDMP, including a pumper of hydraulically connected groundwater, is subject to the monitoring provisions of the proposed regulation. The Board's economic analysis has already considered the impacts of those costs to businesses and private persons and determined that it is necessary for the health, safety and welfare of the people of the state that the proposed regulation apply to businesses and that no considered alternatives that could reduce or exempt the monitoring and reporting impacts on businesses and private persons would adequately meet the objectives of the proposed activity.

Despite being regulated for flow, the instantaneous diversion of water for frost can still cause a drop in stage that creates stranding mortality. Groundwater diversions can contribute to this cumulative effect during a frost event. The proposed regulation provides a method for groundwater diverters to be exempted from the proposed regulation.

Comment 1.10.11: The SWRCB should justify why it is necessary to include the entire Russian River watershed, an area comprised of over 1,485 square miles, in the regulation [October 27, 2010 Notice of Preparation] when the alleged strandings occurred in two isolated areas. There is simply no rational relationship between the strandings that are alleged to have occurred in Hopland or on Felta Creek and water diversions in unconnected or unrelated tributary watersheds. We recognize the SWRCB is adopting this regulation in order to prevent strandings from occurring in the future, but the regulation should be directed more toward those locations where strandings have been shown to occur, and where they are likely to occur based upon habitat requirements, rather than locations that are extremely unlikely to be involved in

stranding events. (*Mike Anderson, Mendocino County Farm Bureau; Jerry Reedy, Reedy Vineyards; Jesse Barton, Gallery and Barton Law Corporation*)

Response: It is not correct to suggest that strandings occurred in only two isolated areas – only two fish strandings were reported by NOAA, with sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences.

Comment 1.10.12: Attached as Exhibit C are excerpts from a study entitled "Hatchery and Genetic Management Plans for Russian River Fish Production Facilities Coho Salmon and Steelhead," which was produced for the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the California Department of Fish and Game. This study was performed to evaluate and select a hatchery program that could reduce any adverse effects on protected Central California Coast (CCC) coho salmon, CCC steelhead, and California Coastal Chinook in the Russian River Valley. As part of this evaluation, pages 2-15 through 2-18 discuss the various habitat requirements of each species. Briefly, all three protected species spawn and rear in Russian River tributaries and the main stem above Cloverdale. The main stem below Cloverdale is principally used for migration. In light of the storage projects that have been built upstream from Hopland (discussed in Section 1.0 above), the SCWA efforts in coordinating releases below Lake Mendocino during the frost season discussed in Section 2.0 above), and the habitat requirements of these protected salmonid species, the SWRCB should consider eliminating Dry Creek below Lake Sonoma from the regulation area. The releases from Lake Sonoma have always been adequate to maintain fish habitat, even during the frost season. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases. The lower Russian River and Dry Creek channel are included in this regulation because frost diverters from these channels can contribute to the rapid reduction in stream stage even when the reservoirs are satisfying release requirements. Based on data from the USGS website for the Russian River near Hopland stream gage, SCWA was in compliance with its instream flow requirements immediately preceding the April 20, 2008 fish stranding on the mainstem Russian River reported by NOAA. The fish stranding event coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. Diversions for frost protection could have the same effect on Dry Creek.

The commenter's summary of the study is inaccurate. According to the study entitled "Hatchery and Genetic Management Plans for Russian River Fish Production Facilities Coho Salmon and Steelhead," produced for the U.S. Army Corps of Engineers, the National Marine Fisheries Service, and the California Department of Fish and Game (Fishpro, a Division of HDR, 2004), coho salmon spawning and rearing occur in tributaries to the Lower Russian River. The mainstem serves primarily as a passage corridor between the ocean and the tributary habitat. Steelhead spawn and rear in tributaries from Jenner Creek, near the mouth, to upper basin streams including Forsythe, Mariposa, Rocky, Fisher, and Corral creeks. Steelhead generally spawn in the tributaries, where fish ascend as high as flows allow. (USACE 1982.) Gravel and streamflow conditions suitable for spawning are prevalent in the Russian River mainstem and tributaries (Winzler and Kelly 1978), although gravel mining and sedimentation have diminished gravel quality and quantity in many areas of the mainstem. In

the Lower and Middle mainstem (downstream of Cloverdale) and the lower reaches of tributaries, water temperatures exceed 55° F (13° C) by April in some years (Winzler and Kelly 1978), which may limit the survival of eggs and fry in these areas. Chinook salmon currently spawn in the mainstem and larger tributaries, including Dry Creek. Chinook salmon spawning was observed well downstream of Dry Creek in November 2002.

Comment 1.10.13: If the SWRCB wanted to develop an appropriate regulation, it would have to address at least the following: (a) exclude withdrawals from storage, (b) exclude “hydraulically connected groundwater,” (c) exclude the main stem Russian River below Coyote Dam, (d) exclude Dry Creek below Warm Springs Dam, and (e) limit the regulation only to areas where factual investigation has revealed an actual problem with frost diversions. By doing so, the SWRCB can significantly diminish the economic impacts and management burdens of this regulation without impairing its effectiveness. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Board considered the available evidence and reduced the geographical scope of the proposed regulation to exclude the diversions for frost protection upstream of Warm Springs Dam in Sonoma County and upstream of Coyote Dam in Mendocino County. The economic analysis performed to support the proposed regulation identifies the economic impacts for the proposed project area. Contrary to the assertions of the commenter, the commenter’s recommended exclusions and limitations would impair the effectiveness of the proposed regulation. The geographic scope may be narrowed in the future if additional information allows for it. At this time the information currently available supports the conclusion that the practices and effects reported by NOAA may be present throughout the watershed.

Topic 1.11 Regulation Approach - Water Diversifiers Affected by Regulation

Comment 1.11.1: The draft regulation does not address other diversions from the Russian River stream system that impact stream stage, and therefore salmonid habitat, even though it is asserting its jurisdiction to prevent “take.” This is an abuse of discretion because it fails to account for other elements of causation. Under the Endangered Species Act, any action that was a “substantial factor” in bringing about a take is subject to enforcement. For example, in *United States v. Glenn-Colusa Irrigation District* (E.D. Cal. 1992) 788 F.Supp. 1126, the court considered whether a fish screen or the pumping of water through that screen was responsible for a take when the pumping of water impinged endangered fish on the screen. Glenn-Colusa argued that the screen, which was owned and operated by the Department of Fish and Game, was responsible for the take because the screen was the direct cause of the killing of the fish. The court considered this argument “absurd for it is the pumping that creates the take,” and that it “is irrelevant whether the taking is direct or indirect.” As long as something is a “substantial factor in bringing about the injury” causation will be found. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The purpose of the proposed regulation is to prevent salmonid stranding mortality in the Russian River watershed due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops in Sonoma and Mendocino Counties, not simply to prevent “take”. As such, the case cited by the commenter is inapposite here. The proposed regulation also does not affect the independent enforcement authorities or responsibilities any other agency may have regarding the same resources to be protected by the proposed regulation.

Comment 1.11.2: A “substantial factor in bringing about the injury” (Id at 1134) involves other water users on the system. These other diversions include domestic, municipal, and industrial users, as well as nighttime diversions that are unrelated to frost protection. Due to pricing tiers available from most electricity providers, there is a cost break associated with electricity use during “off-peak” hours - typically after 9:00pm in March and April. In order to take advantage of the price break, many large electricity customers wait until after 9:00pm to consume large amounts of electricity. Water diversions in the Russian River watershed are no different. We see no reason why diversions unrelated to frost protection must necessarily occur at night, when water demand is already quite high for frost protection purposes and water supply is limited. “When the supply is limited public interest requires that there be the greatest number of beneficial uses which the supply can yield.” Thus, water diversions unrelated to frost protection should be minimized at night in order to allow more frost protection. Water diversions unrelated to frost protection should occur during the day, which maximizes the number of uses of the limited supply. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The purpose of the proposed regulation is to prevent salmonid stranding mortality in the Russian River watershed due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops in Sonoma and Mendocino Counties. Municipal and Industrial diversions in the Russian River watershed are not included in the proposed regulation because these diversions primarily use the mainstem Russian River and are mostly covered by contractual water supplies. These water diversions are made at a rate that is known and accounted for by Sonoma County Water Agency’s releases to maintain flows pursuant to Decision 1610. Additionally, in a report of the Russian River Frost Control Program for the Upper Russian River, Mendocino County, dated November 2009, the Upper Russian River Stewardship Alliance (URSA) stated “The pattern of demand generated by frost protection is markedly different than irrigation. There is enough variation amongst crops and operations that the likelihood of every grower irrigating simultaneously is extremely low. Irrigation is accomplished by irrigating subsets of each ranch in a series of blocks in a rotation that may take several days to complete. In addition, the majority of the crops in the Upper Russian River use low-volume drip irrigation systems. As a result, irrigation is self randomizing and of relatively low intensity. Frost protection is essentially the opposite. During major frost events, almost everyone is forced to protect all of their crops simultaneously using high-volume overhead sprinkler systems for a relatively short period of time. This acute demand can cause large, short term fluctuations in flow.” (Page 12).

Comment 1.11.3: If the State Water Board's objective is to prevent salmonid stranding mortality then ALL water users who divert water during the frost season (March 15 - May 15) need to be included in the regulation, not just agricultural diversions. On page 11 of the EIR it is stated that, "Water is diverted from the Russian River and its tributaries for a variety of purposes including municipal, industrial, domestic and agricultural use." On page 12 of the EIR

it is also stated that 30% of the water right records for the Russian River Watershed provide for the diversion of water for frost protection use. The EIR identifies the fact that other water users divert water from the Russian River Watershed, most likely during March 15 - May 15, yet the SWRCB only proposes to apply the regulation to frost protection diversions, 30% of the water rights on record. The SWRCB should address the impacts on salmonids from non-frost diversions, such as municipalities in the EIR process. *(Mike Anderson, Mendocino County Farm Bureau; Barbara Petersen; Jesse Barton, Gallery and Barton Law Corporation ; Paula Whealen, Wagner and Bonsignore; Jim Lincoln, Napa County Farm Bureau; Glenn McGourty, University of California Agriculture and Natural Resources)*

Response: The 30% citation noted in the comment from the DEIR is for the percentage of water rights, not the percentages of the rate of diversion or volume of water allowed under these water rights. The water application rates per acre for frost can be over four times that of irrigation.

The purpose of the proposed regulation is to prevent salmonid stranding mortality in the Russian River watershed due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops in Sonoma and Mendocino Counties. Municipal and Industrial diversions in the Russian River watershed are not included in the proposed regulation because these diversions primarily use the mainstem Russian River and are mostly covered by contractual water supplies. These water diversions are made at a rate that is known and accounted for by Sonoma County Water Agency's releases to maintain flows pursuant to Decision 1610. In a report of the Russian River Frost Control Program for the Upper Russian River, Mendocino County, dated November 2009, the Upper Russian River Stewardship Alliance (URSA) stated "The pattern of demand generated by frost protection is markedly different than irrigation. There is enough variation amongst crops and operations that the likelihood of every grower irrigating simultaneously is extremely low. Irrigation is accomplished by irrigating subsets of each ranch in a series of blocks in a rotation that may take several days to complete. In addition, the majority of the crops in the Upper Russian River use low-volume drip irrigation systems. As a result, irrigation is self randomizing and of relatively low intensity. Frost protection is essentially the opposite. During major frost events, almost everyone is forced to protect all of their crops simultaneously using high-volume overhead sprinkler systems for a relatively short period of time. This acute demand can cause large, short term fluctuations in flow." (Page 12).

Comment 1.11.4: As drafted, the regulation posits an irrefutable presumption that frost water use adversely affects stream stage and that the regulation of frost water use will result in "protective" stream stage for salmonids. This presumption is contradicted by evidence in the administrative record that Sonoma County Water Agency failed to meet its minimum stream flow obligations on the mainstem Russian River during the April 2008 stranding incident. And yet Sonoma County Water Agency reservoir releases and water diversions are not addressed in the regulation. Unless the overbroad regulation of groundwater and presumption of unreasonableness are deleted from the regulation growers will be forced to litigate these issues in order to have a fair opportunity to demonstrate compliance with law. *(Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission)*

Response: Contrary to the assertions of the commenter, there is nothing in the proposed regulation suggesting an "irrefutable presumption" that diversions for frost protection adversely affect stream stage. There are two data sets in the administrative record which show the

stream flow for the Russian River near Hopland during the April 2008 stranding event. One data set is from the California Data Exchange Center (CDEC), which is maintained by the California Department of Water Resources (DWR). The other data set is for the exact same stream gage and can be found on the United States Geological Survey (USGS) website. The USGS owns and maintains the Russian River near Hopland stream gage. The CDEC and USGS websites provide different data for the same period of time. Data posted to the CDEC website is not reviewed or corrected. The USGS does review and correct data recorded by its gages. Therefore the USGS data set is considered the correct data set for the April 2008 stranding event. This data set shows that the Sonoma County Water Agency was meeting its minimum stream flow obligations immediately preceding the frost event. Any failure to meet the minimum instream flow requirement during the event was a direct result of frost diversions cumulatively reducing stream flow to levels below minimum requirements, which SCWA would not have direct control over.

Comment 1.11.5: The Russian River Property Owners Association (120 members) formally requests that Alexander Valley be excluded from the proposed Frost Protection regulation until farther data are collected. To form a regulation without knowing the problems is the same as prescribing a cure before the illness is known. Neither the Water Board staff, nor the NOAA Fisheries staff appear to understand the hydrological or geological character of Alexander Valley. Especially the tributaries when they reach the valley floor. We have been unjustly accused of harming threatened fish by both the Water Board staff and NOAA Fisheries staff. It is time to dispense with Knee Jerk reactions and look for facts. RRPOA has been committed to sound science and will continue to expand our stream monitoring program. Based on the data that you have already received, we feel that we should be excluded from an area wide regulation. *(Al Cadd, Russian River Property Owners Association)*

Response: There is an adequate factual basis, as described in the Initial Statement of Reasons, for the Board to declare all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County unreasonable unless conducted in accordance with a Board-approved water demand management program. The geographic scope may be narrowed in the future if additional information allows for it. At this time the information currently available supports the conclusion that the practices and effects reported by NMFS may be present throughout the watershed.

Comment 1.11.6: The proposed frost rule is generally sound. The Rule must continue to include connected groundwater and all types of surface water rights. There is no other way for it to work. *(Brian Johnson, Trout Unlimited)*

Response: Comment noted.

Comment 1.11.7: Question for you. The Sonoma County Water Agency. Will they too be affected by this? They are by far the largest user of water from the Russian River. Pumping Station #6 alone removes up to 21 million gallons a day from the Russian River (How come we don't hear about this? How come the news papers don't report this?). Please tell me the average daily water consumption during frost season by the Sonoma County Water Agency (from all Russian River pumping stations). *(Jim Newsome)*

Response: The Sonoma County Water Agency would be affected by this regulation if they

were to divert and deliver water for frost protection below Lake Sonoma or Lake Mendocino. The monthly water deliveries made by the Sonoma County Water Agency to their contractors can be found on their website at <http://www.scwa.ca.gov/water-delivery-data/>

Comment 1.11.8: Russian Riverkeeper urges the Board to adopt the Frost Regulation without further delay. In addition, we suggest the following: The draft's inclusion of connected groundwater and all water rights is appropriate and necessary. (*Kate Wilson, Russian Riverkeeper*)

Response: Comment noted.

Comment 1.11.9: The proposed regulation would: regulate all water used for frost protection in the Russian River Watershed including pre-1914, riparian, licensed, permitted and groundwater; would declare all diversions for frost protection unreasonable unless and until the water is diverted pursuant to a Board approved water demand management program. While we support efforts to insure adequate stream flow for fisheries, we believe that the proposed rule includes water users that have no detrimental effect on salmonids. (*Jim Lincoln, Napa County Farm Bureau*)

Response: There is an adequate factual basis, as described in the Initial Statement of Reasons, for the Board to declare all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County unreasonable unless conducted in accordance with a Board-approved water demand management program. At this time the information currently available supports the conclusion that the practices and effects reported by NMFS may be present throughout the watershed. There are opportunities under the proposed regulation for groundwater diverters to show that their pumping does not contribute to a reduction in stream stage to any surface stream in the Russian River watershed during any single frost event.

Comment 1.11.10: Grape growing is a difficult farming operation. Land owners pay large amounts of property taxes, as well as other fees. If we want agriculture to continue in California, the State needs to study the agricultural needs as well as needs of fish. Also water use by cities needs to be studied. (*Richard Rued*)

Response: Comment noted.

Comment 1.11.11: Even though we do not currently draw water frost protection, our use of water for irrigation would be impacted. (*James Pedroncelli, Pedroncelli Vineyards*)

Response: Comment noted.

Comment 1.11.12: Finally, there is no discussion of other water diverters on the Russian River and its tributaries, which are mostly municipal water providers. Isn't there a concern about their impact on fish during critical low flow periods? Is there any plan or regulation to minimize their diversions when water levels are low? (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: The purpose of the proposed regulation is to prevent salmonid stranding mortality

in the Russian River watershed due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops in Sonoma and Mendocino Counties. Municipal and Industrial diversions in the Russian River watershed are not included in the proposed regulation because these diversions primarily use the mainstem Russian River and are mostly covered by contractual water supplies. These water diversions are made at a rate that is known and accounted for by Sonoma County Water Agency's releases to maintain flows pursuant to Decision 1610. In a report of the Russian River Frost Control Program for the Upper Russian River, Mendocino County, dated November 2009, the Upper Russian River Stewardship Alliance (URSA) stated "The pattern of demand generated by frost protection is markedly different than irrigation. There is enough variation amongst crops and operations that the likelihood of every grower irrigating simultaneously is extremely low. Irrigation is accomplished by irrigating subsets of each ranch in a series of blocks in a rotation that may take several days to complete. In addition, the majority of the crops in the Upper Russian River use low-volume drip irrigation systems. As a result, irrigation is self randomizing and of relatively low intensity. Frost protection is essentially the opposite. During major frost events, almost everyone is forced to protect all of their crops simultaneously using high-volume overhead sprinkler systems for a relatively short period of time. This acute demand can cause large, short term fluctuations in flow." (Page 12).

Comment 1.11.13: Assuming the SWRCB still desires to adopt this regulation, changes should be made to more narrowly target the perceived ills it seeks to correct. The January 2010 version of the regulation reads as though "any diversion of water" would include diversions to and withdrawals from storage, as long as the water was initially diverted from the Russian River stream system. We fail to see why those who have reservoirs capable of supplying an adequate supply of water should be subject to this regulation. Withdrawals from storage have no impact on stream flow or stage and should be exempt from this regulation. In order to clarify this in the regulation, a phrase exempting withdrawals from storage should be included in the definition of "significant" in section (b) of the draft regulation. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 1.11.14: If the SWRCB truly desires to improve habitat conditions for fish in the Russian River, and not rest the entire problem at the doorstep of the agricultural community (which cannot compensate for the lack of flows caused by SCWA), then the regulation should be amended to include all diversions from the Russian River water system, including municipal and residential wells, and it should discourage nighttime diversions unrelated to frost protection. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The purpose of the proposed regulation is to prevent salmonid stranding mortality in the Russian River watershed due to the cumulative effect of instantaneous diversions for purposes of frost protection of crops in Sonoma and Mendocino Counties. SCWA is required to meet prescribed bypass flows, according to Board Decision 1610. According to the USGS Station 11462500, Russian River Near Hopland, gage data, SCWA was in compliance with its

instream flow requirements just immediately preceding the April 20, 2008 fish stranding on the mainstem Russian River reported by NOAA, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. Even then, the available evidence supports the conclusion that it was not SCWA's temporary non-compliance during the event that caused the fish stranding, but the rapid drop due to the uncoordinated diversions for frost protection. Municipal and Industrial diversions in the Russian River watershed are not included in the proposed regulation because these diversions primarily use the mainstem Russian River and are mostly covered by contractual water supplies. These water diversions are made at a rate that is known and accounted for by Sonoma County Water Agency's releases to maintain flows pursuant to Decision 1610. Additionally, in a report of the Russian River Frost Control Program for the Upper Russian River, Mendocino County, dated November 2009, the Upper Russian River Stewardship Alliance (URSA) stated "The pattern of demand generated by frost protection is markedly different than irrigation. There is enough variation amongst crops and operations that the likelihood of every grower irrigating simultaneously is extremely low. Irrigation is accomplished by irrigating subsets of each ranch in a series of blocks in a rotation that may take several days to complete. In addition, the majority of the crops in the Upper Russian River use low-volume drip irrigation systems. As a result, irrigation is self randomizing and of relatively low intensity. Frost protection is essentially the opposite. During major frost events, almost everyone is forced to protect all of their crops simultaneously using high-volume overhead sprinkler systems for a relatively short period of time. This acute demand can cause large, short term fluctuations in flow." (Page 12).

2.0 Necessity for Regulation

Comment 2.0.1: While the SWRCB may appeal to the Napa River frost regulation as regulatory "precedent" for the Russian River frost regulation, the proposed Russian River frost regulation differs substantially from the Napa River frost regulation in that the SWRCB had actual evidence that the supply of water in the Napa River was inadequate to accommodate the demand for all water rights during frost protection. As a result, the SWRCB "concluded that the only feasible solution to the problem was: (1) to require the winter storage of water for frost protection, and (2) to develop other supplemental sources of water so that no direct pumping of water for frost protection would be necessary." (Draft Initial Statement of Reasons, pg 4). (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: See response to comments 3.0.64 and 3.0.89

Comment 2.0.2: In order to adopt this regulation, the SWRCB must find that the regulation is legally "necessary." The necessity must be supported by "substantial evidence". (Government Code section 11350) "Substantial evidence" has been defined in the administrative context as "relevant evidence that a reasonable mind might accept as adequate to support a conclusion," or "evidence of ponderable legal significance...reasonable in nature, credible, and of solid value." (1 Cal. Administrative Mandamus (Cont.Ed.Bar 3rd ed. 2010) §6.171, p. 298.) In addition, the Office of Administrative Law (OAL) must agree with the SWRCB's determination. (Government Code section 11349.1) In various documents related to this regulation, including the draft EIR, and the draft Initial Statement of Reasons, the SWRCB states that the "necessity" for the regulation is based upon a letter dated February 19, 2009, from NMFS, which requests

that the SWRCB take immediate action to address concerns that high instantaneous demand for water for frost protection contributes to significant salmonid mortality. NMFS based this letter upon two alleged strandings that occurred in 2008, one on the Russian River mainstem near Hopland and one on Felta Creek, a small tributary to the Russian River in Sonoma County. Of these two strandings, NMFS claims 10 fish were found stranded in the mainstem Russian River below Hopland, and 31 fish were found stranded on Felta Creek, a tributary of the Russian River. While every reasonable effort should be made to preserve endangered species, the regulation being offered by the SWRCB is legally unnecessary because it will do nothing to preserve the endangered salmonids in the Russian River watershed. As such, it is not supported by “substantial evidence” for the reasons outlined below. (1) The real cause of the drop in streamflow in April 2008 near Hopland was SCWA’s failure to meet its water right permit terms. If SCWA had simply met its instream flow requirements, we would not be here today. (2) There is no evidence supporting the need for the regulation. Whatever strandings may have occurred do not justify the basis for the regulation. (3) The whole need for the regulation has been fabricated. Any evidence purporting to justify the need for the regulation has either been fabricated or grossly exaggerated. (4) Significant improvements have been completed that remove frost protection from playing any role in future strandings. Any contributing role that frost protection may have played in the stream stage drop in 2008 has been remedied. (5) Sonoma County already has an effective frost registration program in place that will monitor the situation. (6) The regulation, in its current form, is unworkable. The methodology and the requirements imposed show that they were drafted by someone with little scientific understanding, and the data collected, if the methods required by the SWRCB are employed, will be worthless. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: In response to the commenter’s contention that “the regulation will do nothing to preserve the endangered salmonids in the Russian River watershed”, refer to response to comment 2.0.4.

The rest of this comment has 6 parts and each will be addressed individually.

- 1) Refer to response to comment 2.0.3
- 2) Refer to response to comments 2.0.4 and 2.0.14
- 3) Refer to response to comments 2.0.6 and 2.0.7
- 4) Refer to response to comments 2.0.10 and 2.0.11
- 5) Refer to response to comment 2.0.12
- 6) The methodology for determining protective stream stages that is provided in the Initial Statement of Reasons is not a requirement of the proposed regulation. There may be other approaches for determining protective stream stages that could be developed in consultation with NMFS and DFG that would likewise satisfy the proposed regulation.

Comment 2.0.3: The regulation being offered by the SWRCB is not necessary. The regulation being offered by the SWRCB is not supported by “substantial evidence”. The real cause of the drop in streamflow in April of 2008 near Hopland was the failure of the Sonoma County Water Agency (SCWA) to comply with the terms of its water right permits. SCWA must meet its minimum instream flows regardless of other senior and riparian diverters on the system. This position is bolstered by the fact that on page 41 of D-1610, the SWRCB removed permit term 68 for other post-1949 appropriative water rights (which prohibited these diverters from diverting when the only water in the system matched SCWA’s releases) and made SCWA

solely responsible to meet the instream flows stipulated between it and the Department of Fish and Game. Therefore, why is the SWRCB imposing this regulation on frost diverters when the SCWA is obligated under D-1610 to meet instream flows? If SCWA had simply met its instream flow requirements, we would not be here today. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: There are two data sets in the administrative record showing the stream flow for the Russian River near Hopland during the April 2008 stranding event. One data set is from the California Data Exchange Center (CDEC), which is maintained by the California Department of Water Resources (DWR). The other data set is for the exact same stream gage and can be found on the United States Geological Survey (USGS) website. The USGS owns and maintains the Russian River near Hopland stream gage. The CDEC and USGS websites provide different data for the same period of time. Data posted to the CDEC website is not reviewed or corrected and is not maintained as a historical record. The USGS does review and correct data recorded by its gages. Data that is more than a year old is considered published data. Therefore the USGS data set is considered the correct data set for the April 2008 stranding event. This data set shows that the Sonoma County Water Agency was meeting its minimum stream flow obligations immediately preceding the frost event. Any failure to meet the minimum instream flow requirement was a direct result of frost diversions cumulatively reducing stream flow to levels below minimum requirements, which SCWA would not have direct control over. The information gathered by the WDMPs pursuant to the proposed regulation will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

Comment 2.0.4: The regulation being offered by the SWRCB is not necessary. The regulation being offered by the SWRCB is not supported by “substantial evidence”. Whatever strandings may have occurred do not justify the basis for the regulation. There is no evidence supporting the need for the regulation. Based upon the results of several Public Records Act requests and Freedom of Information Act requests, the regulation is based upon two strandings - both in 2008. Without minimizing NMFS’ claim that 41 endangered fish were lost, but based upon these 41 fish, the SWRCB has proposed a regulation that spans 1,778 miles of stream systems, or 1,485 square miles in two different counties, that is conservatively projected to cost \$10 million over three years (Table 4.12, Appendix D, DEIR). This is a grossly disproportionate and unreasonable response that will do nothing to improve habitat conditions for fish, particularly when any contribution diversions for frost protection may have had on the only two documented instances of stranding have been fully resolved. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The objective of the proposed regulation is to prevent stranding mortality to salmonids due to the cumulative instantaneous effect of diversions for frost protection. Habitat conditions for salmonids will improve, during the frost season, through coordination and

management of diversions and maintenance of a protective stream stage that protects salmonids from incidences of stranding due to frost protection activities. The Board recognizes and commends the successes to date of local solutions. However, the evidence presented in the Initial Statement of Reasons and DEIR indicate the 2008 strandings are unlikely to be isolated events.

Comment 2.0.5: The regulation being offered by the SWRCB is not necessary. The regulation being offered by the SWRCB is not supported by “substantial evidence”. Recognizing the lack of justification for such a broad regulation, and in an effort to undermine the remedial actions undertaken by wine grape growers to address the strandings, NMFS has developed a paper, Biological Context of the Spring 2008 De-Watering Event in the Upper Mainstem of the Russian River, dated March 2011. NMFS alleges in this document that the 10 steelhead fry found stranded in the Russian River in 2008 actually mean 25,872 fish were stranded. The NMFS Document is unsigned and provides no references or bibliography to support the assumptions or conclusions within it. The methodology employed in the NMFS Document is without merit for several reasons [detailed in commenter's letter]. Surprised by the lack of supporting documentation for the NMFS Document, we contacted David Hines of NMFS, who admitted being the primary author of the document. As he was the primary author, we requested supporting documentation for the assumptions and conclusions made in the paper. His answer was that he had no supporting documentation for the assumptions and conclusions. Please see Exhibit G, which documents our conversation with Mr. Hines. Aware that the SWRCB had posted the NMFS Document on its website as part of its rulemaking file, and that it was therefore intending to rely upon it as justification for the regulation, we had this paper reviewed by Wagner & Bonsignore, Consulting Engineers, and Douglas Parkinson, a fishery biologist. [Details are provided in commenter's letter.] [Commenter concludes:] Since none of NMFS' assumptions or conclusions can be verified, it should not be used as evidence of anything in the administrative record, except for the lack of science supporting the need for the regulation and NMFS' inability to convert meters into feet. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This report referred to by the commenter was not considered during the development of the proposed regulation and is not referenced in the Initial Statement of Reasons or DEIR. The Board did not write or contribute to any portion of this report and any issues with the methodology or conclusions should be addressed to NMFS. It is noted that NMFS sent a letter, dated July 15, 2011, to the Mendocino County Farm Bureau, with copy to the State Water Board, which appears to respond to the concerns outlined in this comment.

Comment 2.0.6: The regulation being offered by the SWRCB is not necessary. The regulation being offered by the SWRCB is not supported by “substantial evidence”. The whole need for the regulation has been fabricated. If a regulation was truly necessary, it would not have been necessary for NMFS and the Division of Water Rights to jointly develop a basis for the regulation, while at the same time ignoring SCWA's permit violations. As discussed above, the SWRCB states that the need for the regulation is based upon a letter dated February 19, 2009, from NMFS. The problem with this letter is that it is the product of NMFS ignoring its enforcement duties and instead allowing an existing Section 7 consultation to be completed, and the Division of Water Rights deciding to override an effective collaborative process so that it may expand its jurisdiction. A timeline is provided to show that NMFS' early efforts at solving

the problem via collaboration were scuttled by select staff from the Division of Water Rights and NMFS in an effort to use the strandings to justify the expansion of their jurisdiction. This was accomplished by keeping evidence unavailable to stakeholders, exaggerating the extent of the issue, and creating contrived regulatory pressure between NMFS and the Division of Water Rights. [Commenter provided excerpts of email correspondence as documentation.] (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Neither the Board nor Board staff fabricated evidence or developed the need for a proposed regulation. The federal endangered status of salmonids has existed since 1997, well before the 2008 frost season. NMFS identified two incidents of actual salmonid mortality in a tributary stream and in the mainstem of the Russian River. Mathew Deitch, et al, made an independent analysis and found a close relationship between frost diversions and rapid stream stage declines in the Maacama Creek watershed. Recently, another salmonid stranding mortality incident has been reported on the West Fork Russian River, which at this time supports that salmonid fry are present throughout the watershed during the frost season.

The 2008 flow record for the USGS Gauge No. 11462500, Russian River near Hopland, prior to the April 20, 2008 salmonid stranding incident does not support the contention that Sonoma County Water Agency (SCWA) was violating the flow requirement of its permit preceding the documented stranding episodes. The USGS data for Station No. 11462500 shows that the Russian River flow was above 185 cubic feet per second. However, the data reported for the same gauge on the Department of Water Resources CDEC internet site does show the flow was below 185 cfs for the same time. Board staff confirmed that USGS staff continually inspect and correct its data, but the Department does not make necessary data corrections on its CDEC data. Board staff concludes that the USGS data is the more reliable data set. Although during the frost event, flows did drop below the required permit flow requirements; the flow record also shows that SCWA promptly increased releases at Coyote Dam to correct for the reduction, but that the travel time for water to reach the Hopland site takes several hours.

Board staff did not “scuttle” the collaborative process between stakeholders and NMFS; staff participated in and supported that process. During that collaborative process, the Board also exercised its discretionary enforcement authority to investigate and consider appropriate actions to prevent violation of law. These activities can appropriately be considered and initiated concurrent with discussions regarding a collaborative solution.

Comment 2.0.7: The regulation being offered by the SWRCB is not necessary. The regulation being offered by the SWRCB is not supported by “substantial evidence”. The whole need for the regulation has been fabricated. The analysis shows that the rate of drawdown for the 2008 occurrence on the main stem of the Russian River near Hopland was substantially less than the critical drawdown rates the most stringent publications NMFS could find in their search for scientific literature and justification for the proposed regulation... (Document is from page 518 of FOIA request from NMFS). Other analyses find the flow reductions observed during the frost events of April 2008 (6 to 7 cfs/hour) were 75% lower than the ramping rates NMFS authorized in the 2009 Biological Opinion for the same river. Moreover, the flow reductions observed during the frost events of April 2008 (6 to 7 cfs/hour) were about half (one inch is equal to 2.54 cm) of the ramping rates discussed in the Biological Assessment for the Coyote and Warm Springs Dam. Rather than recognize the ramping rates before and during the 2008 occurrence

were well below the authorized rates, and well below the standards set by published criteria (and look elsewhere for the cause of the strandings), the SWRCB and NMFS continue to push for regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: In the Russian River Biological Assessment Interim Report 1, 2000, NMFS determined that ramping effects are assumed to be attenuated on the mainstem Russian River by about 5 miles or less downstream of Coyote Dam near the Perkins Street bridge crossing in Ukiah. The ramping rates referred to in the 2009 Biological Opinion of 25 cfs/hr are “Interim Ramping Rates” and are designed specifically for the channel characteristics from Coyote Valley dam to Ukiah. They are not designed to be universally applied on the mainstem of the Russian River.

Hunter (1992) recommends down-ramping rates of 2.54 cm/hr, based on studies on the Sultan River (Olson, 1990) that determined ramping rates of 2.54 cm/hr were adequate to protect steelhead fry. However, Hunter notes that this determination was made in a confined river transect, whereas actual stranding was observed on lower gradient bars further downstream. Thus, the effective ramping rate at actual stranding locations in Hunter’s analysis was less than 2.54 cm/hour. Hunter also states that stranding increases dramatically when flows drop below a critical stage level, typically defined in hydropower settlements as the minimum operating discharge, or the upper end of a flow range where more restrictive operational criteria are applied. This indicates that ramping rates alone will not protect fish from stranding mortality and that stage levels also play a critical role in protecting salmonids from stranding.

Comment 2.0.8: In response [to the SWRCB and NMFS push for regulation], the Upper Russian Stewardship Alliance (URSA) spearheaded the development of a compensatory release program, improved gauging and a network of offstream storage reservoirs at a cost of over \$5M. The combination of tools further reduces fluctuation rates and amplitude during frost protection. However, at a November 2009 SWRCB workshop NMFS deemed the efforts to be “not commensurate with the scope and magnitude of the problem.” (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Board recognizes and commends the successes to date of the Upper Russian Stewardship Alliance. However, we agree with NMFS and believe that while these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 2.0.9: The regulation being offered by the SWRCB is not necessary. The regulation being offered by the SWRCB is not supported by “substantial evidence”. The need for the regulation has been contrived by: (a) ignoring SCWA permit violations for political reasons, (b) undermining an effective collaborative approach, (c) failing to find any additional basis for the regulation, (d) [NMFS's refusal] to turn over public documents to the public, and (e) creating a scientifically indefensible document that purports to show a basis for the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont;*

Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: This comment has 5 parts and each will be addressed individually.

- a) Refer to response to comment 2.0.3
- b) Refer to response to comment 2.0.5 and 2.0.6
- c) Refer to response to comment 2.0.6 and 2.0.7
- d) Comment noted
- e) Refer to response to comments 2.0.4 and 2.0.14

Comment 2.0.10: The regulation being offered by the SWRCB is not necessary. Significant improvements have been completed that remove frost protection from playing any role in future strandings. Any contributing role that frost protection may have played in the stream stage drop in 2008 has been remedied. Since the April 2008 stranding of ten fish on the Russian River, (1) frost diversions have been coordinated with the Sonoma County Water Agency (SCWA) and the Russian River Flood Control District. This coordination will allow frost diversions to be considered when releases are made from Coyote Dam. (2) Several diverters who were pumping directly from the Russian River above Hopland in 2008 have built, or are in the process of building, reservoirs that will reduce the instantaneous demand on the Russian River by 91.6 cfs in all future years. We have attached as Exhibit J a table summarizing these construction projects and their expected reduction in demand. In addition to the capital costs outlined in the summary, many of these growers had to remove several acres of valuable wine grape vines in order to build the off-stream ponds. This information was originally provided to the SWRCB by the Russian River Frost Program's PowerPoint presentation at the November 18, 2009, SWRCB workshop, but has been supplemented with additional new information. (3) A new USGS gauge has been installed at Talmage, which allows for closer monitoring of Russian River flows during frost events that in turn allows for efficient releases from Coyote Dam thereby minimizing stage changes. The April 2008 stranding incident on Felta Creek was allegedly caused by one direct diverter frost protecting four acres of vineyard. The pump used by the diverter has been removed from Felta Creek and replaced with a groundwater well that pumps water into an offstream reservoir. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The installation of offstream reservoirs, new Talmage Gauge, better frost forecasting and improved communication between Mendocino growers and the Sonoma County Water Agency (SCWA) has improved SCWA's ability to increase releases for specific frost diverters using the Russian River mainstem for frost protection. These local cooperative efforts are real meaningful improvements. However, these solutions do not address the risk present in tributaries of the Russian River in which salmonids exist.

Comment 2.0.11: The regulation being offered by the SWRCB is not necessary. Significant improvements have been completed that remove frost protection from playing any role in future strandings. Any contributing role that frost protection may have played in the stream stage drop in 2008 has been remedied. These efforts have resolved any legitimate concerns SWRCB and NMFS may have had. As evidence, note that there have been no legitimate claims of frost-protection-related strandings on the mainstem of the Russian River below Coyote Dam or Felta Creek since 2008. In fact, attached as Exhibit K are declarations from several individuals who

live along various tributaries that have never seen stream stage fluctuations due to frost protection activities, but have seen extreme fluctuations due to natural causes, some of which have resulted in naturally-caused strandings on those tributaries. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The installation of offstream reservoirs, new Talmage Gauge, better frost forecasting and improved communication between Mendocino growers and the Sonoma County Water Agency (SCWA) has improved SCWA's ability to increase releases for specific frost diverters using the Russian River mainstem for frost protection. These local cooperative efforts are real meaningful improvements. However, these solutions do not address the risk present in tributaries of the Russian River in which salmonids exist.

The declarations provided with this comment are important observations of extreme fluctuations stated to be due to natural causes. Frost diversions occur during late night and early morning hours of the day making observations of other potentially extreme fluctuations during frost protection events difficult to visually identify. The evidence available to the Board shows a relationship between frost diversions and rapid reductions in stream stage. The proposed regulation is necessary even with the corrective actions currently underway by local efforts.

Comment 2.0.12: The regulation being offered by the SWRCB is not necessary. Sonoma County already has an effective program in place that will monitor the situation. On February 15, 2011, the Sonoma County Board of Supervisors approved a frost protection ordinance that requires growers to disclose the number and type of water diversions used for frost protection, the acreage they frost protect with water, sources of water, rate of water application and water storage type. Anyone who uses water for frost protection must register with the County. A copy of the registration form is attached as Exhibit L. This registration will ensure 100% participation in the program. Once registered with the County, they become part of a monitoring program administered by a non-profit organization, the Russian River Water Conservation Council (RRWCC). The RRWCC is already administering the program for the County, and has already installed several gauges in streams identified by NMFS as "at risk" stream systems. All the information collected will be provided to a Science Advisory Group that will then provide recommendations to the RRWCC to address any frost protection and fishery conflicts. This program is up and running without the need for the incredibly blunt instrument the SWRCB is wielding. (*Bob Anderson, United Winegrowers for Sonoma County; Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Based on this commenter's description of the Sonoma County program it appears to be a good example of the type of Water Demand Management Program (WDMP) the regulation requires. If all of the required components of a WDMP are incorporated into the Sonoma County program then it would likely be approved by the State Water Board as a WDMP. It should be noted that the Sonoma County program that was approved on February 15, 2011, did not have the details of a monitoring and reporting program in place due to opposition from the wine industry. The monitoring and reporting of stream flow and diversion data is a requirement of the regulation that the Sonoma County program would need to meet in

order to be approved by the State Water Board as a WDMP.

Comment 2.0.13: We would be remiss if we did not address the “stranding” that occurred on April 29 of this year. Before we go any further, it is troubling to note that rather than conduct an investigation, NMFS chose to have the “stranding” published in the local newspaper (see Exhibit N). This is probably because you need actual evidence to conduct an investigation. Nevertheless, the “stranding” occurred on the west fork of the Russian River near Redwood Valley in Mendocino County. NMFS claimed in the news story that the stranding was the result of frost protection occurring in the valley. Specifically, SA Torquemada is quoted in the May 6th Santa Rosa Press Democrat as saying: “This incident illustrates that voluntary efforts have not prevented frost diversion-related fish kills and confirms the need to regulate water use....” However, the facts of the situation show that the fish were stranded as the normal result of the streambed drying from the lack of rainfall. The USGS gauge directly below the “kill” shows no significant drop in flows or elevations from frost diversions. The graph does, however, document flows receding from 90 cfs to 50 cfs in the preceding week from cessation of rain and the onset of warm weather: [Commenter provided hydrographic data]. Note that the “drop” in flow is barely perceptible, and is nevertheless eclipsed by the consistent and rapid decline in river flow overall as a result of the lack of precipitation and the natural drying up of the stream bed. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Comment noted. It has not yet been determined at this time whether or not the stranding that occurred in the West Fork is the result of frost diversions or a natural reduction in stream flow. It is assumed that the USGS gage the commenter is referring to is gage 11461000, Russian River near Ukiah, which is located on the West Fork of the Russian River just above the confluence with the East Fork Russian River. That flow recorded by this gage includes contributing flow from tributaries to the West Fork Russian River that flow into the West Fork below the location of the fish kill in Redwood Valley. These tributaries include Forsythe Creek and York Creek. It should also be noted that the Forsythe Creek watershed is nearly the same size as the watershed draining to the location of the fish kill. It also appears that the Forsythe Creek watershed has fewer diversions and less vineyard development than Redwood Valley. Therefore it would be expected that the Forsythe Creek watershed will heavily influence the flow data recorded at gage 11461000 and conclusions about the reduction in flow in Redwood Valley due to a frost event should not solely be made using this gage. Another gage would be needed to be installed on the West Fork Russian River in order to better monitor the effects of frost diversions in Redwood Valley.

Comment 2.0.14: The Draft Regulation is not properly based on a solid scientific footing and this flawed science is insufficient to justify the regulation's adoption. We understand, from discussions with water availability and threatened/endangered species experts, that the scientific bases for the Draft Regulation are flawed and incomplete. There are key scientific uncertainties regarding the magnitude, extent and causes of the stranding problem, as well as regarding the assumptions and analyses underlying the Draft Regulation. Moreover, as explained in more detail below, the basis for describing environmental impacts and rejecting other alternatives for addressing this problem is notably unscientific, relying more on the personal views of the drafters rather than on a thorough and unbiased scientific analysis of the issues. Moreover, in conducting these scientific analyses, it is important to recognize that diversion for frost protection has different impacts than diversion for irrigation. Water diverted

for frost protection does not normally evaporate - rather, most of the water melts and is returned to the water table. As a result, the scientific analyses of this issue overstate the impacts of water diversion for frost protection. Accordingly, before the State Board adopts the Draft Regulation, there should be appropriate studies, the addition of a wider range of alternatives, and solicitation of further peer review comments to examine the key elements of the Draft Regulation. It is imperative that any new restrictions on agricultural supply diversions have solid, accepted and completely defensible scientific bases. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: The DEIR and Initial Statement of Reasons address the need and scientific bases for the proposed regulation. The high instantaneous demand for water for frost protection resulted in two stranding mortality events documented by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

CEQA directs the lead agency to discuss the existing conditions as well as what would reasonably be expected to occur in the foreseeable future if the project is not approved. In the case of this DEIR the ability of an alternative to fulfill the objectives and goals of the project was used to determine the alternative's benefits in the foreseeable future. Each alternative was evaluated and compared to the others to determine the alternative that provided the greatest beneficial outcome in comparison to the potential negative outcomes resulting from either no action or implementing an alternative. The analysis determined that the alternative which provided the greatest beneficial outcome in comparison to negative outcomes was the proposed regulation

The Board is aware of the unique impacts related to frost protection activities. Frost protection activities result in less overall net loss to the water balance compared to irrigation. The proposed regulation addresses the high instantaneous demand for water in the short term. The DEIR appropriately considers, addresses, and evaluates the impacts related to frost protection activities, including the overall water balance.

The Board evaluated a wide range of alternatives that were submitted and developed over a 28 month period and fully met the requirements of CEQA. The Board has held four workshops and a NOP Scoping meeting over the course of 28 months, and has solicited comments five times and accepted and reviewed all comments submitted during the 28 month time period.

Comment 2.0.15: The EIR references a letter dated February 19, 2009 from the National Marine Fisheries Service (NMFS) to the SWRCB describing two instances of fish stranding

assumed to be the result of water diversions for the purpose of frost protecting crops. Both stranding events described in the letter occurred in April 2008, one on Felta Creek in Sonoma County and the other on the main stem of the Russian River near Hopland in Mendocino County. The EIR indicates that the SWRCB is relying solely on the allegations in this NMFS letter as the basis for explaining why a regulation of the use of Russian River Watershed water for frost protection purposes is necessary. For the reasons explained below, this reliance is misplaced. First, it is important to recognize that the concerns raised by the NMFS letter were acute problems in discrete locations that occurred during an unusually cold and dry spring and are not endemic to the entire Russian River watershed. While the importance of these episodes is not to be understated, these two occurrences do not support the generalization that salmonid stranding are a chronic problem occurring every year throughout the entire Russian River watershed. The vast majority of years are not as critically cold and dry as 2008 and 2009; nor do the conditions that existed near the locations where stranded salmonids were found exist throughout the entire Russian River watershed. Basically, it does not follow that two instances of stranding, only allegedly due to diversions for frost protection, justify a conditional ban on all frost diversions throughout the entire watershed. (*Mike Anderson, Mendocino County Farm Bureau*)

Response: Contrary to the commenter's assertion, the State Water Board is not solely relying on the February 19, 2009 letter from NOAA Fisheries as the basis for this regulation. The high instantaneous demand for water for frost protection resulted in two stranding mortality events documented by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation

Comment 2.0.16: The EIR references a letter dated February 19, 2009 from the National Marine Fisheries Service (NMFS) to the SWRCB describing two instances of fish stranding assumed to be the result of water diversions for the purpose of frost protecting crops. Both stranding events described in the letter occurred in April 2008, one on Felta Creek in Sonoma County and the other on the main stem of the Russian River near Hopland in Mendocino County. The EIR indicates that the SWRCB is relying solely on the allegations in this NMFS letter as the basis for explaining why a regulation of the use of Russian River Watershed water for frost protection purposes is necessary. For the reasons explained below, this reliance is misplaced. Management and infrastructure improvements have already been made to resolve any contributions frost diversions may have had on the stranding incidents described in NMFS February 19, 2009 letter. As a result of a SWRCB workshop held in April 2009, water users set to work to develop a plan, now formalized as the RRF, to mitigate any contribution frost diversions may have had on the instances of stranding that occurred and worked to make

additional management and infrastructure changes to improve conditions for salmonids. Since then, local voluntary actions on the part of landowners, wine grape and pear growers, as well as the RRFP, has resolved any impacts frost diversions may have had on the issues brought forward in the February 19, 2009 NMFS letter. The stranding incident on the Russian River near Hopland, which was related to an instantaneous 83 cfs drop in river stage, was resolved by numerous property owners who were directly diverting water from the Upper Russian River. Since 2008, these individuals have invested in the installation of off-stream storage ponds which permanently reduced the cumulative instantaneous demand on the Russian River by 91 cfs. Regarding the stranding incident on Felta Creek, the property owner has invested in a groundwater well and an off-stream storage pond and no longer diverts water from Felta Creek. Since both stranding event locations identified by NMFS in the February 19, 2009 letter have been addressed and resolved, the SWRCB must identify the current reason why a regulation on the use of frost water in the Russian River is necessary. (*Mike Anderson, Mendocino County Farm Bureau*)

Response: Contrary to the commenter's assertion, the State Water Board is not solely relying on the February 19, 2009 letter from NOAA Fisheries as the basis for this regulation. The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. Possible resolution of the two events described in the February 19, 2009 letter from NOAA Fisheries does not indicate a regulation is not needed. The regulation is needed so that the necessary steps are taken to prevent dewatering events on Russian River tributaries as well as the mainstem Russian River.

Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation. Implementation of WDMPs for tributaries to the Russian River will assure that the necessary data collection and monitoring occurs and that steps are taken, likely similar to those implemented by the RRFP, to prevent additional stranding events.

Comment 2.0.17: After almost three years, there has been little evidence brought forward to support the need for a regulation. What evidence that has been brought forward in the document from NOAA in March 2011 titled, The Biological Context of the Spring 2008 De-Watering Event in the Upper Mainstem of the Russian River, has extrapolated that the ten Steelhead young of the year found stranded on the Upper Main Stem of the Russian River near Hopland in 2008 was expanded through assumptions to a number listed as 25,872. This document and the calculations was not released to the RRFP, but instead the 25 thousand

number was first seen in an article on May 6th titled, *Feds Blame Farmers for Russian River Fish Kill*, that was printed in the *Santa Rosa Press Democrat*. The document was released without a credited author and was released to the court of public opinion through the press. This is not a demonstration of a collaborative effort, but a continued effort to create a negative public opinion that the agricultural community has not made efforts to resolve this issue. When inquiries were made on the March 2008 NOAA document it was found that David Hines was the author, but no additional supporting data has currently been presented (even though it has been requested) to explain how the 25,872 number was statistically quantified. The transparency amongst the agencies to develop collaborative solutions has been disheartening and the only information that was able to be obtained to truly understand the overall scope of the issue was found through multiple FOIA requests. The information obtained in the FOIA on a single set of NOAA field notes showed that ten Steelhead young of the year were discovered stranded at the base of a tributary near Hopland within 2-6 inch cobble. This is the only evidence that has been substantiated. The Draft Initial Statement of Reasons, pg. 1, states that, "Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River Watershed." The word **LIKELY** needs to be considered as well as the lack of solid evidence to justify such a statement. This regulation lacks both factual analysis and evidence to support the conclusion that every frost diversion in the Russian River watershed is harming salmonids. NOAA has also stated that the use of water for frost protection in the Russian River and related impacts to the fishery has been a known problem for years. If this was the case, then why was the agricultural industry not informed? Why was the use of water for frost protection not considered as an impact during the development of D-1610? Once the issue was brought to the attention of the agricultural industry in 2008, the industry made great efforts to work on solutions to reduce impacts to the fishery. *(Mike Anderson, Mendocino County Farm Bureau)*

Response: The March 2011 report by NMFS was not considered during the development of the proposed regulation and is not referenced in the Initial Statement of Reasons or DEIR. The Board did not write or contribute to any portion of this report and any concerns regarding the methodology, conclusions, or methods of the report should be addressed with NMFS. It is noted that NMFS sent a letter, dated July 15, 2011, to the Mendocino County Farm Bureau, with copy to the State Water Board, which appears to respond to some of the concerns outlined in this comment.

Scientific evidence presented in the Initial Statement of Reasons and DEIR indicates that the 2008 strandings are unlikely to be isolated events and that stranding due to instantaneous demand for frost protection is likely occurring throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

According to gage data from USGS Station 11462500, Russian River near Hopland, SCWA

was in compliance with its instream flow requirements immediately preceding the fish stranding reported by NOAA on April 20th, 2008, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. The information gathered by the WDMPs will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 2.0.18: The NOP also indicates the SWRCB is relying on its authority pursuant to Article X, Section 2 of the California Constitution and Water Code section 100 to prevent the waste and unreasonable use of all waters of the state as a basis for the regulation of frost water diversions in the Russian River watershed. However, a single letter describing two instances of fish stranding allegedly due to frost water use is not substantial evidence sufficient to demonstrate that every existing frost water diversion in the Russian River watershed is per se unreasonable. The law provides specific standards for determining whether a particular use is unreasonable and each water user has the right to be heard regarding whether their individual diversion is in fact unreasonable. (*Mike Anderson, Mendocino County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA.

The commenter appears to be misreading the proposed regulation. The State Water Board is not asserting that the two instances of fish stranding demonstrate that every diversion of water for frost protection in the Russian River watershed is unreasonable; the Board has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This determination is significantly narrower than that suggested by the commenter.

Furthermore, contrary to the assertions of the commenter, there is no legal requirement that “each water user has the right to be heard regarding whether their individual diversion is in fact unreasonable” in any particular type of proceeding. Consistent with legal precedent, the Board has based its determination of unreasonableness on the facts and circumstances of this case. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Comment 2.0.19: It has been argued that this rule making is not needed as fish stranding is an isolated and infrequent occurrence - and - that it took a perfect storm of low rain years and extended periods of frost to create a situation where "Take" of endangered fish occurred. This argument is misleading. There are, and have been, numerous instances of "Take" - though not all documented by NMFS. It is true that in years where there is plentiful rain (depending on what summer and fall flows were), there may be less chance of a "Take" occurrence. This fact does not address the issue that many rain years are low and/or the timing of rain and frost occurrences - where the timing of such occurrences degrade flow and habitat conditions and may aggravate the possibility of "TAKE". (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 2.0.20: The Council appreciates that the State Water Board is in a difficult position; the Board faces political pressure to adopt a regulation to address assumed conflicts between frost and other water use and salmonids, but the Board lacks the necessary water use, hydrologic and biological information necessary to identify and regulate actual problems. Unfortunately, the Board has for the most part ignored the input of the agricultural community and has moved forward with a proposed regulation that relies on hollow bureaucratic verbiage intended to appear meaningful while providing no practical guidance that would make the regulation a workable, effective program for addressing real world frost protection and stream flow needs. (*Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission*)

Response: The Board has held several workshops during which stakeholders presented information and comments. The Board noticed the rulemaking process for the proposed regulation and the draft EIR to support the proposed regulation and invited all stakeholders to submit comments. The Board and its staff have reviewed all information provided during this process, and have not ignored any comments or material presented. Based on the available information, the Board concludes that the proposed regulation is necessary.

Comment 2.0.21: The reluctance of your staff to recognize the URSA led regional effort was explained when a Freedom of Information Act (FOIA) request confirmed that your staff, while ostensibly engaged in a collaborative stakeholder process, met secretly with other agencies and conspired to manufacture a "need" for regulation. The record is clear that SWRCB staff not only solicited the February 19, 2009 letter from the NMFS, but encouraged NMFS staff to specifically request emergency regulations. These actions undermined the collaborative process then underway and appear to have compromised the independent decision making responsibility of the agencies. In order to restore trust in the process we respectfully request full public disclosure and a comprehensive investigation of this matter. We also respectfully request that the proposed regulation be tabled pending the outcome of this investigation. We do not believe it is prudent to proceed until it is independently established that a need for regulation currently exists. (*Kendall Smith, County of Mendocino*)

Response: Board staff publicly recognized the achievements of the URSA led program at the Board Workshop in April 2011. Contrary to the assertions of the commenter, Board staff did not conspire to manufacture the need for the proposed regulation, nor did staff participate in the writing of the February 19, 2009 letter from NMFS to the Board. The stranding incidents and studies performed on Maacama Creek in 2006 that are cited in NMFS's letter are documented incidents and publications. As indicated in the letter, NMFS was exploring long-term solutions through a collaborative effort but desired a short-term solution to avoid a potentially widespread reduction in the reproductive success of salmonids. To this end, Board staff was consulted by NMFS staff as to the State governmental processes available and capable of providing a short-term solution to the potential risk to salmonids from frost diversions. Board staff identified the emergency regulation process, and NMFS, on its own, prepared the February 19, 2009 letter.

At the April 7, 2009 Board Workshop, Derek Roy, Special Agent for NMFS gave a PowerPoint presentation that identified some of the 40 members of the Russian River Frost Task Force (including Mendocino County Farm Bureau and Mendocino County Russian River Flood Control District). In that presentation Mr. Roy stated that "Due to the lack of a short term "take" prevention plan for this frost season, the task force has been face[d] with the difficult decision of making recommendations to the California State Water Board regarding emergency regulations to protect ESA listed salmonids." It is important to note that the Board did not in fact pursue an emergency regulation as requested by NMFS, but rather conducted several additional workshops during which stakeholders presented more information and comments. The Board eventually noticed the rulemaking process for the proposed regulation and the supporting draft EIR for which all stakeholders could submit comments. The Board and its staff have reviewed all information provided during this process. Based on the available information, the Board has concluded that the proposed regulation is necessary.

Comment 2.0.22: Sufficient regulations are currently in place to protect special status fish species listed pursuant to the ESA and the habitat upon which those species depend. Flows within the Russian River watershed are also already dictated by Decision 1610 and will be further regulated by the process required by AB 2121. Surrounding habitat is additionally protected by the Clean Water Act, the Porter Cologne Act, and the Fish and Game Code. Existing regulations provide strong protection and equally strong penalties for violations of the ESA. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District; Kendall Smith, County of Mendocino*)

Response: Contrary to the assertions of the commenter, the Board does not agree that "Sufficient regulations are currently in place to protect special status fish species listed pursuant to the ESA and the habitat upon which those species depend." The Board is not relying on any authority any other agency may have regarding the same resources to be protected by the proposed regulation. While Decision 1610 requires instream flows for the mainstem Russian River, it does not specify flows for any tributaries other than Dry Creek below Warm Springs Dam. The Board has concluded that the proposed regulation is necessary to prevent potential salmonid stranding mortality caused by cumulative frost diversions, while, as much as is reasonable, allowing continued use of water for frost protection purposes, provided those diversions are managed pursuant to a Board-approved Water Demand Management Program.

Comment 2.0.23: This proposal is taking from us and has devalued our property significantly without demonstrating any defensible scientific research or data. (*Dermot and Darice Bourke*)

Response: The proposed regulation does not "take" any vested property right. The Supreme

Court has held that there can be no taking where an owner's use of a right is already restricted by background principle of property law. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1002, 1029.) Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 2.0.24: The state at this time has not met the regulatory threshold to justify such a far reaching and precedent setting statute. There have been three incidents of reported fish strandings, and those occurred during the 3rd year of a drought and during the coldest spring in over 30 years. (*Mark Houser; Barbara Petersen; Russ Green; Richard Rued; Hank Wetzel; Dermot and Darice Bourke*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA. The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program.

Comment 2.0.25: The proposed frost protection regulation is a direct result of fish stranding incidents that occurred during the 2008 frost protection season. However, to our knowledge the National Marine Fisheries Service (NMFS) has not conducted a scientific investigation to support the contention that the 2008 strandings were due solely to the diversion of water for frost protection, or that frost protection operations were a significant contributing factor in the strandings. If NMFS has conducted a scientific investigation to support these assertions, it has not produced a report for public review. During the April 2009 SWRCB workshop, data was presented showing how other factors such as Russian River channel entrenchment and associated drop in groundwater levels could have contributed to the dewatering of tributaries. Prior to embarking on the preparation of this EIR, we strongly urge the SWRCB to obtain from NMFS, and disclose to the public, a scientifically-based report on the cause of the 2008 strandings. The SWRCB should not consider adoption of a frost protection regulation until it can be determined whether diversions for frost protection were the cause of the fish mortality occurrences. A regulation that targets only those diverting water for frost protection is unsupported. (*Paula Whealen, Wagner and Bonsignore*)

Response: The DEIR and Initial Statement of Reasons address the need and scientific bases for the proposed regulation. The high instantaneous demand for water for frost protection resulted in two stranding mortality events documented by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that

small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

Comment 2.0.26: I would like to request that you modify the proposed Russian River Frost Regulation. The economic impact analysis in your rulemaking notice cites significant economic impacts and because the need for this new regulation is based on only three incidents of reported fish strandings which occurred during the third year of a drought and during the coldest spring in a great many years, your board should be hesitant to impose regulations which may not be necessary. I question whether the need for such a major and potentially precedent setting regulation has been adequately demonstrated. (*Chris Bowen, Hunter Farms*)

Response: CEQA requires the decision-maker to balance the benefits of a proposed project against the environmental risks in determining whether to approve the project. If this analysis determines the benefits of the proposed action outweigh the negative impacts then the proposed action should be chosen over the "no project" alternative. There is adequate evidence in the record to support the conclusions that the "no project" alternative will not sufficiently achieve the program's objectives because the existing regulatory tools would not adequately address the problem.

Comment 2.0.27: NOAA under ESA has listed several salmonids species as threatened and endangered in the Russian River watershed and they have provided, to someone, information supporting their position that the use of water for protection of grape vines from frost poses a documented threat to federally threatened and endangered salmonids in the Russian River watershed. The State received a letter that "documents two episodes of fish stranding mortality that occurred in April 2008, one on Felta Creek in Sonoma County and the second on the mainstream of the Russian River near Hopland in Mendocino County." Because this is the impetus for this regulation, did anyone ask a couple of key questions from NOAA like: Where these "wild Russian River" fingerlings or where they hatchery planted fingerlings? Was the determination made visually or genetically? Who made the determination - NOAA? Were reasonable precautions being undertaken or taken to protect the fish at the time (ITP)? Was there a documented and re- demonstrable cause and effect relationship established? How many salmonid fry are killed at the hatchery each year? Would this not be a baseline figure for the rest of us before corrective actions are required? Or are there two standards one for government and one for the rest of us. The reason for the questions is NOAA has a body of work showing that anytime "wild" fish and hatchery fish intermingle, you no longer have "wild" fish you have something else. To illustrate this point, as recently as June 22, 2011, the Press Democrat ran an article that stated "wild" salmon had not been seen in East Austin Creek for over 50 years. "But last year, fish were spotted reproducing. They included a male wild salmon and a female with a clipped fin, indicating a hatchery fish". Simply because the male did not have a clipped fin does not necessarily make him a "wild" salmon, he could be a second generation hatchery fish. NOAA admits that not all fins get clipped at the hatcheries. So, when these fish, in East Austin Creek, hatched, what kind of fish are they really? When these fish come back to spawn with all their fins, what kind of fish will they be? This EIR states fish were brought in to stock the hatchery after the dams were built. If one can buy "wild" pacific Coho, here in Sonoma County for \$17.99 a pound, how endangered are these fish? (*T. Connick*)

Response: On Mar. 16, 2009, the Court of Appeals for the Ninth Circuit upheld NOAA

Fisheries Service's hatchery listing policy for Pacific salmonids. (*Trout Unlimited v. Lohn* (2009) 559 F.3d 946.) The policy establishes that NOAA Fisheries Service will consider the extinction risk of the entire biological unit, both naturally spawning populations and hatchery stocks, when it makes a listing decision; and adopts a policy that the agency will allow harvest of listed hatchery fish that are surplus to conservation needs. (NOAA Northwest Regional Office website: <http://www.nwr.noaa.gov/ESA-Salmon-Listings/Salmon-Populations/Alsea-Response/Final-Listings-Hatchery-Policy.cfm>). The Court's ruling invalidated the practice described in the Interim Policy of generally excluding hatchery stocks in a distinct population segment (DPS) from listing unless it was determined that they contained a substantial proportion of the DPS's remaining genetic diversity and were "essential for recovery." Under this new policy, hatchery stocks determined to be part of a DPS will be considered in determining whether a DPS is threatened or endangered under the ESA, and will be included in any listing of the DPS. (50 CFR Parts 223 and 224.) Based on the ruling the Russian River hatchery broodstock are also protected under the Endangered Species Act. The two stranding events reported by NMFS, however, did not involve hatchery fingerlings. Coho salmon are reared at the Don Claussen Warm Springs Hatchery until they are fingerlings and are then released each year into 5 select tributaries in late spring (May-June). A smaller number of advanced fingerlings are released in 5 select tributaries in late fall (Oct-Nov). Steelhead are reared in the hatchery until they are yearlings and are released between January and April in Dry Creek and the East Fork Russian River.

Comment 2.0.28: Both fish strandings, one and only one in Mendocino County have been corrected by growers spending millions of their dollar and federal dollars on off site storage. Sonoma County only stranding was corrected with ground water. We are all doing our best to correct a grossly exaggerated problem. Why should one 4 acre vineyard in Sonoma County and one 10 fish stranding in Mendocino be changed to 24,000 stranded by some kind of unknown method? There is absolutely no sound science to this hypothetical formula that N.M.F. used. (*David and Joyce Fanucchi*)

Response: The Board recognizes and commends the local efforts enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem.

The commenter is referring to information contained in the NMFS 2011 report titled "The Biological Context of the Spring 2008 De-Watering Event in the Upper Mainstem of the Russian River". This report was not considered during the development of the proposed regulation and is not referenced in the Initial Statement of Reasons or DEIR. The Board did not write or contribute to any portion of this report. Any issues with the methodology, conclusions, or methods of release should be addressed to NMFS. It is noted that NMFS sent a letter, dated July 15, 2011, to the Mendocino County Farm Bureau, with copy to the State Water Board, which appears to respond to the concerns outlined in this comment.

Comment 2.0.29: Given the limited incidents of fish strandings that have been documented, the proposed regulation with its very broad reach is excessive. The fact that in 2011 the Russian River watershed had the largest Coho salmon return in years (3 years after the 2008 stranding events) reinforces this conclusion. (*Nick Frey, Sonoma County Winegrape Commission*)

Response: The Don Claussen Warm Springs Hatchery spawns Coho salmon and steelhead broodstock. Coho are reared at the hatchery until they are fingerlings and are then released

each year into 5 select tributaries in late spring (May-June). A smaller number of advanced fingerlings are released in 5 select tributaries in late fall (Oct-Nov). Steelhead are reared in the hatchery until they are yearlings and are released between January and April in Dry Creek and the East Fork Russian River. The Coho overwinter in the tributaries and then migrate out to the ocean and the steelhead migrate out to the ocean when they are released. The hatchery program's target is to release approximately 88,000 Coho salmon fingerlings and 500,000 steelhead yearlings. The goal of the hatchery program is to conserve the genetic resources of a fish population currently at extremely low population abundance and at risk of extinction, using captive propagation methods until a time that the fish population is self-sustaining in the wild. (Fishpro, 2004.) According to the Coho salmon Captive Broodstock Program's adult return summary for 2011, 81 adult Coho Salmon returned to the Russian River Watershed this spring. 3 of these were considered wild. Based on this summary the Program estimates that a total of approximately 190 adult Coho returned this year. (<http://ucanr.org/sites/RussianRiverCoho/files/66271.pdf>.) According to the NMFS Southwest Regional Office's website the recovery target for a self-sustaining population of Coho salmon is around 10,000 returning adults. (http://www.swr.noaa.gov/recovery/coho/Chapter_10_Recovery_Actions_Russian.pdf.)

Comment 2.0.30: The Scientific Basis is Straightforward The frost issue has attracted significant attention because of the presence of fish carcasses. Most sources of stress on salmon and steelhead populations are more subtle. They reduce a watershed's ability to support fish in the first place. The dead bodies are never found and in some cases the fish never existed. Frost protection has been different because actual fish have been found stranded or killed. Still, some critics of the Frost Rule have focused on the relatively few times that fish kills have been documented and publicized. With respect, we think that criticism is misplaced. People who work in the watershed have known about the negative effects of diversions for frost for many years. Well before the documented fish kills or the Deitch, Merenlender, and Kondolf paper, I heard about the problem from farmers who approached me quietly after meetings. At its root, the problem is one of simple math. Direct diversions for frost typically use more than 1 cfs per 10 acres of vineyard. Many of the tributaries with coho and steelhead have dozens or hundreds of acres that are frost protected. Some of these diversions are operated with flashboard dams, direct diversion pumps, or streamside wells. This is on tributaries that can be running at only a few cfs during the frost protection season, depending on how recently it rained. In other words, frost protection can easily require all of the water during a very sensitive time for fish. In retrospect, the most surprising thing about the 2008 fish kills is that it took so long for the issue to be documented. We were also surprised to learn that the issue could affect the mainstem Russian River as well as the tributaries. The situation is made dramatically worse by the sad state of affairs for salmon in the Russian River. We no longer have any margin for error. In the Russian River, coho salmon are almost extirpated. Only the coho broodstock program (the salmon equivalent of the captive condor effort) and restoration projects undertaken by wildlife agencies, private landowners, and other stakeholders are keeping hope alive. Since the Russian River is located in the heart of the Central California Coast coho salmon population segment and it historically supported one of its largest runs, the loss of the Russian River population threatens the survival of the entire species. For steelhead, the situation is slightly less desperate—but only slightly. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 2.0.31: I. Purpose of the Regulation It is clear that the purpose of the regulation was

precipitated by events that occurred in April 2008 of stranding mortality. It appears from the draft EIR that two episodes of strandings occurred. However, lacking from any and all documentation is the data which extrapolated the two incidents into what now appears to be a series of incidents throughout Sonoma and Mendocino counties in 2008 and thereafter. Admittedly, there has been a "lack of monitoring and eyewitnesses during the early hours when frost events occur". The draft EIR takes this lack of data as an assumption of more incidents of strandings. I respectfully request that SWRCB produce specific data showing the exact number of strandings, location and timing of such strandings. Failure to do so shows a lack of causation that it was in fact a withdrawal of water for frost protection measures that caused the strandings and a lack of evidence that there has in fact been a violation of the Endangered Species Act. It is certainly my position, as well as other local growers, that we do not wish to endanger any fish and certainly we wish to do our part to save such species. However, failing to acquire accurate information and thereafter imposing regulations on faulty data will not produce the goal of SWRCB to decrease the risk of salmonid mortality. In order to adequately protect the Coho, Chinook and Steelhead we must properly address the issues and that requires specific and accurate data which is lacking from the draft EIR. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Don and Joe Guadagni, Guadagni Brothers Welding; Stephen Hawkes; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards; James Pedroncelli, Pedroncelli Vineyards; Richard Rued; John and Patti Saini*)

Response: The DEIR and Initial Statement of Reasons address the need and scientific bases for the proposed regulation. The high instantaneous demand for water for frost protection resulted in two stranding mortality events documented by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

Comment 2.0.32: Before the Warm Springs Dam, Dry Creek along with many of its tributaries dried up every year stranding fish. It's nature at work. We have a seasonal creek on our property located at 6062 Dry Creek Road (come check it out), that has been dry since the last rains. It is this way every year. (*Jim Newsome*)

Response: It should be clear that the proposed regulation is intended to apply and does apply only to diversions of water, including diversions from tributaries. If natural stranding occurs, the proposed regulation does not place fault or responsibility on the frost protection diverters who are participating and complying with a Board approved WDMP or diverters exempted by the Board. However, the proposed regulation is drafted so that cumulative frost diversions do not exacerbate natural conditions that already cause stranding mortality.

Comment 2.0.33: This letter is in response to the draft environmental impact report produced in the spring of 2011 by the California Department of Water Resources (DWR), a state agency tasked with water resource use including agricultural frost protection irrigation oversight. I understand that the need for a state regulation on the use of agricultural overhead irrigation for vineyard frost protection has emerged in response to documented fish strandings and compromised anadromous fish habitat attributed to the simultaneous over drafting of streams and tributaries of the Russian River watershed. I am urging the DWR to work with National Marine Fisheries Service and the California Department of Fish and Game to develop strong and enforceable regulations using appropriate means to limit the overuse of precious water resources that fisheries need for their habitat recovery. (*Maria Potter*)

Response: Comment noted.

Comment 2.0.34: My interest in this issue emerged through a study I conducted at Sonoma State University as a student in the Geography Department where I analyzed regional occurrences of frost events in the springtime months over a twenty year period - from 1990 to 2009 in the Russian River watershed. This study demonstrated both a pattern of geographically defined frost trends as well as a general increase in springtime frost events over this recent twenty year period. The data was derived from publicly available air temperature data generated by the University of California Integrated Pest Management website and has now been used by National Marine Fisheries Services to generate maps to assist farmers with making appropriate decisions to balance concerns of fisheries with their agricultural practices. (*Maria Potter*)

Response: Comment noted.

Comment 2.0.35: Although I am confident that there is sufficient concern about this issue among those in the agricultural industry, I do not believe that farmers will easily comply with agency recommendations. In short, my experience leads me to the idea that an enforceable regulation (as opposed to voluntary conservation measures) is sorely needed in order to adequately protect struggling fisheries from certain decline. I feel that the use of fresh water pumped in some cases directly from spawning stream habitat amounts to an excessive and unreasonable use of water, and as such, I would contend that this constitutes a violation of the public trust. (*Maria Potter*)

Response: Comment noted.

Comment 2.0.36: We believe that the proposed frost water regulation is unwarranted. After reviewing documents, released in response to a Freedom of Information Act (FOIA) request, we now know that the heavy handed reaction by the staff of NMFS and the SWRCB was unnecessary and that there is no evidence that the diversion of water for frost protection, in the spring of 2008, impacted salmonid fish populations in the Russian River watershed. Since 2008, thousands of hours of time and millions of dollars have been spent by the agricultural communities of Mendocino and Sonoma counties in an effort to remedy a problem that never existed. The Directors of the SWRCB should allow existing Federal and State laws to protect anadromous fish, abandon the effort to create a new frost protection water regulation and investigate the events that led to their decision that a regulation was needed. Farmers were notified that they had dewatered two places in the Russian River watershed during the spring of

2008, and that fish had been stranded. The agricultural community took the charge very seriously. A tremendous voluntary effort was undertaken to mitigate the reported taking of threatened anadromous fish. Hundreds of hours of meetings and workshops were attended, economic analyses were conducted, grower coalitions were formed, water use data was collected, contractors and attorneys were hired, grants were applied for and received, ponds were built, a multicounty frost forecasting network was developed, new USGS and other gages were installed, meteorological analyses of microclimatic conditions were undertaken and millions of dollars were spent. [Commenter provided further analysis of the FOIA documents, concluding that there had been communication between members of NMFS and SWRCB staff that cannot be categorized as open and collaborative.] The FOIA documents clearly tell the story of how a handful of 2.5 inch juvenile fish were found in two locations in the Russian River watershed with no evidence that they had been stranded by the actions of farmers. Concurrent USGS gage data showed that the river flows, during the supposed time of the stranding, were well within the criteria used by NMFS to determine what passage flows should be for that time of the year and that year class of fish. More recently, in an attempt to justify their extreme reactions and exaggerate the impacts of their false accusation that farmers had dewatered the river, NMFS produced a statistically manipulated report, that multiplied ten stranded juvenile fish into thousands (25,872) of dead fish along the entire length of the Russian River. (*Janet Pauli, Mendocino County Inland Water and Power Commission; County of Mendocino; City of Ukiah; Redwood Valley County Water District; Potter Valley Irrigation District; Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The commenter's assertions from its review of documents received are incorrect. The high instantaneous demand for water for frost protection resulted in two documented stranding mortality events by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

The Board recognizes and commends the successes of local measures enacted by growers to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

The commenter is referring to information contained in the NMFS 2011 report titled "The Biological Context of the Spring 2008 De-Watering Event in the Upper Mainstem of the Russian River". This report was not considered during the development of the proposed regulation and is not referenced in the Initial Statement of Reasons or DEIR. The Board did not write or contribute to any portion of this report. Any issues with the methodology, conclusions, or methods of release should be addressed to NMFS.

Comment 2.0.37: In all of the FOIA documents there was absolutely no recognition by the staff members of NMFS or SWRCB of the immense amount of voluntary time and money that had been spent by farmers to mitigate the perceived problem. There was no concern about the potentially severe economic impact of a punishing regulation. When these facts are coupled with a clear lack of scientific oversight and the blatant exaggeration of data by the staff of these agencies, it should be of grave concern to the Directors of the SWRCB. Falsely accused farmers put thousands of hours, and millions of dollars, into trying to fix a problem that didn't exist. Our water rights were jeopardized and the economy of two counties was seriously, and unnecessarily, threatened. We believe that the Directors of the SWRCB have been deceived, just as we have been deceived. Creating this regulation would set a precedent proving that laws can be enacted with no oversight or underlying basis in fact. Therefore, instead of continuing to discuss an unnecessary and overreaching regulation, the Directors of the SWRCB should be conducting an investigation into the events that have led us all down a very long road for no reason. (*Janet Pauli, Mendocino County Inland Water and Power Commission; County of Mendocino; City of Ukiah; Redwood Valley County Water District; Potter Valley Irrigation District; Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: Board staff publicly recognized the achievements of farmers at the Board Workshop in April 2011. Board staff did not conspire to manufacture the need for the proposed regulation, nor did staff participate in the writing of the February 19, 2009 letter from NMFS. The stranding incidents and studies performed on Maacama Creek in 2006 that are cited in NMFS's letter are documented incidents and publications. As indicated in the letter, NMFS was exploring long-term solutions through a collaborative effort but desired a short-term solution to avoid a potentially widespread reduction in the reproductive success of salmonids. To this end, Board staff was consulted by NMFS staff on the State governmental processes available and capable of providing a short-term solution to the potential risk to salmonids from frost diversions. Board staff identified the emergency regulation process, and NMFS, on its own, prepared the February 19, 2009 letter.

At the April 7, 2009 Board Workshop, Derek Roy, Special Agent for NMFS gave a PowerPoint presentation that identified some of the 40 members of the Russian River Frost Task Force (including Mendocino County Farm Bureau and Mendocino County Russian River Flood Control District). In that presentation, Mr. Roy stated that "Due to the lack of a short term "take" prevention plan for this frost season, the task force has been face[d] with the difficult decision of making recommendations to the California State Water Board regarding emergency regulations to protect ESA listed salmonids." It is important to note that the Board did not in fact pursue emergency regulations as requested by NMFS but rather conducted several other additional workshops during which stakeholders presented more information and comments. The Board eventually noticed the rulemaking process for the proposed regulation and the supporting draft EIR for which all stakeholders could submit comments. The Board and its staff have reviewed all information provided during this process. Based on the available information, the Board has concluded that the proposed regulation is necessary.

Comment 2.0.38: We strongly oppose the proposed Russian River Frost Regulation because it is an unjustified regulation. We have received information from our members about how the proposed regulation is not based upon sound science, ignores private property rights and would jeopardize the fragile economic existence of agribusiness, tourism and lodging industries throughout Mendocino County and the Russian River watershed. Perhaps the most troubling

and perplexing part of this issue is the information received through multiple Freedom of Information Requests which contains evidence about the lack of transparency used by the regulatory agencies to devise this regulation without science and purposeful public input. *(Barbara Reed, Employers Council of Mendocino County)*

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL. The Board has complied with all requirements of CEQA and the APA with regards to the adoption of the proposed regulation. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny. The Board has already considered all comments and materials made or submitted during this process in balanced the competing needs of diverters and the public trust resources at issue.

Comment 2.0.39: It's still hard to believe that there is going to be a tremendous amount of money and energy going to regulations where there has been only three incidents of reported fish kill; those coming during a drought year and a record setting spring frost. I would venture to say that there were probably more naturally occurring stranding this year with the heavy rains allowing fish to reach areas that they would normally not be able to reach and then a more rapid recession of water from these spots. *(Jerry Reedy, Reedy Vineyards)*

Response: The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. It should be clear that the proposed regulation is intended to apply and does apply only to diversions of water, including diversions from tributaries. If natural stranding occurs, the proposed regulation does not place fault or responsibility on the frost protection diverters who are participating and complying with a Board approved WDMP or diverters exempted by the Board. However, the proposed regulation is drafted so that cumulative frost diversions do not exacerbate natural conditions that already cause stranding mortality.

Comment 2.0.40: Finally, if you are allowed to move ahead with these regulations, I would suggest that you use science and actual historical data which is just now being gathered by Sonoma County officials, not politics. *(Jerry Reedy, Reedy Vineyards)*

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL.

Comment 2.0.41: The need for this regulation is based on a letter to the Board dated February 19, 2009 from NOAA Fisheries which referenced two episodes of fish stranding that occurred in April 2008 and requested the Board to implement emergency regulations related to the use of Russian River water for frost protection. However, after almost three years, there has been little evidence brought forward to support this need. The transparency amongst the agencies to develop collaborative solutions was disheartening and the only information that was able to be obtained to truly understand the overall scope of the issue was found through multiple FOIA requests. This regulation lacks both factual analysis and evidence to support the conclusion that every frost diversion in the Russian River watershed is harming salmonids. *(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation;*

Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Peter Chevalier, Chevalier Vineyard Management, Inc.; Jack Cox; Robert Dempel, Dempel Ranch Vineyard; Heath Dolan, Dark Horse Vineyards; Jason Dolan, Dark Horse Vineyards; Eric Foster, Elizabeth Vineyards; S.J. Jahnke, Whistler Management, Inc.; Richard Lamalfa; Donald E. Butow, Butow Vineyards; Michael Boer, Stipp Ranch; Allan Nelson; Wendel Nicolaus, Middleridge Vineyard; Richard Schaefers, Beckstoffer Vineyards; Richard Schaefers, Mendocino Winegrape and Wine Commission; Ken and Kathe Todd, Todd Brothers Vineyards; David Beckstoffer, Beckstoffer Vineyards; Danny Piffero; Jim Lincoln, Napa County Farm Bureau)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL. The Board has not “[concluded] that every frost diversion in the Russian River watershed is harming salmonids,” but has determined that all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This is a significantly different and narrower conclusion than that suggested by the commenter.

Comment 2.0.42: The proposed Russian River Frost Regulation is based on a claim of substantial and ongoing harm to salmonids. This claim is supported by the two events documented in 2008, a year of extremes of drought and extensive frosts. As I pointed out in a previous workshop, the population that was harmed is the same population that has returned in 2010-2011 as the best run in decades. This simple fact refutes the claim which is the basis for the supposed need for the regulation. Chair Hoppin commented, upon confronting this fact, that it is a very complex system and cannot be viewed in such black and white terms. If he is correct, then he has made an even stronger argument against the claim, since the claim has reduced the problem to the most simple, black and white view: that frost diversions are the reason for the salmonid population decline of the past decades. From either perspective, the foundational claim is unsupportable. (*Alfred White, La Ribera Vineyards*)

Response: Uncoordinated frost diversions are a contributing factor to the salmonid population decline; not the sole reason for population decline.

The Don Claussen Warm Springs Hatchery spawns Coho salmon broodstock. Coho are reared at the hatchery until they are fingerlings and are then released each year into 5 select tributaries in late spring (May-June). A smaller number of advanced fingerlings are released in 5 select tributaries in late fall (Oct-Nov). The Coho overwinter in the tributaries and then migrate out to the ocean. The hatchery program's target is to release approximately 88,000 Coho salmon fingerlings. The goal of the hatchery program is to conserve the genetic resources of a fish population currently at extremely low population abundance and at risk of extinction, using captive propagation methods until a time that the fish population is self-sustaining in the wild. (Fishpro, 2004.) According to the Coho salmon Captive Broodstock Program's adult return summary for 2011, 81 adult Coho Salmon returned to the Russian River Watershed this spring. 3 of these were considered wild. Based on this summary the Program estimates that a total of approximately 190 adult Coho returned this year. (<http://ucanr.org/sites/RussianRiverCoho/files/66271.pdf>.) According to the NMFS Southwest Regional Office's website the recovery target for a self-sustaining population of Coho salmon is around 10,000 returning adults.

(http://www.swr.noaa.gov/recovery/coho/Chapter_10_Recovery_Actions_Russian.pdf.)

Comment 2.0.43: When the unsigned document Biological Context of the Spring 2008 De-Watering Event in the Upper Mainstem of the Russian River appeared in March of 2011, the documented 10 fish became 25,872 by a process of arbitrary factors multiplied together. Once the author of the report was identified and asked what was the supporting basis for the various assumptions strung together to make an impressive number, the reply was "Since there were no data on those variables of interest, we used our best professional judgment . . ." This is a euphemistic way of saying "We made them up." This spring, a new claim of a frost protection fish kill was made and highly publicized. Feds blame farmers for Russian River fish kill, Press Democrat, May 6, 2011. It reads, "The deaths of at least 21 juvenile steelhead trout and the stranding of 150 in puddles following a drop in water levels in the west fork of the Russian River near Redwood Valley has focused new attention on farm practices. The fish kill - discovered April 28 - coincided with farmers drawing water to spray for frost protection . . ." The USGS gage directly below the "kill" shows no significant drop in flows from the frost diversion. The graph does, however, document flows receding from 90 cfs to 40 cfs in the preceding week from the cessation of rain and the onset of warm weather. It is plain to see that without the red circle, that day would be indistinguishable from any other day when no frost was occurring. By choosing to look only on that day, they hope to convince you that coincidence proves causality. I trust that you can see through that false logic. It only serves to demonstrate the agenda-driven nature of this dispute rather than a sincere concern for fact based analysis and fact based solutions. (*Alfred White, La Ribera Vineyards*)

Response: The NMFS March 2011 report was not considered during the development of the proposed regulation and is not referenced in the Initial Statement of Reasons or DEIR. The Board did not write or contribute to any portion of this report and any issues with the methodology, conclusions, or methods of release should be addressed to NMFS. It is noted that NMFS sent a letter, dated July 15, 2011, to the Mendocino County Farm Bureau, with copy to the State Water Board, which appears to respond to the concerns outlined in this comment.

It appears there is not enough evidence at this time to demonstrate whether or not the stranding occurred as a result of frost diversions or a natural reduction in stream flow. It is assumed that the USGS gage the commenter is referring to is gage 11461000, Russian River near Ukiah, which is located on the West Fork of the Russian River just above the confluence with the East Fork Russian River. It should be noted that flow recorded by this gage includes contributing flow from tributaries to the West Fork Russian River that flow into the west fork below the location of the fish kill in Redwood Valley. These tributaries include Forsythe Creek and York Creek. It should also be noted that the Forsythe Creek watershed is nearly the same size as the watershed draining to the location of the fish kill. It also appears that the Forsythe Creek watershed has fewer diversions and less vineyard development than Redwood Valley. Therefore it would be expected that the Forsythe Creek watershed will heavily influence the flow data recorded at gage 11461000 and conclusions about the reduction in flow in Redwood Valley due to a frost event cannot be made using this gage. It is likely that another gage will need to be installed on the West Fork Russian River in order to monitor the effects of frost diversions in Redwood Valley.

The scientific evidence presented in the Initial Statement of Reasons and DEIR indicate the 2008 strandings are unlikely to be isolated events. In addition, Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-

Scale Instream Diversions for Frost and Heat Protection in the California Wine Country.” Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch’s July 5, 2011 comment letter explicitly recognizes that “Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use.” This is consistent with the proposed regulation.

Comment 2.0.44: The Federal Endangered Species Act (ESA) requires states to ensure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat. The ESA also prohibits any action that causes a "taking" of any listed endangered wildlife species, including fish. Rapid dewatering of streams, the critical fish habitat (inclusive of headwater creeks, and mainstream rivers), is unequivocally impairing essential behaviors, breeding, and feeding of the listed species, and thus is harming and harassing them. The State therefore has a duty to regulate diversions related to frost protection of wine grapes, to avoid species extinction. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The State Water Board relies on agencies with expertise in particular resource areas for appropriate information relating to those agencies’ purviews. The Board has the independent authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation, and is not relying on any authority any other agency may have regarding the same resources to be protected by the proposed regulation.

Comment 2.0.45: We, along with many other growers in Sonoma and Mendocino Counties, have been working cooperatively to ensure that farming and fishery can co-exist. There have been no serious fish strandings since 2008 - this is not an emergency situation. (*John Jordan, Jordan Winery*)

Response: Comment noted.

Comment 2.0.46: An issue is being made of two strandings in April 2008. It was unfortunate that some fish were killed when the flow of the Russian River and a small stream dropped. Because of these incidences certain agencies feel there is a need to implement regulations related to the use of Russian River water for frost protection. There is no real evidence to support this need. In a matter of 6 months we believe the problem was addressed with the building of multiple ponds so they can frost protect out of the ponds at night and recharge out of the Russian River during the day after the frost pumps have been turned off. (*James, John, David, and Michael Milovina*)

Response: The installation of offstream reservoirs, new Talmage Gauge, better frost forecasting and improved communication between Mendocino growers and the Sonoma County Water Agency (SCWA) has improved SCWA’s ability to increase releases for specific frost diverters using the Russian River mainstem for frost protection. These local cooperative efforts are real meaningful improvements. However, these solutions do not address the risk present in tributaries of the Russian River in which salmonids exist. The Board finds there is

sufficient evidence to support the need for the proposed regulation.

Comment 2.0.47: We have been to several meetings and the agencies responsible for this charade refuse to listen and accept the fact that the problem has been solved. We all have a responsibility to protect the fish and we don't have to be constantly reminded of that fact. We have yet to ever hear one of these people that work for us that they are also looking out for the well-being of us humans. The fish don't pay their salaries. We believe the quick and aggressive approach taken by the farming community demonstrates we can resolve the problem without the need for more unnecessary government regulation. (*James, John, David, and Michael Milovina*)

Response: The Board recognizes and commends the local efforts enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem.

Comment 2.0.48: I implore this Board to reject in entirety these [January 2010] proposed regulations written by staff, and adopt the program for workable frost protection measures developed by the people over the last year, and which will assist salmonids. (*Rudolph Light; Rudolph Light*)

Response: The Board recognizes and commends the local efforts enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem.

Comment 2.0.49: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the facts do not support the proposed regulation. NMFS' February 19, 2009 letter was not the origin of the proposed regulation. The DEIR, Notice of Proposed Rulemaking, and other supporting documents all point to a February 19, 2009 letter from NMFS to the SWRCB ("NMFS letter") as both the genesis of, and primary justification for, the proposed regulation. However, neither characterization is correct. In reality, as demonstrated by documents Farm Bureau received pursuant to a FOIA request, SWRCB staff actually requested, and even helped draft, the letter supposedly originating from NMFS. Consequently, the supporting documents should be corrected to clarify that NMFS' February 19, 2009 letter was requested by and drafted in part by SWRCB staff. (The documents received pursuant to Farm Bureau's FOIA and PRA requests are included on several CDs with this letter. Since these documents provide important information related to the origin, development, and factual justification of the proposed regulation, it is important the SWRCB consider them in regards to the proposed regulation. Consequently, Farm Bureau requests these documents be made part of the record for the proposed regulation.) (*Jack Rice, California Farm Bureau Federation*)

Response: Board staff did not manufacture the need for the proposed regulation, nor did staff participate in the writing of the February 19, 2009 letter from NMFS. The stranding incidents and studies performed on Maacama Creek in 2006 that are cited in NMFS's letter are documented incidents and publications. As indicated in the letter, NMFS was exploring long-term solutions through a collaborative effort but desired a short-term solution to avoid a potentially widespread reduction in the reproductive success of salmonids. To this end, Board staff was consulted by NMFS staff as to the State governmental processes available and

capable of providing a short-term solution to the potential risk to salmonids from frost diversions. Board staff identified the emergency regulation process, and NMFS, on its own, prepared the February 19, 2009 letter.

At the April 7, 2009 Board Workshop, Derek Roy, Special Agent for NMFS gave a PowerPoint presentation that identified some of the 40 members of the Russian River Frost Task Force (including Mendocino County Farm Bureau and Mendocino County Russian River Flood Control District). In that presentation, Mr. Roy stated that "Due to the lack of a short term "take" prevention plan for this frost season, the task force has been faced with the difficult decision of making recommendations to the California State Water Board regarding emergency regulations to protect ESA listed salmonids." It is important to note that the Board did not in fact pursue emergency regulations as requested by NMFS but rather conducted several other additional workshops during which stakeholders presented more information and comments. The Board eventually noticed the rulemaking process for the proposed regulation and the supporting draft EIR for which all stakeholders could submit comments. The Board and its staff have reviewed all information provided during this process. Based on the available information, the Board has concluded that the proposed regulation is necessary.

Comment 2.0.50: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, there is not adequate evidence to support the proposed regulation. According to the supporting documents, the proposed regulation relies almost entirely upon two pieces of evidence to support the conclusion that all surface water diversions and groundwater extractions throughout the Russian River watershed are unreasonable because they may harm or strand salmonids. These two pieces of evidence are the February 19, 2009 letter from NMFS and a paper by Deitch et al. titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." However, reliance upon these two pieces of evidence is misplaced and inadequate to justify the proposed regulation. In regards to the NMFS letter, and as described more fully in the numerous presentations and comments to the Board, voluntary efforts have fully resolved any contributions diversions for frost protection may have had on the strandings described in that letter. (The physical and managerial improvements that eliminated the potential diversions for frost protection that contributed to stranding are also described in the Williams Selyem et al. letter.) Regarding the Deitch, et al. paper, Farm Bureau understands that Dr. Deitch sent a letter to the SWRCB disabusing the Board of the presumption that the study on Maacama Creek could be assumed to reflect conditions throughout the Russian River watershed, which clarifies that the Maacama Creek study does not justify a basin-wide regulation. Notwithstanding the fact that neither the NMFS letter nor the Deitch et al. article can be used to justify a basin-wide declaration of unreasonableness, the supporting documents attempt to justify such a declaration by combining these anecdotal observations with some generic statements about viticulture and theoretical descriptions of frost protection methods to conclude that existing diversions for frost protection are unreasonable. Based upon these sparse facts and assumptions, the proposed regulation concludes that what has been actually observed and documented in two isolated and relative minor instances is in fact a problem endemic to the entire watershed. Such wild extrapolation, however, is improper and does not provide sufficient justification for the proposed regulation. (*Jack Rice, California Farm Bureau Federation*)

Response: The State Water Board is not asserting that the two instances of fish stranding demonstrate that every diversion of water for frost protection in the Russian River watershed is

unreasonable, but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This determination is significantly narrower than that suggested by the commenter.

The proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA. The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program.

Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

Comment 2.051: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the facts do not support the proposed regulation. The State Water Board has not recognized or analyzed natural stream stage variation and natural stranding. Yet another factor the SWRCB must consider, and yet has not, is that significant and sometimes rapid stream stage changes occur routinely from a variety of causes, including naturally, other than frost protection. As evidenced by reviewing streamflow records for any number of north coast streams on the California Department of Water Resources website and the 2000 Biological Assessment for the Operation of Warm Springs Dam and Coyote Valley Dam, reductions in stream stage similar to those seen during the 2008 March-May frost season occur routinely. In fact, it is precisely because streamflows vary naturally that it is possible to develop standards like the "Hunter criteria" which provide acceptable stream stage change rates for reservoir operations and other anthropogenic activities. The proposed regulation and supporting documents do not indicate whether this science has been considered, why it has been rejected, or what standards should be used in place of the "Hunter criteria." Absent such information, it is not clear how the SWRCB will address natural stream stage changes and instances of natural stranding. (The Hunter (1992) criteria indicate that a stream stage change of 1 inch per hour is acceptable. This is the criteria required for the operation of Warm Springs Dam and Coyote Valley Dam. Also, the FOIA documents received by Farm Bureau and others indicate that the SWRCB and NMFS were aware of these criteria. (Also see the Williams Selyem et al. letter.) This information along with information indicating that natural variations in the Russian River exceed these criteria is available in the 2000 Biological Assessment for the Operation of Warm Springs Dam and Coyote Valley Dam.) (*Jack Rice, California Farm Bureau Federation*)

Response: Natural stranding, due to the natural recession of seasonal flows, occurs each year. However, diversions for frost protection can create an unnatural flow recession that can be detected through monitoring. (See Deitch et al, 2009.) In addition, Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

In the Russian River Biological Assessment Interim Report 1, 2000, NMFS determined that ramping effects are assumed to be attenuated on the mainstem Russian River about 5 miles or less downstream of Coyote Dam near the Perkins Street bridge crossing in Ukiah. The ramping rates referred to in the 2009 Biological Opinion of 25 cfs/hr are "Interim Ramping Rates" and are designed specifically for the channel characteristics from Coyote Valley dam to Ukiah. They were not designed to be universally applied on the mainstem of the Russian River.

Hunter (1992) recommends down-ramping rates of 2.54 cm/hr to avoid stranding of salmonids in regulated rivers based on studies on the Sultan River (Olson, 1990) that determined ramping rates of 2.54 cm/hr were adequate to protect steelhead fry. However, Hunter notes that this determination was made in a confined river transect, whereas the stranding was observed on lower gradient bars further downstream. Thus, the effective ramping rate at the actual stranding locations was less than 2.54 cm/hour in Hunter's analysis. Hunter also states that stranding increases dramatically when flows drop below a critical stage level, typically defined in hydropower settlements as the minimum operating discharge, or the upper end of a flow range where more restrictive operational criteria are applied. This indicates that ramping rates alone will not protect fish from stranding mortality and that stage levels also play a critical role in protecting salmonids from stranding.

Comment 2.0.52: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the facts do not support the proposed regulation. There is no evidence that hypothetical frost protection practices are problematic. The DEIR makes a number of general statements about frost protection practices that are apparently intended to demonstrate that there is widespread inefficiency in frost water practices. (DEIR p. 13) The problem is that these are all hypothetical statements. There is no evidence to show that these theoretical situations actually exist at all, let alone in locations and to such a degree that it would pose any actual threat of stranding. Absent this supporting information, the Board may not rely upon merely hypothetical statements to justify the proposed regulation. (*Jack Rice, California Farm Bureau Federation*)

Response: The cumulative effect of uncoordinated diversions for frost protection can cause a rapid, instantaneous reduction in stage that can cause stranding mortality. These impacts could be prevented by coordinating diversions, modifying frost protection methods, or other best management practices. The intent of the Demand Management section (DEIR p. 13) is to identify beneficial management practices that could be implemented to help manage and reduce the instantaneous demand of water for frost protection activities and thus reduce the potential for stranding mortality. It is acknowledged that some landowners are already implementing these beneficial management actions.

Comment 2.0.53: Information in the file indicates that diversion, licensed and unlicensed, for use in frost protection can, and does, have sufficient adverse effects on stream flow to cause

harm or death to salmonids. The failure of the SWRCB to regulate such diversion activity has added to (and complicates) the problem of maintaining sufficient flows to support salmonids in all life stages. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 2.0.54: After months, and years, of dealing with stream flow related activities no effective voluntary solution has been found. Under both, State and Federal Code, the SWRCB must take regulatory action. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 2.0.55: These studies [Surface water balance to evaluate the hydrological impacts of small instream diversions and application to the Russian River basin, California, USA 2007 by Merelender, Deitch, and Kondolf; and Hydrologic impacts of small-scale instream diversions for frost and heat protection in the California wine country Matthew J. Deitch, G. Mathias Kondolf, and Adina M. Merenlender, Department of Environmental Science, Policy, and Management] demonstrate that saving wine grapes from the cold often strands and kills rare populations of listed commercial and sport fish. This spring time pumping and diversion of large amounts of ground and surface water, in the context of survival of listed species, is counter indicated by the facts. The facts mitigate against even small diversions: The steelhead and salmon are already struggling to survive huge odds including extreme low flows, high water temperatures, sedimentation, stranding, predation, and pollution. The listing of the several fish species under the Endangered Species Act is by definition an aggravated circumstance raising the threshold for what constitutes an acceptable impact to their critical habitat. That threshold does not include aerial spraying scarce and critically important water on thousands of acres of wine grapes that can be "protected" by way of numerous other frost avoiding strategies. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 2.0.56: NOWWE supports any improvement in the ability to inventory and accurately monitor frost protection irrigation within the Russian River watershed, including its tributary streams and main stem, in as much as it will lead to better protections for listed salmonids, prevention of strandings and takes, and to overall better management of flows and habitat within the watershed and improved management of vineyard practices. We are all too aware that past frost protection irrigation practices have led to stranding and killing of protected species, and to damages to critical habitat and streams. We are also aware that past frost protection irrigation practices by grape growers and others during critical periods have led to overdrafting of the Russian River tributaries and main stem. It is thus quite important that the management of frost control irrigation withdrawals and practices be improved dramatically, such that the frost water irrigation users will leave sufficient water within the Russian River tributaries and main stem for salmonid health and recovery, and for downstream water rights holders and other stakeholders besides grape growers. (*Casey Caplinger, New Old Ways Wholistically Emerging*)

Response: Comment noted.

Comment 2.0.57: In general, NOWWE is writing in support of the NMFS position on frost protection. (*Stacy Li , New Old Ways Wholistically Emerging*)

Response: Comment noted.

Comment 2.0.58: Threats from frost protection come in two general forms: First, drawdown of the main stem Russian River from cumulative direct diversion demands for frost protection. Extreme events of this type occurred during the 2001 and 2008 frost seasons. The mainstem at the USGS at Hopland gage loss 36% to 50% of the flow on some nights during those frost seasons. Steelhead fry were killed in 2008 when a gravel bar was exposed to air. This source of take of listed species has been proactively addressed by the Mendocino Flood Control District and several owners of large vineyards. There is sufficient new off-stream reservoir storage to account for current frost protection demands that avoids drawdown of the mainstem. In addition, Mr. Sean White, the general manager of the flood control district is developing a communication system so that compensatory releases can be made in anticipation of frost protection demand from Coyote Reservoir. The second threat is from vineyards and orchards located adjacent to and dependant upon direct diversions from tributary streams. In 2008, Felta Creek, a small tributary to the Russian River, was dewatered through direct diversion to protect a modest acreage of vineyard, killing young-of-the-year coho salmon rearing in the creek. Threats from this form of frost protection have not yet been addressed. The threat from tributary direct diversion is greater because there are more vineyards that directly divert from tributaries, tributaries are more easily dewatered than the mainstem, and coho salmon and steelhead trout juveniles tend to rear in the tributaries. (*Stacy Li , New Old Ways Wholistically Emerging*)

Response: Comment noted. Tributaries are included in the geographic scope of the proposed regulation.

Comment 2.0.59: Mark West Creek is a main tributary to the Russian River. Mr. Caplinger owns property adjacent to Mark West Creek and has riparian water rights from Mark West Creek. Sonoma County identified Mark West Creek as a water limited watershed. Mr. Caplinger is particularly concerned about the second form of frost protection with direct diversion from tributary streams. This watershed is particularly susceptible to direct diversion for frost protection. Mark West Creek base-flow has decreased from 3 cfs to less than 1 cfs. Coho salmon and steelhead trout inhabit Mark West Creek. Mark West Creek has been designated as critical habitat for both species. California Department of Fish and Game made at least three salmonid abundance estimates between 1965 to 1970 in Mark West Creek that ranged between 60 steelhead and coho salmon per 100 feet, 60 yearling steelhead per 100 feet and 175 steelhead per 100 feet (CDFG 2000). Bill Cox, CDFG district fisheries biologist for Sonoma and Marin counties rated these salmonid abundances as very high (personal communication, 2008). In my thirty years as a professional fisheries biologist in California, I have not encountered higher abundance estimates for steelhead trout. The high salmonid production potential Mark West Creek should be protected to facilitate recovery of these listed species. There has been recent vineyard development in the headwaters of Mark West Creek. Both Pride Vineyard and the pending Cornell vineyard development may potentially use direct diversion from Mark West Creek as frost protection. Further use of surface water likely to impinge on Mr. Caplinger's riparian water right. (*Stacy Li , New Old Ways Wholistically Emerging*)

Response: Comment noted. The proposed frost regulation is in part intended to address the potential impacts to the Mark West Creek watershed caused by frost protection diversions.

Comment 2.0.60: It is now clear that even small direct diversions on tributary streams can be dewatered quickly causing take of the endangered coho salmon and the threatened steelhead trout. There is no incidental take of coho salmon because they are endangered. SWRCB must take a proactive stance to avoid liability for take of listed species. NOWWE is willing to assist SWRCB in finding solutions to this recently documented threat to listed anadromous salmonids in the Russian River watershed, but particularly as it relates to the Mark West Creek watershed. (*Stacy Li , New Old Ways Wholistically Emerging*)

Response: The Board appreciates any assistance offered. Board staff, however, feels that the adoption of the proposed regulation is the appropriate response to the conditions in the Russian River and its tributaries at this time.

Comment 2.0.61: Frost protection varies drastically from year to year. You may frost protect 1 night or 5 nights or zero nights. To just say that the "use of water in frost protection is effecting the water flow in the Russian River watershed" is not correct. Where is the data on this accusation? (*John and Patti Saini*)

Response: The DEIR and Initial Statement of Reasons provide the factual basis for the proposed regulation. The high instantaneous demand for water for frost protection resulted in two stranding mortality events documented by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents and that diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids.

Comment 2.0.62: I am very concerned about these regulations that are being proposed to label sprinkler frost protection as a nonbeneficial use of water. My biggest concern centers around the quality of science that has been used to justify the regulations, beginning with the National Marine Fishery Service's (NMFS) and California Fish and Game's assessment of fish kills following the extreme frost event that occurred on April 21st, 2008. The sampling techniques and post mortem evaluations utilized an extremely small sample size both in terms of actual fish numbers (10 fish) and spatial distribution along the Russian River (one location). NMFS biologists appear to attribute most fish strandings during spring months to changes in water levels caused by sprinkler frost protection. Yet we know from experience that water levels rise and fall in the Russian River watershed on a seasonal basis and are affected by many factors, including rainfall and evapotranspiration. We also know that there is a huge natural mortality of salmonid fry from a variety of factors, most of them as a consequence of the watershed's natural history. Dewatering as a result of water diversions may very well be a minor cause, and the risk factor should be carefully assessed by professional researchers knowledgeable in the disciplines of inland fisheries and hydrology as well as proper statistical sampling and analysis before the proposed regulations are put in place. In the case of the main stem of the Russian River, growers have now created enough off stream water storage that the

chances of a repeat of the conditions that may have created the April 21st, 2008 fish kills are remote - there is enough off stream capacity to offset almost 91 cubic feet per second diversions that formerly would have been required for frost protection. (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable. The high instantaneous demand for water for frost protection resulted in two stranding mortality events documented by NOAA Fisheries in 2008. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Natural stranding, due to the natural recession of seasonal flows, occurs each year. However, Deitch et al indicates that diversions for frost protection can create an unnatural flow recession that can be monitored for and evaluated. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 2.0.63: Was the original problem blown out of proportion, and are we certain that problem has not already been sufficiently addressed? It is within the realm of imagination (if not yet "scientifically" supported) that circumstances of weather and water supply may occur that could be detrimental to fish. There is record of such an unfortunate occurrence in 2008. (though there is some speculation as to the statistically enhanced significance of the incidence in question). For all those "engaged", the "realm of possibility" was sufficient to take action. Through the efforts of the previously mentioned group a procedure of scheduling releases to offset anticipated diversions was quickly developed which immediately contributed to the reduction of impacts. This coupled with rapid grower response in construction of hundreds of Acre Feet of increased water storage greatly reduced the "potential" for similar circumstances in the future. (*Richard Schaefers, Mendocino Vineyard Company*)

Response: While it appears steps have been taken to reduce the impacts of the frost diversion that led to the occurrence in 2008 on the mainstem Russian River, these same steps have not been taken to prevent potential strandings on tributaries to the Russian River. The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. Implementation of WDMPs for tributaries to the Russian River will also

reduce the potential for stranding occurrences.

Comment 2.0.64: The District is also concerned about much of the information on which the "need" for a regulation has been predicated. After exhaustive research and numerous FOIA requests it has become obvious that items ranging from frequently cited NMFS February 19th letter, to the magnitude of the Hopland fish kill have been exaggerated, manipulated, and/or fabricated in an insincere and unethical effort to bolster the need for a regulation in the absence of corroborating data. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The federal endangered status of affected salmonids has existed since 1997, well before the 2008 frost season. NMFS identified two incidents of actual salmonid mortality in the mainstem and in a tributary stream of the Russian River. Matthew Deitch, et al made an independent analysis and found a close relationship between frost diversions and rapid stream stage declines in the Maacama Creek watershed. Recently, another mortality incident of salmonids occurred in the West Fork Russian River, supporting both that conclusion that salmonid fry are present throughout the watershed during the frost season and that existing efforts have not fully resolved the identified problem.

Comment 2.0.65: The National Marine Fisheries Service has explained that the "take" of listed salmonids documented in 2008 and 2009 indicates that the dewatering of critical habitat occurs in many other watersheds. The fact that the resource agencies have not been able to document take in other locations does not indicate the absence of take in these watersheds, but is rather a function of the code of silence among growers, lack of transparency, and lack of cooperation to access private land. (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: Comment noted.

Comment 2.0.66: It is not possible to effectively quantify water demand and supply based upon mere assertions especially in light of the fact that only a portion of the growers are constructively engaged in the effort to maintain in stream flows in both the main stem Russian and the tributaries of Sonoma and Mendocino Counties. The big agricultural interests have done their members a huge disservice by downplaying the issue of limited water supplies for so long, and they bear the responsibility to cooperate with the regulatory agencies to reverse the impacts on protected species. The agencies have the duty and authority to stop diversions in the name of the public trust and the ESA, and it is incumbent upon the growers to do the heavy lifting. Responsible growers should be rewarded and recalcitrant growers and growers' organizations marginalized. The state cannot be bound by the industry's code of silence and in fact must carry out its duties in spite of and in the face of that silence. The public does not accept the fact that it the burden of the agencies to find the bad actors, especially as the industry is seeking more lenient treatment. Regulatory agencies have been shut out and the result has been TAKE. Realistically, unless and until, the growers are required to fully cooperate, TAKE will continue. (*Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 2.0.67: The draft regulation the SWRCB proposes to adopt suffers from legal and practical flaws. Specifically, this regulation is unnecessary because the causes behind the two isolated strandings have been addressed and corrected. (*Jesse Barton, Gallery and Barton*)

Law Corporation)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA. The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program.

The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 2.0.68: The draft regulation does not address other diversions from the Russian River stream system that impact stream stage, and therefore salmonid habitat. This is an abuse of discretion because it fails to account for other elements of causation. Under the Endangered Species Act, any action that was a "substantial factor" in bringing about a take is subject to enforcement. For example, in *United States v. Glenn-Colusa Irrigation District* (E.D. Cal. 1992) 788 F.Supp. 1126, the court considered whether a fish screen or the pumping of water through that screen was responsible for a take when the pumping of water impinged endangered fish on the screen. Glenn-Colusa argued that the screen, which was owned and operated by the Department of Fish and Game, was responsible for the take because the screen was the direct cause of the killing of the fish. The court considered this argument "absurd for it is the pumping that creates the take," and that it "is irrelevant whether the taking is direct or indirect." As long as something is a "substantial factor in bringing about the injury" causation will be found. It is important that the SWRCB recognize this and amend the draft regulation accordingly because a "substantial factor in bringing about the" alleged fish kill in April of 2008 near Hopland was the failure of the Sonoma County Water Agency (SCWA) to comply with the terms of its water right permits. In Decision 1610, the SWRCB made the following term a part of SCWA's permit 12947A: 18. For the protection of fish and wildlife, and for the maintenance of recreation in the Russian River, permittee shall pass through or release from storage at Lake Mendocino sufficient water to maintain: (B) The following minimum flows in the Russian River between the East Fork Russian River and Dry Creek: (1) [During normal water years] From April 1 through May 31: 185 cfs However, during the entire month of April, SCWA failed to meet this permit term on 24 of the 30 days, with one day, April 21, supplying a flow of only 123 cfs, or only 66% of the required amount. The CDEC report of daily discharge on the Russian River at Hopland during the month of April 2008 and a graph, generated by CDEC, show that the SCWA failed to meet its permit term 80% of the time during the month of April. To suggest, or even believe, that regulating the frost protection community is going to correct this element of causation is, in the words of the Eastern District Court of California, simply absurd. SCWA must meet its minimum instream flows regardless of other senior and riparian diverters on the system. This position is bolstered by the fact that on page 41 of D-1610, the SWRCB removed permit term 68 for other post-1949 appropriative water rights (which prohibited these diverters from diverting when the only water in the system matched SCWA's releases) and made SCWA solely responsible to meet the instream flows stipulated between it and the Department of Fish and Game. Therefore, why is the SWRCB imposing this regulation on frost diverters when the SCWA is obligated under D-1610 to meet instream flows? If SCWA had simply met its instream flow requirements, we would not be here today. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Contrary to the assertion of this commenter, the State Water Board has not abused its discretion nor failed to account for other elements of causation for April 2008 stranding event reported by NMFS. As pointed out in previous comment responses the CDEC data and graphs that the commenter is referring to when making this assertion are not checked for errors or meant to be a historical record. The Russian River at Hopland stream gage is owned and maintained by the USGS. The USGS does review and correct data recorded by its gages. Data that is more than a year old is considered published data. Therefore the USGS data set is considered the correct data set for the April 2008 stranding event. This data set shows that the Sonoma County Water Agency was meeting its minimum stream flow obligations immediately preceding the frost event. Any failure to meet the minimum instream flow requirement was a direct result of frost diversions cumulatively reducing stream flow to levels below minimum requirements, which SCWA would not have direct control over. The information gathered by the WDMPs pursuant to the proposed regulation will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

Comment 2.0.69: The SWRCB's desire to declare all frost protection diversions within the Russian River watershed unreasonable is unnecessary and exceeds the SWRCB's jurisdiction because it starts with a presumption of illegality. In light of the fact that only two fish kills have been alleged, the first being arguably caused by SCWA's failure to meet its instream flow requirements, and the other due to a single landowner dewatering a very small tributary, the SWRCB has not explained why these two isolated incidents justify the universal declaration that perhaps well over a thousand diversions of water from the Russian River stream system within 1,485 square miles are unreasonable. Such a sweeping declaration makes this office wonder why the SWRCB is limiting this declaration to just the Russian River watershed. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The 2008 flow record for the USGS Gauge No. 11462500, Russian River near Hopland, does not support that SCWA was violating the flow requirement of its permit prior to the April 20, 2008 salmonid stranding incident. The USGS data for Station No. 11462500 shows that the Russian River flow was above 185 cubic feet per second.

Comment 2.0.70: An abuse of discretion is established if the decision is arbitrary, capricious, or entirely lacking in evidentiary support. Since there is no evidence that "closely related groundwater" or diversions below Cloverdale have contributed, or even could contribute to the stranding problem, we fail to see how the regulation, as currently drafted, can withstand legal challenge. When applying the "arbitrary and capricious" standard to a decision of a public agency, the court will look to ensure the agency has adequately considered all relevant factors and has demonstrated a rational connection between those factors, the choices made, and the purposes behind the enabling statutes. In this situation, the SWRCB is grossly overreaching its authorization in that it is attempting to regulate conduct that has no plausible connection to the isolated stranding events. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The problem as currently understood is based on cumulative instantaneous demand for water for frost protection, necessitating a comprehensive response until further information is available to exempt parties whose diversions are determined to not contribute to the problem. At this time the information currently available supports the conclusion that the

practices and effects reported by NOAA may be present throughout the watershed as describe in the Initial Statement of Reasons. Likewise, the pumping of hydraulically connected groundwater is currently understood to contribute to the rapid drop in stream stage that impacts salmonids, and is therefore appropriate for inclusion in the regulation at this time.

Comment 2.0.71: In [the Background section of the October 27, 2010 Notice of Preparation], the SWRCB outlines the need for the regulation. The need is based upon two stranding incidents in 2008, one on the main stem Russian River near Hopland, and the other on a small tributary, Felta Creek. Although these events may have justified the need for the regulation in 2008, actions have already been undertaken to prevent events like this from happening in the future. In addition to these corrective measures, it is important to note three additional items. First, the 2008 frost event was extreme and rare. The occurrence of both low flows < 200 cfs at Hopland) and frost < 32 degrees) has only occurred in five of the last nineteen years, and for a total of sixteen days during these same five years. Since 2008, there is no evidence to suggest frost-related strandings are occurring elsewhere in the Russian River watershed. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: It is not correct to suggest that only two fish strandings have been alleged – only two fish strandings were reported by NOAA, with sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences.

The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 2.0.72: Since 2008, SCWA has undertaken efforts to coordinate releases from Lake Mendocino with diversions during the frost season, which should reduce, if not eliminate altogether, strandings on the main stem below Lake Mendocino during the frost season. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Comment noted. While coordinating diversion activities with SCWA may be helping on the Russian River mainstem, the implementation of this regulation will allow for the coordination of diversion activities in other areas of the Russian River watershed through establishment of Water Demand Management Programs.

Comment 2.0.73: It is not necessarily low flows or low water stages that result in strandings. Attached as Exhibit A is the CDEC report of daily discharge at the Hopland gage for the month of April 2009. Note that the discharge is significantly lower in 2009 than the discharge during the stranding event in April 2008 (Exhibit B), yet no strandings occurred in 2009. Thus, what is important here is strandings are related to instantaneous drops in flow, such that fish are caught unaware of the diminishing water supply and do not have adequate time to move to deeper habitat. Since the diverters are now coordinating their activities with SCWA, it is extremely unlikely such strandings will occur again. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: While coordinating diversion activities with SCWA may be helping on the Russian River mainstem, the implementation of this regulation will allow for the coordination of diversion activities in other areas of the Russian River watershed through establishment of Water Demand Management Programs.

Comment 2.0.74: The regulation is not necessary. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This comment is noted and addressed throughout this section. Refer specifically to responses to comments 2.0.2, 2.0.3, 2.0.4, 2.0.5, 2.0.6, 2.0.7, 2.0.9, 2.0.10, 2.0.11, and 2.0.12.

3.0 Regulatory Framework

Comment 3.0.1: The SWRCB has not proceeded in the manner required by law. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL and CEQA.

Comment 3.0.2: The SWRCB asserts the public trust doctrine and the reasonable and beneficial use doctrine as the legal authority for the proposed regulation (Draft Initial Statement of Reasons, pg 2). The State Water Board has a duty to protect, where feasible, the State's public trust resources, including fisheries. The State Water Board also has the authority under article X, section 2 of the California Constitution and Water Code section 100 to prevent the waste or unreasonable use, unreasonable method of use, or the unreasonable method of diversion of all waters of the State. Water Code section 275 directs the State Water Board to "take all appropriate proceedings or actions before executive, legislative, or judicial agencies . . ." to enforce the constitutional and statutory prohibition against waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion, commonly referred to as the reasonable use doctrine . Using this authority, the SWRCB asserts that an entire purpose of use - frost protection in the 1485 square mile Russian River watershed - is unreasonable based on two cases of alleged frost protected related stranding and a study that documented stage changes in one stream. Yet these allegations, and this single study on a single stream, do not fulfill the prerequisites for enacting a reasonable use regulation pursuant to the public trust doctrine and Article X, Section 2 of the California Constitution because the SWRCB does not have actual evidence of harm caused by frost protection water diversions. Evidence of actual harm is required to make the necessary factual and legal findings to conclude that water use for frost protection in the Russian River watershed is an unreasonable use of water unless managed in accordance with a water demand management plan. The SWRCB cannot unilaterally declare an entire method of water use unreasonable with no evidence, or a suspicion based upon a mere presumption of harm only. Although the proposed regulation

might provide the SWRCB the information necessary to make reasonable use determinations for individual water diversions in the future, it cannot adopt a regulation based on an unsubstantiated assumption alone. Accordingly, the SWRCB lacks the legal authority to adopt the regulation with the evidence presently in the record. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Pete Downs, Jackson Family Wines*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA. The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program.

The commenter appears to be misreading the proposed regulation. The State Water Board is not “assert[ing] that an entire purpose of use - frost protection in the 1485 square mile Russian River watershed - is unreasonable,” but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This determination is significantly narrower than that suggested by the commenter.

The commenter does not provide any legal support for the contention that actual evidence of harm is required for the Board to find that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. Nonetheless, there is adequate evidence in the record documenting actual harm to salmonids from the rapid decrease in water levels due to the instantaneous demand for water for frost protection.

Comment 3.0.3: We incorporate in this section all of the arguments made in the other sections, but we do wish to address several additional claims the SWRCB makes that are not supported by the findings or the evidence. The first is the SWRCB’s declaration that all frost protection diversion within the Russian River watershed is “unreasonable.” Such a broad declaration is unnecessary and unsupported because it starts with a presumption of illegality with no justification. In light of the fact that only two fish strandings have been alleged, the first being caused by SCWA’s failure to meet its instream flow requirements (if the stranding is even related to a drop in stage), and the other due to a single landowner allegedly dewatering a very small tributary, the SWRCB has not explained why these two isolated incidents justify the universal declaration that perhaps well over a thousand diversions of water from the Russian River stream system within 1,485 square miles are unreasonable. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: There is an adequate factual basis, as described in the Initial Statement of

Reasons, for the Board to declare all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County unreasonable unless conducted in accordance with a Board-approved water demand management program.

Contrary to the assertions of the commenter, the declaration of unreasonableness is necessary to ensure the efficacy of the regulation.

It is not correct to suggest that only two fish strandings have been alleged – only two fish strandings were reported by NOAA, with sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences.

According to USGS Station 11462500, Russian River near Hopland, gage data, SCWA was in compliance with its instream flow requirements immediately preceding the time of the reported fish stranding on April 20th in question, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection.

Comment 3.0.4: We would expect the SWRCB to only want to regulate those who could contribute to the perceived problem. As discussed above in the section “This Regulation is Overbroad,” this can be accomplished by narrowing the geographic scope and types of water being regulated. If the SWRCB fails to narrow the scope of this regulation to just those who can be reasonably expected to contribute to the perceived problem, the SWRCB’s decision is subject to review by the courts as an abuse of discretion. An abuse of discretion is established if the decision is arbitrary, capricious, or entirely lacking in evidentiary support (Cal. Civil Writ Practice (Cont.Ed.Bar 4rd ed. 2009) §2.32, p. 27). Among the elements of the proposed regulation lacking in evidentiary support is the inclusion of all the tributaries within the scope of the regulation and the inclusion of “hydraulically connected groundwater.” When applying the “arbitrary and capricious” standard to a decision of a public agency, the court will look to ensure the agency has adequately considered all relevant factors and has demonstrated a rational connection between those factors, the choices made, and the purposes behind the enabling statutes. In this situation, the SWRCB is grossly overreaching its discretion in that it is attempting to regulate conduct that has no “rational” or demonstrated connection to the isolated stranding events. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The problem as currently understood is based on cumulative instantaneous demand for water for frost protection, necessitating a comprehensive response until further information is available to exempt parties whose diversions are determined to not contribute to the problem.

The geographic scope may be narrowed in the future if additional information allows for it. At this time the information currently available supports the conclusion that the practices and effects reported by NOAA may be present throughout the watershed as describe in the Initial Statement of Reasons. Likewise, the pumping of hydraulically connected groundwater is currently understood to contribute to the rapid drop in stream stage that impacts salmonids, and is therefore appropriate for inclusion in the regulation at this time.

Comment 3.0.5: An abuse of discretion is established if the decision is arbitrary, capricious, or entirely lacking in evidentiary support. The SWRCB has no evidence justifying the inclusion of all the tributaries within the scope of the regulation. The SWRCB does refer to a study performed by Matthew J. Deitch, G. Mathias Kondolf, and Adina M. Merenlender that studied the effects of direct diversions on stream flows, but that study is much narrower in its focus than the SWRCB's regulation. While the study did examine streamflow in several tributaries, its results cannot be applied on a watershed level as the SWRCB is attempting to do with the regulation. One of the authors, Mr. Deitch, says as much when he learned of the SWRCB's reliance on his study as the basis for the regulation: "It is important to recognize that these effects may not happen everywhere water is used for frost protection, and may not happen every time water is used for frost protection. As such, it is important that regulations do not apply a broad brush to prohibit use of water for frost protection. Rather, any actions should seek to maintain beneficial uses for agriculture as well as ensuring the preservation of streamflow..." (See Exhibit R). Thus, one of the authors of the very study the SWRCB is using to justify the scope of the regulation is cautioning the SWRCB that the study should not be applied to the entire watershed without site-specific analysis. The SWRCB has had this letter since April 6, 2011, yet it continues to rely on the study to support a proposition the study does not advance. When applying the "arbitrary and capricious" standard to a decision of a public agency, the court will look to ensure the agency has adequately considered all relevant factors and has demonstrated a rational connection between those factors, the choices made, and the purposes behind the enabling statutes. In this situation, the SWRCB is grossly overreaching its discretion in that it is attempting to regulate conduct that has no "rational" or demonstrated connection to the isolated stranding events. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The geographic scope may be narrowed in the future if additional information allows for it. At this time the information currently available supports the conclusion that the practices and effects reported by NOAA and Deitch, et al., may be present throughout the watershed as describe in the Initial Statement of Reasons. Mr. Deitch's July 5, 2011 comment letter does not compel a different approach. Mr. Deitch explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection water use..." (Deitch Comment Letter, July 5, 2011.) This is consistent with the proposed regulation.

It is a mischaracterization of the proposed regulation to call it a "broad brush to prohibit use of water for frost protection." Water diverted for frost protection in compliance with a Board-approved water demand management program is not considered unreasonable, and the requirement for water demand management programs allows for appropriately specific implementation, cognizant of the smaller-scale differences within the Russian River watershed.

There is an adequate factual basis, as described in the Initial Statement of Reasons, for the Board to declare all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County unreasonable unless conducted in accordance with a Board-approved water demand management program.

Comment 3.0.6: The SWRCB has not proceeded in the manner required by law because it

has denied vested property right holders due process of law by failing to provide adequate notice and hold a hearing. By its terms, the regulation is going to apply to all appropriative water rights, all groundwater rights, and all riparian water rights. These rights are real property. The SWRCB has failed to provide frost water users in the Russian River watershed due process of law before it denies them a constitutionally protected property right. If the SWRCB wants to actually bring all the frost water users in the Russian River watershed under its authority, it must give proper notice and provide a hearing. Part of this legal obligation is to notify every person within the Russian River watershed who owns a property right that could be affected by the regulation, and hold a proper hearing at which the parties may present evidence and question the SWRCB's scientific and legal justification for the regulation. Everything to date has been extremely informal and the parties that are aware have not been given any opportunity to dispute and question the credibility of the SWRCB evidence in an orderly, efficient, effective, and binding matter. The "hearing" the SWRCB proposes for September 20, 2011, is a "hearing" in name only. There is no provision for testimony or cross-examination - only the ability to comment for three minutes. By limiting the "hearing" to three-minute comments, the SWRCB is engaging in behavior that muzzles meaningful discussion of the issues, and allows it to rely on "evidence" that escapes public scrutiny, regardless of the reliability of that evidence, and ignore evidence it simply does not like. This behavior violates the constitutional rights of every water right holder in the Russian River watershed. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

The proposed regulation does not deny any diverters a "constitutionally protected property right." As the courts have already made clear, "no one can have a protectible interest in the unreasonable use of water." (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1242.) This is likewise true with regard to the public trust. (*Natl. Audubon Society v. Superior Court* (1983) (33 Cal.3d 419, 437 ["parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust."]; see also *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966 ["Thus, like the rule against unreasonable use, when the public trust doctrine clashes with the rule of priority, the rule of priority must yield."]) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 3.0.7: The SWRCB has not proceeded in the manner required by law because it has denied vested property right holders due process of law by failing to provide adequate notice and hold a hearing. By its terms, the regulation is going to apply to all appropriative water rights, all groundwater rights, and all riparian water rights. These rights are real property. The SWRCB has failed to provide frost water users in the Russian River watershed due process of law before it denies them a constitutionally protected property right. As property rights, they are subject to protection by the Due Process Clause of the State and Federal

Constitutions (Cal. Const., art. I, § 7, U.S. Const., 5th Amend.) [which requires some form of notice and a hearing]. The “hearing required by the Due Process Clause must be ‘meaningful,’ and ‘appropriate to the nature of the case.’” At the very least, the hearing should provide opportunity to “present in a deliberate, regular, and orderly manner issues of fact and law.” As elaborated by the U.S. Supreme Court, when discussing the type of hearing due process demands in an administrative context, the Court held that “identification of the specific dictates of due process generally requires consideration of three distinct factors. (*Mathews v. Eldridge* (1976) 424 U.S. 319, 335). With reference to the first factor, the property interest the SWRCB regulation will affect is real property that will adversely affect water users’ income, business opportunities and livelihoods. With reference to the second, the risk of an erroneous deprivation is manifest as the SWRCB has failed to address the legal flaws with its approach and appears to loaf along irrespective of the arguments raised in opposition of its action. And with reference to the final factor, the SWRCB has an interest and duty to prevent waste and unreasonable use of water, but that duty does not dispose of its obligation to exercise this authority with responsibility. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter cites the Supreme Court in *Mathews v. Eldridge* (1976) 424 U.S. 319, 335 which states a three-part test for determining due process – “first, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards; and, finally, the Government’s interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail.”

The Board has complied with all requirements of CEQA and the APA with regards to the adoption of the proposed regulation. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny. The Board has already considered all comments and materials made or submitted during this process in balanced the competing needs of diverters and the public trust resources at issue.

Comment 3.0.8: The SWRCB has not proceeded in the manner required by law because it has denied vested property right holders due process of law by failing to provide adequate notice and hold a hearing. By its terms, the regulation is going to apply to all appropriative water rights, all groundwater rights, and all riparian water rights. These rights are real property. The SWRCB has failed to provide frost water users in the Russian River watershed due process of law before it denies them a constitutionally protected property right. There is ample statutory support for the fact that the SWRCB must provide a formal notice and hearing to re-write the post-1914 water rights of frost water users in the Russian River watershed. For example, Water Code section 1394 (b) requires the SWRCB to provide “notice to the parties and a hearing” if it desires to “amend, revise, supplement, or delete terms and conditions in a permit.” Under Water Code section 1410 (b) (2), the SWRCB can only revoke a permit after giving notice of the proposed revocation “in writing, mailed in a sealed, prepaid postage and certified letter to the permittee.” Only if the permittee “fails to request a hearing” may the SWRCB revoke that permit without a hearing. Under Water Code section 1675 (b), the SWRCB can only revoke a license after “due notice to the licensee and after a hearing.” (*Jesse Barton,*

Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing.

Water Code section 1394 refers to the Board's authority to reserve jurisdiction to amend water right permits and licenses. The Board also has continuing authority, not based on section 1394, to amend all water rights under its public trust and reasonable use authority. (See *United States v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82, 130.)

The proposed regulation will not act to revoke any permit or license and therefore compliance with Water Code sections 1410 and 1675 are inapposite.

Comment 3.0.9: The SWRCB has not proceeded in the manner required by law because it has denied vested property right holders due process of law by failing to provide adequate notice and hold a hearing. By its terms, the regulation is going to apply to all appropriative water rights, all groundwater rights, and all riparian water rights. These rights are real property. The SWRCB has failed to provide frost water users in the Russian River watershed due process of law before it denies them a constitutionally protected property right. If the SWRCB wants to actually investigate the use of water in the Russian River watershed and determine if there is an unreasonable use of water occurring, then a procedure is already in place in the California Code of Regulations. Division 5 of Title 23, Sections 4000 et seq. provide the procedure the SWRCB needs to follow when it wants to prevent the waste, unreasonable use, or diversion of water. Notably, section 4002 (b) provides that only after a hearing is held may the SWRCB "issue its order requiring prevention or termination of the misuse." (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Board has complied with all legal requirements for adopting the proposed regulation. California Code of Regulations, title 23, Division 5 does not limit or constrain the authority of the Board to take necessary action to prevent the misuse of water. (See Cal. Code Regs, tit. 23, § 4007.)

Comment 3.0.10: The SWRCB has not proceeded in the manner required by law because it has denied vested property right holders due process of law by failing to provide adequate notice and hold a hearing. By its terms, the regulation is going to apply to all appropriative water rights, all groundwater rights, and all riparian water rights. These rights are real property. The SWRCB has failed to provide frost water users in the Russian River watershed due process of law before it denies them a constitutionally protected property right. If the SWRCB is required by statute and regulation to grant permit and license holders notice and a hearing before those permits or licenses can be modified or revoked, then the SWRCB is violating both statutory and constitutional law by not providing notice and a hearing when trying to adopt this regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited;*

Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing.

The Board has continuing authority, not based on Water Code section 1394, to amend all water rights under its public trust and reasonable use authority. (See *United States v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82, 130.) The proposed regulation will not act to revoke any permit or license and therefore compliance with Water Code sections 1410 and 1675 is not required.

Comment 3.0.11: The SWRCB has not proceeded in the manner required by law because it has improperly delegated its authority to resolve disputes between different water right priorities. This involves its delegation of authority to the Water Demand Management Program (WDMP). Under the proposed regulation, the SWRCB obligates the WDMP “[i]n developing the corrective action plan, the governing body shall consider the relative priorities of the diverters and any time delay between groundwater diversions and a reduction in stream stage.” If a diverter is unable to comply with the corrective action plan, then that diverter shall “cease diverting water for frost protection.” We recognize the SWRCB is attempting to require the WDMP to enforce water right priorities in order to adhere to the holding in *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 48 Cal.Rptr.3d 468, in which case the court considered whether the SWRCB could lawfully impose Term 91 on a water right permit with a 1927 priority, without imposing the same permit term on other water users that held water rights junior to the 1927 priority. The court held: “In summary, we agree with the trial court that the Board abused its discretion when it included term No. 91 in El Dorado’s permit without including that term in the licenses and permits of junior appropriators, because imposition of term No. 91 in these circumstances subverted the rule of priority without adequate justification.” (Id at 972, 496). Of course, the SWRCB, in proposing to adopt this regulation, is attempting to enforce state law that all water use must be “reasonable.” However, the EID court also addressed this question and succinctly stated that “when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail. Every effort, however, must be made to respect and enforce the rule of priority.” (Id at 966, 490). Thus, when there is inadequate water available to meet all of the beneficial uses, the rights of the junior “appropriator must yield to the rights of the riparian or overlying owner.” (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 99 Cal.Rptr.2d 294.) (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs. As stated in the comment, “when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail.” The Board will, however, in approving WDMPs, exercise “every effort ... to respect and enforce the rule of priority.” (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.)

Comment 3.0.12: The SWRCB has not proceeded in the manner required by law because it has improperly delegated its authority to resolve disputes between different water right priorities. This involves its delegation of authority to the Water Demand Management Program (WDMP). Under the proposed regulation, the SWRCB obligates the WDMP “[i]n developing the corrective action plan, the governing body shall consider the relative priorities of the diverters and any time delay between groundwater diversions and a reduction in stream stage.” If a diverter is unable to comply with the corrective action plan, then that diverter shall “cease diverting water for frost protection.” The problem with requiring the WDMP to “enforce the rule of priority” when developing and imposing corrective actions is that the SWRCB is asking that the program essentially adjudicate the Russian River watershed. There is simply no other way to “consider” the relative priorities of all the different water users within the watershed and arrange them into a hierarchy under which the most junior of the water rights is forced to undertake the corrective action or cease diverting water. [On pp 43-44, the commenter provides an example which the commenter claims shows that considering all the different water rights to the system will be a monumental task. The commenter further states the WDMP is not equipped to deal with the judicial nature of a determination of rights, and that the only mechanism to resolve this dispute is an adjudication.] The commenter provides legal citations regarding two ways of handling adjudications: Chapter 1, of Part 3 of the Water Code (Water Code §§ 2000 et seq. Chapter 3 of Part 3 of the Water Code (Water Code §§ 2500 et seq. Commenter further states: Under Chapter 3, upon any petition signed by one or more claimants to water of any stream system, the SWRCB may enter an order granting the petition and commence making the determination. Commenter states: Regardless of the mechanism used, both mechanisms constitute authority to conduct a judicial or quasi-judicial determination of rights under the law. The SWRCB cannot simply delegate its judicial authority to determine the relative priority of rights of a stream system to a water demand management program. (*Schechter v. County of Los Angeles* (1968) 65 Cal.Rptr 739, 742.) Yet the delegation of “acts discretionary or quasi-judicial in nature” is precisely what the SWRCB is doing by requiring the WDMP to consider water right priorities when developing corrective actions. The WDMP is not equipped to deal with the complex legal determinations necessary to resolve my hypothetical (but likely to be similar to very real situations) scenario outlined above. By passing this obligation on to the WDMP, the SWRCB is hoping to punt the difficult questions, and the liability, onto a group that is ill-equipped and legally inappropriate to handle the situation. This, the SWRCB cannot do. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs. As stated in the comment, “when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail.” The Board will, however, in approving WDMPs, exercise “every effort ... to respect and enforce the rule of priority.” (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) It is not correct to say that an adjudication is required in order to address the matters covered by the proposed regulation in compliance with existing law. (See generally *United States v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82.)

Comment 3.0.13: The SWRCB has not proceeded in the manner required by law because its denial of our request for an extension to comment on the most recent form of the regulation and

its supporting documentation. While an administrative agency may have wide discretion in granting or denying continuances, that discretion is not unlimited. Among the factors a judge will consider in examining an administrative agency's denial for an extension include whether there have been continuances in the past, whether the request was made prior to or on the day of the hearing, and any factual showing of prejudice that resulted from the denial of the continuance. (Cal. Administrative Mandamus (Cont.Ed.Bar 3rd ed. 2011) §6.92, pp.229-230.) In our situation, the SWRCB posted a draft EIR, a new regulation, an Initial Statement of Reasons, and a Notice of Proposed Rulemaking on May 20, 2011. Each one of these documents included numerous studies, references, facts, and figures that we had never seen before and some were not even readable by any known program (SWRCB Water33.sde). The deadline to submit comments was set for noon on July 5, 2011, which meets the minimum legal standard of 45 days. On June 1, 2011, we requested a 45-day extension of time to comment on this material. On June 6, 2001, the SWRCB denied our request, stating that "prior drafts of the regulation, initial statement of reasons, and portions of the Notice of the Proposed Rulemaking had been previously released on March 23, 2011. With a comment period ending on July 5, 2011, this provides a total 105-day review period for a significant portion of the information..." This statement is utterly ridiculous. The differences between the "prior drafts" and the current drafts are substantial. And in addition, there was significant new additional material. This statement of bad faith is amplified by the SWRCB choosing July 5 as the deadline. The day after a national holiday during which every business, including the SWRCB, will be closed, and just a few days after the deadline for all appropriative water right users (and many Statement holders) to report their annual water use to the SWRCB. The date appears to be intentionally chosen to reduce the public's ability to provide comprehensive comments to the SWRCB's regulation. The irony of this action is not lost on us, as such an action sounds like the behavior of the King of England before we declared our independence from Great Britain, (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The public has had ample opportunity for input and comment on the Board's proposed regulation and the date by which comments were due was not intentionally chosen to reduce the public's ability to provide comprehensive comments on the proposed regulation. The Board has complied with all applicable requirements of the APA and CEQA and has provided adequate notice to all parties. The Board made all documents available as soon as it was able and it is merely a coincidence that the end of the comment period falls one day after a three-day weekend rather than a two-day weekend. As explained in the response to the request for extension of time to comment, given the urgent need for the regulation to be in place before the next frost season, the Board was unable to provide an extension of the public comment period.

Comment 3.0.14: The SWRCB has not proceeded in the manner required by law because there is no evidence justifying the regulation, it is not a legitimate exercise of the police power, and therefore amounts to a denial of due process of law. (*Lingle v. Chevron U.S.A. (2005) 544 U.S. 528.*) Similarly, this regulation will effectively take people's vested property rights by denying use of water during one of the most important times of the season, and therefore most valuable times of the season, available under that right, which is a taking of private property without just compensation, regardless of whether it is considered a categorical or regulatory taking. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited;*

Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA.

The proposed regulation does not “take” any vested property right. The Supreme Court has held that there can be no taking where an owner’s use of a right is already restricted by background principle of property law. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1002, 1029.) Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 3.0.15: The Draft Regulation improperly attempts to shift the State Board's legal responsibilities by adopting certain legal presumptions (for example, that diversion of water for frost protection is supposedly a per se unreasonable use of water) that are not legally appropriate or supportable. The legal presumptions against water diverters that are built into the Draft Regulation are not legally appropriate or adequate. For example, the Draft Regulation purports to make a legal finding that any diversion of water from the Russian River stream system for frost protection from March 15 to May 15 is per se unreasonable and a violation of law, unless a certain procedure is followed. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the proposed regulation, including the presumption that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program, is supported by adequate findings, documentation and legal authority.

Comment 3.0.16: The Draft Regulation fails to balance protection of all beneficial uses and will have a drastic and unfairly disproportionate impact on vineyard diverters like Golden Vineyards. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: The Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

Comment 3.0.17: In our opinion, which is elaborated herein, the proposed regulations cannot be validly adopted by this Board, and must be found by the Office of Administrative Law ("OAL") to be invalid, because the regulations fail to meet the standards of "necessity," "authority," clarity" and "consistency" mandated by Government Code §§11349.1 (1), (2), (3), and (4), and 11349.3, as defined by Government Code §11349 (a), (b), (c), and (d), (herein "APA"). (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL.

Comment 3.0.18: The proposed regulation would restrict [Mr. Light's] use of his water rights in the same way they would restrict all other water users, without acknowledging or protecting his priorities under established law. And, the regulations would prevent him from using his appropriative or riparian right for frost protection from March 15 to May 15 - the period when these rights have been used for many years and the period when their use is essential unless he successfully overcomes the uncertainty and bears the burden and expense of obtaining this Board's approval a "plan," with unspecified content and dimension - a "WDMP." Dr. and Mrs. Light oppose the adoption of the proposed regulation for the reason, among others, that they will adversely impact the Lights' grape farming operations and the value of their property, including their water rights and the costly infrastructure that has been developed to put to beneficial use water diverted pursuant to these rights. Fundamentally, Dr. Light's complaint is that the State Water Resources Control Board is ignoring, indeed consciously violating, its duty, as articulated in the State Constitution and several Supreme Court cases, to protect their water rights, which are "property" every bit as entitled to Constitutional protection as ownership of land. The Board is claiming the power to adopt new rules - i.e., to legislate, not adjudicate - that will deny the Lights the right to continue an established use during 2 months of every year because the Board has concluded as a matter of policy that in-stream use of water for the protection of fish is of higher priority than diverting the water for agricultural use. [Commenter provided case law claiming the State Water Board previously opposed "appropriating" unappropriated water for protection of fish so that the water could not be later be appropriated. *Fullerton v. State Water Resources Control Board* (1979) 90 Cal.App.3d 590, 604 n.17; *California Trout, Inc. v. State Water Resources Control Board*, Article X, Sec. 2 and established water rights law. Commenter further states the Fullerton court pointed out that under the Water Code, "the amounts of water required for recreation and the preservation and enhancement of fish and wildlife resources" can be taken into account in determining the "amount of water available for appropriation," so long as riparian rights are not affected (90 Cal.App.3d at 600, n.9), but this did not mean these uses had priority over "agricultural and municipal" uses (*Id.*, at 607, n.17) or that water could be appropriated to remain in the stream to serve these uses. Commenter concludes: It is disconcerting to the Lights, some 30 plus years later, when all that has really changed is the Board's membership and its staff's composition, that their property rights and the value of their land and the value of almost every other landowner's land in the Russian River drainage, are being severally threatened because the Board and its staff have changed their minds. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Consideration of water right priorities is required of a WDMP submitted for Board approval.

The general content required of a WDMP is specified in the proposed regulation and accompanying documents.

The proposed regulation does not deny any diverters a "constitutionally protected property right." As the courts have already made clear, "no one can have a protectible interest in the unreasonable use of water." (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1242.) This is likewise true with regard to the public trust. (*Natl. Audubon Society v. Superior Court* (1983) (33 Cal.3d 419, 437 ["parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner

harmful to the trust.”]; see also *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966 [“Thus, like the rule against unreasonable use, when the public trust doctrine clashes with the rule of priority, the rule of priority must yield.”]) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Contrary to the assertions of the commenter, the Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that “we find no merit in respondents’ assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code.” (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

The proposed regulation, consistent with past State Water Board decisions, does not authorize the appropriation of water for protection of instream beneficial uses. As such the cases cited by the commenter are inapposite.

As described in Draft Initial Statement of Reasons, the Board has determined that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program to minimize the cumulative impacts of such diversions on public trust resources.

Comment 3.0.19: Dr. Light and others have heretofore made extensive comments upon drafts of the proposed regulations stating their opposition to adoption. These oppositions will not be rehashed in the body of this letter, but they are endorsed, and incorporated by reference. These inputs demonstrate that the proposed regulations do not meet the "necessity" and "clarity" requirements of the APA. Specific reference is made to Dr. Light's comments of January 13, 2010 and March 13, 2010; the California Farm Bureau's comments of November 30, 2010; March 29, 2010, and November 23, 2010, comments by the law firm of Gallery & Barton representing Williams Selyem Winery; comments of November 29, 2010 by the Russian River Flood Control and Water Conservation Improvement District; comments of November 30, 2010, by Wagner and Bonsignore; and comments of November 30, 2010, by the California Department of Fish and Game. The Board is requested to consider these inputs carefully before adopting these regulations because, even apart from Water Law issues, they demonstrate, we believe conclusively, that this regulation should not be adopted to apply even in respect to Lake Mendocino and Lake Sonoma project water being used by land owners with no higher priority appropriative or riparian rights. These prior comments also show that the factual basis for this regulation - 25,000 steelhead killed by diversions on one particularly cold night - is fundamentally flawed and, in any event, aberrational and not likely to be repeated. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Contrary to the assertions of the commenter, the proposed regulation is supported by adequate

findings, documentation and legal authority, as required by OAL and CEQA.

Comment 3.0.20: The November 30, 2010 comments by DFG make clear that the proposed regulations, rather than being a proposal to prevent "waste" or the "unreasonable use" or "unreasonable method of use" of water, are a legislative, rulemaking, effort by the Water Board to regulate or supervise frost protection of grapes in the Russian River Basin, whatever water right is implicated. The Board has no "authority," as defined by Government Code §11349 (b), to adopt such a regulatory scheme. (*City of Barstow v. Mojave Water Agency (2000) 24 Cal. 4th 1224.*) (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Contrary to the assertions of the commenter. The proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA.

Comment 3.0.21: The comments of Gallery and Barton [March 29, 2010 and November 23, 2010] carefully point out several fatal deficiencies in the proposed regulations and their accompanying EIR, including that time and use priorities under California water law are ignored; reasonable alternatives, such as regulating release of water from Lakes Mendocino and Sonoma, aren't considered; and clearly foreseeable adverse environmental impacts are not adequately considered. But, this Board has considered these previous comments and nevertheless apparently decided to adopt these regulations. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Consideration of water right priorities is required of a WDMP submitted for Board approval.

Additional regulation of releases of water from Lakes Mendocino and Sonoma was not considered as an alternative as this approach would not meet the goals of the proposed activity. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Warm Springs and Coyote Dams cannot physically or operationally provide water to the Russian River tributaries, and therefore releases from those dams cannot effectuate the goals of the proposed action in those areas. In addition, according to USGS Station 11462500, Russian River near Hopland, gage data, SCWA was in full compliance with its bypass flow requirements immediately before the time of the fish strandings reported by NOAA, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. The information gathered by the WDMPs will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to increase releases, as necessary, to satisfy frost diversion demands. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma may not mitigate for the rapid increase in demand for water for frost protection from contributing tributaries.

All reasonably foreseeable environmental impacts have been adequately analyzed in the Draft EIR.

Comment 3.0.22: By defining as "unreasonable" the use under established water rights of water from the Russian River stream system for frost protection during the period of the year when use of that water is essential for that purpose, unless diversion is pursuant to a "Board

approved" plan (WDMP), these regulations would be invalid, as diametrically inconsistent with the meaning and intent of "self executing" Article X, Sec 2 of the California Constitution. They will certainly be invalid as applied to riparian rights holders such as Dr. Light. Moreover, the Board does not have delegated Legislative authority, under the laws cited in its Notice or under any other provision of law, to adopt these regulations. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

The proposed regulation is consistent with article X, section 2 of the California Constitution, which states "The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." In addition to being "self-executing," article X, section 2 states that "the Legislature may also enact laws in the furtherance of the policy in this section contained." The Legislature has delegated this authority to the Board as described in the Notice of Proposed Rulemaking and Initial Statement of Reasons.

Contrary to the assertions of the commenter, the Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

Comment 3.0.23: Article X, Sec. 2, of the California Constitution was adopted to avoid the "waste of water or unreasonable use or unreasonable method of use" - i.e., letting it run into the sea unused for an economically productive purpose - because such a result would be contrary to the "general welfare" and "public welfare" and "policy" of the 1928 amendment. The holders of riparian rights and pre-1914 appropriative rights were subjected to the "reasonableness" standard articulated in the amendment but assured their existing rights would be protected. Riparians were assured of "so much of the flow ... as may be required or used ... for the purposes for which such lands are [used] or may be made adaptable " The basic idea behind the 1928 Amendment was to make more water "available" for appropriation so that it could be put to economically productive "beneficial use" on lands that lacked a water supply adequate to support viable, economically productive use. It is impossible to interpret the 1928 Amendment, and its enabling legislation now in the Water Code, as authorizing a definition of "unreasonable use" that results in making the growing of grapes uneconomic on vast tracts of land and results in the flow into the sea of water unused for economic purposes for which it can be, has been, and is being utilized. (See, e.g., the brief discussion in footnote 9 of *Joslin v. Marin Mun. Water Dist.* (1967) 67 Cal. 2d 132, 139.) (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Article X, section 2 of the California Constitution, states "The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." This applies to all water rights. What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) (33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."]))

Comment 3.0.24: No case known to the undersigned has held that the Board has been delegated rule making authority to make fundamental changes in the law of water rights and water use that result in making less water available for agricultural or municipal uses so that the in-stream uses of fish protection can be enhanced. *National Audubon Society v. Superior Court* (1983) 33 Cal. 3d 419 is sometimes cited for the proposition that it empowers the Board to take almost unlimited action to protect fish in navigable waters, under the "public trust" doctrine. But, that case's holding provides no basis for upholding the Board's effort to legislate a new regulatory regime that would retroactively impose upon even water rights beyond the Board's regulatory control - e.g., riparian and pre-1914 rights - the Board's chosen balance between "public trust uses" and "usufructuary rights to appropriate water." (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Contrary to the assertions of the commenter. The Board has the authority, as expressed in the Notice of Proposed Rulemaking and Initial Statement of Reasons, to adopt the proposed regulation.

The Board's permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board's public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.)

Comment 3.0.25: No case known to the undersigned has held that an existing utilized riparian water right can even be diminished, much less abolished, for any period of time. (See, e.g., *In Re Water of Hallett Creek Stream System* (1988) 44 Cal.3d 448, 470, where the court says that while an "unexercised" riparian right can be "limited" in a proceeding under §§2000 et seq. of the Water Code, even an "unexercised" right can't be "abolished.") (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board's permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board's public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.)

Contrary to the assertions of the commenter, no water rights are being abolished pursuant to the proposed regulation.

Comment 3.0.26: This current effort is a rule making - i.e., a Legislative effort that, in effect, seeks to redefine "white" as "black". Dr. Light's position is that this is beyond the Board's power and that Article X, Sec. 2 can't be reinterpreted to allow or, as here proposed, to require water to flow unused to the sea between March 15 and May 15 of each year unless a particular group

of users - i.e. agriculture users, without regard to the priority or nature of their water right - devise a "plan" to protect fish suitable to this Board and its staff and the many and varied commentators who under law will have the right to comment on the proposed "plan" and subject it to judicial review if it does not meet with their approval. A similar effort, in a court adjudication, was rejected by the Supreme Court in *Barstow*, supra, 24 Cal.4th 1224. The "certainty in the definition of property rights to the use of water ..." (Water Code §109) that current law states is essential to accomplish the objective of Article X, Sec. 2, of the Constitution - putting the waters of the State to "beneficial use to the fullest extent of which they are capable ..." - is impossible to attain if every change in membership of the Board can result in new regulations that upset longstanding, and investment backed, expectations. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Contrary to the assertions of the commenter, the Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

Article X, section 2 of the California Constitution, states "The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

Comment 3.0.27: Because the impact of the regulation can't be known until the WDMP is adopted, and because that adoption process could take several years, these proposed regulations fail the "clarity" requirement of the APA on that basis alone. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The potential impacts of the regulation have been fully analyzed in the Draft EIR.

Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation.

Comment 3.0.28: The proposed regulations fail the "authority" requirement of the APA because they would be inconsistent with Article X, Sec. 2, of the California Constitution. It is important to understand the Board's limited authority under the 1928 Amendment to adopt regulations such as those being proposed, which govern riparian rights and make substantive changes in general water rights law. And, it is important to understand the context in which that authority has been granted by the Legislature to the Board and will be interpreted and applied by the courts. While there are some very expansive judicial statements about how broad the Board's powers are (see, e.g., *IIDI* and *IIDII*, supra) those statements are usually made within the context of adjudications before the Board about "waste" of water; or the statements are about the Board's power to make rules governing new appropriations. Dr. Light believes that, because these proposed regulations purport to regulate established riparian rights and make significant changes in basic water law, the courts will determine as a matter of law whether these regulations are authorized by and consistent with existing law. Dr. Light also believes that when the courts make this decision this Board's views on the law and the meaning of

"unreasonable" will not be entitled to deference because the meaning of longstanding constitutional and statutory language is involved, and vested property rights are being taken or deprived. See, e.g., *Yamaha Corp. of America v. State Board of Equalization* (1998) 19 Cal. 4th 1, 11, fn.4; *Burke v. California Coastal Commission* (2008) 168 Cal.App.4th 1098, 1106. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."])

The proposed regulation is consistent with Article X, Section 2 of the California Constitution and the Board's public trust and reasonable use authorities.

Contrary to the assertions of the commenter, the Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

The proposed regulation does not deny any diverters any "vested property right." As the courts have already made clear, "no one can have a protectible interest in the unreasonable use of water." (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1242.) This is likewise true with regard to the public trust. (*Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 437 ["parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust."]); see also *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966 ["Thus, like the rule against unreasonable use, when the public trust doctrine clashes with the rule of priority, the rule of priority must yield."]) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 3.0.29: This regulation would deny Dr. Light and all riparians the right to continue an established reasonable use of water for frost protection protected by the 1928 Amendment. It is impossible to read the cases decided shortly after adoption of this amendment, such as *Gin S. Chow v. Santa Barbara* (1933) 217 Cal. 673; *Peabody v. Vallejo* (1935) 2 Cal.2d 351; *Tulare v. Lindsay-Strathmore Irrigation District* (1935) 3 Cal.2d 489; and *Meridian v. San Francisco* (1939) 13 Cal.2d 424, and not understand that the purposes of the amendment were to avoid water wasting unused into the sea and to facilitate the maximum possible use of water for domestic, agricultural, industrial and other uses vital not only to water rights holders' subsistence and economic prosperity but also to an expanding California economy. No one thought then, or now at least until this current proposal was floated, that the amendment gave the Legislature or its delegee the right to order cessation of an established "use" of water for a beneficial purpose under riparian or pre-1914 appropriative water rights. Even as recently as 1976, a Court of Appeal thought it clear that the Board had no authority to adopt Legislative rules that govern these or other established uses by the legerdemain of applying new labels to old practices, See *People v. Forni*; supra, where the court said a regulation similar to the proposed regulation could be considered only as a statement of "policy." (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: What constitutes reasonable use of water depends on current circumstances and

varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."])

It should be noted that the State Water Board's "regulation similar to the proposed regulation" was upheld by the Court of Appeal as a proper exercise of the Board's authority. (*People v. Forni* (1976) 54 Cal.App.3d 743.)

Comment 3.0.30: This regulation would deny Dr. Light and all riparians the right to continue an established reasonable use of water for frost protection protected by the 1928 Amendment. Under Article X, Sec. 2 what "use" or "uses" are "beneficial," and what "uses" and "methods of use" are "unreasonable" are mixed questions of fact and law, to be determined in judicial proceedings where answers depend upon the circumstances. (See *Lux v. Haggin* supra, 69 Cal. at 394-409, *Joslin v. Marin Mun. Water District*, supra, 67 Cal.2d at 139-141 and n. 9). Irrigation, even flood irrigation, while "beneficial" and "reasonable" on rich, loamy soil subject to a mediterranean climate, might not be "reasonable" on very porous, sandy soil. And, if the sandy soil were subject to a wet, cold climate the use might not even be "beneficial." (Ibid.) Under this standard, there is no doubt that frost protection of grapes, during the very period grape buds are subject to freezing, is a "beneficial" and "reasonable" use. And, sprinkling water to accomplish frost protection is a "reasonable method of use". Without this frost protection the land becomes much less valuable and less productive, not a result consistent with the objectives of the 1928 Amendment as interpreted by the Supreme Court in *Joslin*, supra, 67 Cal.2d at 140 n.9, and other cases. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The cases cited by the commenter do not espouse the commenter's conclusion, that questions of reasonable beneficial use are necessarily "to be determined in judicial proceedings." In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that "we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code." (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

Comment 3.0.31: For riparian and pre-1914 rights holders, such as Dr. Light, at least, their rights are specifically protected by the 1928 Amendment. The Supreme Court has made clear that this Board's duty is to protect, not try to define away, these rights. (*Meridian Ltd. v. San Francisco* (1939) 13 Cal.2d 424, 450) This Board's effort to ignore these rules by defining as

"unreasonable" diversion of water for frost protection unless pursuant to a plan it has approved brings to mind the conversation between Humpty Dumpty and Alice in Lewis Carroll's *Through the Looking Glass*. Apparently, this Board thinks it is the "master" and it can make words mean what it wants them to mean! A riparian water right - which is a protected property right (See *Thayer v. California Development Co.* (1912) 164 Cal. 117, 125; see generally, Hutchins, *The California Law of Water Rights*, 183 et seq. (1956)) - is the right to take and use a portion of the flow of a stream every day, all day, all year long, as long as the owner of the right can make reasonable use of the water. This proposed regulation would deprive the holders of that property right in violation of the assurance in Article X, Sec. 2 that such a deprivation will not occur. In fact, if the regulation is adopted and put into effect, it may well be interpreted as a physical "taking" of the land owners' property for the public purpose of protecting fish, without compensation, entitling the owners to a money judgment under the Federal and State Constitutions. (See, e.g., *United States v. State Water Resources Control Board* (1986) 182 Cal.App.3d 82, 101.) The Supreme Court recently reiterated that the Board has no authority to regulate the beneficial use of riparian rights (*California Farm Bureau Federation v. State Water Resources Control Board* (2011) 51 Cal. 4th 421, 429). See also, *People v. Shirokow* (1980) 26 Cal.3d 301, 309, *Nicoll v. Rudnick* (2008) 160 Cal.App.4th 550, 557; *People v. Murrison* (2002) 101 Cal.App.4th 349, 359, fn. 6. Since these proposed regulations are clearly designed to regulate or supervise the use of all water for frost protection diverted from the Russian River or its tributaries -under whatever water right -as recognized by DFG, these regulations run afoul of the 1928 Amendment as interpreted in these cases and violate the "authority" requirement of the APA. Cf. *Barstow*, supra, 24 Cal.4th at 1242-1254. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: As provided by article X, section 2 of the California Constitution, all water rights are "limited to such water as shall be reasonably required for the beneficial use to be served, and such right[s] do not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." And as previously stated, what constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The proposed regulation does not "take" any vested property right. The Supreme Court has held that there can be no taking where an owner's use of a right is already restricted by background principle of property law. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1002, 1029.) Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

The commenter appears to be misreading *California Farm Bureau Federation v. State Water Resources Control Board*. (51 Cal. 4th 421, 429-430. "The SWRCB does have authority to prevent illegal diversions and to prevent waste or unreasonable use of water, regardless of the basis under which the right is held.")

Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL.

Comment 3.0.32: The proposed regulations fail the "authority" mandate of the APA for the additional Reason that they would violate that provision of the 1928 Amendment that limits legislative authority to regulate water rights to the enactment of "Laws in Furtherance of the Policy in this Section Contained." As mentioned, and as simply restated, the "policy" contained in the Amendment is to prevent waste - allowing water to run unused into the sea - and to encourage and protect the "use" of water for reasonable economically productive purposes. Not only does the Amendment prevent the Board from regulating riparian rights holders for any purpose other than to prevent waste, etc. (See Farm Bureau, supra) it imposes upon the Board a duty to protect such right holders in their use of their established rights (See Meridian, supra). Adoption of these regulations would be in violation of that duty because, the regulations do not respect and protect the priorities established by law (cf. Barstow, supra), and compliance with the regulations would be extremely costly for Dr. Light and others, probably depriving their vineyards of economic viability. This Board has no authority to deny a priority water rights holder the opportunity to benefit from the use of his right in order to make water available for a lower priority use. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The proposed regulation is consistent with Article X, Section 2 of the California Constitution. As provided by article X, section 2 of the California Constitution, all water rights are "limited to such water as shall be reasonably required for the beneficial use to be served, and such right[s] do not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water."

The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See Natl. Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."]) The Board's permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board's public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally Natl. Audubon Society v. Superior Court (1983) 33 Cal.3d 419.)

As stated previously, "when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail." (El Dorado Irrigation District v. State Water Resources Control Board (2006) 142 Cal.App.4th 937, 966.) The Board will, however, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority." (Ibid.)

Comment 3.0.33: Even if the language of the 1928 Amendment could be stretched to allow the Legislature to enact laws that would authorize this regulation, the Legislature has not done so; and the proposed regulation is not consistent with or authorized by the authority cited by the Board. None of the code sections cited by the Board provides the Board with APA "Authority" to adopt these regulations. The Board cites as authority for this regulation, Article X, Section 2, of the Constitution and Sections 1058, 100, 275, and 1051.5 of the Water Code. None of these sections can be read to give the Board authority to adopt a comprehensive scheme for regulating frost protection, as DFG has correctly defined this effort, or to define "beneficial use" however it chooses, or to say that the use of water at the time and by the method essential to economically produce a saleable agricultural crop, is an "unreasonable" use or method of use. (See, e.g., Forni, supra; Farm Bureau, supra.) Nothing in any of these sections, or any section, authorizes the Board to require parties to give up their priorities under law or to enter

agreements setting up the expensive regulatory framework required by this proposed regulation. At the very least, if the Board believes that some "power" or "duty" it possesses authorizes these regulations, it should specify and elaborate the section imposing or authorizing that "power" or "duty" and let affected members of the public comment on its analysis. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Contrary to the assertions of the commenter, the Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

No parties will be required "to give up their priorities under law." As previously stated, the Board will, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority."

All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, the evidence and the Board's authority.

Comment 3.0.34: The Water Code as a whole, read together with other laws dealing with the general subject of water and fish, provides clearly that the Board cannot, at least outside the context of passing on new applications or exercising reserved licensing authority, curtail established beneficial uses of water in order to protect fish. It is abundantly clear from other sections of the Water Code, quite obviously not cited by the Board, that its "powers and duties under this Code" (section 1058) do not include the power or the duty to prohibit the established beneficial use of water for frost protection during the frost season in the grape growing areas of the State. And, nowhere can the authority be found to ignore the priorities of use established by California law or to mandate the establishment of the elaborate "water demand management program" that must be established and complied with to save as "reasonable" or "beneficial" a long established and accepted "use" such as frost protection. If there is any doubt about this point respecting some or all post-1914 appropriative rights, no such doubt exists respecting riparian rights or pre-1914 appropriative rights, since the 1928 Amendment protects these rights and the Supreme Court has made clear that the Board has no authority to regulate them. Most of the Board's "powers and duties" are limited to its ability to establish rules governing the appropriation of unappropriated water. The Water Code (section 1257.5), is abundantly clear that the Board "shall consider stream flow requirements proposed for fish and wildlife purposes pursuant to section 1001 and 1002 of the Public Resources Code." Those code sections say that it is the Department of Fish & Game that will establish stream flow requirements necessary for the protection of fish and wildlife, not the State Water Resources Control Board. It is basic law governing statutory interpretation that: "a statutory grant of power or regulation of the mode of exercise implies that no other power passes by the grant and that it is to be exercised only in the prescribed mode." (58 Cal.Jur.3d, Statutes, §130, p. 551. See also *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190; *Martello v. Superior Court* (1927) 202 Cal. 400.) (*Jared*

Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light; Robert Dempel, Dempel Ranch Vineyard)

Response: Contrary to the assertions of the commenter, the Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

As stated previously, “when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail.” (El Dorado Irrigation District v. State Water Resources Control Board (2006) 142 Cal.App.4th 937, 966.) The Board will, however, in approving WDMPs, exercise “every effort ... to respect and enforce the rule of priority.” (Ibid.)

The limit of the State Water Board’s authority is not defined by the 1928 amendment to the California Constitution. (See Natl. Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 443-444 [“More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values.”]) The Board’s permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board’s public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally Natl. Audubon Society v. Superior Court (1983) 33 Cal.3d 419.)

Water Code section 1257.5 applies only to the applications to appropriate water, and as such is inapposite to the Board’s exercise of its continuing authority over the public trust and reasonable uses of all waters of the state.

Comment 3.0.35: Even if the language of the 1928 Amendment could be stretched to allow the Legislature to enact laws that would authorize this regulation, the Legislature has not done so; and the proposed regulation is not consistent with or authorized by the authority cited by the Board. None of the code sections cited by the Board provides the Board with APA “Authority” to adopt these regulations. As mentioned earlier, the courts, and not this Board, have the ultimate responsibility and authority to define the constitutionally significant terms “beneficial use”, “waste”, “unreasonable use” and “unreasonable method of use”; and the meanings adopted must be consistent with and in furtherance of the “policy” contained in the 1928 Amendment. If Section 1058 is interpreted as authorizing these regulations, then that Section authorizes this Board to mandate a change of water use patterns in every part of the State to accomplish any number of objectives that it newly perceives to be in the “public interest,” without any new legislative decision weighing the competing interests involved. It boggles the mind to contemplate the Board requiring Los Angeles water users to return the Los Angeles River to its natural condition in order to protect some fish or water bug listed under the State or Federal ESA! Surely the Legislature never contemplated this result; and the result is belied and prevented by the history and language of Article X, Sec. 2. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: As provided in article X, section 2 of the California Constitution, “...the Legislature may also enact laws in the furtherance of the policy in this section contained.” The Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

Contrary to the unsupported contentions of the commenter, the Board has the authority to and has previously defined what constitutes “beneficial use” (See Cal. Code Regs, tit. 23, §§ 659-

672, citing Wat. Code, § 1058) and declared, by regulation, a particular diversion and use practice unreasonable within the meaning of the Constitution and Water Code. (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

Comment 3.0.36: The Water Code as a whole, read together with other laws dealing with the general subject of water and fish, provides clearly that the Board cannot, at least outside the context of passing on new applications or exercising reserved licensing authority, curtail established beneficial uses of water in order to protect fish. Water Code Section 1241 and the Common Law controlling water rights are inconsistent with the Board's claimed authority to prevent a person from making use of his/her established water right during a 62 day period of the year (i.e., March 15 to May 15) when the exercise of that right is most essential. Section 1241 provides that a person can lose an established post-1914 appropriative water right - many of which will be affected by this regulation if he/she "fails to use beneficially all or any part of the water claimed by him, for which a right of use has vested, for the purpose for which it was appropriated or adjudicated, for a period of five (5) years...." Pre-1914 appropriative rights are subject to loss only under rules recently articulated by *North Kern Water Storage District v. Kern Delta Water District* (2007) 147 Cal.App.4th 555. Established riparian rights are subject to loss only by adverse prescription and use. See, generally, Hutchins, *the California Law of Water Rights*, supra, 284-348. Contrary to this important body of law protecting water rights, the proposed regulation provides that a holder of any water right will be unable to use that right for at least 62 crucial days each year if he/she does not adopt a WDMP that meets Board approval. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."]) The Board's permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board's public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.)

The forfeiture process described in Water Code section 1241 is not implicated by the proposed regulation. The proposed regulation provides that any diversion of water from the Russian River stream system for purposes of frost protection from March 15 through May 15, with certain enumerated exceptions, shall be unreasonable unless conducted in accordance with a Board-approved WDMP. As provided by article X, section 2 of the California Constitution, all water rights are "limited to such water as shall be reasonably required for the beneficial use to be served, and such right[s do] not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water." And as previously stated, what constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

Comment 3.0.37: The Water Code as a whole, read together with other laws dealing with the general subject of water and fish, provides clearly that the Board cannot, at least outside the context of passing on new applications or exercising reserved licensing authority, curtail established beneficial uses of water in order to protect fish. Under Water Code section 1243,

which states that use of water for recreation and enhancement of fish and wildlife is a "beneficial use", the Board when considering water rights applications can determine "the amount of water available for appropriation for other beneficial uses". But, this section also clearly provides "this section shall not be construed to affect riparian rights." See also sections 1243.5 and 1244, which impose limits upon the Board's authority to prioritize fish and wildlife and recreational uses over other beneficial uses. The State's "police power" undoubtedly extends to protecting fish from unreasonable uses of water, even by riparians, at least when the method chosen by the State does not offend the 1928 Amendment. But, the exercise of that power in various circumstances may give rise to "regulatory takings" issues. Also, as mentioned, the State's power of eminent domain may be implicated if it takes a water right from a land owner in order to use it for the public purpose of protecting fish. Dr. Light's position is that the State has not exercised, or authorized the exercise of, either its police power or its powers of eminent domain to protect fish by the methodology of preventing the holders of established water rights from utilizing those rights at the times most critical to them. In other words, Dr. Light's position is that the Board does not have delegated legislative authority to adopt the proposed regulations, at least as they would apply to established riparian rights. If a court holds the regulations are legally adopted these "regulatory taking" and "physical taking" issues will be presented. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board's permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board's public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.) As such, Water Code sections 1243, 1243.5 and 1244 do not define or limit the Board's public trust and waste and unreasonable use authorities.

The proposed regulation, consistent with past State Water Board decisions, does not authorize the appropriation of water for protection of instream beneficial uses.

The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."])

The proposed regulation does not "take" any vested property right. The Supreme Court has held that there can be no taking where an owner's use of a right is already restricted by background principle of property law. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1002, 1029.) Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

The Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

Comment 3.0.38: A fair reading of the Water Code compels the conclusion that the Legislature intended that riparian rights and other vested water rights should receive no less

protection today, after adoption of Article X, Sec. 2, than they received in 1886, except that such rights don't include the right to "waste" water or to make "unreasonable" use of it. Any suggestion in IIDII, supra, or any other case, that these rights are subject to change by the Board's redefinition of words or phrases in the 1928 Amendment or the Water Code, will not survive judicial analysis. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."])

In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that "we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code." (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

Comment 3.0.39: The Board cites *Peabody v. Vallejo* (1933) 2 Cal.2d 351 and *People Ex. Rel. State Water Resources Control Board v. Forni* (1976) 54 Cal.App.3d 743 as providing it with authority to adopt these regulations. Neither case provides that authority. *Peabody*, and other cases cited at pages 14-15 of this letter, held that the prevention of waste requirement and the "reasonableness" test in the 1928 Amendment apply to riparian and pre-1914 appropriative rights, as well as to other appropriative rights. As mentioned, those cases don't allow the Board to make up its own definitions of "reasonable" or "unreasonable" and force them upon all water users. *Forni* is closer on point, as it involved a Board regulation, somewhat like the proposed regulations, stating that direct diversion from the Napa River for frost protection during the period of March 15 to May 15 was an "unreasonable" use of water within the meaning of the 1928 Constitutional Amendment. In *United States v. SWRCB*, supra, 182 Cal.App.3d at 104, *Forni* held that: "In times of water shortage all riparians must curtail their usage in order they share the available water. Similarly, all riparians may be required to share expenses or inconvenience for the common good to enable all riparians to use the water." Whether the Board could mandate that all these riparian users be required to build off-stream reservoirs or lose the ability to frost protect was a question subject to judicial determination, not a question to be decided by the Board. Its regulation could be considered only as a statement of "policy". The court said it wanted to make "unmistakably clear ... that the question of reasonable use or reasonable method of use ... constitutes a factual issue." Thus, as here relevant the case holds: (1) whether direct diversion of water for frost protection is reasonable is a question of fact to be "judicially determined"; and (2) the Board can't compel a specified answer to that question by adopting a regulation. In other words, the Board had no "authority" to adopt a binding regulation within the meaning of the APA! (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. The limit of the State Water Board's authority is not defined by the 1928 amendment to the California Constitution. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."])

The cases cited by the commenter do not espouse the commenter's conclusion that questions of reasonable beneficial use are necessarily "to be determined in judicial proceedings." In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that "we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code." (People v. Forni (1976) 54 Cal.App.3d 743, 752.)

Comment 3.0.40: Federal agencies cannot confer legislative authority on the Board. Apparently the Board's theory is that what used to be a reasonable and beneficial use - that is, frost protecting grapes during the period of time when frost protection is essential to the economic viability of a vineyard - can be prohibited as an unreasonable use because NOAA fisheries requested the Board to make such a determination. However, the Board's authority comes from the State Legislature and is limited by the State Constitution; its power does not come from NOAA or any other Federal agency. Even CEQA, the State's primary environmental protection statute, does not grant state agencies authority they don't otherwise have under their legislation to protect environmental values. (See, e.g., PRC §21004; 14 CCR §15040 (b); Sierra Club v. California Coastal Commission (2005) 35 Cal. 4th 839, 858-860.) (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation, and is not relying on any authority any other agency may have regarding the same resources to be protected by the proposed regulation.

Comment 3.0.41: Neither the Federal nor State laws governing species protection grant any new regulatory authority to the Water Board. Even brief consideration of the enforcement scheme enacted into the Federal and State Endangered Species Acts reveals the fallacy in the Water Board's reasoning. Simply stated, the basic approach of each statute has two prongs: (1) "Take" of a protected species is a crime - i.e., no riparian water rights holder can "take" a protected fish without being subject to criminal prosecution; and (2) no agency can perform, finance or approve (i.e., issue a permit for) any activity if that activity will "take" a species, unless protective conditions are imposed on the activity. In the absence of a private or public person needing a new permit, or money, only the criminal prohibition applies. If a permit is issued it is conditioned to avoid "take" to the maximum feasible extent, but usually "incidental take" is allowed if appropriate protections are followed so that overall and over time the species is better off. The Water Board's proposed regulations do not follow this approach. The water right holder is not required to be an applicant for governmental permission before being subjected to this proposed regime, and he is not given any "incidental take" protection even if he complies and submits a WDMP that is accepted. That is, even if a vineyard owner built an off-stream reservoir and got Board approval for a WDMP if he killed one protected fish while filling his pond he would be subject to prosecution for a felony! (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation, and is not relying on or limited by any authority any other agency may have regarding the same resources to be protected by the proposed regulation.

Comment 3.0.42: The Board's new concept - that it can will itself new power because of perceived changed circumstances affecting protected species and a request from a Federal

agency - is inconsistent with the requirements of due process, fundamental rules of administrative law, and specific provisions in the Water Code. For instance, Section 2 of the Water Code states that the provisions of the code, "shall be construed as restatements and continuations" of early statutory provisions dealing with the same subject matter. Section 103 says that, "in the enactment of this code the Legislature does not intend thereby to effect any change in the law relating to water rights". Section 109 says that, "the growing water needs of the State require the use of water in an efficient manner and that the efficient use of water requires certainty in the definition of property rights to the use of water and the transferability of such rights." (This statute paraphrases the statement quoted at pages 26-27, from *Lux v. Haggin* (1886) 69 Cal. at 372; emphasis added.) (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Comment 3.0.43: All these statutory declarations [PRC §21004; 14 CCR §15040 (b); *Sierra Club v. California Coastal Commission* (2005) 35 Cal. 4th 839, 858-860; Federal and State laws governing species protection; Sections 2, 103, and 109 of the Water Code; and *Lux v. Haggin* (1886) 69 Cal. at 372] are fundamentally at war with the State Board's current claim to be able to adopt regulations that ignore priorities established by law and have the effect of prohibiting what was heretofore considered an essential, reasonable and necessary "beneficial use" for the economic utilization of vast portions of the State's prime agricultural land. We know of no rule of State law that provides that despite these rules, apparently because NOAA requested it, this established use can be declared as no longer a beneficial use or no longer a reasonable method of use. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation.

As stated previously, "when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail." (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) The Board will, however, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority." (*Ibid.*)

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable. What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

Comment 3.0.44: For the reasons stated, these proposed regulations can't pass the "authority," "clarity," and "consistency" requirements of the APA. Other comments demonstrate that they fail the "necessity" requirement. One is left with the question of "Why" are the regulations being proposed. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL. The purpose of the proposed regulation is expressed fully in the Initial Statement of Reasons.

Comment 3.0.45: California water right law encourages economic development and recognizes the need for certainty in the protection of property owners' expectations. The 1928 Amendment says that the State's "general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable." And, section 109 of the Water Code, and many court cases, recognize that "the efficient use of water requires certainty in the definition of property rights to the use of water." In the face of this background, indeed in spite of it in an extreme example of administrative hubris, this Board proposes to adopt a regulation, without any clear authority to sustain it, that will have at least 2 immediate impacts that are contrary to those Constitutional and Legislative mandates: the regulations will prevent the exercise of established water rights thereby preventing the beneficial use of water resources of the state "to the fullest extent of which they are capable" and the regulations will interject great uncertainty in the "definition of property rights to the use of water." (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that "we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code." (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.)

What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

Comment 3.0.46: This regulation will cause severe economic harm to many grape growers in Mendocino and Sonoma Counties and will cause great uncertainty in the "definition of property rights to the use of water" contrary to *Lux v. Haggin*, supra, *Joslin*, supra, fn. 9, the discussion throughout *Hallett Creek*, supra, and Section 109. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: The potential impacts of the regulation have been fully analyzed in the Draft EIR.

Comment 3.0.47: A good factual case for adoption of these regulations has not been made. The arguments about fish dying, etc., are specious at best; no significant number of prosecutions for killing fish have been filed; both the State and Federal Governments have the power and duty under their respective ESAs to bring those prosecutions if significant numbers of protected species are being taken; and all current information indicates the relevant fish stocks are improving. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and*

Mrs. Linda Light)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL.

Enforcement action by other governmental entities with authority over fisheries resources is not a prerequisite to the State Water Board taking action under its authority.

Comment 3.0.48: The WDMP required by the regulations will take years to adopt, if they are adoptable, because they will be subject to CEQA review and subsequent litigation. After these regulations are adopted, no land owner will know when, how and at what cost he/she will be able to use his/her water right to frost protect his/her vineyard - a clear violation of the "clarity" requirement of the APA. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Neither the creation nor approval of a WDMP is an "action" under CEQA.

If the proposed regulation is adopted, landowners covered by the regulation will be able to divert water for frost protection use in compliance with a Board-approved WDMP. Two existing programs that may, if proposed to the Board for approval, constitute WDMPs are Sonoma County's Frost Protection ordinance and the program developed by the Upper Russian River Stewardship Alliance.

Comment 3.0.49: If there really is a fish problem, why aren't NOAA and/or DFG dealing with it by bringing prosecutions or otherwise? Why is the Water Board doing DFG's and NOAA's bidding rather than pursuing its duty to "protect the interest of those who have prior and paramount rights to the use of the waters of the stream," as required by the Meridian case? The Board should seriously contemplate these questions and not adopt these regulations. It will save itself and Northern California water users much money and loss of time and energy by doing so. If the State's basic water laws require revision in such a fundamental manner as here proposed, the Board should propose a Constitutional Amendment or at least comprehensive Legislation appropriate to the significance of the changes they propose. Regulatory encroachments of this type are at war with the objectives to the "Rule of Law" and the economic and political objectives underlying the 1928 Amendment and section 109 of the Water Code. (*Jared Carter, Momsen and Knight, LLP on behalf of Dr. Rudy Light and Mrs. Linda Light*)

Response: Enforcement action by other governmental entities with authority over fisheries resources is not a prerequisite to the State Water Board taking action under its authority.

Not adopting the proposed regulation was considered as an alternative in the DEIR and rejected as not meeting the goals of the proposed activity.

The State Water Board's regulatory authority is not defined by the 1928 amendment to the California Constitution, and the objectives of that amendment are not the current touchstone for all water right considerations. (See *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 443-444 ["More recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values."]) What constitutes reasonable use of water depends on current circumstances and varies as the current situation

changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

Comment 3.0.50: There is no discussion in the DEIR, nor any accounting for the inability of any "individual or governing body" other than SWRCB or the courts to legally, timely, authoritatively and effectively address such issues as the "relative water right priorities of the diverters." For instance, Sonoma County Assistant Counsel David Hurst stated explicitly during development of the county's Frost Regulation Ordinance, that Sonoma County has no authority, nor any interest, in inquiring about the legality of any frost protection applicant's claim of legal water rights. He justifiably insisted that the County has no such authority, and even if they did enquire, that Sonoma County had no interest in pursuing any potential problems, inconsistencies or conflicts. Yet, the local process envisioned in SWRCB's proposed Regulation potentially places responsibility for ensuring that legal water rights are a part of any frost protection water use application and method of use, and correction of problems, with some other entity than SWRCB. The DEIR must address these inherent problems, which will have significant adverse environmental impacts in the worst case scenarios, provide effective corrections or alternatives, and the DEIR must be revised and recirculated to allow for meaningful review and comment from the public. (*David Keller, Friends of the Eel River*)

Response: Pursuant to the proposed regulation, WDMPs must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs.

The potential impacts of the regulation have been fully analyzed in the Draft EIR.

All parties have had ample opportunity for meaningful discussion and significant notice and opportunity to comment on the proposed regulation.

Comment 3.0.51: Sonoma and Mendocino Counties, nor the proposed "individuals or governing bodies" have no authority to enforce water rights, or authority to interpret or judge the "relative water right priorities of the diverters" or to demand that a diverter claiming superior water rights to cease diversions of water deemed by this Regulation to be 'unreasonable or not beneficial.' As a result, any delegation of enforcement activities to "an individual or governing body" such as the counties are highly likely to be contested and ineffectual, gutting the very authority to implement and achieve the State's goals of this Project. The DEIR must address these inherent problems, which will have significant adverse environmental impacts in the worst case scenarios, provide effective corrections or alternatives, and the DEIR must be revised and recirculated to allow for meaningful review and comment from the public. (*David Keller, Friends of the Eel River*)

Response: Pursuant to the proposed regulation, WDMPs must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs.

The potential impacts of the regulation have been fully analyzed in the Draft EIR.

All parties have had ample opportunity for meaningful discussion and significant notice and opportunity to comment on the proposed regulation.

Comment 3.0.52: The proposed Russian River Frost Regulation is concerning for a number of

reasons. The proposed regulation would: regulate all water used for frost protection in the Russian River Watershed including pre-1914, riparian, licensed, permitted and groundwater; would declare all diversions for frost protection unreasonable unless and until the water is diverted pursuant to a Board approved water demand management program; is not based on sound science; includes water users that have no detrimental effect on salmonids; provides little consideration for the priority of individual water rights; ignores other water users in the watershed such as domestic or municipal; will require detailed data collection; and will result in significant costs on agricultural operations within the watershed. Even more concerning is the fact that the proposed regulation is based upon an unprecedented and justified assertion of the Board's authority under the reasonable use doctrine, ostensibly for purposes of regulatory convenience and in order to avoid the takings clause. (*Mike Anderson, Mendocino County Farm Bureau; Peter Chevalier, Chevalier Vineyard Management, Inc.; Jack Cox; Robert Dempel, Dempel Ranch Vineyard; Heath Dolan, Dark Horse Vineyards; Jason Dolan, Dark Horse Vineyards; Eric Foster, Elizabeth Vineyards; S.J. Jahnke, Whistler Management, Inc.; Richard Lamalfa; Donald E. Butow, Butow Vineyards; Michael Boer, Stipp Ranch; Wendel Nicolaus, Middleridge Vineyard; Richard Schaefers, Beckstoffer Vineyards; Richard Schaefers, Mendocino Winegrape and Wine Commission; Ken and Kathe Todd, Todd Brothers Vineyards; David Beckstoffer, Beckstoffer Vineyards; Danny Piffero; Jim Lincoln, Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation that is based on sound science, including the conclusion that all diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County and Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program.

The problem as currently understood is based on cumulative instantaneous demand for water for frost protection, necessitating a comprehensive response until further information is available to exempt parties whose diversions are determined to not contribute to the problem.

As stated previously, "when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail." (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) The Board will, however, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority." (*Ibid.*)

The Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that "we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code." (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

Comment 3.0.53: I have "pre-1914 established water rights" for my property that dates back to the use of the water before 1900. I have thoroughly investigated and reviewed my family succession to my property located at Hopland, Mendocino County, California and found that these water rights have been in existence since the early 1900's. The "pre-1914 water rights" is derived from springs which have been used since 1900 and are in continual use today to produce wine grapes. This use includes use of the water for frost protection, supplemental

irrigation, and heat suppression. I object to any proposal to control or otherwise limit my use of long established water rights. I consider your proposal unlawful, causing me undue stress that I may lose a legacy that has survived five generations. (*Robert Dempel, Dempel Ranch*)

Response: Comment noted.

Comment 3.0.54: To say frost protection is a "waste or unreasonable use, or unreasonable method of use, or the unreasonable method of diversion of all waters of the state" must be removed from the regulations. It is my opinion that if this language is included in the "Proposed Russian River Frost Protection Regulation" it would be grounds for legal action in order to protect our "Senior Water Rights". (*Lea and Harry Black*)

Response: The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. Contrary to the assertions of the commenter, the declaration of unreasonableness is necessary to ensure the efficacy of the regulation.

Comment 3.0.55: I do not think one can make a strong enough statement in opposition to the "Proposed Russian River Frost Protection Regulation" as being bad policy for the state; it sets a precedent with the potential to bankrupt segments of the population and the State. What this state's citizens need is protection from oppressive regulatory interference. Yes, water management can be better to minimize potential fish stranding, but it will not end there. This is another example of reckless endangerment by state agencies charged with regulating water and wild life but have neglected the cumulative impacts of their own collective actions. And are now trying to retroactively shift the consequences of their actions back onto individual landowners while denying any complicity or accepting any responsibility for these impacts. (*T. Connick*)

Response: Comment noted.

Comment 3.0.56: This is yet another round of environmental restrictions and regulations that is not the end, but the start of severe micromanagement against private property rights. The time for a determination as to whether water use was reasonable or unreasonable was at the same time cumulative impacts were to be addressed. These water rights are property rights and to come by years later, after substantial investments in time and capital, and restrict that right in a manner that threatens that investment and livelihood is unconscionable. In water law the concept that first in time is first in right, for "beneficial uses" this concept should likewise apply to the more recent concept of recreational use, fish and wildlife protection, and enhancement and aesthetic enjoyment. I am unaware that these broadened concepts have been given a higher priority right, either by the Courts or Legislature, than any other water rights. (*T. Connick*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The requirement that all water be put to beneficial use to fullest extent to which it is capable is

different and in addition to the requirement that all water diversion and use be reasonable.

Comment 3.0.57: The "Proposed Russian River Frost Protection Regulation" states "Frost protection of crops is a beneficial use of water under section 671 of title 23 of the California Code of Regulations (CCR)" presumably this is to preclude litigation on the issue of take. However, if one is prohibited from exercising that water right during the frost event time of the year, March 15 through May 15, their beneficial use of that water right, for frost protection, has in fact been diminished by regulation – a taking. I'm confused and perplexed by your concept where one can have a beneficial use that is also unreasonable at the same time, which precludes him from exercising a water right, which in turn could cause him to lose his water right because he cannot put it to beneficial use, which is an integral condition of that right. This inability to use one's water right opens up the possibility that this historical use of water for frost protection would be put in jeopardy and then that water, at that time, not used for frost protection could be rededicated for instream beneficial use under Water Code 1707 (a) (1). (*T. Connick*)

Response: The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

The proposed regulation does not "take" any vested property right. The Supreme Court has held that there can be no taking where an owner's use of a right is already restricted by background principle of property law. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1002, 1029.) Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 3.0.58: Your proposed regulation also treats all water used for frost protection equally, when in fact there are great differences between each and every user and his direct impact, if any, to salmonid mortality by stranding. The Supreme Court of California has stated; "CESA allows the DFG to authorize a "take" that is incidental to an otherwise lawful activity if certain conditions are met. (Fish & G. Code, § 2081, subd. (b); see also Cal. Code Regs., tit. 14, § 783 et seq.) At the heart of CESA is the obligation to mitigate such takes. "The impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation." In other words, reading the "roughly proportional" language together with the "fully mitigate" language leads to the conclusion the Legislature intended that a landowner bear no more - but also no less - than the costs incurred from the impact of its activity on listed species." "The focus of the full mitigation requirement is on adverse impacts that result from an 'act' - i.e., a purposeful activity. (Fish & G. Code, § 2081, subd. (b)."" One would presume that those extracting beneficial use water, are or were in the process of becoming in compliance with their ITP requirements that DFG just enacted and were fulfilling those obligations. Did DFG fulfill their obligations timely? I do not see that your proposed regulation complies with the "roughly proportional" requirement under CESA. Please explain. CESA "not only allows but expressly compels giving consideration to economic

objectives." of the applicant. Please explain how this regulation meets that requirement. This implies that the replacement of a fish with a fish would meet this objective, or setting up a trust fund by a group would fulfill this objective to replace fish and created fish habitat as it has in other instances in the state. An enterprising Native American could set up a fish enhancement facility to provide fry for replacement fish and other conservation efforts -- at far less cost than this regulation calls for. (*T. Connick*)

Response: The proposed regulation recognizes the differences between users and the WDMPs will allow for adequate consideration of these differences.

The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State's public trust resources.

Comment 3.0.59: As the [Supreme] court [of California] stated [regarding CESA]: "With respect to unforeseen circumstances, the full mitigation requirement does not apply." "Adverse impacts that result from unforeseen circumstances are impacts that cannot reasonably be anticipated, not impacts from purposeful activities." Because water right holders, applicants and water users have relied on state agencies to administer these laws and regulations and have no control over water issues and the allocations these agencies have or would approved, under what conditions, and what amounts of water would be allocated. The current water users should not be punished and put in jeopardy for the cumulative effects and reasonableness of use, the state is required to review and consider, but has allowed to happen, makes this a state responsibility. (*T. Connick*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

Comment 3.0.60: Using this notion that SWRCB can retroactively change its mind on what is reasonable and unreasonable when a bio-diversity group or U.N. Agenda 21 advocate propose some fringe position is disconcerting. As an example, if the original concept of Lake Sonoma was to use Dry Creek as a water conduit but at certain times of the year volitional fish passage is impaired and undetected fish mortality takes place. Under your logic this would be an unreasonable use of water. Sonoma-Marin water district has a beneficial use of water, but to lessen the impacts on fish, SWRCB could restrict the districts customers from being allowed to water lawns or non-native plants, wash cars, no water for pools or spas, no new subdivision, maybe a cap on the total population, food could only be grown organically as anything else would be unreasonable, water meters not used for year could be rededicated for instream use, where would it stop? NOAA could just as easily make the arguments about fishing, given the apparent correlation between no fishing and now more fish, that fishing boats operating in state waters is an unreasonable use of water because it could cause a "take" - "meaning harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect - any species protected by the Endangered Species Act" that is fishing - right. How many fry have been vacuumed up by jet boats or skies? Would that not be an unreasonable use of water too? (*T. Connick*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The potential impacts of the regulation have been fully analyzed in the Draft EIR.

Comment 3.0.61: I have been unable to locate any SWRCB definitions of what is reasonable use for water. More importantly I have not been able to find any published definitions for when water use becomes unreasonable, under what conditions and circumstances, and by whose interpretation. As far as I can see we only have the approved historical uses to gauge reasonable use. What types of reviews, hearings and scientific review criteria will be required before a reclassification from reasonable to unreasonable use takes place? What remedies apply for the modification to these property right changes? How will reductions in economic output and a reduction in property values be resolved and compensation calculated? What effect will this have on future state budgets and will it cause any new governmental extractions (taxes, fees, etc.)? Who makes up for these losses? If these action where to cause a tax increase does that not need to be voted on first before implementation? How much unemployment will this regulation cause? (*T. Connick*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that “we find no merit in respondents’ assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code.” (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

The Board has complied with all requirements imposed under the APA for the proposed rulemaking.

The potential impacts of the regulation have been fully analyzed in the Draft EIR in compliance with the requirements of CEQA.

Comment 3.0.62: And to top off the problem, you as a board are trying to put forth that frost protection water is not a reasonable use of water. I oppose this statement and request you to pull it out of the draft regulation. This term “unreasonable” could be interpreted incorrectly by any person in power and will erode historic water rights process. I hope you take this letter seriously as we growers feel the board is not taking our efforts seriously. (*David and Joyce Fanucchi*)

Response: The commenter appears to be misreading the proposed regulation. The State Water Board is not “trying to put forth that frost protection water is not a reasonable use of water,” but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This determination is significantly narrower than that suggested by the commenter.

The Board has considered previous comments to this effect and has determined that the declaration of unreasonableness is necessary to ensure the efficacy of the regulation.

Comment 3.0.63: The proposed frost rule is generally sound. The Frost Rule must retain its present form in which frost diversions are "unreasonable unless" done in compliance with the Water Demand Management Plan. This is a good balance between statewide regulation and support for local solutions. Although some growers and trade associations continue to object to the word "unreasonable" we see no better way. With respect, I believe that concerns about creating a stigma for the public perception of winemakers, or economic ruin for the industry are overstated. After all, Napa County went through a similar exercise with a reasonable use rule and their wine industry survived. And if the past is any guide to the future, the regulation will not spread like wildfire to the rest of the state. Again, almost 40 years passed between the Napa River experience and the current rulemaking for the Russian River. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 3.0.64: SWRCB cites as its precedent for the regulation its previous adoption of the regulation in regards to the Napa River watershed. It is true the Napa regulation has been successful and is an example of diverters using offstream storage and coordinated diversions to reduce instantaneous demand on the stream system. However, I respectfully request that SWRCB respond to the varying degrees of differences between the Napa region and the Russian River Watershed. Napa is a fairly simple system compared to the complexities of the Russian River. There are significantly fewer and much larger growers in Napa. There is also a much smaller watershed to be dealt with in Napa. The Russian River Watershed is comprised of numerous tributaries and numerous small growers. Also, Napa growers had both the financial and physical capabilities to build offstream storage. Those capabilities are simply lacking in the Russian River Watershed. It is true SWRCB has appropriately regulated frost water in the Napa region in California. However, as stated over and over again in legal precedent, reasonableness is determined on a factual and case by case basis. I respectfully request that SWRCB acknowledge and respond to the many factual differences between the Napa region and the Russian River Watershed and that merely because the use of frost water in Napa was unreasonable does not mean that Russian River frost water is per se unreasonable. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards*)

Response: The proposed regulation is not based on the fact that "the use of frost water in Napa was unreasonable." As the commenter notes, there are several differences between the proposed regulation and the Napa frost regulation. The Napa frost regulation was intended to deal with the fact that there was insufficient flow during the frost season to supply the instantaneous demand of all vineyardists entitled to water. (See *People v. Forni* (1976) 54 Cal.App.3d 743) The instant proposed regulation is predicated on the fact that, as explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection in the Russian River watershed may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Also as noted in the comment, the Napa River watershed is much smaller than the Russian River watershed, and diverters for frost protection from the Napa River had greater capabilities for constructing offstream storage facilities to resolve the issue. There are also more tributaries and a larger number of smaller diverters in the Russian River watershed. It is expected that stranding mortality in the Russian River watershed can be avoided through coordination or management to reduce the cumulative instantaneous impact of frost diversions. That is why

the instant proposed regulation provides more flexibility for addressing the unique problem faced in the Russian River watershed than the Napa frost regulation did, including on-the-ground management by WDMPs, to be based on the unique circumstances faced by participants of each WDMP.

Comment 3.0.65: We are grape growers in Mendocino County and are doing something people have been doing ever since they learned to grow things, we grow wine grapes. In the 60's, 70's and 80's we frost protected with wind machines and smudge pots and were told we needed to come up with something cleaner. We slowly converted to sprinklers and they have proved to be a good choice. This is a reasonable and beneficial use. This is our life, not a hobby, so how in the world can this be construed as unreasonable use. Some years it is necessary to protect the shoots multiple times and some years as little as once or twice. (*James, John, David, and Michael Milovina*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

Comment 3.0.66: "Unreasonable Use". You have no basis for this! First of all, saving our crops from frost damage using overhead sprinklers is a "reasonable use". There is more than enough water for this, in fact a small ocean of ground water. It ironic, one agency of our government wants to install a diversion pipe line from Dry Creek to Russian River because there is too much water. You say there is not enough. Get a biologist up here to figure things out! Not a bunch of water cops driving around wasting tax payer money. It's shameful. It's stupid! As for frost protection. If your house was on fire, would you use a fire hose to put it out? Of course you would. We feel the same way about protecting our crops as you would about your house. It's not unreasonable at all. (*Jim Newsome*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The proposed regulation does not address water diversion and use for fire protection.

Comment 3.0.67: The state at this time has not met the regulatory threshold to justify such a far reaching and precedent setting statute. Please take a good hard look at the details and think about the far reaching effects rules like these could set into motion. (*Barbara Petersen*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL and CEQA.

Comment 3.0.68: So, I am urging the DWR to retain authority to disallow so called "water rights" that are, in effect, an unreasonable use of water, and as such a violation of the public trust. The way I see it, water used for frost protection is unreasonable within riparian zones recognized as critical habitat for the survival and reproduction of listed salmonids. (*Maria Potter*)

Response: Comment noted.

Comment 3.0.69: Russian Riverkeeper urges the Board to adopt the Frost Regulation without further delay. In addition, we suggest the following: The draft's framework of stating that diversions for frost protection are unreasonable unless they are undertaken in compliance with a Board-approved local water management plan makes sense. (*Kate Wilson, Russian Riverkeeper*)

Response: Comment noted.

Comment 3.0.70: The costs associated with this agricultural program to minimize fish stranding is a cost that the state bears and Water Code 13141 affirms . . . "prior to implementation of the total cost of such a program, together with an identification of potential sources of financing, shall be indicated in any regional *water* quality control plan". The costs associated with the purchase installation, operation, maintenance and interpretation of real-time data collection should be a state cost. (*T. Connick*)

Response: The proposed regulation is not an agricultural water quality control program and as such Water Code section 13141 is inapposite. Nor does section 13141 suggest that costs under that section are to be borne by the state.

Comment 3.0.71: We have been a participant in the Russian River Watershed Council group discussions as well as a participant in the Sonoma County Frost Ordinance. We believe that the Board's proposal to declare water used for frost protection (regardless of source or existing right) an "unreasonable use" is not an appropriate action to take at this time. (*John Jordan, Jordan Winery*)

Response: The State Water Board has not "declare[d] water used for frost protection (regardless of source or existing right) an 'unreasonable use'", " but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This determination is significantly narrower than that suggested by the commenter.

Not adopting the proposed regulation was considered as an alternative in the DEIR and rejected as not meeting the goals of the proposed activity.

Comment 3.0.72: Even more concerning is the fact that the proposed regulation is based upon an unprecedented and justified assertion of the Board's authority under the reasonable use doctrine, ostensibly for purposes of regulatory convenience and in order to avoid the takings clause. (*Peter Chevalier, Chevalier Vineyard Management, Inc.; Jack Cox; Robert Dempel, Dempel Ranch Vineyard; Heath Dolan, Dark Horse Vineyards; Jason Dolan, Dark Horse Vineyards; Eric Foster, Elizabeth Vineyards; S.J. Jahnke, Whistler Management, Inc.; Richard Lamalfa; Donald E. Butow, Butow Vineyards; Michael Boer, Stipp Ranch; Wendel Nicolaus, Middleridge Vineyard; Richard Schaefers, Beckstoffer Vineyards; Richard Schaefers, Mendocino Winegrape and Wine Commission; Ken and Kathe Todd, Todd Brothers Vineyards; David Beckstoffer, Beckstoffer Vineyards; Danny Piffero; Jim Lincoln, Napa County Farm*)

Bureau)

Response: In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that “we find no merit in respondents’ assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code.” (People v. Forni (1976) 54 Cal.App.3d 743, 752.)

Comment 3.0.73: Paragraph (e) of the [January 2010] proposed regulations says that, “Compliance with this section shall constitute a condition of all water right permits and licenses that authorize the diversion of water from the Russian River stream system.” It doesn’t say new permits and new licenses. This proposal cannot be legal without legislative action, and it invites litigation. These proposed regulations simply take away legitimate water rights from diverters. (*Rudolph Light; Rudolph Light*)

Response: Water Code section 1394 refers to the Board’s authority to reserve jurisdiction to amend water right permits and licenses. The Board also has continuing authority, not based on section 1394, to amend all water rights under its public trust and reasonable use authority. (See United States v. State Water Res. Control Bd. (1986) 182 Cal.App.3d 82, 130.)

The Legislature has granted the Board the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation. The Board’s permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board’s public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally Natl. Audubon Society v. Superior Court (1983) 33 Cal.3d 419.)

Comment 3.0.74: Chairman Hoppin prefaced the January 19, 2010 workshop, and said he wanted to clarify five points. Regarding the concept of “unreasonable use”, he said, “The idea that water for frost protection is an unreasonable use I find offensive, but [Division of Water Rights] staff explained this is the route we needed to go to regulate. If you’re in a group, it won’t be considered wasteful and unreasonable.” He went on to say this proposal would be limited to the Russian River Basin. At the end of the workshop, Board Member Spivy-Weber said, “I sympathize with those who are offended by the terms waste and unreasonable use, but we need them to regulate. To the ordinary person, they seem offensive, but the law says we need to use these [words] in order to make the regulations.” I am sure that all affected landowners were gratified to hear these disclaimers, but one fact remains clear: the use of water for frost protection in the Russian River Basin will be declared by law an unreasonable use between March 15 and June 1. The declaration is slightly modified by saying water may be diverted pursuant to a board approved water demand management plan, but that is a minor point. I understand that the idea is to say that water for frost protection is unreasonable only outside of a board approved water demand management program, but any program developed will still be a modification of a declaration which is a monumental change in meaning and long-standing practice. (*Rudolph Light*)

Response: The proposed regulation does not declare “the use of water for frost protection in the Russian River Basin ... an unreasonable use between March 15 and June 1,” but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless

conducted in accordance with a Board-approved water demand management program. This distinction is not “a minor point.”

As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

Comment 3.0.75: [Water Code Section 1058 provides] the Board the authority it needs to develop "reasonable rules and regulations" to set up a program just as growers did for the 2009 growing season. But, no, the Board is saying it must now take an approach to completely redefine one use and label it "unreasonable" except under very limited and vaguely defined circumstances. (*Rudolph Light*)

Response: The proposed regulation does not “completely redefine one use and label it ‘unreasonable’ except under very limited and vague circumstances,” but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. These circumstances are in fact broad and clearly defined.

Comment 3.0.76: There is no doubt that the Division of Water Rights staff proposal considers use of water for frost protection from March 15 through June 1 an unreasonable use despite Mr. Hoppin's [opening] statement [at the January 19, 2010 workshop]. Section (b) [of the January 19, 2010 draft regulation] says all diversions are significant unless the diverter can prove otherwise. That is clear enough. Any diversion (presumably to include frost protection, diversion to storage, or even municipal water) is covered, and any diversion is significant unless a diverter can prove it is not. Section (a) [of the January 19, 2010 draft regulation] says that all diversions for frost protection between March 15 and June 1 that the Board determines are significant shall be an unreasonable use of water and a violation of Section 100. It doesn't take a logician to figure out this peculiar syllogism: 1) All diversions are significant. 2) Water used for frost protection during March 15 -June 1 is an unreasonable use if its use is determined to be significant. 3) But since all water diversions at that time of year are significant, therefore water for frost protection is declared an unreasonable use. This seems to me a disingenuous way of making laws, when staff and Board resort to declaring a use unreasonable when all of you know in fact it is not only reasonable but necessary and a best management practice compared to other alternatives, e.g., wind machines and smudge pots [, per the presentation made at the November 19, 2009 workshop by Glenn McGourty, University of California Cooperative Extension viticultural expert]. This is true with or without any board approved water demand management plan. You know the proposition is false and advance it anyway. The reality is frost protection is critical to farmers growing many kinds of crops, and you are treating it as the opposite. (*Rudolph Light*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

Comment 3.0.77: During the [January 19, 2010] meeting, I was hoping staff would provide a rationale and discuss the legal basis for that assertion. No one on staff offered any reason for the need to declare water for frost protection an unreasonable use in order to regulate that use, nor did they verbally cite any statutes. After I returned home, I looked up the five references cited at the end of the proposed regulations. [Commenter cites Article X, Section 2 of the California Constitution, and Water Code sections 100, 275, 1051.5, 1200, 2000, and 1058.] It is very clear that the Constitution and Water Code Section 100 intend that water be used in a beneficial manner and not be wasted, nor used in an unreasonable way. Water use is to be limited to the amount that is beneficial. At the same time, however, those holding riparian rights cannot be deprived of the reasonable use of that water. Moreover, no appropriator of water can be deprived the use of the water if the appropriator is legally entitled to its use. Water has been lawfully used in this manner, i.e., for frost protection, for many years, with full knowledge of the Water Board. I am not an attorney, but it seems to me that as good an argument may be made that the proposed Section 740 is in direct contradiction to the Constitution and to Section 100 as to accepting the idea that water for frost protection can so easily be declared an unreasonable use. The only way this proposal can be forced into law is to say that frost protection is an unreasonable use (even though the Board and others know it is not), then apply Section 275 to permit the Water Board to take the position it must prevent waste or unreasonable use. However, this is depriving a lawfully entitled riparian user or appropriator of that user's water, whether or not there is a board approved water demand management plan. In all honesty, I can't see how this proposal would survive a challenge. Section 1058 requires that "reasonable rules and regulations" be made by the Water Board. Given the lengthy history of water for frost protection and the success of the current voluntary program, a judge may well say that the proposal is "unreasonable", especially in light of the Constitution's stricture that riparian owners and appropriators cannot be deprived of the water to which they are lawfully entitled. I hate the thought that the development of good regulations based on the current effective program that benefits salmonid migration might be waylaid by a lawsuit by water rights holders against the indefensible language of this proposal. Moreover, the issue would probably be stuck for decades in the courts. (*Rudolph Light*)

Response: As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

As the courts have already made clear, “no one can have a protectible interest in the unreasonable use of water.” (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1242.) This is likewise true with regard to the public trust. (*Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 437 [“parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust.”]; see also *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966 [“Thus, like the rule against unreasonable use, when the public trust doctrine clashes with the rule of priority, the rule of priority must yield.”]) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 3.0.78: To my simple common sense mind, it looks like the overall language is being used in order to thwart the idea and historical practice that water used for frost protection really is a beneficial use, as Chairman Hoppin [in the January 19, 2010 workshop] assured us it indeed is beneficial. It's like saying people know that water for frost protection is a beneficial use but in order to regulate that use, the Board intends to prohibit its use for frost protection during the only season of the year when frost protection is actually practiced. Yossarian faced a similar self-contradictory paradox in "Catch 22". The justification of a board approved water demand management program may well not hold up to scrutiny. (*Rudolph Light*)

Response: The requirement that all water be put to beneficial use to fullest extent to which it is capable is different and in addition to the requirement that all water diversion and use be reasonable.

Comment 3.0.79: Without explanation or support, the proposed regulation and supporting documents give the impression that the SWRCB is obligated to respond to the NMFS February 19, 2009 letter by adopting some form of prohibitive regulation. This is not true. In fact, responding to the NMFS letter with the proposed regulation is imprudent and, as indicated herein, inconsistent with the law. While the Endangered Species Act ("ESA") prohibits individuals from "taking" listed species, it does not impose upon every regulatory body an affirmative obligation to regulate every possible action of every person that could potentially violate the ESA. The ESA is a self-executing, self-standing law, complete within itself for the specific purposes that law addresses. The Board has no obligation to assume (or impose on others) a responsibility the ESA does not itself impose. While it is true that the SWRCB's own statutory charge obligates it to consider and protect instream and public trust resources on balance with all other uses, this obligation from the California Legislature does not amount to a delegation of omnibus responsibility for enforcement of the ESA. Such an assumption of responsibility is certainly not required, and in fact runs afoul of the Board's broader obligations to manage water for the general welfare by balancing various uses. The Board's zeal in the field of species protection does not permit it to abdicate these broader responsibilities in an effort to accomplish what is in effect enforcement of the ESA. (*Jack Rice, California Farm Bureau Federation*)

Response: The State Water Board relies on agencies with expertise in particular resource areas for appropriate information relating to those agencies' purviews. The Board has the

independent authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation, and is not relying on any authority any other agency may have regarding the same resources to be protected by the proposed regulation.

Comment 3.0.80: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation exceeds the SWRCB's authority. Harm to salmonids is not per se unreasonable. One of the many novel and unsupported assumptions underlying the proposed regulation is that any diversion or method of diversion that may harm salmonids or result in stranding mortality is per se an "unreasonable" method of diversion. (The two standards "may harm salmonids" and "may result in stranding mortality" are used somewhat interchangeably in the supporting documents and thus are both mentioned here.) Effectively, this assumption would establish that any possible impact to a listed species means that a water user's water use is per se "unreasonable" - at least unless and until the water user has proven their innocence by submitting to an unknown battery of costly regulatory controls on the legal exercise of any otherwise legal water right. Such novel interpretation of the "reasonable use doctrine" has no basis in existing law. (A review of the authority cited in the DEIR for this rule, *Environmental Defense Fund v. East Bay Municipal Utility District* (1980) 26 Cal. 3d 183, does not reveal any support for the assertion that conflict with species is per se unreasonable.) Under existing law, there are a number of specific and independent statutes requiring protection of species, including most prominently the ESA and California Endangered Species Act ("CESA"). However, the existence of these laws does not provide a basis for the proposition that because a water user may violate such a law in the future, a particular water use may currently be deemed unreasonable. This inappropriately attempts to merge the reasonable use doctrine with the ESA and CESA. Such a merger not only does not make sense, it is also unprecedented and inconsistent with existing law. It should be evident that a water user with a reasonable method of diversion might violate the ESA by the unauthorized "take" of a listed species. This does not mean the use is unreasonable, it just means that the water user violated the ESA. In other words, the SWRCB's public trust obligations are in no way synonymous with or defined by the ESA or CESA. (*Jack Rice, California Farm Bureau Federation*)

Response: The Board has the authority, as expressed in the Notice of Proposed Rulemaking, to adopt the proposed regulation, and is not relying on any authority any other agency may have regarding the same resources to be protected by the proposed regulation.

As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

Comment 3.0.81: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the

proposed regulation fails to balance uses. In reasonable use determinations the Board or court must consider all of the facts and balance all beneficial uses. Here, the SWRCB has conducted no substantive factual inquiry and has made no attempt to balance beneficial uses. Rather, based upon anecdotal facts and unjustified extrapolation, the proposed regulation makes a universal declaration of "unreasonableness" throughout the watershed. Such an approach is an abrogation of the SWRCB's responsibility to balance uses. (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, the Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

Comment 3.0.82: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation fails to balance uses. Relying on a vacuum of information, the proposed regulation directs all water users to participate in an as yet undefined SWRCB-approved Water Demand Management Program ("WDMP") (regardless of whether these users have any impact or not), for the purpose of establishing whatever standards are necessary to entirely eliminate any possible risk of stranding mortality (regardless of the relative causes or inevitability of such stranding). If one does not participate in such a program, the regulation imposes an absolute prohibition on any diversion of water for frost protection. While simple and ably targeted at achieving a single overriding objective, such an approach can hardly be called a proper "balancing" of uses; rather, it establishes the Board's goal of "preventing stranding" as the primary use and object of all water management throughout the watershed, to which all other uses must cede. (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, the Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

The proposed regulation is supported by adequate findings, documentation and legal authority, as required by OAL and CEQA. The evidence before the Board supports the conclusion that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program.

Comment 3.0.83: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation fails to balance uses. The fact that the obligation to "prevent stranding" - or in other words completely eliminate any risk of stranding whatsoever - sets an impossibly high standard. To ensure with 100% certainty that not a single fish could possibly be stranded due to any diversion or extraction of water for frost protection, it would likely require that diversions have absolutely no effect on stream stage. This could well mean that in many cases no water could be diverted. Taken to its absurd conclusion, this could even mean that the proposed regulation might impose on water users the obligation to augment flows to prevent any natural stranding that may occur during this period (since the objectives of the proposed regulation do not clearly distinguish between natural or diversion related stranding). Of course, there is nothing balanced or "reasonable" about such an approach, but this is nonetheless how the proposed regulation is drafted. (The Williams Selyem et al. letter and the 2000 Biological

Assessment for the Operation of Warm Springs and Coyote Valley Dams (hereinafter "2000 Biological Assessment" - a document within the SWRCB's records) provide evidence that, particularly in the spring as flows recede, stream stages drop and stranding occurs naturally. Furthermore, it is worth noting that the proposed regulation does not clearly distinguish between natural or diversion related stranding in describing the objectives of the regulation.) (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, the Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

It should be clear that the proposed regulation is intended to apply and does apply only to diversions of water, including diversions from tributaries. If natural stranding occurs, the proposed regulation does not place fault or responsibility on the frost protection diverters who are participating and complying with a Board approved WDMP or diverters exempted by the Board. However, the proposed regulation is drafted so that cumulative frost diversions do not exacerbate natural conditions that already cause stranding mortality.

Comment 3.0.84: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation fails to balance uses. To better appreciate how the proposed regulation does not properly balance uses, it may be useful to suggest what a balanced approach might look like: One scenario might be where the SWRCB, after considering whether certain diversions actually posed a threat of stranding, determined that a reasonable balancing of uses required an 80% probability that fish would not be stranded due to diversions for frost protection. (The "80%" figure is for example only.) Such an approach would afford a reasonable degree of safety for the fishery resources, without giving one use absolute preference. Without such flexibility, the obligation to attain 100% certainty is likely unattainable, unworkable, and unreasonable. (For example, the degree to which diversions must be limited or changed to go from 50% to 80% certainty of preventing stranding may be relatively low. The degree of modification required to go from 80% to 95% is likely much greater. And the degree to which water users must limit or modify diversions in order to achieve 100% certainty no stranding will occur is exponentially greater.) (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, the Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to "consider in detail each and every

conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.)

Comment 3.0.85: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation is contrary to due process. It is impossible to know from the information presented with the proposed regulation what actual obligations the standards of a Board-approved WDMP might require, but then it is equally impossible to know from the information presented whether there is in fact any widespread risk of stranding in the watershed. This reinforces the point made below that the SWRCB cannot support a declaration of unreasonableness without conducting a thorough factual investigation in the context of a formal evidentiary hearing. To clarify, upon completing the proper factual investigation in an appropriate process, the SWRCB might indeed conclude a particular diversion or method of diversion is unreasonable in light of all the facts (including its effect on species). However, the SWRCB may not cut corners and arrive at such a result prematurely and improperly by means of a regulation that circumvents due process and avoids all of the necessary factual antecedents for a determination of "reasonableness." The proposed regulation impermissibly places its entire emphasis on theoretical potential to pose some threat to species without any consideration of the relative burden to the water right holders or any actual benefit to the species. (*Jack Rice, California Farm Bureau Federation*)

Response: The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Contrary to the assertions of the commenter, the proposed regulation provides adequate information regarding the requirements for a Board-approved WDMP.

Based on the information before the Board, after significant notice and opportunity to comment on the proposed regulation and present evidence, the State Water Board determined that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. The Board did not “cut corners” in arriving at this conclusion, but complied with all requirements of CEQA and the APA.

The Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

Comment 3.0.86: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, there is no evidence to support inclusion of groundwater extraction in the regulation. Another unsupported component of the proposed regulation is that it would apply to all groundwater extractions within the basin. However, there is no evidence in the record to demonstrate that groundwater extractions have the sort of instantaneous effect on stream flow that a direct diversion might have. In fact, there is evidence to the contrary that groundwater extractions,

even if hydraulically connected, have a buffered effect on streamflow. (See the Williams Selyem et al. letter.) Furthermore, since the only evidence of stranding is allegedly connected to direct diversions, there is therefore absolutely no justification for extending the regulation to groundwater. This expansion is particularly unjustified in light of the SWRCB's obligation to review the facts and circumstances of each case when making a reasonable use determination. (*Jack Rice, California Farm Bureau Federation*)

Response: As described in the Initial Statement of Reasons, the proposed regulation applies to hydraulically connected groundwater because groundwater pumping can contribute to a cumulative reduction in stream stage during a frost event. Even though the impacts of groundwater pumping on surface flows are not necessarily instantaneous, delayed impacts could still result in reduced stream stage, and the Board believes that it is appropriate, and there is adequate evidence in the record, to include hydraulically connected groundwater pumping in the proposed regulation. Hydraulically connected groundwater pumping that does not contribute to a cumulative reduction in stream stage to any surface stream in the Russian River watershed during the frost season may be exempted per the terms of the proposed regulation.

Comment 3.0.87: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation exceeds the SWRCB's authority and is contrary to due process. The most troubling aspect of the proposed regulation is the manner in which the SWRCB is proposing to exercise its authorities under the reasonable use doctrine. In the name of administrative convenience, the proposed regulation radically breaks with all past precedent relating to the reasonable use doctrine and its application to water rights and water use in California. A determination as to whether a particular diversion or method of diversion is reasonable or unreasonable is a judicial function. This becomes clear when one considers that: 1) both courts and the SWRCB have concurrent jurisdiction over reasonable use determinations (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 451); 2) "courts, including *Joslin [v. Marin Municipal Water District]* (1967) 67 Cal. 2d 132] have uniformly determined that reasonableness is a question of fact requiring case-by case consideration of the circumstances in each case. (*Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist.* (1935) 3 Cal. 2d 489, 567)" (*California Water II*, page 48); and 3) a declaration of unreasonableness affects a constitutionally protected property right by limiting, conditioning, or even extinguishing the underlying water rights (*Imperial Irrigation District v State Water Resources Control Board* (1990) 225 Cal. App. 3d 548, 562). In *State Water Resources Control Board v. Forni* (1976) 54 Cal. App. 3d 743 ("Forni") - a case upon which the SWRCB relies heavily - a regulation similar to the proposed rule was upheld not as an actual declaration of reasonableness, but rather as a mere policy statement which left the ultimate adjudication of reasonableness to the judiciary. (*People ex rei. State Water Resources Control Bd. v. Forni* (1976) 54 Cal.AppJd 743, 752.) Thus, the *Forni* case, *Imperial Irrigation District v State Water Resources Control Board* (1990) 225 Cal. App. 3d 548, and a long and venerable line of earlier cases leave no doubt but that determining reasonableness is a judicial function that may be done by courts or the SWRCB, but only through a judicial or quasi-judicial process on a case-by-case basis. In fact, the proper approach is outlined at California Code of Regulations title 23, § 4000 et seq. in the Board's own regulations relating to the "Prevention of Waste, Unreasonable Use or Diversion of Water." Although the SWRCB may not be obligated to precisely follow these regulations, any procedure followed by the Board must preserve the basic due process guarantees that are reflected in these regulations. In other words, even if the SWRCB need not follow the precise letter of its

own regulations, it must provide some comparable process to ensure the same substantive protections of due process. The mere fact that the proposed regulation is to be generally and prospectively applied does not mean that the SWRCB is therefore enabled to transform into a quasi-legislative function what is necessarily a quasi-judicial function. Nonetheless, the Board apparently seeks to accomplish just such a transformation in the name of administrative convenience. (Draft Initial Statement of Reasons, p. 3: "Without a comprehensive regulation, the State Water Resources Control Board would have to address diversions piecemeal, or in a complex and time consuming adjudicative proceeding, as described below.") However, "administrative efficiency at the expense of due process is not permissible. (Manufactured Home Communities, Inc. v County of San Luis Obispo (2008) 167 Cal.App.4th 705, 715.) Simply put, the SWRCB cannot follow a regulatory process to do what must be done through an adjudicatory process. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Jack Rice, California Farm Bureau Federation*)

Response: The cases cited by the commenter do not espouse either of the commenter's conclusions - that the "proposed regulation radically breaks with all past precedent relating to the reasonable use doctrine" and that "a determination as to whether a particular diversion or method of diversion is reasonable or unreasonable is a judicial function." In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that "we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code." (*People v. Forni* (1976) 54 Cal.App.3d 743, 752.)

Furthermore, contrary to the assertions of the commenter, the Board has based its determination of unreasonableness on the facts and circumstances of this case. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

As cited in *Imperial Irrigation District v State Water Resources Control Board* (1990) 225 Cal. App. 3d 548, cited by the commenter, "It has been long established that all property is held subject to the reasonable exercise of the police power and that constitutional provisions declaring that property shall not be taken without due process of law have no application in such cases." (*Gin S. Chow v. City of Santa Barbara* (1933) 217 Cal. 673, 703.) The proposed regulation does not deny any diverters a "constitutionally protected property right." As the courts have already made clear, "no one can have a protectible interest in the unreasonable use of water." (*City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1242.) This is likewise true with regard to the public trust. (*Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 437 ["parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust."]);

see also *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966 ["Thus, like the rule against unreasonable use, when the public trust doctrine clashes with the rule of priority, the rule of priority must yield."])

The Board has complied with all legal requirements for adopting the proposed regulation. California Code of Regulations, title 23, Division 5 does not limit or constrain the authority of the Board to take necessary action to prevent the misuse of water. (See Cal. Code Regs, tit. 23, § 4007.)

The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Comment 3.0.88: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation is inconsistent with due process. The SWRCB's authority to implement the reasonable use doctrine is both more powerful and more limited than its general regulatory authority. As the Board is well aware, there is legally no right to use water "unreasonably." Consequently, by declaring all diversions for frost protection "unreasonable," the proposed regulation would have the extraordinary effect of eliminating all water rights for frost protection unless and until the water users demonstrate compliance with certain as yet undefined procedural obligations. This means that regardless of whether such diversions are "unreasonable" in fact, the proposed regulation would nonetheless impair vested water rights by declaring all diversions for frost protection "unreasonable" as a matter of administrative convenience. Thus, the proposed regulation would essentially create a new and unprecedented category of procedural unreasonableness. In so doing, the proposed regulation enters into direct conflict with fundamental due process requirements guaranteed under the United States and California Constitutions, and protected by the Civil Rights Act at 42 U.S.C. section 1983. If adopted, the proposed regulation will be contrary to the Constitution and inconsistent with due process because: it would impair a constitutionally protected property right; it would impose a procedural obligation on legal water users through a regulatory (quasilegisative) process even though the obligation here is properly an evidentiary one to be met by the Board through an adjudicatory (quasi-judicial) process; it lacks adequate factual support; it fails to provide clear standards for compliance; it applies indiscriminately to all diversions for frost protection whether or not there is any demonstrable risk of actual harm to salmonids; and it amends water rights without following the proper water rights procedures. (*Jack Rice, California Farm Bureau Federation*)

Response: The proposed regulation does not "eliminat[e] all water rights for frost protection unless and until the water users demonstrate compliance with certain as yet undefined procedural obligations," but has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management plan. Contrary to the assertions of the commenter, the proposed regulation provides adequate information regarding the requirements for a Board-approved WDMP.

The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Contrary to the assertions of the commenter, there is no legal requirement that questions of reasonable beneficial use are necessarily “to be determined in judicial proceedings.” In response to the State Water Board adopting a similar regulation to apply to the Napa River watershed the California Court of Appeal, First DCA, held that “we find no merit in respondents’ assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code.” (People v. Forni (1976) 54 Cal.App.3d 743, 752.)

The Board has based its determination of unreasonableness on the facts and circumstances of this case. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

Furthermore, the proposed regulation does not deny any diverters a “constitutionally protected property right.” As the courts have already made clear, “no one can have a protectible interest in the unreasonable use of water.” (City of Barstow v. Mojave Water Agency (2000) 23 Cal.4th 1224, 1242.) This is likewise true with regard to the public trust. (Natl. Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 437 [“parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust.”]; see also El Dorado Irrigation District v. State Water Resources Control Board (2006) 142 Cal.App.4th 937, 966 [“Thus, like the rule against unreasonable use, when the public trust doctrine clashes with the rule of priority, the rule of priority must yield.”])

Comment 3.0.89: The supporting documents point to the Napa River as an example of “regulatory precedent.” However, as detailed below, this reference is misleading and any reliance is misplaced. An in-depth analysis of the Napa River situation, particularly the regulation and the First Appellate District case of State Water Resources Control Board v. Forni, (People ex rei. State Water Resources Control Bd. v. Forni (1976) 54 Cal. App. 3d 743.) reveals that the proposed regulation shares nothing more than a superficial similarity with the Napa River example. This superficial similarity does include a similar problem, that of “high instantaneous demand for water for frost protection by numerous vineyardists;” (Cal. Code of Regs., tit. 23, § 735.) and like the proposed regulation, the Napa River regulations did declare certain “diversions of water” for frost protection between March 15 and May 15 to be “unreasonable in violation of Water Code section 100.” However, the similarity ends with these simple and incomplete facts. The difference between the Napa River regulation and the proposed regulation is that under the Napa River regulation the SWRCB properly left to an adjudicatory process the ultimate factual determination as to which individual diversions would be actually ruled unreasonable. Thus, before the Board could in fact apply its rule to any

diversion in the watershed, the Board correctly recognized that it first had to obtain a judicial or adjudicatory determination as to the "reasonableness" of each diversion in the watershed. [Commenter included a review of the legal question at issue in Forni.] In addition to these fundamental legal and procedural distinctions, the Napa situation of the 1970s and the present-day Russian River situation can be factually distinguished as well. First of all, the facts of the former case suggest that instantaneous demand for frost protection in the Napa Valley was at times actually "drying up the river." By contrast, in the Russian River Valley drawdown from instantaneous demand for frost protection at the time of the only partially documented incident of fish stranding in 2008 involves a rate of decline of less than 1.5 centimeters per hour - and at no time is there any evidence to suggest that flows in the Russian River as a consequence of frost protection ever come anywhere even close to "drying up." Second, in the Napa Valley the effect of instantaneous demand was an obvious infringement on vested water rights; certain diverters in the watershed were at times completely deprived of their water supply. Thus, in Napa, the precise magnitude and location of such impacts were obvious, as was the cause. All of this was known and clearly documented as the result of an extensive adjudicatory proceeding. In contrast, the proposed regulation is based solely on outdated (see discussion regarding improvements already made) anecdotal observations and unjustified extrapolations. There is very little, if any, factual information to document the precise nature or magnitude of any adverse impacts, or to establish any causal link between stranding and frost protection. Even if such a declaration were factually justified, however, the ultimate determination as to which, if any, of all the hundreds of diversions in the Russian River watershed are "unreasonable," and which are "reasonable," is necessarily an adjudicatory determination that can only be reached by means of an appropriate proceeding before the Board or a court. Thus, contrary to the assertion in the Board's rulemaking, neither the Napa River regulations nor the Forni case provide support for the Board's current approach. For that matter, neither does any other water right proceeding of the Board or any decision yet issued by the courts. (*Jack Rice, California Farm Bureau Federation*)

Response: The commenter appears to be misreading *People v. Forni* (1976) 54 Cal.App.3d 743, missing several important points. Primarily, the commenter seems to be reading that case as having considered the current version of the Napa regulation, California Code of Regulations, title 23, section 735, when the court actually considered a different version of the regulation, which stated, similar to the proposed regulation for the Russian River watershed, "diversion of water from the Napa River after March 15 for frost protection except to replenish water stored in reservoirs prior to March 15 is an unreasonable method of diversion...." (*People v. Forni* (1976) 54 Cal.App.3d 743, 752, citing former Cal. Code Regs, tit. 23, § 659.) The fact that the State Water Board may have construed and later amended that regulation to "[leave] to an adjudicatory process the ultimate factual determination as to which individual diversions would be actually ruled unreasonable" does not constrain the Board's authority being exercised in the present case. Importantly, the court upheld the Board's exercise of its authority in enacting the former version of the regulation in that case. (*Id.*)

The commenter's quoted language from that case does not support the commenter's conclusion that "the question of 'unreasonable use' as applied to an individual water right, cannot be determined in any way other than through a judicial or quasi-judicial administrative inquiry into the factual specifics of each case," because neither the current situation or the situation addressed in *People v. Forni*, are determinations of "an individual water right." Furthermore, the cited language expresses only a limitation by the court as to the scope of the ruling and not a limitation as to the authority of the Board. (*Id.* at 754, ["the question of reasonable use or reasonable method of use of water constitutes a factual issue which cannot be properly resolved by a motion for judgment on the pleadings."]) In response to the State

Water Board adopting the Napa River regulation, the court “[found] no merit in respondents’ assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code.” (Id. at 752.)

As to the factual distinctions between the proposed regulation and the Napa River regulation, those differences are why the instant proposed regulation provides more flexibility for addressing the unique problem faced in the Russian River watershed than the Napa frost regulation did, including on-the-ground management by WDMPs, to be based on the unique circumstances faced by participants of each WDMP.

The proposed regulation is supported by adequate findings and documentation, as required by OAL and CEQA.

Comment 3.0.90: The proposed regulation would, for the first time, create a category of "procedural unreasonableness." Reasonable use determinations have in the past always required a case-by-case, factual analysis of the particular physical conditions involved in each situation. In a normal proceeding, the end result is a fact-specific determination as to whether a particular diversion or method of diversion is in fact physically unreasonable in light of all of the relevant facts. In contrast, the proposed regulation suggests that a use can be deemed unreasonable without any evidence of an actual physical conflict, but rather merely because that diversion is not operated "in accordance with a board approved water demand management program (WDMP)." The WDMP is then obliged to perform a number of strictly procedural tasks including determining whether or not the diversion actually has any physical "potential ... to cause stranding mortality." If so, the WDMP is supposed to then identify corrective actions "that will prevent stranding mortality," or "cease diverting water for frost protection." (Note: It is not clear from the regulation whether the obligation to "prevent stranding mortality" is limited in any way or if the obligation includes preventing any natural occurrences of stranding that may happen as well.) While perhaps elegant in its simplicity, this approach is fatally flawed in that it completely ignores the fact that Constitutional obligation to use water reasonably is a physical obligation, depending on the facts in each case, and not a procedural requirement. [Commenter provided two hypothetical scenarios that could occur under the proposed regulation. Scenario 1 may result in situations in which water users' diversions might be physically and factually reasonable, but procedurally unreasonable. Scenario 2 may result in the water users' right to use water being artificially limited, constrained, or regulated away without any factual basis or evidentiary support for doing so.] The point of these hypothetical scenarios is to demonstrate that the proposed regulation simply may not rely on the reasonable use doctrine in the manner suggested in the proposed regulation. The situation simply does not justify the creation of a new category of "procedural unreasonableness," even if such an approach were legal. In point of fact, the Board's proposed approach is not merely unjustified and itself "unreasonable," it is contrary to the law. (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, the Board has based its determination of unreasonableness on the facts and circumstances of this case. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has

determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program.

It should be clear that the proposed regulation is intended to apply and does apply only to diversions of water, including diversions from tributaries. If natural stranding occurs, the proposed regulation does not place fault or responsibility on the frost protection diverters who are participating and complying with a Board approved WDMP or diverters exempted by the Board. However, the proposed regulation is drafted so that cumulative frost diversions do not exacerbate natural conditions that already cause stranding mortality.

The Board can and has asserted the reasonable use doctrine in the manner suggested by the proposed regulation. (See *People v. Forni* (1976) 54 Cal.App.3d 743, 752, ["we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code."])

Comment 3.0.91: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation exceeds the SWRCB's authority and is contrary to due process. While it is clear the SWRCB has some authority over pre-1914, riparian, and groundwater rights, this authority is not coextensive with the Board's authority over post-1914 appropriative water rights. While the SWRCB may alter or modify post-1914 appropriative rights through various mechanisms provided for in the Water Code, this same regulatory authority does not extend to the pre-1914, riparian, and groundwater rights. Rather, the SWRCB's authority over those water rights is more limited. While in the exercise of certain quasi-judicial functions, the SWRCB, like the courts, may make certain determinations regarding pre-1914, riparian, and groundwater rights (including, specifically, a determination that a particular diversion, method of diversion, or method of use is "unreasonable" in light of the particular facts of each case), the SWRCB does not have the same authority to exercise quasi-legislative authority over pre-1914, riparian, and groundwater rights that it might be empowered to do in regards to post-1914 appropriative rights. (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, there is no legal requirement that questions of reasonable beneficial use are necessarily to be determined in quasi-judicial proceedings. The Board can and has asserted the reasonable use doctrine in the manner suggested by the proposed regulation. (See *People v. Forni* (1976) 54 Cal.App.3d 743, 752, ["we find no merit in respondents' assertion that the Board has exceeded its authority by declaring in section 659 that the direct diversion of water in the frost period constitutes an unreasonable use within the meaning of the Constitution and Water Code."])

Water Code section 1394 refers to the Board's authority to reserve jurisdiction to amend water right permits and licenses. The Board also has continuing authority, not based on section 1394, to amend all water rights under its public trust and reasonable use authority. (See *United States v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82, 130.)

The Legislature has granted the Board the authority, as expressed in the Notice of Proposed

Rulemaking, to adopt the proposed regulation. The Board's permitting authority over water rights issued subsequent to December 1914 should not be confused with the Board's public trust and reasonable use authorities, which extend to all water diversion and use in the state. (See generally *Natl. Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.)

Comment 3.0.92: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation exceeds the SWRCB's authority and is contrary to due process. Although the SWRCB does have its most expansive authority over post-1914 appropriative water rights, this authority is by no means unlimited. The proposed regulation purports to amend every license and permit issued in the area subject to the proposed regulation without any due process, including the statutorily required proceedings for amending a water right which require notice, a hearing, presentation of evidence, cross-examination, and other procedural safeguards. Here, the Board is in effect proposing to amend hundreds of individual water rights licenses and permits without providing any of the statutory due process protections it must provide for such a purpose. (*Jack Rice, California Farm Bureau Federation*)

Response: Water Code section 1394 refers to the Board's authority to reserve jurisdiction to amend water right permits and licenses. The Board also has continuing authority, not based on section 1394, to amend all water rights under its public trust and reasonable use authority. (See *United States v. State Water Res. Control Bd.* (1986) 182 Cal.App.3d 82, 130.)

The Board has complied with all requirements of CEQA and the APA. All parties have had significant notice and opportunity to comment on the proposed regulation and present evidence prior to the Board holding its hearing. There has already been ample opportunity for meaningful discussion on the proposed regulation, and all evidence has been adequately available for public scrutiny.

Comment 3.0.93: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation exceeds the SWRCB's authority and is contrary to due process. In addition to its failure to balance competing uses, the proposed regulation fails to appropriately consider water right priorities. In declaring all diversions "unreasonable" without distinction, the Board's rule makes absolutely no attempt to allocate any responsibility for mitigating the effects of water diversions among different classes of water users. Thus, riparians are treated the same as appropriators, and senior appropriators the same as junior ones. Like the novel attempt to designate all uses of water "unreasonable" without any appropriate due process protections or consideration of the facts, this complete disdain for water rights priorities represents a radical departure from all prior precedent and, we believe, is inconsistent with the law. (*Jack Rice, California Farm Bureau Federation*)

Response: Contrary to the assertions of the commenter, the Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation.

Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs. As stated previously, "when the rule of priority clashes with the rule against unreasonable use of water,

the latter must prevail.” The Board will, however, in approving WDMPs, exercise “every effort ... to respect and enforce the rule of priority.” (El Dorado Irrigation District v. State Water Resources Control Board (2006) 142 Cal.App.4th 937, 966.)

Comment 3.0.94: While Farm Bureau remains committed to supporting efforts that make real world improvements to benefit fish and farmers, the proposed regulation is unnecessary, unjustified, and exceeds the SWRCB's authority. As the following comment explains, the proposed regulation exceeds the SWRCB's authority and is contrary to due process. The proposed regulation improperly shifts the burden of proof. It is a longstanding presumption that a use is reasonable, particularly if it is a typical use in the area, and that the burden is on the party challenging the use to demonstrate unreasonableness. (Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist. (1935) 3 Cal. 2d 489, 547-548.) Here, the Board's proposed regulation reverses this burden of proof, establishing an assumption that all diversions for frost protection are per se "unreasonable," and shifting to the water users the burden of proving otherwise. Even stranger is that even if subsequently proven innocent, the water user is still apparently obligated to participate in the WDMP or risk prosecution. (*Jack Rice, California Farm Bureau Federation*)

Response: The Board has based its determination of unreasonableness on the facts and circumstances of this case. As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management program to reduce their instantaneous impact. Therefore, the proposed regulation deems diversions for frost protection during the enumerated period, in the enumerated geographic area, unreasonable unless conducted in accordance with a Board-approved water demand management program. The commenter does not explain how this process runs afoul of Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist. (1935) 3 Cal. 2d 489, which was, in effect, an action by one appropriator to quiet the title of a prior appropriator. (Id. at 548.)

The commenter appears to be misreading the proposed regulation. Pursuant to subdivision (d) of the proposed regulation, as clarified in response to comments received, a diverter who demonstrates to the satisfaction of the Board that his or her groundwater pumping does not contribute to a cumulative reduction in stream stage to any surface stream in the Russian River watershed during any single frost event is exempt from the regulation.

Comment 3.0.95: Last but not least, the use of the wording "unreasonable use of water for frost protection" is totally unacceptable because it sets precedent on land rights. (*Allan Nelson*)

Response: Contrary to the assertions of the commenter, the declaration of unreasonableness is necessary to ensure the efficacy of the regulation. The proposed regulation neither sets precedent nor affects land rights.

Comment 3.0.96: Obviously the use of water to protect vineyards from frost was not thought of as unreasonable 40 years ago, The question of whether the practice is harmful to the community today has not been answered. But it is hard to see how taking the historic right to use water in this way is not "taking." (*Stephen Hawkes*)

Response: What constitutes reasonable use of water depends on current circumstances and varies as the current situation changes. (See *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.* (1980) 26 Cal.3d 183, 194.)

The proposed regulation does not “take” any vested property right.” The Supreme Court has held that there can be no taking where an owner’s use of a right is already restricted by background principle of property law. (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1002, 1029.) Both the public trust and the prohibition against unreasonable use inhere in all water rights. (See *El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.) Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 3.0.97: It's not clear that we are all working on the same problem. Out in the parking lot, after several meetings, I have heard it observed that this issue is not after all, about "the fish". If this is a matter of water law, or establishment of useful legal precedence, then legal help is advisable and we need to participate in pursuit of equitable solutions. It should be understood however, that if the issue is fish, the courtroom is not where the important work needs to be done (*Richard Schaefers, Mendocino Vineyard Company*)

Response: Comment noted.

Comment 3.0.98: Russian River Frost Regulation Draft EIR, 3.1 Background (page 11)- This section references the regulatory context of Decision 1610 but fails to mention that this existing regulatory mechanism was violated on multiple days during the events of 2008 and the SWRCB did nothing to enforce this existing regulation. If the SWRCB is not utilizing its current regulatory authority, it is difficult to understand the "need" for additional regulatory authority. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: Additional regulation of releases of water from Lakes Mendocino and Sonoma was not considered as an alternative as this approach would not meet the goals of the proposed activity. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Warm Springs and Coyote Dams cannot physically or operationally provide water to the Russian River tributaries, and therefore releases from those dams cannot effectuate the goals of the proposed action in those areas. In addition, according to USGS Station 11462500, Russian River near Hopland, gage data, SCWA was in full compliance with its bypass flow requirements at the time of one of the fish strandings reported by NOAA, and was in compliance with its instream flow requirements immediately preceding the other fish stranding reported by NOAA, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. The information gathered by the WDMPs will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

Comment 3.0.99: On at least equal footing with the enormous use of fresh water supplies for frost protection activities, numerous other beneficial uses of the state's water exist. The proposed regulation, however only affirms the beneficial use of water for frost protection of crops. In order to avoid any confusion as to the relative importance of all beneficial uses, and if such a statement as to the beneficial uses of water for frost protection is to be included in this regulation, so must all other relevant beneficial uses. Other beneficial uses expressly called out in the California Code of Regulations are rare and endangered species habitat, wildlife habitat, fish spawning, cold-water habitat, and fish migration among several other beneficial uses applicable to anadromous fish species. (*Kimberly Burr, Northern California River Watch*)

Response: Reference in the proposed regulation to California Code of Regulation, title 23, section 671, does not affect the efficacy of other prior regulatory enunciations of beneficial uses in California Code of Regulation, title 23, Chapter 2, Article 2, Subarticle 2.

Comment 3.0.100: In addition to the junior yielding to the rights of the senior right holder, a senior right holder "cannot be compelled to incur any material expense in order to accommodate the [junior] appropriator." (*City of Lodi v. East Bay Municipal Utility District (1936) 7 Cal. 2d 316, 341, 60 P.2d 439.*) Yet the regulation will be doing exactly this when it forces senior water right holders to join and participate in a "water demand management program," install meters, and otherwise subject themselves to regulation to which juniors will not be subject. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: As stated previously, "when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail." The Board will, however, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority." (*El Dorado Irrigation District v. State Water Resources Control Board (2006) 142 Cal.App.4th 937, 966.*)

Comment 3.0.101: The draft regulation the SWRCB proposes to adopt suffers from legal and practical flaws. Specifically, this regulation exceeds the SWRCB's jurisdiction and authority. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 3.0.102: There are a number of different water rights of different priorities within the Russian River watershed. The [January 2010] regulation treats them all the same, without regard to priority. This the SWRCB cannot do. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here. It should be noted, however, that "when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail." The Board will, however, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority." (*El Dorado Irrigation District v. State Water Resources Control Board (2006) 142 Cal.App.4th 937, 966.*)

Comment 3.0.103: It is difficult to comment on the "project" description of [the October 27, 2010 Notice of Preparation] because the draft regulation (i.e. the "project") is not included in the description. If the SWRCB plans on describing the environmental impact of the proposed regulation, it would be helpful to include the actual language of the regulation. Otherwise, any examination of the proposed regulation will be illusory. Nevertheless, based upon the general description that is included in this section, and the draft regulation that was circulated in January 2010, it is unclear why the SWRCB is limiting the effect of the regulation to those that divert water for frost protection. If the problem is truly as widespread as the SWRCB believes, all diversions of water for all purposes should be included in the regulation. Otherwise, the SWRCB is ignoring other perhaps more significant diversions, and violating the rule of priority, thereby making more water available for other possibly junior uses, including domestic, irrigation, municipal, and industrial. The effect of not encompassing all water uses in the regulation is that the SWRCB is more accurately attempting to regulate an industry, agriculture (including grape growing), rather than attempting to regulate water use. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Diversions of water for uses other than frost protection are not understood to cause the rapid decrease in water levels that can cause stranding mortality of salmonids.

As stated previously, "when the rule of priority clashes with the rule against unreasonable use of water, the latter must prevail." The Board will, however, in approving WDMPs, exercise "every effort ... to respect and enforce the rule of priority." (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.)

Comment 3.0.104: As a threshold matter, the SWRCB has not fulfilled the prerequisites for enacting a reasonable use regulation pursuant to Water Code section 100 and Article X, Section 2 of the California Constitution. The SWRCB has not made the necessary factual and legal findings to conclude that water use for frost protection in the Russian River watershed is an unreasonable use of water unless managed in accordance with a water demand management plan. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the proposed regulation is supported by adequate findings and documentation, as required by OAL and CEQA.

4.0 Rulemaking Process / Regulation Approach

Comment 4.0.1: In order to survive a legal challenge, this regulation, among other things, must: (a) disclose the fact that this regulation will have a significant, statewide adverse economic impact directly affecting business, (b) disclose that this impact will impair California

businesses' ability to compete with businesses in other states, (c) disclose all the businesses that will be affected by the regulation (e.g. wineries, growers, management companies, labor, hotels, restaurants, etc.), (d) disclose all of the monitoring and reporting the SWRCB will be imposing on the grape growers, and (e) disclose all the costs that a private person or business would incur in complying with this regulation. (Government Code section 11350, 11346.5 (a)) The SWRCB appears to have disclosed (a) and (b), but not (c), (d), or (e). Based upon what has been written above, the SWRCB needs to go back and disclose the real impact on businesses, disclose more of the monitoring obligations and costs, and disclose more accurate estimates of the costs individuals and businesses can expect to pay under this regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: These factors have either already been disclosed in the Draft EIR or are not required to be individually evaluated under existing law.

Comment 4.0.2: The SWRCB must consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. (Govt Code Section 11346.5 (a) (13)). As has been outlined on the previous pages, there are many alternatives that can reduce these costs. The most prudent approach in light of all the evidence would be for the SWRCB to back away from the regulation and allow the counties and the local growers to manage the watershed. With the Endangered Species Act looming in the background, there is no incentive for a frost water user to create or maintain a conflict with a special status species. The Federal ESA enforcement proceeding on Felta Creek is incentive enough to work together and avoid any conflicts. As discussed above, Sonoma County already has a program in place and if the SWRCB would let it proceed, a similar program could be developed in Mendocino County if necessary. Neither county is interested in this regulation and the impacts it will create. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This was not considered as an alternative as this approach would not meet the goals of the proposed activity.

Comment 4.0.3: The SWRCB must consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. (Govt Code Section 11346.5 (a) (13)). As has been outlined on the previous pages, there are many alternatives that can reduce these costs. There would be cost savings by exempting those who pump from wells - underflow or percolating. Groundwater pumping attenuates any possible direct impact on river flows or stage by supplying the water from the underground aquifer. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Exempting groundwater pumping without a showing that such pumping is not hydraulically connected to surface flows would undermine the effectiveness of the regulation as the regulation is necessary to address the cumulative impacts of pumping for frost protection in

a comprehensive manner. Pumped groundwater that is not hydraulically connected to a surface stream may be exempted from the regulation per the terms of the proposed regulation.

Comment 4.0.4: The SWRCB must consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. (Govt Code Section 11346.5 (a) (13)). As has been outlined on the previous pages, there are many alternatives that can reduce these costs. If the regulation must stay, there would be significant cost savings by exempting growers on: (1) Dry Creek below Warm Springs Dam because it is highly regulated due to releases from Lake Sonoma and there has been no evidence to suggest diversions on this creek impair salmonid habitat. (2) The mainstem below Coyote Dam because it too is highly regulated from releases from Lake Mendocino and there has been no evidence to suggest diversions below the dam currently impair salmonid habitat. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This was not considered as an alternative as this approach would not meet the goals of the proposed activity. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection. Warm Springs Dam and Coyote Dam cannot physically or operationally mitigate for the effects of instantaneous demand.

Comment 4.0.5: The SWRCB must consider alternatives that reduce or exempt the monitoring and reporting impacts on businesses and private persons. (Govt Code Section 11346.5 (a) (13)). As has been outlined on the previous pages, there are many alternatives that can reduce these costs. If the SWRCB is concerned that diverting directly from the main stem or Dry Creek may still create a drop in river stage, it could exempt growers on the main stem Russian River and Dry Creek who also pump from wells. This adds an extra layer of protection. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Exempting groundwater pumping without a showing that such pumping is not hydraulically connected to surface flows would undermine the effectiveness of the regulation as the regulation is necessary to address the cumulative impacts of pumping for frost protection in a comprehensive manner. Pumped groundwater that is not hydraulically connected to a surface stream may be exempted from the regulation per the terms of the proposed regulation.

Comment 4.0.6: Should the Board implement this proposed regulation the unreasonable use of water regulation needs to be eliminated. (*Don and Joe Guadagni, Guadagni Brothers Welding*)

Response: This was not considered as an alternative as this approach would not meet the goals of the proposed activity.

Comment 4.0.7: In order to adopt this regulation, the SWRCB must find that the regulation is legally "necessary" as per Government Code section 11350 and the Office of Administrative

Law (OAL) must agree with the SWRCB's determination as per Government Code section 11349.1. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The proposed regulation is supported by adequate findings and documentation, as required by OAL.

Comment 4.0.8: This regulation also exceeds the SWRCB's regulatory authority. Government Code section 11346.3 provides: " (c) No administrative regulation adopted on or after January 1, 1993, that requires a report shall apply to businesses, unless the state agency adopting the regulation makes a finding that it is necessary for the health, safety, or welfare of the people of the state that the regulation apply to businesses." The last sentence of section (a) of the SWRCB's [January 2010] draft regulation provides: "In addition, the program shall include, for the March 15 through June 1 period, monitoring and reporting to the individual or governing body responsible for administering the program, and to the board of (1) instantaneous water diversion rates for each water diversion that the board has determined to be significant and (2) flows in the Russian River mainstem and any tributaries that support anadromous fish. The program shall provide for the transmission of monitoring data, in an appropriate format, not less than hourly, to an internet site accessible to the board." Many of those who will be regulated under the SWRCB's regulation will be businesses. While the SWRCB may be able to declare the regulation is necessary for the health, safety, or welfare of the people of this state, this does not necessarily make it so. If anything, this regulation is so incredibly oppressive and expensive (see below) that all the evidence shows this regulation will jeopardize the health, safety, and welfare of the people of the Russian River Valley. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: Consistent with Government Code section 11346.3, the Board has found the regulation to be necessary for the health, safety or welfare of the people of the state.

Comment 4.0.9: The administrative record lacks the factual and legal basis necessary to adopt and implement the proposed regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation is supported by adequate findings and documentation, as required by OAL.

Comment 4.0.10: The SWRCB is unable to meet the findings that will be necessary for the regulation to pass OAL review and survive legal challenge. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation is supported by adequate findings and documentation, as required by OAL.

5.0 Collaborative Approaches

Comment 5.0.1: The Mendocino County BOS has been mystified by the failure of your Board and other regulatory agencies, principally the National Marine Fisheries Service (NMFS) to acknowledge the URSA led efforts that have resulted in enhanced data, effective flow management protocols and newly constructed off-stream storage for frost protection that offsets the need for 90 cubic feet per second (cfs) of direct diversion while the greatest flow deviation recorded in 2008 was 83 cfs. The problems observed in 2008 on the upper main stem of the Russian River have been successfully resolved and URSA has proposed protocols to assure continued compliance with the Endangered Species Act. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District; Kendall Smith, County of Mendocino; Rudolph Light*)

Response: Board staff publicly recognized the achievements of the Upper Russian Stewardship Alliance (URSA) led program at the Board Workshop in April 2011. The Board recognizes and commends the successes to date of URSA. However, we agree with NMFS and believe that while these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. The accomplishments to date may have reduced the impacts of the frost diversion that led to the occurrence in 2008 on the mainstem Russian River, however these same steps have not been taken to prevent potential standings elsewhere in the Russian River watershed.

Comment 5.0.2: I am a Sonoma County 3rd generation farmer in Alexander Valley. I have been on my property since 1948. Since my family owned this land, it has been in prunes, grape nursery rootings and now grapes. I'm not opposing a frost water regulation, but I do want it to be correct as possible the first time around. I'm requesting that you continue working with us as we are breaking our fannies to work and educate you on what's really happening in our area. We have fulfilled the board's request to achieve grower participation with a county ordinance. This was a huge task and many of us have spent endless hours getting farmers registered and willing to participate. It will educate growers, correct or have the regulatory agencies deal with diverters that are de-watering tributaries We are organizing, educating, monitoring, working with regulators and sharing our information all at our own expense even though 90% of grape growers in Sonoma County are on the main stem aquifer not affecting river levels. (*Lea and Harry Black; David and Joyce Fanucchi*)

Response: The Board recognizes and commends the successes to date of local growers. The Sonoma County Ordinance is a meaningful step in the right direction. However, it should be noted that the Sonoma County program that was approved on February 15, 2011, did not have the details of a monitoring and reporting program in place due to opposition from the wine industry. The monitoring and reporting of stream flow and diversion data is a requirement of the regulation that the Sonoma County program would need to meet in order to be approved by the State Water Board as a WDMP.

Comment 5.0.3: I have a concrete alternative suggestion to this proposal. You already have a workable water demand management program in place. In view of the obvious success in 2009 of the frost protection water management program created by the farmers, Mendocino and Sonoma County Farm Bureaus, Russian River Flood Control District, Sonoma County Water Agency, NOAA Fisheries and others, I think it would be a good idea to promote what they did,

and continue this program. It worked, and worked well. Grapes were protected from frost damage and there was abundant water for fish to travel downstream to the ocean even in a lower than average rainfall year. You can rely on citizens to do what is right, and if you will give this program a chance for three or four years, I'm certain all of you will be pleased by the results, and will not feel the Board has to regulate in this draconian manner. The goal is to have enough water for fish passage in spring, and farmers will be happy to work to ensure that goal. So it is not only reasonable and sensible, but also morally right to proceed with a plan that has been shown to work. If there are any problems with individual water right holders, the Water Board and other state and federal agencies already have plenty of hammers in the toolbox: federal and state Endangered Species Acts, Fish and Game Department regulations, and I suspect other provisions of the Water Code itself. Frost protection does not have to be declared an unreasonable use to allow for the prosecution of illegal diverters. (*Rudolph Light*)

Response: The Board recognizes and commends the successes to date of the local growers and the agencies listed by the commenter. However, we agree with NMFS and believe that while these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. The Sonoma County Frost Ordinance program that was approved on February 15, 2011, did not have the details of a monitoring and reporting program in place due to opposition from the wine industry. The monitoring and reporting of stream flow and diversion data is a necessary component of any program developed to address the fish stranding problem. Additionally the Upper Russian Stewardship Alliance (URSA) led program took steps to reduce the impacts of the frost diversion that led to the occurrence in 2008 on the mainstem Russian River, however these same steps have not been taken to prevent potential strandings on tributaries to the Russian River in Mendocino County. The full magnitude of the problem has not been addressed and the proposed regulation is still necessary.

Comment 5.0.4: After three years of working to learn about and resolve the problems alleged in the National Marine Fisheries Service ("NMFS") February 19, 2009 letter to the SWRCB, the proposed regulation comes as a great disappointment. Based solely on anecdotal facts and simplistic assumptions, the proposed approach utterly ignores physical solutions already voluntarily put in place in favor of a regulation that would have the Board conditionally invalidate all water rights used for frost protection in the Russian River watershed. (In the interest of readability, the term "Russian River watershed" is used to refer to the area covered by the regulation, which we recognize does not include the watershed above Warm Springs and Coyote Valley dams.) (*Jack Rice, California Farm Bureau Federation*)

Response: The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. The regulation is needed so that the necessary steps are taken to prevent dewatering events on Russian River tributaries as well as the mainstem Russian River.

Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete

streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation. Implementation of WDMPs for tributaries to the Russian River will assure that the necessary data collection and monitoring occurs and that steps are taken, likely similar to those implemented by the RRF, to prevent additional stranding events.

The commenter appears to be misreading the proposed regulation. The State Water Board is not invalidating all water rights used for frost protection or asserting that all frost protection in the Russian River watershed is unreasonable; the Board has determined, based on the evidence in the record, that diversions of water for frost protection from March 15 through May 15 in the Russian River Watershed below Coyote Dam in Mendocino County or Warm Springs Dam in Sonoma County are unreasonable unless conducted in accordance with a Board-approved water demand management program. This determination is significantly narrower than that suggested by the commenter.

Comment 5.0.5: At the November 18, 2009 workshop, diverters presented, to the State Board, Self Governance plans that claimed to address flow issues related to water use for frost protection. Both the National Marine Fisheries Service and the California Department of Fish and Game gave unequivocal testimony to the fact that the fine elements needed to address issues and provide enforceable and measurable outcomes sufficient to protect salmonids were not extant in these proposed plans. And, in fact, continued operations without sufficient standards being set by the State Board would allow a situation to continue with the very high risk of "TAKE" of salmonids as a likely outcome. Both, NMFS and DFG asked the State Board to proceed with the development of regulatory policy that would assure protection of the beneficial use of the cold water fishery. While these two responsible agencies did not offer new wording for such policy they made it clear that accounting for water use was among the many factors that must be included in such policy development. (*Alan Levine, Coast Action Group*)

Response: Comment noted. The regulation requires adequate data collection and analysis that will determine where problem areas exist and lead to development of corrective actions in these areas.

Comment 5.0.6: The plans proposed by the diverters at the November 18, 2009 Workshop made the following claims that were questionable and not supported by fact. There was claim of coordinated efforts that would realize necessary protections. This claim is insupportable as the documents allow for voluntary participation of "willing" parties - with no enforcement mechanisms. This hole in comprehensive compliance makes these plans less than enforceable. There was claim that necessary and effective BMPs are now in place to deal with issue. This is not the case as BMPs are yet to be developed and/or approved by regulatory agency. Policy or plans can not be deemed effective or called comprehensive until necessary BMPs are in place, approved by responsible agency, and deemed sufficient and operable. The proposed plan (s) were based on future actions, including MOUs that had not fully been described or available for review by responsible managing agency or other concerned parties. The above noted planning flaws would yield a system of governance that was not enforceable and possibly lacking in the necessary attributes needed to address the flow issues related to

frost protection water use. The proposed self governance plan (s) went on to claim that all past problems were identified and fixed, thus reoccurrence of "TAKE" would not be possible. This claim is not consistent with the testimony offered by NMFS or DFG. In fact, the diversion self governance proponents claimed that the incidence was a fluke, related to a "perfect storm" of facts - including: several successive dry years, sedimentation, and abnormal frost events. Not only is this claim inconsistent with NMFS and DFG testimony (continued take is probable with out emergency regulation), the claim denies the effects of overuse during frost events (and for irrigation) and its potential to adversely effect salmonids in all life stages. This denial of responsibility puts in question the availability of the diverters and their intent to take sufficient action necessary to protect beneficial uses. The diverters' discussion of options for solving the frost protection (and possibly irrigation issue) included the use of wastewater. This option has not been fully investigated and is unlikely to be useful for many years. Wastewater is pollutant laden and use of same on saturated soils for frost protection poses threat to surface waters. This threat must be addressed and is subject to NPDES permitting process. Thus, there is much more work to be accomplished on this option before it has merit. The option of controlled releases to mitigate frost protection use from Lake Mendocino by the Flood Control District (as presented by Sean White) also has issues that are significant and have not been considered. Monitoring and reporting of actions proposed by proponents of the diverters plan (s) are not sufficiently robust or transparent in terms of providing adequate information to the SWRCB, other managing agencies, and other concerned parties. *(Alan Levine, Coast Action Group)*

Response: Comment noted. The Board recognizes and commends the successes of local measures enacted to date. However, we agree with NMFS and believe that while these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 5.0.7: As the related agencies focused on developing regulatory enforcement, the agricultural community voluntarily worked to implement on the ground projects that would actually benefit the fishery. Both stranding episodes referenced in the April 2008 NOAA letter have been fully addressed, millions of dollars of infrastructure have been constructed, numerous meetings have been held and a thorough contingency plan, the Russian River Frost Program, was presented to the Board in 2009. All of this was done in good faith to demonstrate that any problems that existed could be resolved without a regulation, yet the Board has insisted on pursuing a regulatory approach. As a member of the agricultural community that will be impacted by the proposed regulation, I encourage the Board to reject the proposed regulation and instead support the collaborative, cost effective and productive solution to allow for Russian River water to be used both for farming and the fishery without additional layers of needless regulation. *(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; James, John, David, and Michael Milovina; Alfred White, La Ribera Vineyards; Peter Chevalier, Chevalier Vineyard Management, Inc.; Jack Cox; Robert Dempel, Dempel Ranch Vineyard; Heath Dolan, Dark Horse Vineyards; Jason Dolan, Dark Horse Vineyards; Eric Foster, Elizabeth Vineyards; S.J. Jahnke, Whistler Management, Inc.; Richard Lamalfa; Donald E. Butow, Butow Vineyards; Michael Boer, Stipp Ranch; Wendel Nicolaus, Middleridge Vineyard; Richard Schaefers, Beckstoffer Vineyards; Richard Schaefers, Mendocino Vineyard Company; Richard Schaefers, Mendocino Winegrape and Wine Commission; Ken and Kathe Todd, Todd Brothers Vineyards; David Beckstoffer, Beckstoffer Vineyards; Danny Piffero; Kendall Smith, County of Mendocino; Jim Lincoln, Napa County Farm Bureau)*

Response: The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. Possible resolution of the two events described in the February 19, 2009 letter from NOAA Fisheries does not indicate a regulation is not needed. The regulation is needed so that the necessary steps are taken to prevent dewatering events on Russian River tributaries as well as the mainstem Russian River.

Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

Comment 5.0.8: We feel that in both Sonoma County and Mendocino County that landowners have already responded to any concerns. There is the need for cooperation with water released from both Warm Springs and Coyote dams. (*John and Patti Saini*)

Response: The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation.

Comment 5.0.9: Immediately after the incidents of 2008 were brought to the attention of the District, we have worked tirelessly to solve this issue. Since 2008 numerous, substantive projects have been completed. Those projects, combined with additional USGS gaging, improved coordination with Sonoma County Water Agency, and better forecasting have solved frost-related issues where they have been documented in Mendocino County. These accomplishments were executed entirely through volunteer efforts back-stopped by existing regulations. (*John Jordan, Jordan Winery; Pete Opatz, Silverado Premium Properties and the Russian River Water Conservation Council; Nick Frey, Sonoma Winegrape Commission; Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District; Richard Schaefers, Mendocino Vineyard Company*)

Response: The installation of offstream reservoirs, new Talmage Gauge, better frost forecasting and improved communication between Mendocino growers and the Sonoma County Water Agency (SCWA) has improved SCWA's ability to increase releases for specific frost diverters using the Russian River mainstem for frost protection. These local cooperative efforts are real meaningful improvements. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the

problem and do not obviate the need for the proposed regulation.

Comment 5.0.10: The District is also frustrated that the SWRCB and the NMFS have emphasized monitoring and enforcement instead of promoting the development of infrastructure that would eliminate the need for direct diversions for frost protection. This same infrastructure would also facilitate the SWRCB in meeting its goals under AB2121. In these fiscally constrained times, the District believes it would be much more effective to focus state, federal, and private money in the development of permanent solutions instead of mandating perpetual expenditures on unnecessary analysis and reporting. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The Board does promote the development of infrastructure that would eliminate the need for direct diversions for frost protection. Applicants requesting permits for offstream storage for frost protection have been made a priority of the Permitting Section of the Division of Water Rights. It should be noted that development of offstream storage for every single frost diverter is not necessarily a permanent solution as the commenter suggests. If all diverters switched from direct diversion to diversion to offstream storage, the possibility exists for the stranding problem to shifted from the middle of the night to the middle of the day when all diverters turn their pumps on to refill the reservoir. It is important that offstream storage projects are managed for reduction in the instantaneous pumping from the Russian River stream system. Coordination of timing of pumping may also be necessary in some situations. Monitoring of stream flow and diversions is a big component for the successful coordination of diversions.

Comment 5.0.11: The regulation being offered by the SWRCB is not necessary. We recognize that special status fish were lost in April 2008. However, the actual physical evidence, scientific literature, and the [NMFS ESA Section 7 Consultation] 2009 Biological Opinion strongly suggest the role that frost protection had, if any, in this event was smaller and more isolated than individuals from NMFS and SWRCB have alleged. Since 2008, efforts to remove frost protection from any role in either event have been completed through non-regulatory efforts driven by cooperation (see fourth reason immediately below). There is no evidence to support the contention that these two disparate events warrant broad, basin-wide regulation. There is evidence to support that when identified, problems can be resolved through cooperation, as shown by the results of the Frost Protection Task Force. The fisheries and the public would be best served if this blind pursuit of a regulation was abandoned, and replaced by the "collaborative approach" originally advanced by the NMFS Southwest Division. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Board recognizes and commends the successes of local measures enacted to date. However, although these accomplishments are a meaningful step in the right direction, they do not address the full scope and magnitude of the problem and do not obviate the need for the proposed regulation. Possible resolution of the two events described in the February 19, 2009 letter from NMFS does not indicate a regulation is not needed. The regulation is needed so that the necessary steps are taken to prevent dewatering events on Russian River tributaries as well as the mainstem Russian River.

Scientific research indicates that the two episodes of stream dewatering documented by NMFS

were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, "Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country." Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation. Implementation of WDMP's for tributaries to the Russian River will assure that the necessary data collection and monitoring occurs and that steps are taken, likely similar to those implemented by the Frost Protection Task Force, to prevent additional stranding events.

6.0 Enforcement

Comment 6.0.1: The California Department of Fish and Game has been absent from protecting the anadromous fisheries (i.e. Rivers in California with declining anadromous fish populations, which includes the Russian River watershed, and management actions in the Bay Delta Estuary regarding state and federal pumping) and resident wild trout fisheries (i.e. Lower McCloud River; Pit River; North Fork Feather River, et al) of California due to very poor leadership of the California Department of Fish and Game Director and regional managers. (*Bob Baiocchi, California Fisheries and Water Unlimited*)

Response: Comment noted but it does not directly pertain to the proposed regulation. The comment should be directed to the Department. The Board notes that the proposed regulation will ensure consultation with the Department by the governing body in the development of stream stage monitoring programs and the risk assessment to evaluate the potential for frost diversions to cause salmonid stranding mortality.

Comment 6.0.2: The California Department of Fish and Game has been absent with enforcing California Fish and Game Code 5937 due to very poor leadership of the California Department of Fish and Game Director and regional managers (i.e. Bullards Bar Dam, et al). (*Bob Baiocchi, California Fisheries and Water Unlimited*)

Response: Comment noted but it does not directly pertain to the proposed regulation. The comment should be directed to the Department.

Comment 6.0.3: The proposed ruling proposes to provide money to the California Department of Fish and Game for enforcement purposes for the proposed frost regulations. That would be a waste of public money due to the very poor leadership of the California Department of Fish and Game Director and regional managers. (*Bob Baiocchi, California Fisheries and Water Unlimited*)

Response: The proposed regulation does not contain any provision for enforcement by the

Department. The proposed regulation requires the governing body to consult with the Department for its expertise and opinion of stream monitoring locations and stages, and the risk assessment of stranding salmon mortality. In the past, Department staff have participated in growers meetings and in its comment dated July 1, 2011, stated that its staff remains available to consult with the Board and governing bodies as identified in the proposed regulation.

Comment 6.0.4: As the recognized advocacy group for Mark West Creek (MWC) and its rapidly dwindling water, salmonids and wildlife populations, we write you to implore the SWRCB not to put (or allow) enforcement of the plan in the hands of any Sonoma County public agency or board, or a local entity or individual, since none has the will, independence, or power to withstand the inevitable and repeatedly successful efforts of the wine industry to neuter, co-opt, control and corrupt any environmentally prophylactic act and/or program. In addition, during the drafting of the Sonoma County Vineyard and Orchard Frost Ordinance the county violated the state 'open meeting' laws. They held secret meetings that co-opted county officials, reflected the growers' dominating control over local officials, violated provisions of CEQA and exposed the symbiotic cozy relationship between the subject and its regulators, and now hopefully serves to disqualify Sonoma County regulators from overseeing and enforcing the Russian River Frost Protection Regulation. These various 'back door' efforts by wine industry leaders should serve notice they are not to be believed and can't take any leadership role in enforcement. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The proposed regulation does not provide for enforcement by the governing body. Enforcement of a violation of the regulation is solely retained by the Board. Any current authority retained by Sonoma County, or other governmental agency, is not enhanced or restricted by the proposed regulation. Other comments related to Sonoma County's officials are not related to the proposed regulation.

Comment 6.0.5: It must be patently visible to even the most casual observer that the grape growers and winemakers of Sonoma and Mendocino counties do not process the basic neutrality essential to meaningful monitoring and oversight. The wine industry has ingratiated itself with the traditional, long-term agricultural powers in these counties, and have greatly benefited from the union. The combination of new money from the wine business, and old connections and power from the true farmers, is a combination public trust agencies have been subservient to; allowing any of the affiliated agricultural groups a role (beyond observation) in the regulatory enforcement element of the frost protection plan would constitute a fatal design defect rendering all the efforts of hundreds for naught. Any local agency solution would involve the wine industry, which controls local politics through its careful and effective planning. A state agency, unimpeded by the locals, or a state level Special Master will be necessary for the plan's enforcement to have any intended positive impact. On behalf of the human habitants of MWC, and on behalf of the flora and fauna we've treasured for decades as they've dwindled, we urge you to adopt the suggestions in the letter of the SCWC, of which SMWC is a supporter, and it guarantees the wine industry and its close political allies not have any role in the enforcement of the Frost Protection Plan. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Contrary to the comment, the Board desires the wine industry participation in the local development of an effective WDMP. The wine industry provides valuable capabilities such as network contacting of growers, expertise on frost systems improvement technologies, alternative frost protection systems, and overall grower perspectives. In regards to enforcement of a Board-approved WDMP, the Board is capable of the enforcement of proposed

regulation, if necessary, without a Special Master.

Comment 6.0.6: What jumped out at me with the latest draft regulation was the lack of clarity regarding enforcement. What can be expected is that there will be a lack of personnel and budget for (frost protection regulation) enforcement and the agricultural industry will try to step up into this role by retaining consultants and the RCD's who will demonstrate so called "best management practices", in lieu of real changes. As a former employee of a resource conservation district, I will state unequivocally that these special districts are quick to act in the interest of farmers and tend to side with private property owners at the detriment of biological resource habitat. There is no defined water master approach in this draft regulation, in spite of its apparent effectiveness in the neighboring county of Napa. (*Maria Potter*)

Response: The proposed regulation is expected to be self-executing by a local governing body or individual. The governing body will schedule and implement a Board-approved WDMP and report annually to the Board. Should growers fail to participate in a WDMP, their diversion for frost protection is, by the proposed regulation, unreasonable, and therefore subject to enforcement by the Board. The proposed regulation does not need to re-state the Board's existing authority for enforcement.

Comment 6.0.7: The Board must ensure that the Board has authority to require compliance, and it must exercise that authority. Individual responsibility must be achievable and transparent, and the Board must enforce it. (*Chris Shutes, California Sportfishing Protection Alliance*)

Response: The Board has authority to enforce requirements of the proposed regulation. The Board also has ensured transparency by virtue of requiring governing bodies or individuals to submit annual program reports to the Board.

Comment 6.0.8: Russian Riverkeeper urges the Board to adopt the Frost Regulation without further delay. In addition, we suggest the following: The rule must ensure accountability (i.e., if something goes wrong, it must be clear who is responsible for fixing it). (*Kate Wilson, Russian Riverkeeper*)

Response: Comment noted. Adoption of a regulation requires the Board to follow the rulemaking process established by the Office of Administrative Law. The Board is complying with this process. The regulation is designed to implement procedures to avoid the stranding mortality of salmonids by a diversion of water for frost protection. Diversion of water in violation of this regulation is subject to enforcement by the Board.

Comment 6.0.9: Noncompliance with any part of the regulation, or actions contributing to "take," as characterized by the State, must be considered serious and subject to swift and significant mandatory penalties. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The proposed regulation does not expand the Board's authority. The Board's existing authority to prevent waste and unreasonable use is provided by article X of the State Constitution, and Water Code sections 100 and 275. The enforcement of a "take" of a federally listed endangered species is not within the Board's authority to issue an administrative civil liability.

Comment 6.0.10: The proposed regulation is incomplete in every meaningful way. Section 862 (e): Asserting that compliance is a condition of permitting and licensure magnifies the problem of not having a WDMP in that there is no way to comply with a plan that does not exist. Further, due to the overreaching and erroneous assumption that all groundwater in the watershed is hydraulically connected to the stream system, this provision is of confusing relevance to properly unpermitted and properly unlicensed wells in the watershed. (*Pete Downs, Jackson Family Wines*)

Response: The first sentence of subdivision (e) of the proposed regulation only pertains to persons diverting water for frost protection pursuant to permits and licenses issued by the State Water Board. This sentence does not pertain to any other frost diverters subject to the proposed regulation. Incorporating the proposed regulation as a permit or license term provides the Board with additional enforcement authority over water right permittees and licensees.

The Board's existing authority under article X of the State Constitution includes all waters of the state, including groundwater. The proposed regulation establishes that a frost diversion in the Russian River watershed not participating or complying with a Board-approved WDMP is an unreasonable diversion. The Board does not find the language confusing.

Comment 6.0.11: The March 18, 2010 Draft Regulation needs to include means by which the illegal diversions and storage facilities will be addressed. Please add language that requires proof of license, water right, appropriative right, etc. in order to verify that diversions are legal. Grower cooperation in this area, i.e. require that growers describe any and all known legal and questionable diversions in the watershed, must be required. The growers know best where the diversions are occurring and these numerous unregulated diversions will undo all constructive efforts to manage demand. (*Larry Hanson, Northern California River Watch*)

Response: The proposed regulation does not need to address unauthorized diversions. The Board has records of all known existing water rights. The Board also has authority pursuant to Water Code section 1052, et seq to investigate and enforce against any unauthorized diversion and use of water. The proposed regulation does not need to restate this authority.

Comment 6.0.12: A meaningful, timely, enforceable, regulation that reverses the harms caused by the industry in the past, and that fully evaluates and rectifies present and future impacts to the critical habitat and the protected species is the only acceptable regulation. (*Larry Hanson, Northern California River Watch*)

Response: Comment noted. The proposed regulation relies first on local solutions and cooperation. Enforcement of past activities that have been corrected is not an effective use of State resources.

Comment 6.0.13: A weak blanket regulation [January 2010 draft Regulation] would set up a presumption that compliance will follow, despite the fact that compliance with other laws and regulations has not occurred including the ESA. A good regulation is timely and properly implemented with clear enforcement components. The discussion of a private body or individual resolving disputes is unacceptable and weakens the laudable aspects of regulation like the inclusion of closely connected groundwater and the beginnings of a discussion to gauge streams in real time. A dispute resolution process serves only as an additional layer of protection from prosecution by setting up a system preventing anyone from directly enforcing

existing laws and regulations on reasonable use, storage, and diversion. This is to take protection of the fishery in the wrong direction. Political solutions have failed us for decades, time has run out and now more reliable, and enforceable measures need to be taken. (*Larry Hanson, Northern California River Watch*)

Response: The comment is noted. The proposed regulation does not limit or restrict the enforcement authority of other state and federal agencies as it pertains to the ESA. The proposed regulation also does not limit or restrict the Board's authority pertaining to unauthorized diversions, or violations of permit and license terms. However, in developing this proposed regulation, the Board considers that most of the frost diverters in the Russian River watershed are operating under valid rights. Therefore, contrary to the comment, the Board believes that a locally managed program is an effective tool to protect instream uses.

Comment 6.0.14: The Regulation's requirement that the WDMP "shall be administered by an individual or governing body (governing body) capable of ensuring that the requirements of the program are met." No individual or governing body other than SWRCB has the full authority to effectively and legally process meaningful applications and ensure full implementation of the WDMP. This renders the Regulation and WDMPs essentially meaningless. The DEIR must address these inherent problems, which will have significant adverse environmental impacts in the worst case scenarios, provide effective corrections or alternatives, and the DEIR must be revised and recirculated to allow for meaningful review and comment from the public. (*David Keller, Friends of the Eel River*)

Response: The Board disagrees with the comment. Local growers have demonstrated that a local program can be effectively organized and implemented. The Sonoma County Frost Ordinance also demonstrates that local agencies can implement many portions of the components of the proposed water demand management program (WDMP). The Board believes that if required by the Board, the regulated community will effectively implement the necessary components of the WDMP and report their progress to the Board. The Board also retains the authority to require changes to any WDMP and its enforcement authority for non-participation or lack of compliance.

7.0 Water Right Administration

Comment 7.0.1: The proposed Regulation does not require that applicants divulge whether or not they have legal water rights or license of any kind, nor even if they have completed applications for water rights which are currently pending before SWRCB. The Regulations apparently presume the prior existence of a legally valid water right or license on the part of the applicant. However, since the application requires neither any statement or proof of an existing valid water right or license, nor actual evidence to be provided to demonstrate valid water right or license, the approval of an application to comply with the WDMP could be made for an applicant with no legal water rights or license. The DEIR must address these inherent problems, which will have significant adverse environmental impacts in the worst case scenarios, provide effective corrections or alternatives, and the DEIR must be revised and recirculated to allow for meaningful review and comment from the public. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The proposed regulation does not need to address whether or not a participating

grower has a legal water right or license of any kind, or any applications pending before Board. The Board has records of all known existing water rights and would be able to make that determination based on inventory information. Additionally, participation in a Water Demand Management Program (WDMP) pursuant to the proposed regulation does not legitimize an unauthorized diversion. The proposed regulation does not affect the Board's separate authority (e.g. Water Code section 1052) to investigate and enforce against any unauthorized diversion and use of water independent of the proposed regulation. The proposed regulation does not need to restate this authority and the DEIR does not need to address any environmental effects caused by an unauthorized diversion.

Comment 7.0.2: The record suggests one of the only feasible solutions is to develop other supplemental sources of water. A preferred solution is to capture and store more wintertime flow. The Board can greatly influence that outcome. (*Bob Anderson, United Winegrowers for Sonoma County*)

Response: The proposed regulation does anticipate corrective actions, when necessary, to include offstream storage.

Comment 7.0.3: Time and staff constraints with respect to permit issuance must be acknowledged and accepted by the regulated communities as a fact of life and now simply as a part of an effective species recovery process. (*Larry Hanson, Northern California River Watch*)

Response: Comment noted. However, the Board has expedited its water right permitting process by prioritizing processing of offstream storage projects in the Russian River watershed.

Comment 7.0.4: In addition to the changes already mentioned in the "Overbroad" section, there are some additional changes that can be made to limit the effects of [the January 2010] regulation without impairing its effectiveness: Expedite and encourage permits for off-stream storage where the underlying aquifer is not sufficient for wells in the underflow for frost control. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board has expedited its water right permitting process by prioritizing processing of offstream storage projects in the Russian River watershed. An expedited permitting and change petition process has been used for recent reservoirs in the watershed.

Comment 7.0.5: In addition to the changes already mentioned in the "Overbroad" section, there are some additional changes that can be made to limit the effects of [the January 2010] regulation without impairing its effectiveness: Allow those who hold riparian rights to divert and store water for 90 days. This will greatly reduce instantaneous demand during the frost season. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: California courts, like courts in other states, have uniformly determined that storage of water for future use, whether cyclic or seasonal, is not a proper exercise of a riparian right, but constitutes an appropriation of water. (*Moore v. California-Oregon Power Co.* (1943) 22 Cal.2d 725; *City of Lodi v. East Bay Municipal Utility Dist.* (1936) 7 Cal.2d 316; *Colorado Power Co. v. Pacific Gas and Electric Co.* (1933) 218 Cal. 559; *Seneca Consolidated Gold Mines Ltd. v. Great Western Power Co.* (1930) 209 Cal. 206; *Herminghaus v. Southern California Edison Co.* (1926) 200 Cal. 81.)

8.0 Economic Analysis

Comment 8.0.1: The SWRCB underestimates the costs that will be associated with implementation of the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Comment too general for a specific response. See response to specific comments below.

Comment 8.0.2: Attached as Exhibit S is an economic study prepared by Prof. Robert Eyler of Sonoma State University. This study shows that even if the regulation were to result in a minimal 10% crop loss, it could cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. First, the SWRCB regulation will operate as a complete prohibition on water use for frost protection until a water demand management program is developed, approved, and implemented. These steps will take several months to complete, perhaps even years. Therefore, in the meantime, vineyard owners will be unable to use water to protect their crops and would be expected to suffer extreme wine grape losses until alternative forms of frost protection could be acquired. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This response is in two parts. The first responds to the conclusions made by the Eyler study and the second to the concerns regarding the implementation schedule for the regulation.

Conclusions of the Eyler Study

The Eyler study was completed prior to October 27, 2010, seven months prior to the release of the proposed regulation. The proposed regulation has evolved considerably from its initial draft and any assessment of economic impacts performed at that time would be premature and inappropriate. However Eyler's study has very little to do with the provisions of the proposed regulation and focuses on providing spectacular conclusions for public consumption not based on fact or sound analysis.

In addition to being written seven months prior to the release of the proposed regulation, Eyler's study has three major procedural flaws: 1) the acreage of wine grapes at risk of frost damage by restricting Russian River diversions was grossly overestimated, 2) watershed wine grape production levels were incorrectly related to winery production, and 3) the use of incorrect regional economic impact estimation procedures "multiple counts" the total economic effects of the regulation.

Eyler assumed an annual 10% crop loss as a result of the regulation which he estimated at \$59,959,666. This would imply a total crop value of \$599,596,660 at risk of frost damages as a

result of restrictions on Russian River diversions for frost protection. The reported total value of wine grapes and pears produced in Sonoma and Mendocino Counties in 2009 was \$553,604,300 and this was an all-time high. The total value of those crops being frost protected from water diverted from the Russian River is approximated by a producer survey and watershed experts at 21,198 acres with an annual production of \$156 million. Therefore the assumed annual crop loss as a result of the regulation is 38 percent of the crops at risk not 10 percent. No attempt is made to explain or justify this critical assumption. The State Water Board's Draft Economic and Fiscal Impacts of the Proposed Russian River Frost Regulation, dated May 2, 2011, estimated the acreage of crops subject to mitigation measures (alternatives to direct water diversions) to be 3,783 acres (Table 4-5) with a production value of \$28.2 million. The only "crop loss" was predicted to be for those producers who reduce acreage as a result of the cost to install mitigation practices that was estimated at \$1.24 million after the fifth year of the regulation (Table 4-16). The difference between Eyler's assumed annual crop loss (\$60 million) and the annual crop loss estimated in the State Water Board's May 2, 2011 Draft Report (\$1.24 million) is \$58.76 million.

The second major flaw in Eyler's analysis is that the assumed annual value of wine grape loss of \$60 million will result in a direct annual loss to the wine industry of over \$1 billion. This is an incorrect assumption and is unsupported by facts. First, winery operations in California have access to a vast array of wine grape supplies which in most years are not afforded contracts. Wine grape losses caused by such things as frost can easily be remedied by securing the required grape juice from local, regional or state growers (See "Wine Grape Growers See Multiyear Contracts Return; Some Prices Also Improving" By Jeff Quackenbush, Business Journal Staff Reporter July 25th, 2011 06:58am). The referenced article describes the current wine grape juice market conditions and the readily available wine grape juice supplies on a production year basis.

Second, even if one assumes a direct one-to-one effect of wine grape production to winery production, the magnitude is unrealistic. One way of deriving a relationship of this magnitude would be the following. Assuming the \$60 million crop loss is based on grapes valued at \$2,000 per ton would mean a loss of 30,000 tons of grapes. Assuming that a ton of grapes produces 720 bottles of wine, total production lost would be 21.6 million bottles of wine. If the value of wine losses is estimated at \$1 billion, the average wholesale price to the wineries would have to be over \$46 per bottle. Since a single bottle of Alexander Valley Cabernet Sauvignon vintage 2009 retails for \$10.99, the assumption is not credible (Louis M. Martini 750ml retail, at Costco on 8/7/2011). By not explaining this relationship, the report's conclusion is not credible.

The third major flaw is the degree of multiple counting that was used in estimating the total economic effects (direct, indirect and induced) of the crop losses. Eyler concluded that the \$60 million in assumed direct wine grape crop losses (Table 21) would result in \$2.1 billion loss of California business revenue (Table 25). This would have needed a multiplier of 35, which is impossible. The published IMPLAN output (revenue) multiplier for the state of California is 1.64. The similar multiplier for the two county economy would necessarily be smaller because of the interdependence of the regions' wine grape sector with the State. Because this conclusion is not based on standard accepted basic regional economic theory, principles and analytical practices, it does not support any revision to the Board's reports.

Regulation Implementation.

The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an

initial Water Demand Management Program that is submitted prior to February 1, 2012. The State Water Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The State Water Board anticipates periodic updates will be made to Water Demand Management Programs that reflect the data and information contained in annual reports.

Comment 8.0.3: Attached as Exhibit S is an economic study prepared by Prof. Robert Eyster of Sonoma State University. This study shows that even if the regulation were to result in a minimal 10% crop loss, it could cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. Assuming the regulation is implemented within a reasonable time, not every vineyard owner will be able to comply with its terms for either financial or practical reasons. For example, according to the SWRCB's own analysis, this regulation is expected to cost a typical 160-acre vineyard from \$9,600 to \$352,000 in order to initially comply with its mandates. It will cost an additional \$3,000 to \$36,200 per year to keep that 160-acre vineyard in compliance. It is expected to cost a typical 40-acre vineyard from \$2,400 to \$87,880 in order to initially comply with its mandates. It will cost an additional \$750 to \$9,000 per year to keep that 40-acre vineyard in compliance (see Exhibit A). Many small family farms will not be able to absorb this cost, so they will be forced to shift to another crop if they can afford to or sell the land (see Exhibit B). These costs associated with grape production loss are completely ignored in the SWRCB documents, as they are not discussed anywhere. The SWRCB documents simply assume everyone will be able to afford the above costs, which is shocking. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Production losses as a result of the costs of compliance and corrective actions are discussed in Form 399 Attachment Section 4.8. Annual wine grape and pear acreage is projected to decline in the Russian River watershed after five years by 159 acres with annual production losses valued at \$1.24 million.

Comment 8.0.4: Attached as Exhibit S is an economic study prepared by Prof. Robert Eyster of Sonoma State University. This study shows that even if the regulation were to result in a minimal 10% crop loss, it could cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. There may be cases where water can no longer be used for frost protection. In these cases, the farmer must find an alternative form of frost protection (e.g. wind, heaters, etc.) If no alternative form of frost protection is feasible, either because it is too expensive or because alternative forms are not effective (e.g. in Mendocino County where frost events are particularly extreme and where no inversion layer typically exists), then that farmer could lose his entire crop. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation does not prohibit frost protection or the use of water as a method of frost protection; it requires that the water diverted be accordance with a Board approved Water Demand Management Program. Landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750. Impacts of increased diversions of water and its availability for summer irrigation are subject to the conditioning of water right permits and licensing under the AB 2121 policy.

Comment 8.0.5: Attached as Exhibit S is an economic study prepared by Prof. Robert Eyster of Sonoma State University. This study shows that even if the regulation were to result in a minimal 10% crop loss, it could cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. First, the SWRCB regulation will operate as a complete prohibition on water use for frost protection until a water demand management program is developed, approved, and implemented. Second, assuming the regulation is implemented within a reasonable time, not every vineyard owner will be able to comply with its terms for either financial or practical reasons. Third, there may be cases where water can no longer be used for frost protection. Based just on these three facts, the proposed regulation will have significant economic consequences for California. While the SWRCB is required under Government Code section 11346.5 to identify and describe these costs, the costs the SWRCB has disclosed as part of the Notice of Proposed Rulemaking significantly underestimate those costs. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial Water Demand Management Program that is submitted prior to February 1, 2012. The State Water Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The State Water Board anticipates periodic updates will be made to Water Demand Management Programs that reflect the data and information contained in annual reports

The proposed regulation does not prohibit frost protection or the use of water as a method of frost protection; it requires that the water diverted be accordance with a Board approved Water Demand Management Program. Landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750. Impacts of increased diversions of water and its availability for summer irrigation are subject to the conditioning of water right permits and licensing under the AB 2121 policy.

The reduction in wine grape acreage as a result of the compliance and corrective action costs are discussed in Form 399 Attachment Section 4.8. Annual wine grape and pear acreage is projected to decline after five years by 159 acres with production losses valued at \$1,239,919.

Comment 8.0.6: We had Form 399 reviewed by Prof. Robert Eyler, whose review revealed that Form 399 has underestimated the financial cost of the regulation in several key areas. First, the capital costs of implementing “corrective actions” under the regulation are likely underestimated. Second, Form 399 uses outdated multipliers that underestimate the economic impact on industry and employment, and does in fact underestimate employment losses by between 15% and 56%. Third, the methodology used to determine a “typical” business is flawed and likely underestimates the number and scope of businesses to be affected by the regulation. A copy of Prof. Eyler’s report is attached as Exhibit T. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Capital costs are documented in Section 4.4. While it is easy to acquire bids from single companies that show high capital cost, the proper procedure would be to seek competitive bids to ensure the lowest possible cost.

The latest IMPLAN multipliers were used in this analysis.

No methodology was employed in selecting a “typical business”. Four sizes of wine grape growers were selected to represent “typical businesses” (Table 4-17). They vary from 40 to 640 acres. The representation of a typical size of vineyard or orchard does not affect the per acre cost of implementing and complying with the proposed regulation. No economies of size or scale are assumed therefore cost per acre is assumed constant with respect to the size of operation.

Comment 8.0.7: Section 4.1 of the Form 399 Attachment: Under the Frost Diversion System Inventory, Form 399 uses the \$64 Sonoma County Frost Protection Ordinance registration fee as the basis for determining the cost to develop the inventory. However, the inventory also requires each and every individual diverter to monitor and record their rate of diversion, hours of operation, and volume of water diverted during each frost event of the year. Form 399 does not consider these costs at all. It is true that the recent changes to the Water Code require individual diverters to monitor and record water diverted and used on a monthly basis, but the requirements of the proposed regulation go above and beyond demanding monthly totals. The proposed regulation wants each individual frost event monitored and recorded, not a monthly total. This additional layer of measurement will result in substantial additional costs that have not been considered in the analysis. In order to monitor each and every frost protection diversion and meet the requirements of the regulation, additional meters must be installed at each diversion location. Based upon quotations we received for this same work (Exhibit U), we estimate the cost to be approximately \$8,800 per diversion. Based upon a survey conducted by the Sonoma County Farm Bureau, there are 418 diversions in the Russian River watershed in Sonoma County. We currently have no information on the number of diversions in Mendocino County. However, due to the similar number of acres frost protected by water in Mendocino County (16,400) and Sonoma County (15,581) it is reasonable to assume there are a similar number of diversions in Mendocino County. Based upon 836 diversions, we have a total cost of

\$7,356,800.00. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation requires participating frost diverters to identify the rate of diversion, hours of operation, and volume of water diverted during each frost event. The Initial Statement of Reason identified that because conditions of many permits and licenses and the recent legislative changes to Water Code section 5103, subd. (e), require that surface diverters install and maintain measuring devices using best available technology and best engineering practices to measure their diversions, the proposed regulation does not need to specify such requirements. Most growers have well drillers reports for groundwater wells or pump tests that identify the capacity of the diversion pump, acreage frost protected, and the rate of diversion for their frost protection application. Maintaining records of hours of operations and determination of the volume of diversion based on the rate of diversion and hours can be determined without additional meters. Therefore, a fee of \$64 per acre is adequate to cover anticipated inventory costs and preparing individual diversion reports.

Comment 8.0.8: Section 4.2 of the Form 399 Attachment: Under the Stream Stage Monitoring Program, Form 399 does list and disclose the possible costs associated with the installation and operation of 71 stream stage monitoring gauges. However, there are two problems with these costs. One, the costs are from Washington State, which has different permitting requirements, and two, the costs are ten years old. We believe a more accurate estimate is found in our Exhibit V. Each telemetry capable meter is estimated to cost between \$14,000 and \$16,000 per diversion, and with the estimated permitting costs of \$3,000 per diversion, this element of the monitoring and reporting program will cost an additional \$1,278,000 (71 gauges using \$18,000 as an average) to implement. In addition, it will cost an additional \$8,000 to \$12,000 to maintain each diversion on a regular basis. This adds a yearly cost of \$710,000 (71 gauges using \$10,000 as an average) to the monitoring and reporting program. In addition to underestimating the gauge costs, Form 399 does not include costs associated with determining “the stream stage that should be maintained at each gage to prevent stranding mortality.” We contacted an environmental consulting firm that can provide this service (Analytical Environmental Services or “AES”) and asked them for a bid. Based upon their review of the proposed regulation requirement, they anticipate a total cost of approximately \$52,560.00 per site. Using Form 399’s estimate of 71 gauges (see Table 4-2 of Form 399), we expect the costs to be \$3,731,760.00 (see Tasks 1-7 of Exhibit W). (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Washington State stream monitoring program is USGS compliant and fully meets the requirements of the proposed regulation.

The cost of the system is still relevant according to the Washington State Department of Ecology.

The commenter incorrectly assumes that all stream gages must be or will be USGS compliant; this is not a requirement of the proposed regulation and was therefore not considered as part of the economic analysis. Instead the economic analysis appropriately assumed a reasonable

number of gages would be USGS compliant gages, while most would not.

The cost estimate submitted by AES was a solicited bid not a competitive bid. This should not be considered a realistic cost estimate of a stream monitoring system. A competitive bid process would yield a more realistic cost.

Comment 8.0.9: Section 4.3 of the Form 399 Attachment - Based on the inventory and stream stage information collected from the monitoring program, the risk assessment is supposed to evaluate the potential for frost diversions to cause stranding mortality. The risk assessment shall be evaluated and updated annually. The annual preparation of the risk assessment “was estimated by Water Board staff at \$50,000.” Similar to the above section we had AES provide a bid for this work, and the SWRCB was only off by a factor of 10. At a price of \$7,120.00 per site, multiplied by 71 sites, we have a total price of \$505,520.00 to prepare the SWRCB’s annual risk assessment (see Task 8 of Exhibit W). (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The cost of the risk assessment is estimated to be \$50,000, which should adequately cover the required tasks.

The cost estimate submitted by AES was a solicited bid not a competitive bid. This is not considered a realistic cost estimate of the risk assessment since the specifics of the task has not been developed. A competitive bid process would also yield a more realistic cost estimate.

Comment 8.0.10: Section 4.4 of the Form 399 Attachment - Areas that may require corrective action and Adoption of best management practices: In Section 4.4 of Form 399, the SWRCB estimates the number of acres that would need corrective action (Table 4-5), and then estimates number and collective capacity of existing storage facilities. In order to determine the number of acres that would need corrective action, Form 399 utilizes the NMFS GIS layer of “Potential Stranding Sites.” This GIS layer represents NMFS estimations of the most “at risk” locations for stranding. The problem with this approach is that it grossly underestimates the number of acres that will be affected by this regulation. The regulation will apply to the entire Russian River watershed, not just the NMFS “Potential Stranding Sites,” so it is unjustified to reduce the costs in this way. All this does is unjustifiably underestimate the costs of the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: It is reasonable to assume that an area less than the entire acreage of the geographic area affected by the proposed regulation would undergo some corrective action. The Board used the entire vineyard acreage within the NMFS Potential Stranding Sites Layer (stranding layer) to identify streams and associated watershed acreage that may likely need corrective action based on existing information. Because only a portion of any watershed acreage identified in the stranding layer analysis would need corrective action, it is reasonable to assume that acreage determined to need corrective action that are located outside of the watersheds identified in the stranding layer analysis would be covered by the additional acreage included in the Board’s analysis for the stranding layer that did not actually require

corrective action.

Comment 8.0.11: Section 4.4 of Form 399 Attachment - Existing Water Storage Facilities and Adoption of Best Management Practices. After determining the number of acres needing “corrective action,” existing reservoir capacity and additional cost are subsequently estimated as part of an effort to determine the amount of additional storage capacity needed to satisfy frost protection demand in excess of existing capacity. Note that Table 4-6, which summarizes estimated existing reservoir capacity on a watershed basis within each county, is not referenced anywhere in the text of the Form 399 Attachment. Conceptually, this approach is overly general as it does not consider factors that would limit a grower’s access to an existing pond. The biggest potential factor is the fact that the grower may not own the pond and would need to obtain access agreements with other landowners. While Section 4.4 does apply a reduction factor to the estimated existing capacity available in each county (0.85 for Mendocino County and 0.75 for Sonoma County), the basis for this adjustment is unclear. Section 4.4 states that the capacity adjustment was based on “approximations of known wastewater treatment ponds and residential density in specific areas of the watershed” while Footnote 2 to Table 4-6 states “Not all water storage facilities are available for frost protection due to other ownership and other dedicated uses.” No other supporting information is disclosed to support the assumed reduction factors, which means that the amount of existing capacity available is likely overestimated and the extent of additional capacity required is underestimated. Further, the reduction factors assume an either/or condition, i.e. a grower will either have access to an existing pond or he won’t. In instances where such access is possible, the cost of acquiring access to another landowner’s pond has not been considered in Form 399. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The adjustment factor was devised to represent a typical situation. As stated on page 17 of the Form 399 Attachment, the adjustment factors were derived based on approximations of the known wastewater treatment plants and residential density in specific areas of the watershed. This assumption is considered conservative. Given the proximity of the identified ponds to the vineyards and orchards, the actual water supply could be substantially more.

Comment 8.0.12: Form 399 Attachment, Section 4.4, Table 4-5 summarizes “measured crop acreages and areas protected by existing frost control methods” in Mendocino County and Sonoma County, respectively, on a watershed basis. However, while reference documents are cited, a map showing the boundaries of “measured crop acreages” within each watershed is not included in any of the EIR documents. These maps should be included so that the information in Form 399 can be understood and corroborated. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The GIS layer depicting the potential areas that will be affected by the proposed regulation is available from the SWRCB upon request.

Comment 8.0.13: Form 399 Attachment, Section 4.4, Table 4-5 wrongly extrapolates Sonoma County-wide information provided in Table 3-7 to individual watersheds. There is no basis to assume that the “Method of Frost Protection” percentages provided in Table 3-7 for Sonoma County as a whole are applicable to the individual watersheds listed in Table 4-5. The use of this extrapolation provides an unverified and likely misleading summary of the distribution of existing methods of frost protection in Sonoma County. The SWRCB should provide information to support the use of the Table 3-7 percentages on a watershed basis in Table 4-5, or delete the watershed breakdown values in Table 4-5. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The assumption regarding the adoption of frost protection methods represents the collective intelligence of Sonoma County wine grape producers. This type of assumption is common in predicting future technology adoption patterns.

Comment 8.0.14: Form 399 Attachment, Section 4.4 - Corrective Action: Constructing additional off-stream water storage and Adoption of Best Management Practices. One significant factor overlooked in Section 4.4 (page 20) is the assumption that additional off-stream water storage facilities can even be built in light of the SWRCB's new North Coast Instream Flow Policy (NCIFP). Based upon analysis provided by Rudolph Light, the new policy effectively eliminates ponds built within watersheds equal to or less than 1 square mile in size. For ponds between 1 and 15 square miles, a person would only be able to divert for a few days each year, which would eliminate all but the smallest of ponds (see Exhibit X). Section 4.4 does not consider this new policy and instead assumes that all one has to do is file an application and a permit for a new pond will be provided. Under the new instream flow policy, new ponds in the Russian River watershed will be extremely difficult to build and practically no new ponds will be built that will be of sufficient size to last through a frost season. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The State Water Board responded to Mr. Light's comment in “Response to Public Comments on the February 2010 Revision to the Draft Policy for Maintaining Instream Flows in Northern California Coastal Streams”, dated April 2010. In its responses, the State Water Board noted Mr. Light appeared to not have read Section A.1.8.1 and A.1.8.2 of the Policy, and that Mr. Light may not have applied the Policy provisions correctly. The State Water Board also stated that applicants would need to do careful planning in smaller watersheds in order to obtain desired yields.

Comment 8.0.15: Form 399 Attachment, Section 4.4 - Corrective Action: Constructing additional off-stream water storage and Adoption of Best Management Practices. Table 4-8 does not include engineering and design costs. Section 4.4 of Form 399 states that after allowing for a 50 percent USDA-NRCS AWEF cost share, the unit cost for construction of a pond of less than 50 acre-feet would be \$2,625 for an unlined pond and \$3,622 for a lined pond. The costs to build new reservoirs are significantly underestimated. The methodology presented in Table 4-8 has a number of shortcomings that result in underestimating the true cost of constructing and operating off-stream storage ponds for frost protection, as follows: (1)

The estimate does not appear to include any costs associated with engineering design or geotechnical investigation. The estimate also does not appear to include engineering inspection and testing services during construction. Collectively, professional services associated with design, construction and contract management can be a substantial percentage of the construction cost, perhaps 15 to 30 percent depending upon level of project complexity and other factors. If these costs have not been included in the estimated construction cost in Table 4-8, they should be added and the capital and annual costs recomputed. (2) Notwithstanding any changes to the estimated cost that might result from item 1 above, the use of a unit construction cost of \$5,250 is unrealistically low, especially if a pond liner is required. [Commenter provided example construction costs for Fetzer Sundial Pond, Fetzer Los Cerros Pond, La Ribera, and Beckstoffer.] (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The cost of off stream storage shown in Table 4-8 includes all direct and indirect costs.

A 30 acre-foot pond was used as an example to determine all costs. Total installation and construction costs for a 30 acre-foot unlined pond were reported by NRCS to be \$157,500, or \$5,250 per acre-foot. Table 4-8 shows that direct and indirect costs total \$202,409, or \$6,746.96 per acre-foot. Pond linings are not included in the cost estimate as they are not required. It is not clear where the \$3,622 cost quoted by the commenter comes from.

It is noted that examples of pond construction costs that were furnished by the commenter were comparable with the costs reported in Table 4-8. The Beckstoffer pond for example was constructed for \$5,700, which is less than the total cost of \$6,746.96 per acre-foot derived from Table 4-8.

Comment 8.0.16: Form 399 Attachment, Section 4.4 - Corrective Action: Constructing additional off-stream water storage and Adoption of Best Management Practices. Table 4-8 does not include costs for a new pumping station. Table 4-8 allows a cost of \$20,000 for a pipeline, presumably for the purpose of conveying water from the source stream to the reservoir. However, Table 4-8 omits the cost of a new pumping station at the reservoir that would be needed to pump water out of the reservoir for frost protection. Additional costs will potentially be incurred for reconfiguring mainline piping systems for the new pump station. For example, for the Fetzer projects identified in item 2 above, about \$168,000 was expended at the Sundial Pond for new pumps and appurtenant facilities, and about \$69,000 was expended at the Los Cerros Pond for new pumps, mainline piping and appurtenant facilities. For the Beckstoffer project identified in item 2 above, the cost for pumps was about \$220,000. When this cost is added to the pond construction cost the total is cost is \$609,000, resulting in a unit cost for the project of about \$8,960 per acre-foot. Table 4-8 should be revised to include the cost of new pumping facilities that will be needed at new ponds for the withdrawal and application of water for frost protection. Table 4-8 also excludes the cost of fencing around these ponds; a fence is typically used around plastic-lined ponds for safety and to exclude wildlife that can damage the pond liner. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: In many cases existing pumping capacity that currently facilitates diversions and irrigation can be used to access water from new ponds. To assume no existing pumping capacity exists would result in higher than actual costs. The costs cited are high compared to costs reported by NRCS. Contacting the NRCS representative may provide additional information to the commenter. She will be able to give you the specifics on how similar projects were completed at a fraction of the costs reported.

Pond liners are not required by the proposed regulation therefore no equipment required for a pond liner is included in the economic analysis.

Comment 8.0.17: Form 399 Attachment, Section 4.4 - Corrective Action: Constructing additional off-stream water storage and Adoption of Best Management Practices. Table 4-8 inappropriately assumes a 50% cost share from NRCS. The assumption of a 50 percent NRCS AWEP cost share is not a “given,” however, Table 4-8 assumes that it will apply. There are several conditions to qualify for the limited AWEP funds (see Exhibit Y): (1) Growers must meet certain economic qualifications to qualify for these funds. Of the projects mentioned in item 2 above, the Fetzer and Beckstoffer projects did not qualify. (2) Based upon our conversation with Carol Mandel of the NRCS, the AWEP cost share program has, at most, two years left. (3) The money available is not unlimited. The program is competitive and the NRCS office ranks the projects based on estimated water savings. Only some projects are funded each year. (4) Due to price increases, the program only offers a fixed amount of money, not a 50% cost share as discussed in Table 4.8. This fixed rate translates into only a 30% to 40% cost share. Even at this level, many applicants cannot afford to construct the pond. In fact, several applicants who were awarded funding last year still could not afford to build the pond. (5) In order for an applicant to be considered for funding, they must have a permit from the SWRCB or some other legal basis authorizing the storage of water. Based on the SWRCB’s own Water Code section 1259.2 report, it takes the SWRCB anywhere from 2-5 years to issue a permit on a water right application in Sonoma or Mendocino counties (which we think is still extremely optimistic) (see Exhibit Z). Thus, by the time anyone undertakes corrective action under this regulation and applies for a permit to store water, the NRCS AWEP funding program will be over. This means that Table 4.8 in Form 399 should be rewritten and it should not consider any cost share from NRCS. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: A grower may apply directly to NRCS for financial or technical assistance to implement agricultural enhancement activities. However they must be eligible for the Environmental Quality Incentive Program (EQIP). A grower may also apply for Agricultural Water Enhancement Program (AWEP) assistance through an eligible entity that submits a proposal on behalf of a group of agricultural producers. The Conservation Program for Russian River Grape Growers is recognized as an eligible entity under AWEP. The NRCS will provide financial and technical assistance on water conserving practices that conserve salmon habitat while protecting crops from frost. Conservation practices include various types of wind machines, retrofitting of sprinkler heads, and incorporation of on-site weather stations to improve timing and application of water. The cost sharing of groundwater pumping could also be considered if the applicant can show that the well does not affect river stage. Grounds for disqualification of individual growers for the AWEP cost share are based principally on the lack of effectiveness of practices being proposed, although other criteria such as financial factors are also considered.

According to the California State office of NRCS, the Conservation Program for Russian River Grape Growers is currently funded through Fiscal Year 2012 (September 30, 2013) and funding is expected each year thereafter. NRCS places a high priority on the Russian River Program to reduce water diversions to protect salmonid habitat and it will receive strong support in upcoming funding authorizations such as the 2012 Farm Bill. Therefore, a 50 percent subsidy of installation costs is a plausible assumption. Under special circumstances, some applicants can be eligible for up to 70 percent of installation costs.

Although a water right permit is needed to authorize diversion of water, the water right applicant could build the reservoir using AWEP funds while waiting for permit issuance.

Comment 8.0.18: Form 399 Attachment, Section 4.4 - Corrective Action: Installing Wind Machines and Adoption of Best Management Practices: While Form 399 (page 22) does accurately report the costs one could expect to pay to install wind machines, it incorrectly assumes fans will work in Mendocino County and it excludes heater costs. All of the costs associated with installing wind machines in Mendocino County should include the cost of heaters, otherwise, the cost is significantly underestimated. It is important to note that Mendocino County experiences more frost events, on average, than Sonoma County, and the frost events it does experience are generally much colder. See attached Exhibit AA, which is a GIS-based frost risk assessment for the Russian River Valley. This analysis was prepared by a student, but was presented by NOAA Fisheries during a SWRCB frost protection workshop held on July 14, 2009. Note the much greater number of frost events at and above Hopland each year. Because of the more frequent and colder temperatures, it has been stated with conviction that fans simply do not work in Mendocino County without a significant number of heaters. Furthermore, some heater costs should be included in the Sonoma estimates because as Form 399 does state, fans do not work in all situations. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: While page 22 shows anticipated costs for wind machines, Table 4-11 shows that, for the purposes of the analysis, the adoption rate for wind machines in Mendocino County was assumed to be zero.

Comment 8.0.19: Form 399 Attachment, Section 4.4 - Corrective Action: Drilling Water Wells and Adoption of Best Management Practices. Form 399 does not include the costs associated with determining whether a well is hydraulically connected to the Russian River. Because this cost should be included in any analysis, we obtained an estimate from Todd Engineers, an engineering firm that specializes in hydrogeology. The estimate to determine whether a well is hydraulically connected to the Russian River is \$15,000.00. Please see Exhibit BB. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The State Water Board's Economic and Fiscal Analysis includes costs that are expected to be incurred by WDMP participants. Only those growers who choose not to participate in the WDMP will be required to show that their pumping does not affect water levels

in the Russian River. This is not considered to be a cost attributable to the proposed regulation.

Comment 8.0.20: Form 399 Attachment, Section 4.4 - Corrective Action: Coordinated Water Diversions and Adoption of Best Management Practices. Form 399 says cost of coordinating diversions would be negligible, but no basis for that estimation is provided. Extensive planning and communication would be required to coordinate diversions in real time across the Russian River watershed. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Stream stage monitoring data, frost diversion data, and fishery information may be evaluated during the risk assessment to assess whether water diversion coordination strategies may be effective in preventing salmonid stranding mortality. The assumed cost levels described in the Form 399 Attachment are considered adequate to cover the installation and operation of corrective action practices.

Comment 8.0.21: Form 399 Attachment, Section 4.5, Annual Report. Staff estimates the cost to develop the annual report at \$20,000 annually, but provides no information supporting the estimate. This section should be revised to disclose how this value was determined. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The cost of preparing the annual report is expected to be minimal since the costs of preparing the inventory results, diversion data (\$90,688), river stage information (\$304,319) and the risk analysis (\$37,000) are included in other cost categories (Table 4-13).

Comment 8.0.22: Form 399 Attachment, Section 4.6. Direct Cost of the Proposed Regulation. This section asserts the economic equivalence of costs and benefits associated with the proposed regulation, but information is lacking to support this conclusion. In Section 4.6 it is stated that the direct cost of the proposed regulation to Mendocino and Sonoma County growers “represents a reduction in income to growers but an increase in economic activity to firms providing services and products for frost protection therefore there is no net loss in aggregate welfare. The cost to growers of meeting the requirements of the proposed regulation is roughly equal to the regional economic benefits realized by those expenditures.” While the cost of the regulation will be borne locally, there is no information provided to conclude that the “firms providing services and products for frost protection” are local, therefore it cannot be concluded from the information provided that there is no net loss to the aggregate welfare, at least in the local context. Furthermore, any increase in economic activity due to the purchase of services and products will be temporary, and the on-going costs to the growers will continue long after the temporary bump in economic activity. The loss in tax revenue to the counties will also be permanent (see pages 49-51 of Exhibit S). Therefore, one cannot reasonably conclude there is “no net loss in aggregate welfare.” (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The Form 399 Attachment assumed the regional benefits of corrective actions, stream stage monitoring, and inventory expenditures are at least equal to the cost. This should not be a contentious assumption. The regional benefits of corrective actions and monitoring expenditures were similarly estimated in the Eyer study and he concluded that this is in fact true. In fact, that study estimates that the economic impact of \$83 million in wind machine purchases will result in an increase in regional economic activity of \$155 million; \$10 million spent on monitoring equipment would create \$19 million in regional economic activity. These results are high because inflated multipliers were used. However they are consistent with accepted analytical procedures and results from compatible studies. These results and conventional knowledge indicate that corrective action, inventory and monitoring costs will at least equal regional benefits.

Comment 8.0.23: Form 399 Attachment, Section 5.4. Benefits of the Regulation. Item C.3 of Form 399 asks for a dollar figure response on the “total statewide benefits from this regulation over its lifetime.” The response to Item C.3 refers to Section 5.3, however Section 5.3 does not address economic benefits. Item D.2 of Form 399 asks for dollar figures for the benefits associated with the proposed regulation and alternatives. The response to Item D.2 refers to Section 5.4 of Form 399, which subjectively and qualitatively describes the benefits of the proposed regulation, but does not quantify the economic benefits of the regulation. In addition to benefiting salmonids, Section 5.4 speculates that the proposed regulation “could lead to an increase in recreational and commercial fishing” which would benefit “people who work in the commercial fishing industry and the rural communities that provide goods and services to recreational anglers,” however, no dollar values are assigned to these benefits in Section 5.4 or elsewhere in the document. Section 5.4 concludes by stating that there is “intrinsic value” to preserving salmonid species. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: One of the stated purposes of a CEQA analysis is to “inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) “A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that “the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season.” This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential “environmental impacts” analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.24: Form 399 significantly underestimates costs by: (1) assuming that everyone subject to the regulation will be able to afford corrective measures, when in fact many will suffer significant crop loss every frost season, (2) using outdated multipliers in its analysis, (3) underestimating employment losses, (4) failing to include the costs of meter systems the regulation will require, (5) using outdated and nonlocal estimates for meters it does include in the cost analysis, (6) failing to include the costs associated with determining the stream stage necessary to prevent stranding, (7) failing to include the costs associated with performing an annual risk assessment, (8) unjustifiably reducing the number of acres that will be affected by

the regulation, (9) assuming most reservoirs are eligible to be used for frost protection, (10) assuming additional reservoirs can even be built in light of the SWRCB North Coast Instream Flow Policy, (11) underestimating reservoir construction costs, (12) failing to include pump station costs as part of reservoir construction costs, (13) assuming that USDA-NRCS grants are unlimited, apply to everyone and provide a 50% cost share, (14) assuming wind machines can be used effectively in Mendocino County, and (15) failing to include the costs associated with determining whether a groundwater well is “hydraulically connected” to the Russian River stream system. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This comment has fifteen parts, and each will be addressed individually:

- 1) See response to comment 8.0.3
- 2) See response to comment 8.0.40
- 3) See response to comment 8.0.40
- 4) See response to comment 8.0.7
- 5) See response to comment 8.0.8
- 6) The estimated cost per site is listed in table 4-3
- 7) See response to comment 8.0.9
- 8) See response to comment 8.0.10
- 9) See response to comment 8.0.11
- 10) See response to comment 8.0.14
- 11) See response to comment 8.0.15
- 12) See response to comment 8.0.16
- 13) See response to comment 8.0.17
- 14) See response to comment 8.0.18
- 15) See response to comment 8.0.19

Comment 8.0.25: There is nothing in Form 399 or its attachment that quantifies benefits economically, and therefore the assertions of no net loss in aggregate welfare and the equality of expenditures and benefits are not supported in this document. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Only the regional benefits of expenditures for corrective actions, inventory and monitoring were assumed to be monetarily equal. The Form 399 Attachment assumed the regional benefits of corrective actions, stream stage monitoring, and inventory expenditures are at least equal to the costs. This should not be a contentious assumption. The regional benefits of corrective actions and monitoring expenditures were similarly estimated in the Eyler study and he concluded that this is in fact true. In fact, that study estimates that the economic impact of \$83 million in wind machine purchases will result in an increase in regional economic activity of \$155 million; \$10 million spent on monitoring equipment would create \$19 million in regional economic activity. These results are high because inflated multipliers were used. However they are consistent with accepted analytical procedures and results from compatible studies. These results and conventional knowledge indicate that corrective action, inventory and monitoring costs will at least equal regional benefits.

One of the stated purposes of a CEQA analysis is to “inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) “A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that “the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season.” This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential “environmental impacts” analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.26: The 3/21/2011 Economic Impact Analysis concludes by providing an overview of economic impacts; the stated benefits of which would mainly be to the habitat of salmonid fisheries and fishing throughout the Russian River basin. The benefits are anecdotally stated and not estimated in terms of economic impact. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: One of the stated purposes of a CEQA analysis is to “inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) “A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that “the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season.” This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential “environmental impacts” analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.27: The results in the 3/21/2011 Economic Analysis report understate the proposed regulation's cost by using a simplified economic impact analysis and by not integrating the true capital cost cash flows into the annual regulatory cost figures. The analysis simply spreads the costs of installing new capital equipment evenly over a 30-year period. Such an even spread does not recognize up-front costs for farmers that maybe needed to initiate a loan or the project itself. By not considering cash flow will be larger in the first five years to install the corrective equipment or conform initially to the proposed regulation over the timeline of the analysis (five years from regulation inception), the costs to wine grape farmers are grossly understated. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The capital costs specified in the Form 399 Attachment adequately cover the purchase and initial costs of all expenditures that will be required by the proposed regulation.

Capitalizing these costs over the life of the investment is the correct procedure. Capitalizing initial expenditures over a short time horizon is not correct. A substantial amount of the investment in corrective actions will be financed internally by wine grape producers. This would lower the corrective action costs considerably because only the opportunity cost of capital would be included. The analysis also ignores the tax advantages of the investment in the form of allowed accelerated depreciation.

Comment 8.0.28: The 3/21/2011 Economic Analysis indicates the association of wine grape farms to other, affected businesses (the multiplier effects), is much smaller than would be expected if the standard method used in the wine industry were followed to see how other firms are impacted. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Total economic impacts were estimated using standard input-output techniques. The method used by Eyler to estimate the total economic impacts is incorrect and results in massive double counting. See response to 8.0.2 and 8.0.30.

The total economic impacts were estimated using the most recent IMPLAN input-output multipliers available. The sector multiplier used was the fruit farming sector which includes pears. It is important to note that the IMPLAN model is resident at the California Department of Water Resources and was not modified in any way by the user.

Based on the Eyler study, the wine industry needs to review their economic impact analysis and procedures to insure they are not overestimating secondary economic effects. Assuming that economic changes in one sector have a direct one to one affect on a secondary industry is not realistic. This relationship definitely does not exist in the Russian River Watershed because there has been an over supply of premium wine grapes in the recent past that has resulted in depressed wine grape prices. For a current assessment of the regional wine grape market see "Market for California's North Coast wine grapes improving", by Greg Northcutt, August 24, 2011 1:36 pm, http://westernfarmpress.com/grapes/market-california-s-north-coast-,wine-grapes-improving?YM_MID=1253627&YM_RID=ghorner%40waterboards.ca.gov#.TIUuVoiQevY.email, and "Wine Grape Growers See Multiyear Contracts Return; Some Prices Also Improving" (<http://www.northbaybusinessjournal.com/36880/wine-grape-contracts/>)" By Jeff Quackenbush, North Bay Business Journal Staff Reporter, July 25th, 2011 06:58am.

Comment 8.0.29: A review of the 3/21/2011 Economic Analysis reveals that there are some large assumptions made by the author about the economic impacts of this regulation on the wine grape industry, and the economic impact analysis understates the impacts due to the method used in calculating the impacts. The capital costs of converting or "correcting" non-compliant vineyard are likely understated for the five-year period of analysis and thus contribute to an understatement of the economic impacts. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: If the comment is suggesting that the capital costs should be amortized over 5

years because the analysis has a 5 year time horizon, this is incorrect for two reasons. First, capital costs are amortized over the useful life of the investment, which is 30 years, and second, the period of analysis is for 30 years, the projected life of the regulation. This is considered a conservative assumption since the life the regulation and its successors may be considerably longer.

Comment 8.0.30: A review of the 3/21/2011 Economic Analysis reveals that there are some large assumptions made by the author about the economic impacts of this regulation on the wine grape industry, and the economic impact analysis understates the impacts due to the method used in calculating the impacts. The economic impact analysis uses multipliers only for wine grape vineyards and assumes intra-industry effects that are smaller than the most recent impact multiplier in Sonoma and Mendocino counties for wine grape or pear farms. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The total economic impacts were estimated using the most recent IMPLAN input-output multipliers available. The sector multiplier used was the fruit farming sector which includes pears. Also see response to comments 8.0.2 and 8.0.40. It is important to note that the IMPLAN model is resident at the California Department of Water Resources and was not modified in any way by the user.

Comment 8.0.31: A review of the 3/21/2011 Economic Analysis reveals that there are some large assumptions made by the author about the economic impacts of this regulation on the wine grape industry, and the economic impact analysis understates the impacts due to the method used in calculating the impacts. The study likely underestimates the number of farms to come under the regulation by providing no pinpoint geography of the proposed regulation and assuming the typical wine grape farm is 160 acres in size. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The number of farms does not factor into the estimation of the economic impacts of the proposed regulation. The number of farms subject to the proposed regulation was not estimated because that data is not published on a regular basis by any public agency. In reference to "pinpoint geography", a GIS analysis identifying the crop acreage that could be subject to corrective action was conducted and the results were included in the Attachment (Table 4-5).

The typical wine grape farm was not assumed to be 160 acres. Rather than select one size, four sizes of operation ranging from 40 to 640 acres were specified (see Table 4-14). The specification of the size of operations does not change per acre costs or the total cost of the proposed regulation. The assumption regarding the typical size of operation was used to report capital and annual costs on the Form 399.

Comment 8.0.32: The 3/21/2011 Economic Analysis attempts to determine the number of acres that will be impacted by the regulation through a variety of assumptions and estimations. Tables 3-1 through 3-5 set up the basic analysis of regulatory costs to farmers and ultimately to

the county economies. These tables define the estimated area that may be affected, which helps to estimate the number of affected businesses. Based upon Table 3-5, approximately 74,320 acres in Mendocino and Sonoma counties could be affected by the regulation. The 3/21/2011 Economic Analysis then goes on to reduce the amount of affected acreage to a total of 21,198 acres (Table 3-8). If the number of acres under protection increases from these estimates, so do the potential number of stations needed to monitor and assess compliance, the number of vineyards; and ultimately the economic impacts. An important aspect of the 3/21/2011 Economic Analysis is that it assumes less than the total acreage in these counties will be affected by the regulation. It is likely, however, that wine grape and pear acreage in Sonoma and Mendocino counties would be "assessed" for exposure to a regulatory violation. Thus, it is possible that all acres in these counties will be asked to engage in some "corrective" action. For example, in Mendocino County, the report suggests there would be no wind machines installed or used (Table 4-11 shows no acreage in Mendocino protected by wind). Any frost protection, compliant or non-compliant, would involve water use. That exposes the entirety of Mendocino's wine grape and pear farms to this proposed regulation if the initial assessment suggests corrections need to be made to all wine grape and pear farms, which is a risk to farmers as a result of the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: It is reasonable to assume that an area less than the entire acreage of the geographic area affected by the proposed regulation would undergo some corrective action. The Board used the entire vineyard acreage within the NMFS Potential Stranding Sites Layer (stranding layer) to identify streams and associated watershed acreage that may likely need corrective action based on existing information. Because only a portion of any watershed acreage identified in the stranding layer analysis would need corrective action, it is reasonable to assume that acreage determined to need corrective action that are located outside of the watersheds identified in the stranding layer analysis would be covered by the additional acreage included in the Board's analysis for the stranding layer that did not actually require corrective action.

Comment 8.0.33: The 3/21/2011 Economic Analysis' description of the Russian River watershed underestimates the cost of the program by underestimating the amount of water needed for frost protection in Sonoma County and the number of acres potentially affected by the regulation. It assumes that the temperature in Sonoma County is uniform, and based upon this uniformity, estimates the amount of water used for frost protection. Table 4-7 of the report provides this data, which is connected to the fourth column of Table 4-6, labeled "Frost Protection Availability Factor". These data estimate the acre-feet of water used per acre per year for frost protection from available sources. The percentage assigned to Sonoma County is the same as Hopland, the southernmost town in Mendocino County with a weather station (see footnote 1 of Table 4-7). Yet this assumption is incorrect. Looking at the weather data in Hopland since 1989, between the dates of March 15 and May 15, the average daily low was under 40 degrees only 4 days which is "warmer" than weather stations in Sonoma County; it seems likely that a statistical analysis of the daily temperatures in Hopland would show it to be warmer than other points to the south with statistical significance, Hopland would use less water than its southern neighbors. By using Hopland as the basis for water use, the 3/21/2011 Economic Analysis is underestimating the amount of water needed in Sonoma County, and therefore the costs of the regulation. (*Jesse Barton, Gallery and Barton Law Corporation;*

Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: Using the Hopland site temperature data as a proxy for Sonoma County actually overestimates the frost risk to Sonoma County. One only has to look at the data contained in Exhibit 3 of the comment letter submitted by the Upper Russian River Stewardship Alliance and the Middle Russian River Stewardship Alliance on November 10, 2009 for the November 18, 2009 State Water Board workshop. Exhibit 3 is an analysis of low stream flows and freezing temperatures at Hopland and Healdsburg conducted by Wagner & Bonsignore, Consulting Civil Engineers. The two sites were selected by the two groups as representative sites of Mendocino and Sonoma Counties. Staff compared the data from the two sites to see the difference in frost risk between the two counties. The number of days of less than or equal to 32 degrees between March 1 to May 31 in the years 1991 to 2009 recorded in Sanel Valley (Hopland) was 150. In Windsor (Healdsburg), 76 days were recorded. According to this compelling data, Hopland is much colder in terms of frost risk than central Sonoma County (Healdsburg). See also the Exhibit AA referenced by Jesse Barton, which indicates that there are much greater numbers of frost events at and above Hopland each year.

The information clearly indicates that Hopland has an average number of spring frost days far in excess of those experienced in Sonoma County. Therefore the use of this assumption will overestimate the amount of water required by Sonoma County growers for frost diversion..

Comment 8.0.34: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and it's Appendix. (Section 6). Capital costs used in the final analysis were underestimated. The capital cost analysis is a critical factor in determining the economic impact of this regulation on wine grape farmers. Having the capital costs included means there should also be an analysis of the benefits to local contractors and firms that specialize in building ponds, dams, wind machines, etc. Overall, there could be a net benefit calculation. On the other hand, the capital costs depend on the farmer's ability to finance the mandated cost in the first place. If farmers foresee a relatively large cost per acre to comply with the proposed regulation, and decide to cease operations, or reduce their acreage in wine grapes or pears to reduce the costs, then no benefits will be realized by firms providing support to a new water demand management program. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)*)

Response: Capital costs were explicitly and correctly accounted for in all corrective action and monitoring budgets.

The specific beneficiaries of the corrective action and monitoring expenditures were not identified but the assumption that the regional benefits of those expenditures would exceed the costs to growers was made. This should not be a contentious assumption. The regional benefits of corrective actions and monitoring expenditures were similarly estimated in the Eyler study and he concluded that this is in fact true. In fact, that study estimates that the economic impact of \$83 million in wind machine purchases will result in an increase in regional economic activity of \$155 million; \$10 million spent on monitoring equipment would create \$19 million in regional economic activity. These results are high because inflated multipliers were used.

However they are consistent with accepted analytical procedures and results from compatible studies. These results and conventional knowledge indicate that corrective action, inventory and monitoring costs will at least equal regional benefits.

The reduction in crop acreage and production resulting from increased production costs is address in Section 4.8. The secondary economic effects (benefits) of the corrective action and monitoring expenditures were not estimated in the analysis but assumed at least equal. This is explained in the response to 8.0.22.

Comment 8.0.35: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and it's Appendix. (Section 6). The number of businesses affected was underestimated. The analysis assumed a 50% payment cost reduction, paid for by a USDA program. This assumes all affected parties will be eligible for the USDA funding, that the funds are able to satiate the demand from this proposed regulation, and the program funding will remain intact, which may or may not be likely. If the "state" regulation goes into place, and the costs to farmers are two years off, the federal funding to support this may be exhausted. The impacts on farmers increase significantly if this is the case. The capital costs need to be amortized over the 5-year analysis (see below) in the least, and a net benefit analysis would also help make the calculations more realistic to the cash outflow for farmers to be compliant. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The number of affected regional businesses is estimated at over 3,000 (Table 5-1). This is not an underestimate. This is the total number of firms in the two counties that are economically linked to agriculture. This number is necessarily larger than the number of Russian River watershed firms. Most of these businesses will experience a positive impact due to corrective action, inventory, monitoring and administrative expenditures.

The USDA program will be able to cost share the pond construction that could be required under the proposed regulation. The AWEF program is expected to continue through FY 2012 and thereafter. Although a water right permit is needed to authorize diversion of water, the water right applicant could build the reservoir using AWEF funds while waiting for permit issuance.

The capital costs were correctly amortized over the lifetime of the project. If the comment is suggesting that the capital costs should be amortized over 5 years because the analysis has a 5 year time horizon, this is incorrect for two reasons. First, capital costs are amortized over the useful life of the investment, which is 30 years, and second, the period of analysis is for 30 years, the projected life of the regulation. This is considered a conservative assumption since the life the regulation and its successors may be considerably longer.

The Form 399 Attachment did not identify specific beneficiaries of corrective action and monitoring expenditures but it assumed that the regional benefits of those expenditures would exceed the costs to growers. The regional benefits of corrective actions, stream stage monitoring, and inventory expenditures were assumed to be at least equal to the cost. This should not be a contentious assumption. The regional benefits of corrective actions and monitoring expenditures were similarly estimated in the Eyler study and he concluded that this is in fact true. In fact, that study estimates that the economic impact of \$83 million in wind

machine purchases will result in an increase in regional economic activity of \$155 million; \$10 million spent on monitoring equipment would create \$19 million in regional economic activity. These results are high because inflated multipliers were used. However they are consistent with accepted analytical procedures and results from compatible studies. These results and conventional knowledge indicate that corrective action, inventory and monitoring costs will at least equal regional benefits.

Comment 8.0.36: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and it's Appendix. (Section 6). The number of businesses affected was underestimated. Since wind is not an effective form of frost control in Mendocino County, by Table 4-11's statement, then the costs for Mendocino farmers are differentially higher to comply than in Sonoma County. The numbers further estimate that there will be 70% of affected Mendocino acreage and 65% of Sonoma acreage to install ponds, which is the most costly of the alternatives. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Careful inspection of Table 4-11 will show that the assumption not to include wind machines as a Mendocino County frost protection option actually reduces the total estimate costs of frost protection because wind is the most costly option. Installing ponds costs \$245.99 per acre and wind machines cost \$408.34 per acre. Installing ponds in Sonoma County is estimated at \$168.70 per acre and wind machines will cost \$277.84 per acre.

Comment 8.0.37: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and it's Appendix. (Section 6). The number of businesses affected was underestimated. The analysis seems to use bearing acreage only. If the monitoring is not to start for another two years, currently non-bearing acreage will then be bearing in some proportion. As a cover, all acreage should be used; also, the regulation will likely reduce the planting of new acreage, which directly affects firms that specialize in vineyard management and planting. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Non-bearing wine grape acreage will transition to bearing acreage and this is not considered in the analysis because it is assumed to replace a similar amount of current production acreage.

The total reduction in fruit acreage, production and value as the result of the proposed regulation is estimated in Section 4.9. This estimate includes the indirect economic impacts of wine grape and pear production.

Comment 8.0.38: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and it's Appendix. (Section 6). The assumption that many industries are indirectly affected versus being directly affected by changes to vineyard production and cost (e.g., vineyard management and wineries that buy and transfer grapes from vineyards at a certain cost that may rise to cover the regulation's cost)

is a shortcoming of the analysis. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter is confused about direct and indirect economic effects of the proposed regulation. The proposed regulation will directly affect the operations of wine grape and pear growers. The subsequent impacts of actions taken by the growers are considered indirect and induced economic effects and are included in the SAM type employment, income and output multipliers used in this analysis. To suggest that the second round of expenditures be somehow considered direct effects will result in double counting and a severe overestimation of the total economic impact.

Comment 8.0.39: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and its Appendix. (Section 6). Capital costs used in the final analysis were underestimated. The capital costs were assumed to spread evenly over a 30-year period. This assumes that the farmer will not have to pay a down payment to receive a loan from a financial institution at an estimated six percent rate of interest. If a down payment is necessary, or if the interest rate increases from 6%, the cost to the farmer rises. If these costs rise, the negative economic impacts as stated in the 3/21/2011 Economic Analysis are underestimated. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The capital costs are correctly amortized over the useful life of the investment. The use of 6 percent is typical in the current capital market for this type of investment and is assumed to remain relatively constant in the future. The tax benefits of the investment and internal financing were not accounted for in this analysis.

The capital costs adequately cover the purchase and initial costs of all expenditures that will be required by the proposed regulation. Capitalizing these costs over the life of the investment is the correct procedure. Capitalizing initial expenditures over a short time horizon is not correct. A substantial amount of the investment in corrective actions will be financed internally by wine grape producers. This would lower the corrective action costs considerably because only the opportunity cost of capital would be included. The analysis also ignores the tax advantages of the investment in the form of allowed accelerated depreciation.

Comment 8.0.40: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and its Appendix. (Section 6). The analysis used IMPLAN multipliers. Use of IMPLAN multipliers is not the same as using IMPLAN itself. Rather than rely on the IMPLAN model, the 3/21/2011 Economic Analysis simply uses the multipliers of an older IMPLAN version as a statement of intra-industry effects. As a result, the 3/21/2011 Economic Analysis underestimates the regional income and employment impacts of the regulation. Table 5-2 in the 3/21/2011 Economic Analysis estimated employment impacts from the estimated loss of vineyard revenue using a simple multiplier of 1.95 jobs per grape growing job lost for every \$1 million in lost production value. Based on Table 5-2, the 3/21/2011 Economic Analysis concluded that limited job loss will result from the regulation. This analysis used the RIMS II multipliers and obtained these multipliers for 2007 and for California overall using the NAICS code for "Fruit Farming". However, if the most recent IMPLAN model is used,

which uses RIMS III multipliers, and can apply them specifically to Sonoma and Mendocino counties, the lost employment numbers are higher. (Commenter compares his Table 1, pg 5 with Table 2, pg 6.) (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Total economic impacts of the proposed regulation were estimated using California input-output multipliers generated by MIG, Inc (formerly Minnesota IMPLAN Group, Inc) for 2007. The 2007 multipliers were the most recent IMPLAN multipliers available at the time of this analysis.

The IMPLAN model estimates multipliers based on user specified geographic and economic sector delineations. The IMPLAN model does not perform impact analysis. Procedures for estimating regional economic impacts are available from IMPLAN. The specific multipliers used in this analysis were estimates for the State of California. The resulting multipliers are larger than what would be estimated for either the Mendocino or Sonoma county economy or for the Russian River watershed economy. Therefore the reported total economic impacts are actually greater than what would be estimated using the multipliers estimated at the county level.

The commenter incorrectly states that RIMS II (Regional Input-output Modeling System) multipliers were used to estimate total economic impacts. RIMS II is a model developed and maintained by the US Bureau of Economic Analysis. It estimates multipliers for state, MSA and county economies and is publically available upon request at a nominal cost. This model or service was not used to estimate the total economic impacts of the proposed regulation. It is important to note that IMPLAN does not use or distribute, nor have they ever used or distributed RIMS generated data or multipliers in their model. In fact IMPLAN was originally developed by the US forest Service in the 1970s as an alternative to RIMS. RIMS is a closed model and the multipliers cannot be edited or changed by the user. The Forest Service wanted multipliers that showed more geographic and sector detail and The IMPLAN model was the result. It was subsequently privatized. It has the advantage and disadvantage of being modified by the user if the user feels that better regional data exists. Therefore it is important to know if the user has in any way modified the underlying transaction table, the table of direct coefficients, the multipliers, or the demand patterns.

Incidentally, a RIMS III model or multipliers does not exist for distribution or sale at this time.

Comment 8.0.41: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and it's Appendix. (Section 6). The analysis used IMPLAN multipliers. Use of IMPLAN multipliers is not the same as using IMPLAN itself. Rather than rely on the IMPLAN model, the 3/21/2011 Economic Analysis simply uses the multipliers of an older IMPLAN version as a statement of intra-industry effects. As a result, the 3/21/2011 Economic Analysis underestimates the regional income and employment impacts of the regulation. [The commenter's Table 3] shows the results of losing \$1,000,000 of production (as measured by reduced revenue) for grape farming. Looking at incomes and jobs, losing \$1,000,000 from grape farming reduced jobs by 15.7 throughout the local economy, has a 1.798 multiplier effect on other business incomes per \$1 lost of farmer revenue in these counties, and over \$634K in wages if \$1 million in revenue was lost. As can be seen in Table 3, for every \$1 lost using the Sonoma County multipliers from 2008 and the IMPLAN model overall, the business revenue multiplier is \$1.799, which is greater than the \$1.643 stated in the

3/21/2011 Economic Analysis. [Commenter states that] if the latest and geography-specific multipliers in [commenter's] Table 3 were used, the types of firms most affected, and the percentage of intra-industry effects, would be different [than those reported in the 3/21/2011 Economic Analysis]. Further, the breadth of industries affected [list shown in section 5.1 of the 3/21/2011 Economic Analysis] is not in agreement with the latest multipliers. Table 4 [in the commenter's letter] recasts [the list in section 5.1 of the 3/21/2011 Economic Analysis] using multipliers used to generate the data in [commenter's] Tables 2 and 3. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Input-output multipliers are not expressed in dollars and cents but as ratios of total economic impact to direct economic impact. See the response to 8.0.40.

Comment 8.0.42: The 3/21/2011 Economic Analysis' local and regional economic impact analyses are contained in portions of its sections 4 and 5 and its Appendix. (Section 6). Typical farms are stated to be 160 acres in size, which implies a small number of farming businesses based on the stated acreage by NASS. Table 4-17 of the 3/21/2011 Economic Analysis states that the reporting cost for a typical business will be \$151, assuming a typical business is composed of 160 acres. No explanation is given why 160 acres was chosen as the "typical" size. The appropriate method of determining the number of business affected would be to use the number of bearing acres in Sonoma and Mendocino counties from the Grape Acreage report and recent figures from the Employment Development Department of California (EDD) on the number of grape vineyards that are in Sonoma and Mendocino counties as payroll establishments. However, even then the numbers of acres per farm will be artificially high because some farmers do not pay any wages because they own a self-proprietorship without any ancillary labor, do not pay W-2 workers, or pay contract labor, all of which will not show up in the EDD figures concerning number of businesses. In addition, some vineyard operations are counted within the number of wineries, a different industrial category in the North American Industry Classification System (NAICS) codes. As a result, the actual number of firms that are growing grapes is likely larger for that reason as well, which means more business are affected than the 3/21/2011 Economic Analysis estimates. It is important that accurate figures are used in this analysis. If the number of farms increases from the current estimates, the number of grape-growing-operations affected by the proposed regulation rises. This would, in turn, increase the negative economic impacts to the wine industry and (the county economies as calculated because more acreage would also fall under the proposed regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The regional economic impacts are reported in Section 5.

Size of operating vineyards is not a reported statistic but a typical sized operation is selected to illustrate the impact of required reporting.

The number of businesses affected by the proposed regulation is presented in Table 5.1. The size or number of wine grape and pear operations does not have any effect on the magnitude of the economic impact of the proposed regulation. It is only used to illustrate the magnitude of

the impacts on operations of different sizes.

Comment 8.0.43: The overall, negative economic impacts of the regulation on the counties of Sonoma and Mendocino, and ultimately on the State of California, are underestimated in the 3/21/2011 Economic Analysis for the following reasons: (1) The way capital costs per acre are used within the calculation of the economic detriment of the regulation on the California economy underestimates the negative impacts; (2) The multipliers used for estimating the effects are smaller than the most recent and geographically specific multipliers for Sonoma and Mendocino counties; and (3) The number of firms and acres affected is likely underestimated as well as the breadth of firms that are directly affected by the proposed regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This comment has three parts, and each will be addressed individually:

- 1) See response to comment 8.0.39
- 2) See response to comments 8.0.40, 8.0.41
- 3) See response to comment 8.0.42

Comment 8.0.44: The commenter had no issue with the methods used in the Appendix to the 3/21/2011 Economic Analysis. Rather, the commenter had issues with the data used to determine the final values and the methods used once these figures are in place for the economic impact analysis. The commenter noted that the analysis shows Chardonnay in all cases sees an increase in acreage as a result of higher costs of production in the long run, and that it is convenient that Chardonnay has a negative, long-run supply elasticity, which reduces the overall impacts. The commenter noted the analysis assumes that the long run is five years; and given that new grapes take 3-5 years to bear fruit, the commenter was not sure why five years would be considered the long run versus 20 to 30 years, which would also increase the negative economic impact to farmers. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The long run is considered the long run because wine grape planting decisions have a 3-5 year time horizon. Contrary to the assertions of the commenter, defining the long run as being longer in duration would decrease the estimated economic impact not increase it.

Comment 8.0.45: The 3/21/2011 Economic Analysis is similar to the original document shown in 2010 by the SWRCB. The costs of monitoring, reporting, assessment, and new capital formation is squarely on farmers, short of the 50% shared cost for a new reservoir, assumed to be covered by a federal government subsidy, which may or may not remain in place. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: See the response to 8.0.17. A grower may apply directly to NRCS for financial or technical assistance to implement agricultural enhancement activities. However they must be

eligible for the Environmental Quality Incentive Program (EQIP). A grower may also apply for Agricultural Water Enhancement Program (AWEP) assistance through an eligible entity that submits a proposal on behalf of a group of agricultural producers. The Conservation Program for Russian River Grape Growers is recognized as an eligible entity under AWEP. The NRCS will provide financial and technical assistance on water conserving practices that conserve salmon habitat while protecting crops from frost. Conservation practices include various types of wind machines, retrofitting of sprinkler heads, and incorporation of on-site weather stations to improve timing and application of water. The cost sharing of groundwater pumping could also be considered if the applicant can show that the well does not affect river stage. Grounds for disqualification of individual growers for the AWEP cost share are based principally on the lack of effectiveness of practices being proposed, although other criteria such as financial factors are also considered.

According to the California State office of NRCS, the Conservation Program for Russian River Grape Growers is currently funded through Fiscal Year 2012 (September 30, 2013) and funding is expected each year thereafter. NRCS places a high priority on the Russian River Program to reduce water diversions to protect salmonid habitat and it will receive strong support in upcoming funding authorizations such as the 2012 Farm Bill. Therefore assuming a 50 percent subsidy of installation costs is a plausible assumption. Under special circumstances, some applicants can be eligible for up to 70 percent of installation costs.

Although a water right permit is needed to authorize diversion of water, the water right applicant could build the reservoir using AWEP funds while waiting for permit issuance

Comment 8.0.46: The 3/21/2011 Economic Analysis assumes that a small number of acres would be frost protected in Mendocino County. It is critical to consider the loss of farmers due to the imposed cost. The non-corrective and corrective action acres make the estimates smaller than they originally were in the original 2010 version. If corrective actions are seen as coming in year 2 after initial assessment, those corrective costs of building capital are not in the overall impacts as cash flows for farmers. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: It is reasonable to assume that an area less than the entire acreage of the geographic area affected by the proposed regulation would undergo some corrective action. The Board used the entire vineyard acreage within the NMFS Potential Stranding Sites Layer (stranding layer) to identify streams and associated watershed acreage that may likely need corrective action based on existing information. Because only a portion of any watershed acreage identified in the stranding layer analysis would need corrective action, it is reasonable to assume that acreage determined to need corrective action that are located outside of the watersheds identified in the stranding layer analysis would be covered by the additional acreage included in the Board's analysis for the stranding layer that did not actually require corrective action.

The total cost of corrective actions was assumed to occur in year two (Table 4-12).

Comment 8.0.47: The 3/21/2011 Economic Analysis assumes water use is the same throughout Sonoma County, which cannot be true. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards;*

Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: Using the Hopland site temperature data as a proxy for Sonoma County actually overestimates the frost risk to Sonoma County. One only has to look at the data contained in Exhibit 3 of the comment letter submitted by the Upper Russian River Stewardship Alliance and the Middle Russian River Stewardship Alliance on November 10, 2009 for the November 18, 2009 State Water Board workshop. Exhibit 3 is an analysis of low stream flows and freezing temperatures at Hopland and Healdsburg conducted by Wagner & Bonsignore, Consulting Civil Engineers. The two sites were selected by the two groups as representative sites of Mendocino and Sonoma Counties. Staff compared the data from the two sites to see the difference in frost risk between the two counties. The number of days of less than or equal to 32 degrees between March 1 to May 31 in the years 1991 to 2009 recorded in Sanel Valley (Hopland) was 150. In Windsor (Healdsburg), 76 days were recorded. According to this compelling data, Hopland is much colder in terms of frost risk than central Sonoma County (Healdsburg). See also the Exhibit AA referenced by Jesse Barton, which indicates that there are much greater numbers of frost events at and above Hopland each year.

The information clearly indicates that Hopland has an average number of spring frost days far in excess of those experienced in Sonoma County. Therefore the use of this assumption will overestimate the amount of water required by Sonoma County growers for frost diversion.. The water use for frost protection in Hopland was assumed as the average water use for Sonoma County.

Comment 8.0.48: Regarding the 3/21/2011 Economic Analysis, if wind is the least costly [corrective action], but does not work in all areas, we must assume that the proposed regulation will cost farmers more. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Wind machines are not the least cost option for frost control. It is the highest cost option. Careful inspection of Table 4-11 will show that the assumption not to include wind machines as a Mendocino County frost protection option actually reduces the total estimated costs of frost protection because wind is the most costly option. Installing ponds costs \$245.99 per acre and wind machines cost \$408.34 per acre. Installing ponds in Sonoma County is estimated at \$168.70 per acre and wind machines will cost \$277.84 per acre.

Comment 8.0.49: The 3/21/2011 Economic Analysis assumes wind will not apply anywhere in Mendocino County, and that most farmers will have to install ponds, if that is even possible. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Ponds are extensively used for irrigation and frost protection in Mendocino County. New installations are entirely possible and probable.

Comment 8.0.50: Regarding the 3/21/2011 Economic Analysis, if corrective actions are seen as coming in year 2 after initial assessment, those corrective costs of building capital are not in the overall impacts as cash flows for farmers. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The cost estimates account for all capital and annual costs.

Comment 8.0.51: The Draft Regulation is expected to require vineyard owners to spend huge sums of money to employ consultants, conduct monitoring, participate in a plan and then implement interim and permanent corrective measures, and this expenditure is not economically achievable for many vineyard owners. The vibrant and growing wine grape industry in Mendocino and Sonoma Counties is composed in large part of small vineyard owners and wineries, many of whom entered the business in the last 25 years. It is absolutely critical for these businesses that their wine grapes be protected during the early part of the growing season when freezing temperatures threaten the viability of the grapes. If proper frost protection is not implemented, the crops could be completely lost.

As the Draft EIR concedes (page 41), wine grapes are far and away the top agricultural crop in Mendocino and Sonoma Counties, with an annual value in 2009 of \$78.5 million in Mendocino County and \$465 million in Sonoma County, totaling over half a billion dollars annually. These crops dwarf in value all of the other agricultural crops in the counties put together. Without question, wine grapes are a key driver and economic mainstay of the economies in both counties. It is undisputed that frost protection to protect these crops is a recognized "beneficial use" which the State Board is required to enhance and protect. However, the Draft Regulation makes no attempt to protect and enhance this beneficial use. To the contrary, it elevates protection of one beneficial use above all other beneficial uses.

The Board's own economic analysis demonstrates that adoption of the Draft Regulation will have huge economic consequences for wine grape growers. A typical 160-acre wine grape vineyard is expected to spend from \$9,600 to \$352,000 initially (including capital costs for corrective actions) to comply with the Regulation's mandates and an additional \$3,000 to \$36,200 every year to remain in compliance. For small farmers like Golden Vineyards, these expected costs are not affordable and could well cause a wholesale shift in land use away from wine grapes. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Estimates of capital and annual costs of the proposed regulation are presented in Table 4-13. The expected reduction in crop acreage as a result of the costs is estimated at 159 (Table 4-15).

The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost.

Comment 8.0.52: Please note that the "Economic and Fiscal Impacts of the Proposed Frost

Regulation" provided in the DEIR Appendix D fails to provide any quantitative analysis or accounting for the values of the steelhead, Coho and Chinook salmon themselves; any value of recreational, sports or commercial fisheries for these species with their recovery; the tourism values of having a river with a viable and recovering salmonid populations; lost property values for Sonoma and Mendocino land without salmon and steelhead as part of the regional attractiveness; the intrinsic value of the salmon and steelhead; and the regional identity as not just the Redwood Empire, but also the historic identity of the Russian River watershed as a prime salmon and steelhead region of the country and North Bay region. As a result, the economic analysis is completely skewed and invalid, with only a declaration of the most severe costs of purported losses to the grape and wine industries and no costs or benefits related to the loss or recovery of steelhead, Chinook or Coho salmon. However, like any real balance sheet, it should have included the net gains for a recovered, and revered, salmon and steelhead population throughout the Sonoma and Mendocino watershed of the Russian River - or conversely, for their loss in this region. For the economic analysis to have any value, credibility, validity and relevance to the proposed Regulation, the DEIR should include a completely revised and balanced economic analysis including the quantitative values of a recovering or lost fishery. At the very least, the losses purported to accrue to the grape and wine industries must be balanced with the losses attributable to the long-term loss of salmon and steelhead in the region. In addition, the continued demands for Eel River water (never compensated or paid for by its Russian River water beneficiaries) and the losses to Eel River threatened and endangered salmon and steelhead populations, fisheries, tourism, recreation, tourism, tribal rights and historic identities, and North Coast regional identities, should be included in any so-called economic analysis that attempts to quantify the value of grapes and wine production vs. proposed regulatory controls on the indiscriminate use of water and public trust resources for frost control irrigation. (*Larry Hanson, Northern California River Watch*)

Response: One of the stated purposes of a CEQA analysis is to "inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities." (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) "A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that "the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season." This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential "environmental impacts" analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.53: The DEIR includes figures only on the economic value of crops such as vineyards. And in doing so, the DEIR looked at none other than the California Farm Bureau's website (DEIR p. 41). There is no attempt, however to quantify what salmon and steelhead are worth, what their functioning habitat is worth, how much it costs to run hatcheries, to restore destroyed habitat, and to run a system that is in place to manage the excesses of the industry that complains that they might have to change their practices in significant ways precisely due to its own excesses. Analyses of what it actually costs to replace the functions that habitat and species perform have been conducted by others. For example, it has been determined that, "[a]llowing the current rate of biodiversity loss to continue could cost the global economy untold trillions." <http://summitcountyvoice.com/2010/05/30/the-cost-of-extinction/> and <http://www.ciel.org/Publications/summary.html> and many other reports. The industry's

economics, a major concern of the regulation, are in many ways artificial. A regulation cannot possibly properly gauge its affect on an industry that has externalized many of its costs for decades. Extractive industries have always had many of their costs carried by the public, regulatory agencies, and the environment. Requiring them to internalize costs by properly protecting the environment through adequate regulation is how industries of the twenty-first century should be operating and how the environment will be properly valued. (*Larry Hanson, Northern California River Watch*)

Response: One of the stated purposes of a CEQA analysis is to “inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) “A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that “the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season.” This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential “environmental impacts” analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.54: According to the Marin Institute, seven wine companies produce 82 percent of all wine sold in the U.S., and six of these are global corporations. Seven of the top ten wine companies (by U.S. sales) are also global corporations with wine, spirits, and beer brands integrated into their product portfolios. (“Myth of the Family Farmer”, Marininstitute.org). These statistics suggest that the wine industry is not made up of fragile mom and pop farms but a handful of powerful corporations with very thirsty shareholders with their eyes on California's north coast streams. (*Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 8.0.55: Diverter compliance with such rulemaking by the SWRCB will not set unreasonable or extraordinarily costly standards for those growers subject to and threatened by frost occurrences. Reasonable compliance efforts should be able to attain the standards set by this rulemaking. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 8.0.56: To keep this in perspective the regulation is only applicable about 15% of the time but has fixed capital and annualized costs that are exorbitant. Governmental costs (DFG & SWRCB) of \$390,000 a year, or is it 15% of a year, (unclear if this includes pensions and healthcare) no office costs, no auto cost, no course enhancement costs, no administrative costs, no assistant secretarial costs, etc., so what is the total cost of this governmental expansion? Who pays? And if it goes statewide how much will it cost and will it require additional tax monies? Have the Governor and Legislator approve of your expansion efforts so we, the taxpayers, will know whom to hold accountable? The extrapolated costs the EIR has sighted for this program on the 63,825 acres covered by the regulation: 1. Initial capital costs range \$60 to \$100 per acre X 63,825 acres gives a total cost range between \$3,829,500 and

\$6,382,500. 2. Capital costs range \$1,475 to \$2,197 per acre X 63,825 acres gives a total cost range between \$94,141,875 and \$140,223,525. 3. Annual costs (or tax) range \$18.75 to \$28.50 per acre X 63,825 acres give a total annual cost between \$1,196,718 and \$1,819,012 4. Acreage displaced by offstream storage, Sonoma, lower range 250 acres @ \$35,000 = \$8,750,000, @ \$50,000 = \$12,500,000, Upper range 2820 acres @\$60,000 = \$169,200,000, @ \$125,000 = \$352,500,000 for storage ponds! Crop loss related to offstream storage \$8515 x 250 acres = \$2,128,750, @ 2820 acres X 8515 = \$24,012,300 The other part to this is that in a drought year, fish could become impaired and the argument could easily be made that this water storage is also unreasonable and needs to be used for instream flows as DFG proposed in the Scott and Shasta Rivers Watershed Programs. 5. Plus this regulation threatens a \$500,000,000.00 agricultural enterprise to an extent that has not been determined. Lets take the average of these 5 items; 1. \$5,106,000; 2. \$117,182,700; 3. \$1,507,865; 4. \$260,850,000 + \$13,070,525 \$273,920,525; 5. \$250,000,000 and it comes to \$646,360,000. Do not obscure the total costs. That's real money for a fish one can buy in a Sonoma County supermarket! This looks like a new tax on a select few, for a public benefit. (*T. Connick*)

Response: The DEIR adequately and appropriately addresses all reasonably foreseeable direct and indirect costs and fiscal impacts of the proposed regulation. Speculative costs were not considered.

Comment 8.0.57: Your EIR states the by implementing this type of program "Section 21100, subdivision (b) (5) of the Public Resources Code requires an EIR to discuss the growth-inducing impacts of a project. (See also State CEQA Guidelines, § 15126.)" Section 15126 also states "All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation." Under operations your EIR does not discuss specifically "the ways in which the proposed project could foster economic or population growth" reductions caused by "a reduction in vineyard acreage [that] may occur due to reduced profit margins, which could cause continued production under the present use to become infeasible." No wonder this state is broke. As a taxpayer who pays real money to this state, I want a full accounting of all cost related to the implementation and on ongoing costs for this and every new regulation. What are the true potential cost reductions in economic productivity, reduced property taxes, reduced sales taxes, and reduced income taxes, lost employment, potential crop losses from frost, and the additional costs to the remaining participants? Where is a detailed breakdown of the total cumulative costs for compliance with this proposed regulation? How much true governmental expansion will occur to implement, manage and monitor, just this regulation in this watershed, and what will its total costs be the first year, 3 years, 5 years, 10 years. What are the costs if implemented statewide? What is the source of its funding? What will be the net effect to the state's GDP? (*T. Connick*)

Response: Comment noted. The DEIR adequately and appropriately addresses all reasonably foreseeable direct and indirect costs and fiscal impacts of the proposed regulation. Speculative costs were not considered.

Comment 8.0.58: The Sonoma County Wine Grape Commission represents over 1500 vineyard owners in Sonoma County. Approximately 40% of those growers have fewer than 20 acres and 80% have fewer than 100 acres. The costs associated with this proposed regulation will be a tremendous burden to these growers. (*Nick Frey, Sonoma County Winegrape Commission*)

Response: Comment noted.

Comment 8.0.59: Vineyards and Orchards Have Alternatives and Sources of Support The good news is that alternatives exist to direct diversion of water for frost protection. A great many farmers have already responded to the fish kills and impending regulation by installing fans and ponds. They deserve our thanks and our support. It is also true that not all diversions cause the same level of harm. Since the 2008 fish kills, the industry and its regulators have developed a much better understanding of how many "priority" diversions exist that may require "corrective action" under the Rule. The highest priority projects will be those diversions that rely on flashboard dams or small ponds located above a fish-bearing stream reach. Those diversions dewater the reach immediately below them whenever the rate of pumping for frost exceeds inflow, and whenever they are filling or refilling. Many other diversions will have to be evaluated for their cumulative effects to fisheries, and some diversions will be able to continue operating as they do today. Our estimate of the number of diversions that might need to be changed corresponds roughly to the SWRCB estimate in the rulemaking package. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 8.0.60: As the Initial Statement of Reasons notes, the Frost Rule has economic benefits as well as economic costs. Those benefits have not been quantified but they could be significant. The economic contribution of recreational and commercial fishing is enormous. Recreational fishermen in California spent \$2 billion in 2006 (the last year for which data is available), and California earns more state and local tax revenues from sport fishing than any other state--over \$336 million in 2006. Some estimate the direct value of fishing for salmon alone at \$255 million. The Russian River no longer supports harvest or recreational fishing for salmon, but steelhead are a different story. It is no longer the fabled sport fishery it used to be, but a great many TU members still fish the Russian regularly for steelhead. They contribute substantial revenues to the communities in the watershed and they are an important part of our cultural heritage. (*Brian Johnson, Trout Unlimited*)

Response: One of the stated purposes of a CEQA analysis is to "inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities." (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) "A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that "the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season." This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential "environmental impacts" analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.61: In the absence of substantive evidence of the value of Russian River watershed salmonids, the DEIR is inadequate. The evaluation of the proposed activity - adopting a regulation, and the discussion of feasible alternatives, minimizing effects on the industry, a weighing of the relative benefits and costs, and analysis of cumulative impacts - is impossible without substantial information on the economic value of listed species and their habitat. The DEIR's economic analysis addresses only the purported economic value of agricultural crops, mainly wine grapes. It presents only figures from the California Farm

Bureau's website (DEIR p. 41) and emphasizes the impact on local family farmers. The DEIR makes no attempt to analyze the worth of salmon and steelhead to the economy or to ecosystems, what the functioning habitat is worth, or the costs to run hatcheries or restore destroyed habitat. Analyses of the actual costs for replacing functions that habitat and species perform have concluded that "[a]llowing the current rate of biodiversity loss to continue could cost the global economy untold trillions." (See International Union for the Conservation of Nature report at: <http://summitcountyvoice.com/2010/05/30/the-cost-of-extinction/>; and Center for International Environmental Law report at: <http://www.ciel.org/Publications/summary.html>.) In the twenty-first century, it is time to enact adequate regulation, requiring that these giant global industries internalize costs, by properly valuing and protecting the environment. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen KrimeI, Save Mark West Creek*)

Response: One of the stated purposes of a CEQA analysis is to "inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities." (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) "A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." (Id., subd. (g).) Page 125 of the Draft Environmental Impact Report (Draft EIR) states that "the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season." This language is consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential "environmental impacts" analyzed by in the Draft EIR. The Department of Finance approved the Form 399 on August 1, 2011.

Comment 8.0.62: Vineyards and Orchards Have Alternatives and Sources of Support It is important to note that there are many stakeholders who are committed to helping individual farmers adapt to the new regulatory environment by providing financial and technical assistance. I will mention four. First, the USDA Natural Resources Conservation Service has devoted a commendable level of staff time and funding for farmers who want to switch frost protection to offstream ponds or to fans. The Agricultural Water Enhancement Program alone could bring \$5.7 million to the Russian River between the years 2009 and 2014. Many farmers have already taken advantage of it. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 8.0.63: Vineyards and Orchards Have Alternatives and Sources of Support It is important to note that there are many stakeholders who are committed to helping individual farmers adapt to the new regulatory environment by providing financial and technical assistance. I will mention four. Second, cooperative programs such as the Russian River Coho Water Resources Partnership are helping farmers with engineering, scientific support, and construction funding for fans and ponds (www.cohopartnership.org). That partnership includes the Gold Ridge Resource Conservation District, Sotoyome Resource Conservation District, Center for Ecosystem Management and Restoration, Occidental Arts and Ecology Center's WATER Institute, UC Cooperative Extension and California Sea Grant Program, and Trout Unlimited. It is funded by the National Fish and Wildlife Foundation with additional support from the Sonoma County Water Agency. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 8.0.64: Vineyards and Orchards Have Alternatives and Sources of Support It is important to note that there are many stakeholders who are committed to helping individual farmers adapt to the new regulatory environment by providing financial and technical assistance. I will mention four. The Coho Partnership and others have also installed stream flow gages that could be made available to the "governing body" and others tasked with responding to the Frost Rule. The Partnership currently operates more than 20 gages in Sonoma County, and we have told Sonoma County and the county's industry representatives that we hope to work with them to meet the needs of the Frost Rule and the County's Ordinance. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 8.0.65: Vineyards and Orchards Have Alternatives and Sources of Support It is important to note that there are many stakeholders who are committed to helping individual farmers adapt to the new regulatory environment by providing financial and technical assistance. I will mention four. Third, many people are focused on expediting permitting for farmers who wish to switch from direct diversions to diversions to offstream storage. Trout Unlimited and the wine industry worked with SWRCB to include special incentives for such projects in the North Coast Instream Flow Policy. More recently, TU and the wine industry have been discussing proposed legislation with Assembly member Huffman's office, as well as SWRCB and DFG. That bill (A.B. 964) would create a new Small Irrigation Registration modeled on the Small Domestic Use Registration. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 8.0.66: Vineyards and Orchards Have Alternatives and Sources of Support It is important to note that there are many stakeholders who are committed to helping individual farmers adapt to the new regulatory environment by providing financial and technical assistance. I will mention four. Fourth, Sonoma County has stepped forward to support development of a local program that could satisfy part of the Frost Rule. Although some conservationists remain skeptical and a few grape growers resent the County's effort, it provides a sound foundation for the stream inventory, stream gaging, and diversion reporting components of the Frost Rule.¹ (Footnote: 1 As the Draft Statement of Reasons notes, the County Ordinance is focused on the data gathering part of the Frost Rule, and does not require corrective actions. This is true by design, and TU agrees with SWRCB staff's assessment that the County Ordinance is no substitute for the State Rule. However, we believe it is an appropriate role for the County to play.) (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 8.0.67: The DEIR's discussion of wine industry economics is largely superficial. By destroying forests, damaging soils on slopes, and overly diverting water resources, while increasing pollution from fertilizers and biocides, the wine industry has externalized many costs for decades. These externalized costs have been paid for by regulatory agencies, the public, and the environment. The DEIR's economic analysis addresses only the purported economic value of agricultural crops, mainly wine grapes. It presents only figures from the California Farm Bureau's website (DEIR p. 41) and emphasizes the impact on local family farmers. Valid

statistics show that the wine industry does not comprise family farms. According to the Marin Institute, seven companies produce 82 percent of all wine sold in the U.S., and six of them are global corporations. Seven of the top 10 wine companies (U.S. sales) also are global sellers of wine, spirits, and beer brands. This same list of powerful corporations dominates Sonoma County winegrowing, and the water withdrawals from California's north coast streams. *(Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek)*

Response: Comment noted.

Comment 8.0.68: While we and some of the larger organizations are more likely to have the resources to implement these initiatives on a meaningful scale and time frame, many of the growers in the Russian River watershed will need time and financial support to do the same. Given the importance of agriculture to the identity and economic vitality of Sonoma and Mendocino Counties, we believe you should take that fact into account as you consider any changes to the regulations that would have serious, long-lasting impacts on the agricultural community. *(Pete Downs, Jackson Family Wines)*

Response: The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial Water Demand Management Program that is submitted prior to February 1, 2012. The State Water Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The State Water Board anticipates periodic updates will be made to Water Demand Management Programs that reflect the data and information contained in annual reports. Funding sources available to assist with corrective actions have been discussed in several earlier responses, and comments from Trout Unlimited (above) outlined other funding sources.

Comment 8.0.69: The proposed regulations will create a substantial and poorly understood burden on the agricultural community. Another effect of the lack of definition or specificity in the regulation is that the burden on the agricultural community in terms of time and money is impossible to reliably calculate, but promises to be substantial. The Notice of Proposed Rulemaking estimates the cost impacts to regulated persons and business to be as follows: The State Water Board estimates that the initial capital costs for a 160-acre vineyard to comply with the proposed regulation would range from \$9,600 to \$17,000 and the annual costs would range from \$3,000 to \$4,700. Capital costs for implementing any needed corrective actions for a 160-acre vineyard would range from \$236,000 to \$352,000, with annual costs ranging from \$26,000 to \$36,200. (Notice of Proposed Rulemaking, p. 6.) These initial estimates, which are likely skewed towards the low end of the range of possible costs, are in themselves extremely broad ranges, offering a plus-or-minus \$116,000.00 estimate in one case. In addition, there is stated basis for calculating these estimates and no indication of what kinds of expenditures make up the total costs. Again, the failure to propose a substantially developed regulation, rather than a regulation that simply states that all the important parts will be developed later, prevents those with the most to bear from the regulation from being able to understand the true burden of the regulation. Beyond this, the costs estimated in the Notice of Proposed Rulemaking improperly and disproportionately burden the agricultural community with unreasonably large compliance costs. More information needs to be shared about the basis for the cost estimates and more time spent examining the extent of the burden of this regulation and the allocation of that burden before the regulation can be implemented. Not to do so risks crippling this areas signature agricultural industry - threatening other sources of income to the

region, including everything from regional revenue from tourism to government revenue from payroll and sales taxes. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Jim Newsome; Barbara Petersen; Barbara Reed, Employers Council of Mendocino County; Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards"); Pete Downs, Jackson Family Wines; John and Patti Saini; Jim Lincoln, Napa County Farm Bureau*)

Response: The referenced costs are not ranges of the true costs. They represent the estimated costs of growers meeting specific requirements of the proposed regulation. The \$9,600 capital costs that are referenced by the commenter refer to a 160 acre Sonoma County Russian River diverter that will be responsible for inventory and monitoring costs. These costs are expected to be applied to a total of 12,819 acres. The \$17,000 capital costs refer to a 160 acre Mendocino County Russian River diverter that will be responsible for inventory and monitoring costs. These costs are expected to be applied to a total of 4,596 acres.

The second set of costs for corrective actions refers to Mendocino and Sonoma County growers. These costs are expected to apply to 1,020 acres in Mendocino County and to 2,763 acres in Sonoma County.

The specific costs of complying with the regulation are presented in Tables 4-1, 4-2, 4-3, 4-4, 4-8, 4-9, 4-10, 4-11, and 4-13.

Comment 8.0.70: Diverter compliance with such rulemaking by the SWRCB will not set unreasonable or extraordinarily costly standards for those growers subject to and threatened by frost occurrences. Reasonable compliance efforts should be able to attain the standards set by this rulemaking. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 8.0.71: Affidavit on Frost Protection Use 1. My full name is Wendel Nicolaus (Midleridge Vineyard M/R Vineyard) 2. The information contained in this affidavit is based upon my personal knowledge. 3. In the last five years I have used water diverted from the Russian River, or a tributary of the Russian River, for frost protection purposes. 4. I plan on using water for from protection purposes in the future. 5. A Significant portion of my income is derived from income I receive from selling crops that depend upon using water for frost protection. 6. I am aware that the SWRCB estimates this regulation is expected to cost a typical 160-acre vineyard from \$9,600 to \$352,000 in order to initially comply with its mandates. It will cost an estimated additional \$3,000 to \$36,200 per year to keep that 160-acre vineyard in compliance. It is estimated to cost a typical 40-acre vineyard from \$2,400 to \$87,880 in order to initially comply with its mandates. It will cost an additional \$750 to \$9,000 per year to keep that 40-acre vineyard in compliance. 7. If I were forced to incur these costs in order to continue to use water for frost control, I would likely have to cease using water for frost control purposes. 8. As a result of not having water available for frost control, I would either: (a) likely cease farming altogether because my crop losses would be so high that it would be difficult to cover my costs in bringing what little fruit I could harvest to market; or (b) reduce the amount of acreage I do farm and either leave the remainder fallow or sell it. (*Wendel Nicolaus, Middleridge Vineyard*)

Response: Based on the review of the current water rights of the individuals who submitted affidavits, all of these individuals have water rights that can support switching to other summer crops that would not require frost protection from March 15 – May 15 and it is therefore unlikely these individuals would choose to take their land out of agricultural production. The Draft EIR adequately discloses and analyzes the direct and indirect impacts to agricultural resources associated with land conversion.

Comment 8.0.72: Another point to make is the economical loss this will create by the switching to wind machines from the use of water. In the regulations now written it states that loss to growers will be made up by wind machine sales. That has to be GOVERNMENT MENTALLY at its best! Who ever wrote that had to be a piece of work! (*Allan Nelson*)

Response: Table 4-11 contains the assumptions regarding the adoption of wind machines to mitigate the loss of Russian River water. Wind machines are assumed to be adopted by only five percent (138 acres) of growers not allowed to divert Russian River water. It is further assumed that wind machines will not be adopted by Mendocino growers.

Comment 8.0.73: Many growers use surface water, ground water, and wind machines. To not be able to use over head frost protection in our operation would be devastating. When you have the system and then you are not able to use it doesn't make economic sense. No one has talked about how much we already have invested. With over head frost protection, one might have a cost of \$ 5,000.00 to \$ 10,000.00 per acre. On a 40 acre vineyard that would be \$200,000.00 to \$400,000.00. On a 160 acre vineyard that would be \$800,000.00 to \$1,600,000.00. Why would you want to abandon a system that you have invested in, isn't causing any damage and works! (*John and Patti Saini*)

Response: The proposed regulation does not restrict the use of sprinkler systems for frost control. Existing sprinkler systems can be used in conjunction with either pond water or groundwater. This arrangement is assumed with over 96 percent of the acreage required to mitigate Russian River frost diversions.

Comment 8.0.74: Perhaps the farmers should impound water in ponds at a low pumping rate to moderate the impact of using so much at one time. I have 40 acres of vineyard and have been quoted a price of \$250,000 to modify my system in this way. That is about twice the yearly net income from the farm, and does not take into account the value of the land which would be sacrificed for the project or the extremely arduous struggle involved in getting permission to build a pond in the first place, both at state and county levels with a long list of regulatory agencies. (*Stephen Hawkes*)

Response: Financial or technical assistance on installing ponds for frost protection is available from NRCS. A grower may apply directly to NRCS for financial or technical assistance to implement agricultural enhancement activities. However they must be eligible for the Environmental Quality Incentive Program (EQIP). A grower may also apply for Agricultural Water Enhancement Program (AWEP) assistance through an eligible entity that submits a proposal on behalf of a group of agricultural producers. The Conservation Program for Russian River Grape Growers is recognized as an eligible entity under AWEP. The NRCS will provide financial and technical assistance on water conserving practices that conserve salmon habitat while protecting crops from frost. Conservation practices include various types of wind machines, retrofitting of sprinkler heads, and incorporation of on-site weather stations to improve timing and application of water. The cost sharing of groundwater pumping could also

be considered if the applicant can show that the well does not affect river stage. Grounds for disqualification of individual growers for the AWEF cost share are based principally on the lack of effectiveness of practices being proposed, although other criteria such as financial factors are also considered.

According to the California State office of NRCS, the Conservation Program for Russian River Grape Growers is currently funded through Fiscal Year 2012 (September 30, 2013) and funding is expected each year thereafter. NRCS places a high priority on the Russian River Program to reduce water diversions to protect salmonid habitat and it will receive strong support in upcoming funding authorizations such as the 2012 Farm Bill. Therefore assuming a 50 percent subsidy of installation costs is a plausible assumption. Under special circumstances, some applicants can be eligible for up to 70 percent of installation costs.

Although a water right permit is needed to authorize diversion of water, the water right applicant could build the reservoir using AWEF funds while waiting for permit issuance.

Comment 8.0.75: A major concern is the complete lack of economic analysis if sprinkler frost protection is no longer allowed as a way of protecting vines from frost, both to the individual grower and our region. My research has shown that frost injury will cause somewhere between a 50 -85% loss of yield in affected vineyards. The amount of water that is used most years in the Russian River watershed for frost protection is somewhere between 2000-4000 acre feet. This is a very small amount of water that produces huge positive benefits to our region in terms of employment, property equity, economic activity and tax base for all levels of government including local, state and federal sectors. Without frost protection, we would lose dependable crop production on somewhere between 4000 to 7000 acres, which is a large portion of the 18,000 acres estimated to be in production in our county. (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: The proposed regulation does not restrict the use of sprinkler systems for frost control. Existing sprinkler systems can be used in conjunction with either pond water or groundwater. This arrangement is assumed with over 96 percent of the acreage required to mitigate Russian River frost diversions.

Comment 8.0.76: Additionally, there are the costs of compliance with the regulations which will include installation and maintenance of flow meters to measure stream flows, water meters on all pumps, total water use reporting, and associated paperwork. (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: Water diversions are not required to be metered.

Comment 8.0.77: Before these proposed regulations are implemented, I recommend that your agency considers a thorough economic analysis on the impact of these regulations on the affected producers, and income to the local economy if frost protection is no longer a beneficial use of water and an analysis on the loss of income to local, state and federal coffers if these vineyards are no longer able to produce fruit. (*Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: The economic analysis recommended by the commenter is reported in the Form 399 attachment. The requirement that all water be put to beneficial use is different than the

requirement that all water diversion and use be reasonable.

Comment 8.0.78: All claims of crop losses or economic impacts must be evaluated by peer-reviewed science. Will the economic analysis acknowledge that business decisions come with risks and rewards? Will such an analysis acknowledge and evaluate the costs to society when an industry attempts to externalize its costs on to society at the expense of society's public trust resources? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The Board has complied with all requirements imposed under the Administrative Procedures Act for the proposed rulemaking. A scientific peer review is required only if a proposed rule contains levels, standards, or other requirement for the protection of public health or the environment. The proposed regulation contains no levels or standards.

Comment 8.0.79: The draft regulation the SWRCB proposes to adopt suffers from legal and practical flaws. Specifically, this regulation fails to consider the full spectrum of costs that will be associated with its implementation including: 1. There will be many who will be unable to participate in the program due to technical issues or cost. The losses associated with these "unable to comply" businesses are expected to be \$9.3 million in direct lost grape and wine production in Mendocino County and \$15.9 million in direct losses in Sonoma County. Indirect losses could be as much as \$1.1 billion. 2. The cost associated with gaging each diversion is estimated to be \$7.35 million. 3. The cost associated with equipping each diversion with telemetry is estimated to be an additional \$1.35 million. 4. The cost associated with gaging all of the Russian River tributaries supporting an anadromous fishery is estimated to be \$1.38 million. 5. The cost associated with maintaining each one of these stream gages is estimated to be \$770,000 per year. 6. The cost to install fans to reduce instantaneous water demand is estimated to be \$44.9 million in Mendocino County and \$42.6 million in Sonoma County. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: This comment has six parts and each will be addressed individually:

- 1) See response to comment 8.0.2
- 2) See response to comment 8.0.7
- 3) The May 2011 proposed regulation does not require installation of telemetry on diversion monitoring devices.
- 4) See response to comment 8.0.8
- 5) See response to comment 8.0.8
- 6) The Form 399 Attachment estimates the total capital cost of installing wind machines in Sonoma County would be \$205,754. The Form 399 Attachment reports no total capital costs for installing wind machines in Mendocino County due to the questionable effectiveness of wind machines in Mendocino County. See Tables 4-9 and 4-11.

Comment 8.0.80: Due to the various paths available under the [January 2010] regulation, it is difficult to pinpoint, at this time, the specific costs of this regulation, but some estimations associated with each of the two primary paths can be made. Path One - Not Able to Participate: Generally, the [January 2010] regulation prohibits frost protection diversions unless the diverter is part of a water management program. No one knows what this management program will look like, and what eligibility requirements will be involved. It is entirely possible that some people may not be able to participate for financial or technical reasons. If a grower is unable to participate, and is unable to utilize alternative methods of frost protection, then there will be costs attributable to frost damage each year. There are approximately 16,400 acres in Mendocino County and 15,581 acres in Sonoma County that currently use water to frost protect

young wine grape shoots. Of these acres, a percentage will be unable to participate in the water management program. Since we do not know what that percentage may be, we must use an estimate. Based upon the expenses of the program, as outlined below, we believe it would not be unreasonable to assume that 15% of the growers in each county will be unable to participate in the program. This equals 2,460 acres in Mendocino County and 2,337 acres in Sonoma County. Attached as Exhibit G is the Mendocino County Crop Report for 2008. Based upon an average of 2.8 tons of grapes per acre, at a value of \$1,355.00 per ton, Mendocino County growers will experience a loss of approximately \$9,333,240.00 in one year ($2,460 \times 2.8 \times 1,355 = 9,333,240$). This assumes a total loss of a wine crop, which is not unexpected due to the frequency of frosts in Mendocino County. Attached as Exhibit H is the Sonoma County Crop Report for 2008. Based upon an average of 3.05 tons of grapes per acre, at a value of \$2,238.00 per ton, Sonoma County growers will experience a loss of approximately \$15,952,128.00 in one year ($2,337 \times 3.05 \times 2,238 = 15,952,128$). Similar to Mendocino County, this assumes a total loss of a wine crop, which is not unexpected due to the frequency of frosts in Sonoma County. Please note that these are direct costs and do not consider indirect costs such as losses in tourism, harvesting and processing labor, recreation, accommodations, and food services. Attached as Exhibit I is a study entitled "Economic Impact of Wine and Vineyards in Sonoma County." Based upon this study the full economic impact of the wine and vineyard sector in Sonoma County totals \$7.6 billion. This value includes all services, products, and the employment induced by these activities. If we consider the total impact of a 15% loss of wine grape acreage in Sonoma County, the total direct and indirect losses would approximate \$1.1 billion. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: This comment was on an early draft of the proposed regulation. The current draft of the proposed regulation was released in May 2011. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 8.0.81: Due to the various paths available under the [January 2010] regulation, it is difficult to pinpoint, at this time, the specific costs of this regulation, but some estimations associated with each of the two primary paths can be made. Path Two - Able to Participate In Program: There will be many who will be able to participate in the monitoring and reporting program, but this participation will involve significant costs. The program will be required to ensure that "the instantaneous cumulative diversion rate does not result in a reduction in stream flow that is harmful to anadromous fish," and that the program include monitoring of (a) instantaneous diversion rates, and (b) flows in the Russian River main stem and tributaries that support anadromous fish. This information shall be reported on an hourly basis to a website. In order to monitor each and every frost protection diversion, gages must be installed at each diversion location. Based upon quotations we received for this same work (Exhibit J), we estimate the cost to be approximately \$8,800 per diversion. Based upon a survey conducted by the Sonoma County Farm Bureau, there are 418 diversions in the Russian River watershed in Sonoma County. We currently have no information on the number of diversions in Mendocino County. However, due to the similar number of acres frost protected by water in Mendocino County (16,400) and Sonoma County (15,581) it is reasonable to assume there are a similar number of diversions in Mendocino County. [Commenter provides description of assumptions used to estimate monitoring and reporting costs.] In summation, the costs associated with complying with the monitoring and reporting portion of [the January 2010] regulation are estimated as follows:

	Price per Installation	Number of Installations	Total Cost to install meters at each diversion
	\$8,800.00	418 (Mendocino)	\$3,678,400.00
		418 (Sonoma)	\$3,678,400.00
Cost to include telemetry of each meter	\$1,619.11	418 (Mendocino)	\$676,787.98
		418 (Sonoma)	\$676,787.98

Cost to install telemetry capable stage and flow gages on all major

and minor tributaries that support an anadromous fishery (includes permitting) \$18,000.00 77
\$1,386,000.00 Annual maintenance cost of the stream flow and stage gages \$8,000.00 to
\$12,000.00 77 \$770,000.00 Costs to install wind machines to reduce \$32,871.00 1,366
(Mendocino) \$44,901,786.00 instantaneous water demand 1,298 (Sonoma) \$42,666,558.00
Total Estimated Cost \$98,665,718.96 (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: This comment was on an early draft of the proposed regulation. The current draft of the proposed regulation does not require monitoring of instantaneous diversion rates or reporting on an hourly basis.

Comment 8.0.82: Aside from the staggering costs associated with [the January 2010] regulation, there are significant practical problems with requiring all of this work to be completed by March 14, 2011, which is the planned effective date for the regulation. According to ECORP Consulting (Exhibit L), it generally takes up to a year to either clear or obtain the necessary permitting. Assuming that all of the above can even be completed by March 14, 2011, these measures to reduce water demand from the Russian River will still result in wine grape losses because fans cannot always adequately protect young grape shoots from frost damage. The concern here is a type of frost called advective. Attached to this comment letter is a Power Point presentation made by Glenn McGourty (Exhibit O) on April 7, 2009, at a SWRCB workshop explaining the difference between advective and radiation type frosts, their prevalence, and the ineffectiveness of wind machines to prevent such damage to young grape shoots. In an effort to quantify "advective" type economic losses, attached to this comment letter (Exhibit P) is an economic analysis performed by John Dyson, owner of Williams Selyem. Based upon Mr. Dyson's analysis, implementation of [the January 2010] regulation could cost the Sonoma County wine industry as much as \$1.1 billion per year in frost damage losses. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: This comment was concerning an early draft of the proposed regulation.

The current draft of the proposed regulation is targeted for implementation beginning in 2012, not March 14, 2011. The May 2011 Form 399 Attachment predicts there will be crop losses of 159 acres resulting from this regulation.

The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial Water Demand Management Program that is submitted prior to February 1, 2012. The State Water Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The State Water Board anticipates periodic updates will be made to Water Demand Management Programs that reflect the data and information contained in annual reports.

Wind machines are not considered as an alternative to Russian River water diversions in Mendocino County. Wind machines are projected to be used as a corrective action on 138 acres in Sonoma County (Table 4-11).

The economic analysis performed by John Dyson (Exhibit P) was performed earlier and does not relate to the current regulation. Since the reported results of the Dyson analysis are similar to those reported in the Eyer's study, both of the analyses probably suffer from the same flaws. See response to Comment 8.0.2.

Comment 8.0.83: The second reason the regulation in its current form may prove to be unworkable is that the regulation, at least the one publicly circulated in January 2010, requires that all "significant" diversions be monitored instantaneously and the data transmitted on an hourly basis to a website accessible by the SWRCB and the public. As discussed in my earlier letter, while this technology is available, it is not cheap. We have estimated the costs to install gauges on all "significant" diversions (\$8,800 per diversion x 836 diversions = \$7,356,800.00) (see Exhibit D and the associated explanation contained in my March 29, 2010, letter to the SWRCB), install stream monitoring gauges in the "Russian River and any tributaries that support anadromous fish" (\$18,000 per gauge x 77 gauges = \$1,386,000.00) (see Exhibit E), and then outfit each of these diversions and stream flow gauges with telemetry capable of being downloaded to a website (see Exhibit F) (\$1,619.11 per diversion + \$1,000 per gauge = \$1,353,575.90 + \$77,000 = \$1,430,575.90); the cost would be expected to be around \$10.1 million (\$7,356,800.00 + \$1,386,000.00 + \$1,430,575.90 = \$10,173,375.90). While the data collected may be helpful, it is unclear how the SWRCB plans on reviewing 836 diversions every hour, or a diversion every 4 seconds. In order to do so, the SWRCB is going to need a control center similar, to the NASA Space Center. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The current draft of the proposed regulation does not require monitoring of instantaneous diversion rates or reporting on an hourly basis.

Comment 8.0.84: While this [January 2010] regulation will have impacts upon a wide variety of resources, we believe that the effects on agricultural resources will be particularly acute and will require extensive analysis in the EIR. It appears to this commentator that the SWRCB has consistently and grossly underestimated the economic impact this regulation will have on the wine industry, and agriculture in general, in Sonoma and Mendocino counties. While the California Environmental Quality Act does not consider economic or social effects to be "significant effects on the environment" directly, they can be considered to determine the significance of physical changes caused by the project, and they must be considered in deciding whether changes in the project are feasible to reduce or avoid significant environmental effects. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: This comment was on an early draft of the proposed regulation. The most current version of the draft regulation was dated May 2011. In May 2011, the State Water Board made available for public comment a Draft Environmental Impact Report that analyzed the potential environmental impacts of the proposed regulation.

9.0 Statewide Implications

Comment 9.0.1: This rule is one of the few serious efforts the Board has made to address the cumulative effects of diversions. For too long, an ethic that denies responsibility for the cumulative effects of diversions based on the small increment of effect of each individual diversion has dominated discourse and action by and before the Board. CSPA recommends a more general change in the paradigm, so that cumulative effects of diversions throughout the state are adequately addressed and mitigated. (*Chris Shutes, California Sportfishing Protection Alliance*)

Response: Comment noted. The comment goes beyond the scope of the proposed regulation.

Comment 9.0.2: If the proposed regulation is adopted, I have no doubt that it will be expanded in the future to other regions of the state and with different dates, to the serious detriment of agriculture. This regulation will also become another weapon in the arsenal of environmental groups whenever they want to shut down agriculture, because they will cite the words as written. And the environmental groups will omit all references to any sort of water demand management plan, board approved or otherwise. At the moment, the Board is telling us that in order to regulate the process for frost protection, that activity must be declared illegal. But in declaring it illegal, it is almost certain that many farms will be jeopardized to the point of ceasing to operate. I know that destruction of agriculture is not at all the Board's intent. Chairman Hoppin and Ms. Spivy-Weber made that clear. The Board is trying to regulate a necessary activity so as to promote both agriculture and downstream salmonid passage. But in that attempt you all may inadvertently be banning legitimate agriculture, and not just in the Russian River area, but eventually in the entire state. (*Chris Bowen, Hunter Farms; Rudolph Light; Rudolph Light*)

Response: The proposed regulation is strictly limited to the Russian River watershed. The commenter is also mistaken in asserting that the proposed regulation declares frost protection "illegal". On the contrary, the Board and Water Code identify that frost diversion is a beneficial use of water. Through this proposed regulation, the Board is providing for the continuation of using water for frost protection but requiring that these beneficial uses of water be managed by a local water demand management program. The program will monitor and assess the potential risks to salmonids caused by existing and new frost diversions, and recommend and implement necessary corrective actions to prevent salmonid mortality. Many diverters will not be required to change current operations, but only to report diversions on an annual basis to allow the governing body to assess risks based on existing and future demands, variable stream stage conditions, and presence of salmonids.

10.0 CEQA

Topic 10.1 CEQA - General

Comment 10.1.1: The DEIR fails to identify assessment methodologies and thresholds of significance. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: A programmatic DEIR does not analyze environmental impacts at the project level and is therefore more general in nature. Individual projects are not exempt from the CEQA process and impacts will be addressed and mitigated at the project level where required. At the programmatic level it is not always practical to establish thresholds of significance and it does not always improve the process of identifying significant effects. The Governor's Office of Planning and Research does not suggest that an agency establish a threshold for every conceivable environmental effect. This may be neither practical nor desirable. (See <http://ceres.ca.gov/ceqa/more/tas/Threshold.html>). The DEIR appropriately analyzes the potential direct and indirect impacts to the environment at a programmatic level.

Comment 10.1.2: The conclusions and assumptions in the DEIR are not supported by substantial evidence. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzner Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the DEIR is supported by adequate findings and documentation as required by CEQA.

Comment 10.1.3: Golden Vineyards requests that the State Board decline to adopt the Draft Regulation and refuse to certify the Final EIR that results from this greatly flawed Draft EIR. The Draft Regulation is based on a seriously inadequate environmental analysis and is accompanied by a legally deficient Draft EIR. Implementation of the Draft EIR relies on a series of unwarranted legal presumptions against vineyard owners regarding diversion of water for frost protection. Most importantly, the Draft EIR that supposedly justifies adoption of the Draft Regulation is fundamentally flawed and completely fails to inform the public of anticipated environmental impacts and fails to provide an appropriate environmental decision basis for State Board consideration of the Draft Regulation. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the DEIR is supported by adequate findings and documentation and adequately analyzes all reasonably foreseeable direct and indirect impacts of the proposed alternatives, as required by CEQA.

Comment 10.1.4: The Draft EIR is so woefully inadequate that this draft document needs to be recirculated once the deficiencies in it have been addressed. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the DEIR is supported by adequate findings and documentation and adequately analyzes all reasonably foreseeable direct and indirect impacts of the proposed alternatives, as required by CEQA.

Comment 10.1.5: The Draft Regulation essentially ignores the huge economic and water availability impacts that it will inevitably cause to vineyard owners in Mendocino and Sonoma Counties and fails to take into account the associated environmental impacts. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the DEIR adequately analyzes all reasonably foreseeable direct and indirect impacts of the proposed alternatives, as required by CEQA.

Comment 10.1.6: See FOER's previously submitted "Comments on the Notice of Preparation for the Russian River Frost Protection Regulation EIR", Nov. 30, 2010, attached. Unfortunately, the DEIR failed to respond to many of the comments in this letter. These comments are hereby incorporated in full as comments on the DEIR, and to be treated and responded to as such. (*David Keller, Friends of the Eel River*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here. Those previously submitted

comments that pertain to the current proposed draft regulation or DEIR have been responded to elsewhere in this document.

Comment 10.1.7: Northern California River watch hereby incorporates by reference all comments previously submitted to the state on the subject of diversions for frost control by Northern California River Watch, the Center for Biological Diversity, and Coast Action Group, their agents, and representatives. These comments include the next four emails that contain attachments and pictures referenced herein. (*Larry Hanson, Northern California River Watch*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here. Those previously submitted comments that pertain to the current proposed draft regulation or DEIR have been responded to elsewhere in this document.

Comment 10.1.8: Our conditional support of the plan as it currently exists, is subject to the comments and reservations of the July 5, 2011, comment letter re the Draft EIR report concerning the subject Frost Protection Regulation and Proposed Regulation authored by the Sonoma County Water Coalition (SCWC), of which SMWC is a supporter. Seeing no productivity in simply restating the SCWC scientific and legal points and arguments, SMWC does hereby incorporate same by this reference as if fully set forth in its entirety and endorse the comments and conclusions of SCWC. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The referenced comments submitted by SCWC that pertain to the current proposed draft regulation or DEIR have been responded to elsewhere in this document.

Comment 10.1.9: The October 27, 2010, SWRCB 'Notice of Preparation and Public Scoping Meeting' aptly described a most challenging formational aspect of the Russian River Frost Protection Regulation when it noted, at page 1: "NO RESPONSIBLE AGENCIES EXIST FOR THIS PROJECT BECAUSE NO OTHER AGENCY HAS AUTHORITY TO CARRY OUT OR APPROVE THE ACTIVITIES THAT WILL BE SUBJECT TO THE REGULATION." No further reference is made to the non-existence of a responsible agency to aid the implementation and monitoring of the plan. If the above-quote remains accurate at this juncture, the major threshold primarily is the identification and selection going forward of the lead agency for CEQA compliance, and of responsible agencies; the distinction for CEQA purposes between the two is critical. (*Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: The proposed project is the adoption of the Russian River Frost Protection Regulation. Because the State Water Board is the only agency approving or carrying out the proposed activity, there are no "lead" or "responsible" agencies under CEQA. (See. Cal. Code Regs., tit. 14, §§ 15050, et seq.) Because the State Water Board appropriately prepared a programmatic analysis for this action, it is unclear at this point whether there will be more than one agency with authority to carry out or approve any site-specific activities that may require project-specific environmental analysis at a later date.

Comment 10.1.10: All historic comments by interested parties addressing relevant issue in the Proposed Russian River Frost Protection Regulation (Regulation) must be considered in the policy development and in the EIR. Coast Action Group has previously submitted comments on Frost Protection and Flow Maintenance issues - Comments, November 6, 2009, and November

20, 2009. We trust that these comments are being considered in your review, rule making process, and related EIR. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here.

Comment 10.1.11: Under CEQA , the lead agency is responsible to review a project, or in this case rule making for consistency with other regulation - in this case Cal Water Code and Cal Fish and Game Code. Please make sure that the Regulation is consistent with Fish and Game Code 5937: (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 10.1.12: Coast Action Group has previously submitted comments on Frost Protection and Flow Maintenance issues - Comments, November 6, 2009, November 20, 2009, and November 26, 2010. We trust that these comments are being considered in your review and rule making process and related EIR. (*Alan Levine, Coast Action Group*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here.

Comment 10.1.13: Coast Action Group has previously submitted comments on Frost Protection and Flow Maintenance issues - Comments, November 6, 2009, and November 20, 2009. We trust that these comments are being considered in your review and rule making process and related EIR. (*Alan Levine, Coast Action Group*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here.

Comment 10.1.14: On November 6, 2009 (in previous comments on flow maintenance policy to the Board), CAG entered into the record significant discussion and recommendations. In light of the new information (discussed below), nothing has changed in regards to these policy inputs by CAG. (*Alan Levine, Coast Action Group*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Comment 10.1.15: My comments from March 18, 2010 (posted under Northern California River Watch) are still relevant. These in combination with submitted comments sent on April 4th, 2011, are to be in the current record. (*Larry Hanson, Northern California River Watch*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here.

Topic 10.2 CEQA - Project Description

Comment 10.2.1: The DEIR's failure to define and analyze the basic project objective to prevent stream stage changes to avoid stranding prevents meaningful impact disclosure and comparison of alternatives. The basic project objective is to adopt a regulation that prevents diversions for frost protection from "causing salmonid stranding mortality." The DEIR summarily concludes that "the regulation will operate to protect the environment by ensuring that water diversions for the purposes of frost protection are coordinated in a manner that the instantaneous cumulative diversion rate does not result in a reduction of stream stage that causes salmonid stranding mortality." The DEIR, however, does not define what "a reduction of stream stage that causes salmonid stranding mortality" actually is, because the DEIR acknowledges that this information will be obtained only through studies conducted by the WDMPs. Without this information, the DEIR does not disclose and assess the actual impacts to streamflow and salmonids from the regulation. For example, the DEIR assumes, without evidence, that a WDMP will be effective, when in fact development of the lower limits of the stream stage to protect salmonids may result in salmonid mortality. Further, the DEIR cannot evaluate whether the project objective will be accomplished with the proposed project or alternatives. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. The stream stage monitoring program will determine and set critical stage levels, in consultation with NMFS and DFG, to protect salmonids from stranding mortality at stream channel features, such as gravel bars, side channels, and pocket pools along river margins. Protection of salmonids from stranding mortality would also include maintaining a continuously wetted channel to prevent that would allow exposure to air and mortality of juvenile salmonids and desiccation of redds. Due to the variation in stream channel morphology, flow, and frost water demand, appropriate stream stage levels must be determined at a site specific level.

The Board recognizes that all required aspects of a WDMP cannot be implemented immediately. The intent of the Board is to have a phased approach to the WDMP. The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial WDMP that is submitted prior to February 1, 2012. The Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The Board anticipates periodic updates will be made to WDMPs that reflect the data and information contained in annual reports. Contrary to the assertions of the commenter the DEIR does adequately disclose and assess the impacts to streamflow and salmonids from the proposed regulation at a programmatic level.

In the case of this DEIR the ability of an alternative to fulfill the objectives and goals of the project was used to determine the alternative's benefits in the foreseeable future. Each alternative was evaluated and compared to the others to determine the alternative that provided

the greatest beneficial outcome in comparison to the potential negative outcomes resulting from either no action or implementing an alternative. The analysis determined that the alternative that provided the greatest beneficial outcome in comparison to negative outcomes was the proposed regulation.

Comment 10.2.2: Since the Water Demand Management Programs for implementation do not yet exist, and the governing body has not been identified or does not currently exist, the Project Description within the DEIR is significantly incomplete, and does not allow the public, agencies, interested stakeholders and the SWRCB to completely and accurately determine the environmental impacts of them. There are too many possible variations within the range of future "individual projects developed in response to the proposed regulation [that] can be expected to identify project-specific environmental effects" for this DEIR and proposed Regulation to be meaningfully addressed at this point. This DEIR must be revised and recirculated by SWRCB when these future critical components of the Project are identified and/or created and analyzed under CEQA for their competency, credibility, ability to carry out and fund the programs, authority and effectiveness. Without further scrutiny within a revised and recirculated DEIR, the CEQA mandates for a clear and stable project description are not met, and such a truncated process significantly impairs the public's and decision makers' ability to provide informed analysis and recommend changes in the Project while it is still flexible. *(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)*

Response: The DEIR adequately evaluated the direct and indirect impacts associated with a range of anticipated actions that may occur under a WDMP, regardless of who the governing body is. Thru consultation, the resource agencies and the Board will help develop the stream stage monitoring program of the WDMP. Schedules and implementation plans will be submitted for review, revisions, and approval by the Board. The proposed regulation ensures a transparent process and does not preclude anyone from commenting on a WDMP. The proposed regulation and DEIR do not preclude, and in fact expect future individual projects will be conducted in compliance with CEQA, where applicable.

Comment 10.2.3: A project description in a DEIR must not be narrowed in a manner that restricts the consideration of alternatives. The Project Description in this case is very narrow. The proposed project is to establish a regulation that will prevent salmonid stranding mortality while minimizing the impacts of the regulation on the use of water for purposes of frost protection. (DEIR, page 9). By using the phrase narrow phrasing "while minimizing the impacts on the use of water", the description leaves very little room to consider a reasonable range of alternatives to the proposed regulation. This is improper. Only those alternatives that minimize impacts on the industry fit such a narrow project description. The proposed regulation is largely based upon the reasonable use doctrine which requires use to be weighed against availability of feasible alternatives, as opposed to minimal impact on frost protection activities. Furthermore, the state explains the reasons for the regulation thus. "Given the potential impact to salmonids and the availability of feasible alternatives to simultaneous diversions from the stream, uncoordinated, unregulated diversions of water from the Russian River stream system for purposes of frost protection are unreasonable." The regulation uses the word feasible alternatives not alternatives that minimize affects of frost protection activities of the industry. A regulation that would employ feasible alternatives as opposed to a regulation that seeks only to minimize affects on growers are widely disparate in application. By using the phrase "while

minimizing the impacts on the use of water", the description leaves very little room to consider a reasonable range of alternatives to the proposed regulation. This is improper and leaves only those alternatives that minimize impacts on the industry rather than those alternatives that are feasible. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimeel, Save Mark West Creek; Larry Hanson, Northern California River Watch; David Keller, Friends of the Eel River*)

Response: The DEIR includes a clearly written statement of objectives and goals that was used to develop a reasonable range of alternatives. The Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation. The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to "consider in detail each and every conceivable variation of the alternatives stated." (*Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287-288.)

The Board is charged with making difficult decisions on complicated public trust matters. In this case, the Board has examined the evidence concerning a threat to listed and endangered species and the growers' need for the continued beneficial use of water for frost protection purposes in the Russian River watershed. Based on the available evidence, stranding mortality can be avoided by coordination or management of frost protection diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board has determined these diversions are unreasonable unless conducted in accordance with a Board-approved water demand management plan to reduce their instantaneous impact.

Comment 10.2.4: Russian River Frost Regulation Draft EIR 3.1, Need for the regulation (page 9)- Analysis of emails obtained through the FOIA and PRA requests filed by the California Farm Bureau Federation show that the February 19th letter from NMFS does not justify the need for a regulation. The letter was not sent to the SWRCB out of need, but instead at the suggestion of SWRCB staff. In addition, the language suggesting the "need for a regulation" was in fact inserted into the letter by Victoria Whitney of the SWRCB. Using this letter as "justification" is an entirely false premise. 3.1 Need for the regulation (page 10)- There is no reference listed as NOAA 2009b in the bibliography. 3.1 Need for the regulation (page 10)- In paragraph 3 it states: "Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents ... ". The supporting citation of Dietch et al. 2009 has no biological, ecological, or general relevance to the circumstances of the regulated mainstem where stranding was observed near Hopland. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: Board staff did not conspire to manufacture the need for the proposed regulation, nor did staff participate in the writing of the February 19, 2009 letter from NMFS. The stranding incidents and studies performed on Maacama Creek in 2006 that are cited in NMFS's letter are documented incidents and publications. As indicated in the letter, NMFS was exploring long-term solutions through a collaborative effort but desired a short-term solution to avoid a potentially widespread reduction in the reproductive success of salmonids. To this end, Board staff was consulted by NMFS staff on the State governmental processes available and capable of providing a short-term solution to the potential risk to salmonids from frost diversions. Board staff identified the emergency regulation process, and NMFS, on its own, prepared the February 19, 2009 letter.

At the April 7, 2009 Board Workshop, Derek Roy, Special Agent for NMFS gave a powerpoint

presentation that identified some of the 40 members of the Russian River Frost Task Force (including Mendocino County Farm Bureau and Mendocino County Russian River Flood Control District). In that presentation, Mr. Roy stated that “Due to the lack of a short term “take” prevention plan for this frost season, the task force has been face[d] with the difficult decision of making recommendations to the California State Water Board regarding emergency regulations to protect ESA listed salmonids.” It is important to note that the Board did not in fact pursue emergency regulations as requested by NMFS but rather conducted several other additional workshops during which stakeholders presented more information and comments. The Board eventually noticed the rulemaking process for the proposed regulation and the supporting draft EIR for which all stakeholders could submit comments. The Board and its staff have reviewed all information provided during this process. Based on the available information, the Board has concluded that the proposed regulation is necessary.

The commenter appears to misunderstand the proposed regulation. The proposed regulation is not limited to the mainstem Russian River, and as such the research and conclusion of Deitch et al. support the scope of the proposed regulation extending to tributaries as well as the mainstem Russian River. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country, and concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids.

The Board made changes to the DEIR and supporting documents to clarify the reference listed as NOAA 2009b in the bibliography.

Comment 10.2.5: Russian River Frost Regulation Draft EIR 3.1 Demand management (page 13)- (8) There are no varieties that do not require frost protection in Mendocino County. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The commenter is misinterpreting this section of the DEIR. The DEIR identifies switching to less frost sensitive varieties as a management option to conserve the amount of water needed for frost protection in a season. For instance, a grower may have a vineyard with a variety of crops, which bud out at different rates, planted at various elevations. There may be instances when only certain varieties or crops at certain elevations require frost protection. By placing valves in the frost system, the grower could control which areas to frost protect and not needlessly frost protect the entire property.

Comment 10.2.6: The project purpose and project description are defined so narrowly that they prohibit consideration of a reasonable range of alternatives. The DEIR must include a clearly written statement of objectives to help the SWRCB develop a reasonable range of alternatives to evaluate in the EIR. Further, the EIR must analyze a reasonable range of alternatives to the proposed project that would feasibly attain most of the project’s basic objectives while reducing any of its significant effects. Commenters on the Notice of Preparation expressed concern that the basic project purpose defined in the NOP was too narrow because it would constrain the alternatives analysis by identifying only one acceptable alternative, the proposed regulation in the Project Description. The DEIR attempts to address this NOP shortcoming by expanding the project purpose to include the adoption of a “regulation

that will prevent salmonid stranding mortality while minimizing the impacts of the regulation on the use of water for purposes of frost protection”, but the DEIR still myopically limits the regulation to the “diversion for purposes of frost protection of crops in the Russian River watershed...” This narrow objective precludes consideration of other regulation alternatives that, for example, would apply to all water use during frost protection periods that could contribute to salmonid stranding. The DEIR unreasonably limits the regulation to “water diversion for purposes of frost protection of crops” despite evidence in the record that there are multiple natural and water diversion-related causes of salmonid stranding, including other non-frost related diversions that are within the regulatory authority of the Board. The DEIR also constrains the consideration of alternatives with the following “goals”: (a) promote local development and governance of programs that prevent stranding mortality during the frost season, (b) provide transparency of diversion and stream stage monitoring data, (c) ensure that the State Water Board can require any changes to WDMP’s that are necessary to ensure that WDMP’s are successful and implemented on a timely basis, (d) provide for State Water Board enforcement against non-compliance, and (e) develop a comprehensive regulation that includes all diverters of water for frost protection use, including diverters who pump groundwater that is hydraulically connected to the stream system. Although the revised project objectives and goals in the DEIR may appear to be meaningful improvements at first blush, the DEIR suffers the same failing of the NOP in that it continues to constrain the alternatives analysis by ensuring that the proposed regulation is the only acceptable alternative. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Paula Whealen, Wagner and Bonsignore*)

Response: The DEIR includes a clearly written statement of objectives and goals that was used to develop a reasonable range of alternatives. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (*Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.*) The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to the instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Diversions of water for uses other than frost protection are not understood to cause the rapid decrease in water levels that can cause stranding mortality of salmonids. Natural stranding, due to the natural recession of seasonal flows, occurs each year. However, diversions for frost protection can create an unnatural flow recession that can be detected through monitoring. (See Deitch et al, 2009.)

Topic 10.3 CEQA - Environmental Settings

Comment 10.3.1: A description of stream flow processes in the alluvial reaches of tributaries is omitted [in the DEIR] and differs substantially from the description in the DEIR. In the large alluvial valleys of the watershed, runoff infiltrates until the groundwater table rises sufficiently to produce surface flow. Alluvial tributary reaches may experience changes of surface flow to subsurface and back numerous times over the rainy season. Additionally, the stage of the mainstem Russian River channel in the alluvial valleys (Ukiah, Alexander, Russian) largely defines the top of the groundwater table and affects stage in the alluvial reaches of the tributary streams. The Draft EIR simply states: "In the valleys groundwater occurs in the alluvial deposits. The summer baseflow is maintained by groundwater discharge along reaches where the water table is higher than the adjacent stream. In the larger valley drainages, such as the

Russian River, groundwater discharge is large enough to sustain perennial flow." This description is erroneous and not based on any data or study of actual conditions. The Russian River, prior to the Potter Valley diversion and Coyote Dam, did not have perennial flow. Due to the well-documented channel entrenchment along the Russian River (page 38 EIR), the bottom elevation has dropped 18-20 ft creating a "French drain" effect to lower the groundwater table and dewater the tributaries. Each tributary undergoes losses of surface flow to groundwater (losing reach) and gains surface flow from groundwater (gaining reach) throughout the rainy season, depending on the timing and intensity of rainfall, geology of the tributary watershed, the operation of the Coyote and Warm Springs Dams and the stage of the Russian River. Large well fields and direct diversions also affect stream flow. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives." (Cal. Code Regs., tit. 14, § 15125, subd. (a).) In this case, the environmental setting of the project area is described to a level of detail that matches and provides proper context for the impact evaluation, and a more detailed description of the environmental setting is not necessary to an understanding of the potentially significant effects the draft regulation. The DEIR provides an adequate description, at the programmatic level, of the different valley types and streams found in the Russian River watershed.

The description quoted by the commenter is an accurate and appropriate description of the Russian River watershed. Contrary to the commenter's assertion, the Russian River was a perennial system prior to the Potter Valley diversion and Coyote Dam and still is today. As stated on page 20 of the DEIR, flows during summer and early fall are generally low, and many small streams in the project area may go dry. From a hydrologic standpoint, this statement logically includes portions of streams in the upper watersheds referred to on a map as the "mainstem" or its forks. It should also be noted that the description of "small" is proportional to the overall watershed size and would therefore include some of the alluvial tributaries.

The closest reference on page 38 of the DEIR (Section 4.6.3 Decline of Salmon and Steelhead Fisheries in the Project Area) states "Channel incision has been noted to lead to passage barriers at headcuts and over-steepened locations, particularly in Russian River tributaries. Down-cutting and groundwater pumping have led to lowering of water tables, vertical bank creation, and corresponding impacts to the riparian zone." The intent of the commenter's reference and statement is unclear, but it appears to simply summarize (in the commenter's words) portions of the environmental setting descriptions found in DEIR Sections 4.1, 4.2, and 4.6.

Comment 10.3.2: The DEIR, at 3. Project Description, 4.2 Hydrology and Water Quality, and at 8. Cumulative and Growth-inducing Impacts. Water Supply (DEIR 124) completely and erroneously omits any discussion of the environmental setting and hydrologic relationship between the Eel River, the Potter Valley Project diversions, inflows to the East Branch Russian River, storage in Lake Mendocino, and their ultimate relationship to the water balance for flows in the Russian River main stem and hydraulically connected ground water. In addition, the impacts of continued diversions of water from the Eel River to its own populations of listed salmonids, water quality and public trust resources must also be addressed. See, Friends of the

Eel River v. Sonoma County Water Agency (2003) 108 Cal.App.4th 859, 870-71. The DEIR must be corrected and recirculated for comment. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Paula Whealen, Wagner and Bonsignore*)

Response: Section 4.6.3 of the DEIR provides a general description of the Eel River diversion. "Flow hydrographs have been altered substantially in the mainstem Russian River and in Dry Creek in response to dam construction and intra-basin diversion from the Eel River to the Russian River." The objective of the proposed regulation is to prevent cumulative diversions for frost protection from causing rapid reduction in stream stage that causes stranding mortality in salmonids. The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases. Frost protection activities in the watersheds upstream of the reservoirs may result in less available water for downstream uses over the short term, but little of this water is evaporated or used by the crops and therefore results in a low overall net loss to the water balance as compared to other uses.

The requirements of the proposed regulation and the stream stage monitoring program must be met regardless of the climatic conditions or reduced flows from the Eel river through the Potter Valley Project. Impacts to salmonids in the Eel River and other Eel River flow issues related to the Potter Valley Project are outside the scope of this project and are analyzed and addressed under the FERC process.

At a programmatic level, the DEIR adequately describes the relationship between the Eel River, inflows to the East Branch Russian River, storage in Lake Mendocino, and their ultimate relationship to the water balance for flows in the Russian River main stem and hydraulically connected ground water as it relates to the scope of the proposed project.

Comment 10.3.3: Unless the proposed Regulation and DEIR are willing to explicitly exempt and eliminate all inflows from the Eel River for modeling and for use in addressing maintenance of Russian River flows, the DEIR must include all impacts to the Eel River of this continued diversion. Else, it must provide a water balance for the Russian River with NO water inflows from the Eel River. The proposed Regulation and DEIR fails to address these aspects of a correct and complete Project Description and Project impacts, thereby making its evaluation of environmental impacts under CEQA significantly invalid and incomplete. It should be revised and recirculated. (*David Keller, Friends of the Eel River*)

Response: The objective of the proposed regulation is to prevent cumulative diversions for frost protection from causing rapid reduction in stream stage that causes stranding mortality in salmonids. The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases. Frost protection activities in the watersheds upstream of the reservoirs may result in less available water for downstream uses over the short term, but little of this water is evaporated or used by the crops and therefore results in a low overall net loss to the water

balance as compared to other uses. The requirements of the proposed regulation and the stream stage monitoring program must be met regardless of the climatic conditions or reduced flows from the Eel river through the Potter Valley Project. Impacts to salmonids in the Eel River and other Eel River flow issues related to the Potter Valley Project are outside the scope of this project and are analyzed and addressed under the FERC process.

Comment 10.3.4: In the case of the pollutant sediment: Excessive sediment loads, and aggregation, beyond normal background levels effect stream function (habitat availability - pool depth, pool riffle complex, embededness, etc.). Excessive sediment loads also limit available surface water flows (a greater percentage of the flow is subsurface). Excessive sediment loads effect on surface flows can influence stream temperature (mostly during low flow periods), and water temperature in pools (lack of depth and temperature stratification). Thus, sediment loading contributes to issues in stream flow and habitat alteration. Conversely, lower stream flows from over use (too much diversion) contribute to the inability of the stream flow hydrograph to move sediment and aggregate through and eventually out of the system. Disturbance of the hydrograph, from diversion, limits stream function from creating holes (hole depth) and an appropriate pool riffle complex sufficient to provide the habitat values that are needed for salmonid survival. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Comment noted.

Comment 10.3.5: The waterbodies (Russian River, Navarro River, and other north coast rivers listed on the States 303 (d) of Water Quality Limited Segments) are noted to be listed as impaired by sediment, temperature, and other pollutants. These water bodies are also flow impaired. Flow is not a pollutant. However, there is a relationship with the pollutants sediment, temperature, and nutrient concentrations with flow issues. Thus, the CEQA document being prepared must consider how current diversion practice may affect impaired status and how rule making will address controls for water use for frost protection, and general flow issues, in regards to desired outcomes from such rule making and legal responsibilities to protect all beneficial uses (including the cold water fishery) and move towards attainment of Water Quality Standards. Environmental review of the proposed rulemaking must consider these factors - diversion effects on impaired status. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). The proposed regulation does not approve or condition water right permits other than as stated in subdivision (e) of the proposed regulation. Flow objectives associated with Water Quality Standards and 303 (d) listings are outside the scope of this project. The DEIR adequately describes and addresses the relationship between flow, diversions for frost protection, and stranding of salmonids.

Comment 10.3.6: The EIR must carefully consider and describe the existing environmental setting for the Project. The EIR should contain a full description and discussion of existing water rights, diversions (legal and illegal), pumping and storage (legal, permitted as well as illegal or unpermitted) within the Russian River watershed, including its tributaries, which are used for sources of the frost protection water supplies. The segments and seasonality of any overdrafted portions of the Russian River must be identified clearly. (*David Keller, Friends of*

the Eel River)

Response: The DEIR adequately describes the existing water rights in the Russian River watershed on pages 11-12. The proposed regulation will identify and address frost protection activities that result in overdrafted segments of the Russian River and its tributaries through implementation of the WDMP.

Comment 10.3.7: The EIR must also have a full description and discussion of any reasonably foreseeable changes of flows within the Russian River. This includes changes in River and tributary base flows and seasonal flows, and tributary connectivity due to existing and newly approved gravel and sand mining of the Russian River and its tributaries, as well as timber harvest practices and land conversions that impact erosion, soil stability, loss of groundwater and other impacts to River and tributary flows. The EIR must also include changes in flows due to compliance with AB2121 requirements, NMFS Russian River Biological Opinion requirements, revisions proposed for D-1610 (including a change in hydrologic index from the upper Eel River watershed to the Lake Mendocino watershed) and any proposed changes in municipal and/or agricultural water demands and River or groundwater extraction from Sonoma County Water Agency and any other municipal or agricultural water rights holders. In addition, the EIR must describe clearly the inflows to the East Branch Russian River derived from diversions from the Eel River through the Potter Valley Project. Inasmuch as water stored in Lake Mendocino is used to provide any elements of a water balance and flow regime for the Russian River and its listed salmonids, the conditions of the Eel River diversions must be included in the environmental setting for this Project's EIR. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 870-71. The Project is proposing to provide a revised and improved regulatory setting and practices for the Russian River. It is likely that the Eel River flows through the Potter Valley Project will change again in the future as the new FERC relicensing process begins. Hence, the EIR should include a scenario in which no flows from the Eel River are diverted to the Russian River. (*David Keller, Friends of the Eel River*)

Response: The DEIR adequately addresses and describes all reasonably foreseeable changes of flows from implementation of the proposed regulation within the project area. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). The proposed regulation does not approve or condition water right or FERC permits other than as stated in subdivision (e) of the proposed regulation, nor does it require any of the activities identified by the commenter. As such, and because the occurrence and terms of such activities are speculative and unrelated to the proposed activity, the DEIR appropriately does not consider those activities. The potential environmental impacts of those activities will be considered under any CEQA analyses for those projects.

The watershed areas upstream of Warm Springs and Coyote Dams are not included in the geographic scope of the regulation because the dams are barriers to salmonid migration. The impacts downstream of the reservoirs from instantaneous reductions in stream stage due to frost protection diversions upstream of the reservoirs are mitigated for through controlled releases. Frost protection activities in the watersheds upstream of the reservoirs may result in less available water for downstream uses in the short term, but little of this water is evaporated or used by the crops and therefore results in a low overall net loss to the water balance as compared to other uses. The requirements of the proposed regulation and the stream stage monitoring program must be met regardless of the climatic conditions or reduced flows from the

Eel river through the Potter Valley Project. Impacts to salmonids in the Eel River and other Eel River flow issues related to the Potter Valley Project are outside the scope of this project and are analyzed and addressed under the FERC process.

Comment 10.3.8: The waterbodies (Russian River, Navarro River, and other north coast rivers listed on the States 303 (d) of Water Quality Limited Segments) are listed as impaired by sediment, temperature, and other pollutants. These water bodies are also flow impaired. Flow is not a pollutant. However, there is a relationship with the pollutants sediment, temperature, and nutrient concentrations with flow issues. Any rule making and/or monitoring program must consider how current diversion practice may affect impaired status and how rule making will address controls for water use for frost protection, and general flow issues. Such rule making must consider desired outcomes from such rule making and legal responsibilities to protect all beneficial uses (including the cold water fishery) and move towards attainment of Water Quality Standards. (*Alan Levine, Coast Action Group*)

Response: The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). The proposed regulation does not approve or condition water right permits other than as stated in subdivision (e) of the proposed regulation. Flow objectives associated with Water Quality Standards and 303 (d) listings are outside the scope of this project. The DEIR adequately describes and addresses the relationship between flow, diversions for frost protection, and stranding of salmonids.

Comment 10.3.9: Our family has farmed in the Dry Creek Valley for more than 80 years. We have held a permit for Water Diversion & Use since 1951. There is a drainage stream that flows through our property that has water flow to Dry Creek only during rain season. We do not take or use water for frost protection, however, any fish in the stream are naturally stranded. (*James Pedroncelli, Pedroncelli Vineyards*)

Response: Comment noted. Natural stranding, due to the natural recession of seasonal flows, occurs each year. However, diversions for frost protection can create an unnatural flow recession that can be detected through monitoring. (See Deitch et al, 2009.)

Comment 10.3.10: Program EIRs may be “prepared on a series of actions that can be characterized as one large project and are related . . . to . . . [in] connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program.” Used properly, a Program EIR may “consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts.” Although focused on a regulation that applies to a large geographic region, the Program EIR nevertheless must disclose and assess the impacts of the project. An accurate discussion of the environmental setting, including rare or unique environmental resources in the project area, are essential for complete disclosure and analysis of a project’s impacts. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Comment noted. The DEIR adequately includes an accurate discussion of the environmental setting at a programmatic level, including rare or unique environmental

resources (Appendices B and C) in the project area.

Topic 10.4 CEQA - Alternatives to the Proposed Regulation

Comment 10.4.1: The DEIR failed to evaluate the proposed alternative to regulate all diversions during the frost protection period (Mendocino County Farm Bureau et al. Scoping Comments, p. 7). As stated above, the failure to include the release of water and rediversion by SCWA will impair the regulation and result in unanalyzed environmental impacts. By comprehensively addressing all water diversions this proposed alternative regulation would feasibly attain most of the project's basic objectives while reducing any of its significant effects because it would be more effective in managing stream stage and preventing salmonids stranding. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Diversions of water for uses other than frost protection are not understood to cause the rapid decrease in water levels that can cause stranding mortality of salmonids.

Comment 10.4.2: The DEIR failed to evaluate the proposed alternative to exclude from the regulation diversions of water from the mainstem Russian River and Dry Creek below the large municipal reservoirs. These stream reaches are already managed according to State Board-imposed minimum stream flows (Mendocino County Farm Bureau et al Scoping Comments, p. 7). By excluding diversion of water from the regulated mainstem rivers that does not have an instantaneous adverse effect on stream stage, and thereby reducing the cost of compliance for a large number of mainstem water diverters, this proposed alternative regulation would feasibly attain most of the project's basic objectives while reducing many of its significant effects. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). While SCWA is required to meet prescribed bypass flows, according to USGS Station 11462500, Russian River Near Hopland, gage data, SCWA was in compliance with its instream flow requirements immediately preceding the April 20, 2008 fish stranding on the mainstem Russian River reported by NOAA, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. Even then, the available evidence supports the conclusion that it was not SCWA's temporary non-compliance that caused the fish stranding, but the rapid drop due to the uncoordinated diversions for frost protection.

At this time there is insufficient information available for the Board to identify and exclude diversions of water "from the regulated mainstem rivers that [do] not have an instantaneous

adverse effect on stream stage.“ The information gathered by the WDMPs will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events.

Comment 10.4.3: The DEIR failed to evaluate the proposed alternative to exclude from the regulation the pumping of groundwater. The pumping of groundwater does not have an instantaneous effect on stream stage (Mendocino County Farm Bureau et al Scoping Comments, p. 7). By excluding groundwater pumping that does not have an instantaneous adverse effect on stream stage, and thereby reducing the cost of compliance for a large number of groundwater pumpers, this proposed alternative regulation would feasibly attain most of the project’s basic objectives while reducing many of its significant effects. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the pumping of hydraulically connected groundwater is currently understood to contribute to the rapid drop in stream stage that impacts salmonids, and is therefore appropriate for inclusion in the regulation at this time. The proposed regulation, as clarified in response to comments received, allows pumpers of groundwater that do not contribute to a cumulative reduction in stream stage to any surface stream in the Russian River watershed during any single frost event to be exempted from the regulation upon approval by the deputy Director for Water Rights.

Comment 10.4.4: The DEIR also fails to consider reducing the intensity or scope of the regulation, which would necessarily reduce all of the regulation’s significant environmental impacts. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.)

Comment 10.4.5: One key to an adequate EIR is its identification and detailed discussion of alternatives to the Proposed Action (the Draft Regulation). The State Board has made no real attempt to analyze a reasonable and full range of alternatives to the Draft Regulation. For example, it has failed to propose and analyze a balanced frost protection policy that protects and enhances agricultural supply and other beneficial uses without applying the most conservative fish stranding assumptions utilized in the Draft Regulation. This type of alternative should promote greater balance of beneficial uses and incorporate mitigation measures to address the potentially significant impacts on the wine grape industry. Rather than undertake a creative and serious effort to develop such an alternative, the State Board urges commenters to come up with their own alternatives (after they have already made significant efforts to do so). This "pass the buck" approach to alternatives is not sufficient under CEQA. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation. The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.)

Comment 10.4.6: The State Board should develop further alternatives and consider adopting a voluntary participation alternative. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.) There is adequate evidence in the record to support the conclusions that the new and developing “voluntary” programs will not sufficiently achieve the program’s objectives, precisely because they are voluntary. There is evidence in the record from growers who indicate they will not participate in any program unless required to. The programs that are currently being developed, however, may be submitted for Board approval under the proposed regulation.

Comment 10.4.7: Alternatives listed in Section 5.2/6.10.2 - Local Stakeholder Voluntary Programs - Alternative 2 Including: Russian River Frost Program, Russian River Property Owners. These Non-Governmental Organizations may not be allowed to administrate the Regulation. They may participate in programs administered by the State Water Board in compliance with the Regulation and other State Code. Alternatives listed in Section 5:3/6.10.3 - Adopt a Regulation Similar to the Sonoma County Vineyard Ordinance is also a non-starter. The noted Sonoma County Ordinance has no reasonable capability to comply with the purpose of the Regulation. Nor - is there staff, resources, or expertise to comply with the purpose of the Regulation. For example; Sonoma County was considering local rule making in the form of a Frost Protection Ordinance. The proposed ordinance was to include rules (BMPs) for water use for frost protection and proposed monitoring and reporting. Legal standards caused the County to rethink the proposed ordinance language - omitting BMP and reasonable monitoring language. The Ordinance, plain language, says that all vineyards using water for frost protection must register with the County Ag Commissioner and participate in a comprehensive monitoring program. The issue is that what such a "Comprehensive" Program may look like? There is no definition or description of what is to occur in a "Comprehensive" monitoring program. Nor is real-time monitoring suggested. It is doubtful that Sonoma County would pass and manage an ordinance with language that required actions necessary to protect fish with a functional WDMP or monitoring that is transparent. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs. The Sonoma County Vineyard Ordinance will not, by itself, meet the requirements of the proposed regulation, unless approved by the Board, which will require compliance with the minimum requirements for WDMPs outlined in the proposed regulation.

Comment 10.4.8: In addition, the EIR must describe and discuss the proposed Sonoma

County Vineyard Frost Protection Ordinance (s) and Best Management Practices guidelines, as currently proposed, and likely to be soon adopted by the Sonoma County Board of Supervisors and Agricultural Commissioner, and any parallel efforts being undertaken in Mendocino County. (*David Keller, Friends of the Eel River*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.) The Sonoma County Vineyard Ordinance will not, by itself, meet the requirements of the proposed regulation, unless approved by the Board, which will require compliance with the minimum requirements for WDMPs outlined in the proposed regulation.

Comment 10.4.9: In addition to the regulatory language and Water Demand Management Program (“WDMP”) of the proposed Project, the EIR should evaluate other alternative means of reducing or avoiding the risks of fish stranding mortality and other damages to protected species and public trust resources associated with the use of water diversions for purposes of frost protection. Such alternatives can be used in conjunction with a regulatory and WDMP framework to help reduce water demands in the first place, while still reaching the goal of achieving reasonably effective frost protection for economically viable crops. Alternative means of achieving of protecting listed salmonids with reasonably effective frost protection should include, at a minimum: - avoidance of planting grapes and other crops in known frost-prone areas and topography - use of varieties that are more resistant to frost damage - use of wind and heating options for vineyards at risk - use of devices and methods such as Shur Farms Frost Protection Cold Air Drain which utilizes air movement, not water, to protect crops from frost damage (www.shurfarms.com) (*David Keller, Friends of the Eel River*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.)

Comment 10.4.10: Given the simultaneous listing and protections for three salmonid species in the Eel River, and given the likelihood of reductions in flows from the Eel River through the Potter Valley Project, it is important that the EIR evaluate thoroughly an alternative that does not rely on any continued diversions from the Eel River. This would include any prospective changes in water sources for storage and release from Lake Mendocino. This includes raising Coyote Dam, removing sediments within the reservoir, and other means of re-managing the water supply pool and flood storage pool at Lake Mendocino. (*David Keller, Friends of the Eel River*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.)

Comment 10.4.11: No regulation- Significant strides to eliminate the problems observed in 2008 have been implemented. Since 2008 over 60cfs of instantaneous demand in the upper Russian River has be reallocated to diversion from storage. This demand offset, when combined with the installation of new mainstem gages and the development of coordinated

release protocols has largely mitigated the problems documented in Mendocino County. In Sonoma County, the direct diversion cited as the source of problems in 2008 and 2009 has been reallocated to groundwater. With the only documented problems mitigated the on-going need for a regulation is based entirely on unsubstantiated speculation. In addition, any "protection" that the proposed regulation could potentially provide is already provided by, or is superseded by, the Federal Endangered Species Act, the California Endangered Species Act and the California Fish and Game Code. Creating an additional layer of regulation is not warranted. (*Sean White, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: There is adequate evidence in the record for the Board to determine with reasonable certainty that, despite the fact that only two fish strandings were reported by NOAA, those two reported stranding incidents are unlikely to be isolated occurrences. Furthermore, based on the fact that there have been documented fish-strandings, clearly the Federal and California ESAs are not currently providing adequate protection for the public trust resources and need further protection by the proposed regulation.

Comment 10.4.12: Programmatic Policy for Facilitating the Ability to Store Water- The District feels that the problems associated with frost diversions can be effectively managed by the construction and utilization of offstream storage. Unfortunately efforts to build or utilize storage have been thwarted by SWRCB policies that penalize diverters and expose their rights to protest while attempting to "do the right thing". A policy facilitating storage and protecting the rights of diverters making environmentally beneficial permit modifications would allow the instantaneous demand associated from frost diversions to be easily managed. (*Sean White, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The State Water Board encourages diverters currently exercising direct diversion rights for frost protection to utilize, to the extent feasible, offstream storage in lieu of direct diversion. The Board cannot, however, ignore statutory and judicial requirements regarding the right to store water for later use.

Comment 10.4.13: If the basic objective is to reduce the effects of water diversions on salmonids during a frost event, then an alternative to the proposed regulation should be the "Russian River Frost Program" presented to the SWRCB by Mendocino County and Sonoma County interests in December 2009. This Program is a non-regulatory diversion management plan that has already fostered reductions in diversion rates during frost periods. The Russian River Frost Program advocates expedited processing of changes to existing water rights and for new appropriations that will result in a reduction in instantaneous demands within the watershed. These types of projects have had (and will have) an immediate positive effect on the instantaneous demand during the frost protection season. The Russian River Frost Program is already organized and operating, and should constitute a qualified Water Demand Management Plan. The EIR should evaluate the effectiveness of the Russian River Frost Program as an alternative. If it is found to be the most effective and/or protective alternative, then there would be no need for the proposed frost protection regulation. SWRCB can best utilize its reasonable use authority by evaluating individual diversions rather than adopting a blanket regulation. (*Paula Whealen, Wagner and Bonsignore*)

Response: The DEIR evaluated the Russian River Frost Program under Alternative 2 - Local Stakeholders Voluntary Programs. The Board previously considered all comments received on the identification and development of alternatives for the proposed project. Comments that do

not address the current proposed regulation or draft EIR require no response here.

The Russian River Frost Program will not, by itself, meet the requirements of the proposed regulation, unless approved by the Board, which will require compliance with the minimum requirements for WDMPs outlined in the proposed regulation.

Comment 10.4.14: II. Alternatives to the Proposed Regulation I urge SWRCB to strongly consider a regulation similar to the Sonoma County Vineyard and Orchard Frost Protection Ordinance. The data that is so very lacking from all agencies could be gathered and analyzed through this type of regulation. Only then can we all specifically address the problems and come up with a solution that will indeed save fish. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards*)

Response: The DEIR evaluated the Sonoma County Vineyard and Orchard Frost Protection Ordinance as Alternative 3. This alternative was rejected as the preferred alternative because it does not include specific details of a monitoring program and does not set firm timelines for developing and implementing the monitoring program. Therefore, the alternative does not currently provide adequate stream or diversion monitoring. In addition, any monitoring program that is developed may not be adequate if it does not provide for transparency of records. This alternative also does not require implementation of BMPs if a risk of harm to salmonids is identified. Without the knowledge of the quantity and timing of frost diversions, a stream monitoring program, and a mandatory corrective action program, there is no guarantee that an alternative similar to the Sonoma County Ordinance will do enough to fully meet the objective and goals of the proposed project.

The Sonoma County Vineyard Ordinance will not, by itself, meet the requirements of the proposed regulation, unless approved by the Board, which will require compliance with the minimum requirements for WDMPs outlined in the proposed regulation.

Comment 10.4.15: CAG would argue that the only viable solution (if water is absolutely necessary for frost protection) is off stream storage that is only diverted according to set policy (NMFS/DFG Guidelines) and with staged diversion controlled so as to not adversely effect the hydrograph - and - only diverted by parties that hold water rights and license to divert. (*Alan Levine, Coast Action Group*)

Response: The DEIR evaluated requiring offstream storage as Alternative 4 - Adopt a Regulation Similar to California Code of Regulations, title 23, section 735. The DEIR correctly concluded that this alternative would be successful in protecting salmonids from stranding mortality. However, this alternative is less likely to meet one aspect of the project objective, which is to minimize the impact of regulation on the use of water for purposes of frost protection by allowing diverters an opportunity to address and mitigate their impacts at a local level through managing diversions and implementing BMPs. Because stranding mortality can be avoided by coordination or management of diversions for frost protection to reduce the instantaneous impact, the proposed regulation recognizes the need for varying strategies and does not prohibit any particular practice in all cases, so long as diverters participate in a Board-approved WDMP.

The Board has records of all known existing water rights. The Board also has authority pursuant to Water Code section 1052, et seq to investigate and enforce against any

unauthorized diversion and use of water. The proposed regulation does not need to restate this authority.

Comment 10.4.16: We offer these alternatives to direct diversion to the State Water Resources Control Board (SWRCB) for their consideration: * SWRCB should prohibit any future direct diversion for frost protection. Given documented take of listed species, this form of frost protection should be deemed an unreasonable use of water. * A stopgap approach would be to change the sprinklers to low emitters to reduce the rate of water consumption. * The number of direct diverters dependant upon tributary water is already excessive. Therefore SWRCB should initiate a program to convert present direct diverters to either groundwater from wells or off-stream reservoirs with appropriate bypass flows and seasons of diversion, i.e., December 15-March 31 to maintain adequate flows in these small tributaries. * SWRCB should limit the number of days annually that frost protection from direct diversion can be used. The number of frost threat days in 2001 and 2008 were excessive. Protection for the owners of orchards or vineyards should come in the form of crop insurance under these circumstances. * SWRCB should encourage use of wind mills where appropriate to reduce the demand on water. * Cloth canopies made of Remay could be placed over the vines to reduce threat of frost. This would reduce the demand on water. * There are other alternatives to be investigated such as some form of electrical resistance (similar to engine block heaters) or Christmas tree lights (those that give off heat) as alternatives to water protection. (*Stacy Li, New Old Ways Wholistically Emerging*)

Response: The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to “consider in detail each and every conceivable variation of the alternatives stated.” (Residents Ad Hoc Stadium Com. v. Board of Trustees (1979) 89 Cal.App.3d 274, 287-288.) Some of the alternatives suggested by the commenter would not meet the objectives of the proposed activity, while others have been showed in the DEIR to lead to greater environmental impacts.

Comment 10.4.17: Russian River Frost Regulation Draft EIR 5.2 Local stakeholder voluntary programs (Page 51)- The DEIR states that both the URSA and MRSA programs "exclude a collaborative process with public agencies". This statement is not accurate. Both URSA and MRSA have participated in the Frost Protection Taskforce and worked consistently with regulators to implement their programs. The only URSA/MRSA process in which regulators are disallowed is participation in the Science Advisory Group (SAG). It is critical to note that URSA/MRSA members are also disallowed from participating in the SAG since the entire intent of the SAG is to develop a science-based, non-biased, peer review panel. Characterizing this process as exclusionary misrepresents the core function of the SAG. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The Board commends the Russian River Frost Program (RRFP) on its participation and efforts to date. Under the RRFP, the process for development and implementation of the monitoring program excludes consultation and transparency with the resource agencies charged with carrying out the provisions of the ESA. The commenter’s comparison with excluding the URSA/MRSA members from this process who do not have expertise in fisheries biology and are not charged with carrying out the provisions of the ESA is not a relevant comparison.

The RRFP will not, by itself, meet the requirements of the proposed regulation unless approved by the Board, which will require compliance with the minimum requirements for WDMPs

outlined in the proposed regulation. The proposed regulation does not preclude the RRF from using a Science Advisory Group (SAG) to act as the governing body. The proposed regulation does not preclude SAG from making recommendations to the Board that differ from the recommendations of the Resource Agencies. The Board retains authority to approve a WDMP and approve or require any changes to a WDMP.

Comment 10.4.18: In addition to undermining Article X, the proposed regulation [January 2010] seeks to establish another layer of protection from prosecution by establishment of a private individual or body through which disputes must be channeled. The Board-adopted regulation for the Napa River frost protection problem is stronger, and there is no basis for weakening the precedent set by the Napa regulation, or undermining the state Constitution. The Napa River regulation §735 requires a water master administering a Board or court order and requires water storage only in legal reservoirs prior to the frost season. (*Larry Hanson, Northern California River Watch*)

Response: Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs.

There are several differences between the proposed regulation and the Napa frost regulation. The Napa frost regulation was intended to deal with the fact that there was insufficient flow during the frost season to supply the instantaneous demand of all vineyardists entitled to water. (See *People v. Forni* (1976) 54 Cal.App.3d 743.) The proposed regulation is predicated on the fact that, as explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection in the Russian River watershed may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. The Napa River watershed is also much smaller than the Russian River watershed, and diverters for frost protection from the Napa River had greater capabilities for constructing offstream storage facilities to resolve the issue. There are also more tributaries and a larger number of smaller diverters in the Russian River watershed. It is expected that stranding mortality in the Russian River watershed can be avoided through coordination or management to reduce the cumulative instantaneous impact of frost diversions. That is why the proposed regulation provides more flexibility for addressing the unique problem faced in the Russian River watershed than the Napa frost regulation did, including on-the-ground management by WDMPs, to be based on the unique circumstances faced by participants of each WDMP.

Comment 10.4.19: Isn't the most reliable approach that meets the objectives of protecting listed species from activities that threaten and cause harm to them a prohibition on the use of water for frost protection in salmonid-bearing streams? Given the crisis in which the threatened and endangered species find themselves, are there any other feasible measures other than a prohibition on frost protection in salmonid-bearing streams that would address the practical realities of the inability of agencies to police every frost-prone tributary that salmon inhabit and in which grapes have been planted? In the absence of effective plans that include robust funding and enforcement, isn't a prohibition the best response to the determination that use of water for frost protection activities is wasteful and unreasonable, and therefore unconstitutional? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection

may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the Board did not find it necessary to prohibit all diversions for frost protection on Salmonid-bearing streams.

Comment 10.4.20: Before these proposed regulations are implemented, I recommend that your agency considers practical alternatives that can prevent potential fish strandings that still allow agriculture to thrive and continue as an important economic sector in our community. Sprinkler frost protection is still the only method to prevent damage to frost sensitive crops when temperatures fall below 27 degrees F, which is common in our region. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The Board has carefully considered and balanced all beneficial uses in drafting the proposed regulation. The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. Because stranding mortality can be avoided by coordination or management of diversions for frost protection to reduce the instantaneous impact, the proposed regulation recognizes the need for varying strategies and does not prohibit any particular practice in all cases, so long as diverters participate in a Board-approved WDMP.

Comment 10.4.21: [Comment on October 27, Notice of Preparation]: The SWRCB should consider supporting existing non-regulatory actions already being taken to improve habitat conditions and prevent the recurrence of stranding events. One alternative to the regulation is the ordinance currently being considered by the Sonoma County Board of Supervisors. The ordinance incorporates all the major elements of the earlier drafts of the SWRCB draft regulation, including measuring and monitoring, but because the ordinance is local, it promises to do all of this quicker, at a reduced cost, with more accountability and less government intrusion. (*Jesse Barton, Gallery and Barton Law Corporation; Glenn McGourty, University of California Agriculture and Natural Resources*)

Response: There is adequate evidence in the record to support the conclusions that the new and developing "voluntary" programs will not sufficiently achieve the program's objectives, precisely because they are voluntary. Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The Sonoma County Vineyard Ordinance will not, by itself, meet the requirements of the proposed regulation, unless approved by the Board, which will require compliance with the minimum requirements for WDMPs outlined in the proposed regulation.

Comment 10.4.22: The regulation being proposed by the SWRCB may prove to be unworkable, at least in the form circulated in January 2010, for various reasons. First, it could take years to fully implement the regulation. Second, the regulation requires that all "significant" diversions be monitored instantaneously and the data transmitted on an hourly basis to a website accessible by the SWRCB and the public. Third, the blanket prohibition on frost diversions, even in times of an advective frost, could prove to be fatal to many vineyards. In order to address these shortcomings in the regulation, [the SWRCB's EIR should consider the following alternatives to the regulation that would involve SWRCB actions that could] directly reduce instantaneous demand: (a) Expedite and encourage permits for off-stream storage where the underlying aquifer is not sufficient for wells in the underflow for frost control. (b) Allow direct diversion right holders (permitted and licensed, pre-1914, and riparian rights) to

divert and regulate water for 90 days. This will greatly reduce instantaneous demand during the frost season. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The Board previously considered all comments received on the proposed regulation. Comments that do not address the current proposed regulation or draft EIR require no response here.

Topic 10.5 CEQA - Assessment of Environmental Impacts

Comment 10.5.1: The DEIR fails to disclose and analyze significant effects. The DEIR fails to disclose and analyze significant effects on agriculture. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: This comment is noted and addressed throughout this section. Refer specifically to responses to comments 10.5.4, 10.5.5, 10.5.6, 10.5.7, 10.5.8, 10.5.9, 10.5.10, and 10.5.11.

Comment 10.5.2: The DEIR Section 6 effects analysis reduces potential impacts to mere generalities without discussion of the impact assessment methodologies or reliance on thresholds of significance. For example, the analysis regarding the removal of surface water diversions in Section 6.4.2 concludes that, "In general, the foreseeable, indirect environmental consequences of these diversion structure modifications would likely be beneficial in terms of anadromous fish passage and habitat, and adverse with respect to construction-related effects that may cause short-term impacts on aesthetic, water, and biological resources and short-term noise-related impacts." The DEIR justifies this simplistic conclusion on mere generalities: "Surface water diversion structure removal can have beneficial ecological effects in terms of returning the stream to a more natural hydrograph, temperature regime, dissolved oxygen content, and sediment transport system. It can promote the rehabilitation of native species including fish; biodiversity and the population densities of native aquatic organisms increase when structures are removed. The removal of a surface water diversion structure may provide new upstream habitat to anadromous fish if they were unable to pass the structure previously. It can reduce predation of endangered anadromous fish that get caught in pools below structures. Removal of diversion structures returns the natural flow of streams, which benefits the life cycles of many aquatic organisms. Frequent and more natural flooding resulting from diversion structure removal may promote wetland and riparian growth along river edges." (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: A programmatic DEIR does not analyze environmental impacts at the project level and is therefore more general in nature. Individual projects are not exempt from the CEQA process and impacts will be addressed and mitigated at the project level where required. At the programmatic level it is not always practical to establish thresholds of significance and it does not always improve the process of identifying significant effects. The Governor's Office of Planning and Research does not suggest that an agency establish a threshold for every

conceivable environmental effect. This may be neither practical nor desirable. (See <http://ceres.ca.gov/ceqa/more/tas/Threshold.html>). The DEIR appropriately analyzes the potential direct and indirect impacts to the environment at a programmatic level.

Comment 10.5.3: The DEIR fails to discuss specific impact mechanisms and assessment methodologies, including impacts that are affected by factors not in the proposed regulation, and thresholds of significance that are essential for assessing the proposed regulation. The DEIR states "Stranding can occur as a result of natural declines in flow, municipal water withdrawals, and other non-frost diversion causes." The DEIR fails to discuss the extent to which the non-frost diversions may cause or contribute to stranding that occurs during frost protection periods, and whether these causes impair the effectiveness of the regulation. In short, the DEIR does not adequately analyze whether the objective of reducing stranding will actually occur. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The CEQA process directs the lead agency to assess the impacts of the proposed project and alternatives to the project. The DEIR addresses all reasonably foreseeable direct and indirect impacts of the proposed regulation and alternatives and is not required to address those factors that are not within the scope of the project. The proposed regulation applies specifically to stranding that occurs due to the cumulative instantaneous demand for water during frost protection that creates a rapid reduction in stream stage. Other diversions do not contribute to the instantaneous reduction in stage. Six total alternatives were evaluated through the CEQA process and the proposed regulation most fully meets the goals and objectives of the project.

Comment 10.5.4: The DEIR fails to disclose and analyze significant effects. Construction of new reservoirs may result in increased recreation on those reservoirs. This impact is not discussed on page 68 of the DEIR. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR addresses the impacts of reservoirs constructed on private property. These reservoirs are not expected to be accessible for public recreation. It is not reasonable to assume private landowners would allow for public recreation on their reservoirs and choose to incur the costs and potential liabilities public access would involve. It is also not reasonable to assume that reservoirs for frost protection purposes will be constructed on public property and designed for public recreation. Therefore the DEIR appropriately does not identify increased recreation on reservoirs as a significant environmental impact.

Comment 10.5.5: The DEIR fails to disclose and analyze significant effects. Removal or modification of existing onstream reservoirs that provide flood control or otherwise attenuate peak flows may increase flooding and property damage. This impact is not discussed. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR fully discloses and analyzes the significant effects of removal or modification of surface water diversion structures. The proposed regulation does not require onstream reservoir removal. It is not anticipated that a diverter will remove their onstream reservoir in response to the proposed regulation.

Comment 10.5.6: The DEIR fails to disclose and analyze significant effects. Removal or modification of existing water diversions may reduce the water supply, and reliability of supply, for agricultural and domestic uses dependent on those diversions. Reliability of supply for new water diversions may be affected by environmental protection (e.g., bypass flow) conditions and conditions for the protection of senior water rights. Loss of and decreased reliability of supply may reduce the quantity of lands in agricultural production. These impacts are not discussed in DEIR Section 6.4. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter is misinterpreting section 6.4. It is anticipated that the removal or modification of surface water diversions would occur if the current demand for water supplied by these diversions structures is replaced with alternative methods of diversion or sources of water. The proposed regulation does not require the removal of surface water diversion structures. The proposed regulation does not reduce the reliability of the supply for agriculture and domestic uses. Removal or modification of surface water diversion structures will not reduce the quantity of lands in agricultural production.

Comment 10.5.7: The DEIR fails to disclose and analyze significant effects. The use of recycled water will likely increase if the regulation is adopted. The DEIR does not analyze this impact. The sole discussion of recycled water in the DEIR incorrectly concludes that the use of recycled water is not economically feasible to be done at a large scale to serve as an alternative to the project, citing one example where a regional recycled water program ("NSCARP") was not adopted by SCWA and the statement that there may not be funds available to complete a proposed Mendocino County recycled water project. The large cost and uncertain standards of the regulation are likely to make these and other recycled water options relatively cost-effective and feasible. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter's statement is unsupported and based on speculation. CEQA directs the lead agency to note its conclusion and terminate discussion of an impact if after thorough investigation it is determined that the impact is too speculative for evaluation. The DEIR adequately addresses the use of recycled water in Section 6.9.

Comment 10.5.8: The DEIR fails to disclose and analyze significant effects. The reduction of water diversions for frost protection purposes during the frost protection season and other times of the year may increase the amount of water in stream for non-frost water uses. The failure of the regulation to address non-frost diversions may result in increases in non-frost water use, which may adversely affect salmonid and other biological resources and impair the effectiveness and feasibility of the regulation. These impacts are not addressed in the DEIR. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont;*

Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: The proposed regulation applies specifically to stranding that occurs due to the cumulative instantaneous demand for water during frost protection events that creates a rapid reduction in stream stage. Other diversions do not contribute to the instantaneous reduction in stage. The DEIR does adequately evaluate the extent to which the proposed regulation may result in diverters switching to other crops that do not require frost protection.

Comment 10.5.9: The DEIR fails to disclose and analyze significant effects on agriculture. The draft EIR did not utilize the recommended Environmental Checklist that is part of the California Environmental Quality Act Guidelines Appendix G when it evaluated the environmental impacts of the draft regulation. As a result, the draft EIR does not consider or evaluate numerous potential impacts. We repeat several questions from the Checklist here. "Will the project convert prime farmland, unique farmland, or farmland of Statewide importance, as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural uses?" Yes. The SWRCB apparently disregards its own economic analysis that estimates the cost of this regulation. According to the SWRCB, this regulation is expected to cost a typical 160-acre vineyard from \$9,600 to \$352,000 in order to initially comply with its mandates. It will cost an additional \$3,000 to \$36,200 per year to keep that 160-acre vineyard in compliance. It is expected to cost a typical 40-acre vineyard from \$2,400 to \$87,880 in order to initially comply with its mandates. It will cost an additional \$750 to \$9,000 per year to keep that 40-acre vineyard in compliance (see Exhibit A). If we look at the higher end of these expected costs, one must suspend common sense to argue small farms will not go out of business as a result of this regulation. Attached as Exhibit B are ten declarations from small family farms in Mendocino and Sonoma counties stating that if forced to incur these types of expenses, they will have no choice but to cease farming and possibly put the property up for sale. The DEIR fails to identify, evaluate, and mitigate the significant environmental effects associated with land conversion. It is important to note that conversion of farmland to either housing or deep pit gravel mining is likely. Deep pit gravel mining has already taken hundreds of acres of farm land out of production along the Russian River below Healdsburg and in several locations in Ukiah. According to the Department of Conservation's California Geological Survey the Northern San Francisco Bay Area will need 647 million tons of aggregate over the next 50 years. Currently only 46 million tons are available through permitted sites. This discrepancy combined with the high yields of aggregate found in the floodplain valleys of the Russian River make farmland to pit mine conversion a very likely possibility. None of these significant effects were analyzed or mitigated in the DEIR. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR did utilize the recommended Environmental Checklist that is part of the California Environmental Quality Act Guidelines Appendix G. There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with

the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750. Based on the review of the current water rights of the individuals who submitted affidavits, all of these individuals have water rights that can support switching to other summer crops that would not require frost protection from March 15 – May 15 and it is therefore unlikely these individuals would choose to take their land out of agricultural production. The commenter's statement that the DEIR fails to identify, evaluate, and mitigate the significant environmental effects associated with land conversion is speculative and unsupported. The DEIR adequately discloses and analyzes the direct and indirect impacts to agricultural resources associated with land conversion.

Comment 10.5.10: The DEIR fails to disclose and analyze significant effects on agriculture. The draft EIR did not utilize the recommended Environmental Checklist that is part of the California Environmental Quality Act Guidelines Appendix G when it evaluated the environmental impacts of the draft regulation. As a result, the draft EIR does not consider or evaluate numerous potential impacts. We repeat several questions from the Checklist here. "Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?" Yes. Under the Williamson Act, landowners promise to keep land in agriculture in return for a substantial reduction in real estate taxes. The Act is clear that land must be retained in agriculture and from time to time a county may require the landowner to document the agricultural use using receipts and inventories for crops or livestock. If the land is not kept in agricultural production, a county may initiate termination of the contract for breach of contract, which subjects the landowner to a significant penalty and loss of tax benefits. With the effective elimination of State open space subventions to counties since fiscal year 2009/2010, the counties have greater incentive to terminate Williamson Act contracts due to nonproduction. It is likely that many landowners will be unable to assume the costs of the draft regulation and will have to let land lie fallow, or sell it. If that land is covered by a Williamson Act contract, the landowner may no longer be able to conform to the terms of the contract due to loss of water essential to successful farming. As a consequence, a county has the authority to terminate the contract based on noncompliance. The landowner in turn, no longer being under the obligations of the Williamson Act and faced with the burden of much higher property taxes and a termination penalty, may subdivide and sell the land for development, which will lead to many significant impacts. Therefore, the draft regulation is likely to conflict with Williamson Act contracts. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR did utilize the recommended Environmental Checklist that is part of the California Environmental Quality Act Guidelines Appendix G. There is not supporting evidence to conclude that the proposed regulation would conflict with existing zoning for agricultural use, or a Williamson Act contract. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any

identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750. The commenter's statement that the proposed regulation would conflict with existing zoning for agricultural use, or a Williamson Act contract is unsupported and speculative. The DEIR adequately discloses and analyzes the impacts to agricultural resources and associated conflicts with existing zoning for agricultural use, or a Williamson Act contract.

Comment 10.5.11: The DEIR fails to disclose and analyze significant effects on agriculture. The draft EIR did not utilize the recommended Environmental Checklist that is part of the California Environmental Quality Act Guidelines Appendix G when it evaluated the environmental impacts of the draft regulation. As a result, the draft EIR does not consider or evaluate numerous potential impacts. We repeat several questions from the Checklist here. "Would the project induce substantial population growth in an area, either directly or indirectly?" Yes. The regulation will cause land to be taken out of production. If water becomes unavailable for frost protection, and growers are unable to acquire alternative forms of frost protection, there is a high probability that some landowners will let their land lie fallow and pull it out of production. A likely land use change would be to develop houses, especially in areas peripheral to cities, and to rural residential areas away from cities. Implementation of the regulation will therefore result in significant impacts to housing and population. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR did utilize the recommended Environmental Checklist that is part of the California Environmental Quality Act Guidelines Appendix G. There is not supporting evidence to conclude that the proposed regulation would induce substantial population growth in an area, either directly or indirectly. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750. The commenter's statement that the proposed regulation would induce substantial population growth in an area, either directly or indirectly is unsupported and speculative. The DEIR adequately discloses and analyzes the impacts to agricultural resources and associated substantial population growth in an area, either directly or indirectly.

Comment 10.5.12: The DEIR's failure to address SCWA's operation of Warm Springs Dam and Coyote Dam and rediversion for municipal purposes will frustrate the regulation and does not disclose associated impacts. The DEIR (pg 16) and regulation unfairly give Sonoma County Water Agency (SCWA) a free pass on theory that its diversions are "coordinated" per the terms of Decision 1610. The DEIR does not acknowledge that Decision 1610 obligates SCWA to maintain minimum streamflows in the mainstems of the Russian River and Dry Creek irrespective of other downstream diversions, and SCWA failed to meet its minimum streamflow obligation during the fish stranding mortality event in April 2008. Yet the record demonstrates that SCWA would not be subject to the proposed regulation, even though it has adversely affected salmonids during frost protection periods. The failure to include SCWA's diversions will impair the effectiveness of the proposed regulation, and therefore the environmental effects of the proposed regulation have been misstated. This intentional omission of SCWA diversions from the regulation and EIR "impermissibly truncate[s]" the project (County of Inyo v. City of Los Angeles (1981) 124 Cal.App.3d 1, 10). The failure to include in the regulation SCWA's releases of water from Coyote Dam and Warm Springs Dam and rediversion of water by SCWA will impair the effectiveness and feasibility of the regulation and result in significant redirected impacts to frost water users and biological resources. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the separate requirements imposed on SCWA pursuant to State Water Board Decision 1610 are not extinguished, modified, or "given a free pass" under the terms of the proposed regulation. The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Warm Springs and Coyote Dams cannot physically or operationally provide water to the Russian River tributaries, and therefore releases from those dams cannot effectuate the goals of the proposed action in those areas. In addition, according to USGS Station 11462500, Russian River near Hopland, gage data, SCWA was in full compliance with its bypass flow requirements at the time of one of the fish strandings reported by NOAA, and was in compliance with its instream flow requirements immediately preceding the other fish stranding reported by NOAA, which coincided with a rapid decrease in stream stage due to high instantaneous demand for water for frost protection. The information gathered by the WDMPs will help SCWA better anticipate the demand for water for frost protection and manage its releases so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection. As such, the DEIR appropriately looks at existing conditions, including SCWA's responsibilities under Decision 1610, in assessing the baseline for the CEQA environmental analysis.

Comment 10.5.13: The potential stranding GIS layer is an inadequate database to determine the acreage of vineyards that may cause stranding and therefore are affected by the frost regulation. Page 57 of the draft EIR describes a NMFS GIS layer "Potential Stranding Sites." This layer was then used in conjunction with a layer titled SWRCB Water33.sde "USDA Prime Imagery" to determine the location and acreage of vineyards upstream of "potential stranding sites." The NMFS stranding layer shows portions of tributary creeks distributed throughout the Russian River watershed. It is important to emphasize that the "Intrinsic Potential Model"

identifies general stream conditions good for salmonids under “pristine” conditions. Further, this model uses a Digital Elevation Model (DEM) which has a resolution of 1 pixel = 10 meters or 32.8 feet. This means that no topographic feature smaller than 10 meters is part of the model. The creeks evaluated with this method rarely have salmonid habitats (riffles, pools, gravel bars) larger than 10 meters in length. Additionally, the DEM is created from USGS topographic maps typically at a scale of 1:24,000. These maps were originally created using photogrammetric methods from aerial photos and involve very little field verification. This general level of topographic data and mean annual precipitation data were then used with another GIS layer (SWRCB Water33.sde) that is not accessible to the public but can be assumed to be vineyard areas to create a map of “potential stranding areas.” The only criterion used was vineyards near stream channels. No information regarding water sources or even if water is used for frost control was included. According to the NMFS accounts of the 2008 strandings on the Russian River near Hopland, 10 one-inch steelhead were stranded in three to six-inch gravel and cobble due to a 1cm/hr drop in water stage. An analysis using data layers with a resolution of 32.8 feet and a model that looks at landscape scale patterns in creeks cannot be used to predict where stranding will occur due to such miniscule changes in stream stage. This is an example of a generalized, largely data-free analysis. This analysis was created to justify the assumption that the incident, which occurred in 2008, in a drought year with a very cold spring, occurred over a much larger area. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter misinterpreted the purpose and use of the NMFS GIS stranding layer “Potential Stranding Sites” in the DEIR. SWRCB Water33.sde is a database where the “USA Prime Imagery” layer is stored. This is a satellite imagery layer that is publicly available on the internet. The layers were used to establish conservative, lower range baseline estimates of vineyard and orchard acreage that could potentially require corrective actions. The layers were not used to justify the assumption that the incident, which occurred in 2008, in a drought year with a very cold spring, occurred over a much larger area. Scientific research indicates that the two episodes of stream dewatering documented by NOAA Fisheries were not isolated incidents, and diversions for purposes of frost protection likely are adversely affecting salmonids throughout the Russian River watershed. Deitch et al. studied the effects of dispersed, small-scale water projects on streamflow and aquatic ecosystems in the northern California wine country and published the results in a paper titled, “Hydrologic Impacts of Small-Scale Instream Diversions for Frost and Heat Protection in the California Wine Country.” Deitch et al. concluded that small instream diversions during frost events deplete streamflow over short durations. The report also indicates that small instream diversions on other tributaries in the Russian River watershed may have similar effects, and that the cumulative changes that small water diversions cause to the natural flow regime may play a principal role in limiting valued ecological resources such as anadromous salmonids. Mr. Deitch’s July 5, 2011 comment letter explicitly recognizes that “Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use.” This is consistent with the proposed regulation.

Comment 10.5.14: Clear impact assessment methodologies and thresholds of significance are just as necessary for a Program EIR as they are for a site-specific project EIR. The discussion of the project’s impacts “should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and

residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services.” The overgeneralization of the proposed project in order to defer impact analyses as too speculative deprives the public of the opportunity to assess the actual impacts of the regulation. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the commenter’s statement, at the programmatic level it is not always practical to establish thresholds of significance and it does not always improve the process of identifying significant effects. The Governor’s Office of Planning and Research does not suggest that an agency establish a threshold for every conceivable environmental effect. This may be neither practical nor desirable (<http://ceres.ca.gov/ceqa/more/tas/Threshold.html>).

The DEIR adequately addresses all relevant direct and indirect impacts as directed by CEQA. CEQA directs the lead agency to note its conclusion and terminate discussion of an impact if after thorough investigation it is determined that the impact is too speculative for evaluation.

Comment 10.5.15: The commenter provided required criteria for stream flow monitoring stations as specified by the US Geologic Survey. The commenter further states: "Most important of these criteria is to avoid placing gauges where there are significant losses of surface flow to groundwater, which occurs in all of the alluvial reaches of the tributaries and the river. The physical requirements for gauging sites apply whether a pressure transducer or stilling well is used. The description on page 82 of the EIR regarding how a gauging site is chosen is incorrect and inconsistent with all of these published protocols." (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The majority of the gages are anticipated to be placed in the Russian River tributaries or the headwater reaches of the mainstem. The objective of the proposed regulation is to measure stream stage, which has different QA/QC measures and objectives than those for USGS rated gages for stream flow. In general tributary and headwater reaches have higher frequencies of mesohabitat types per mile than large rivers. This results in a higher number of locations where the morphological features necessary to reliably measure stage exist as compared to locating USGS rated gages on large rivers, such as the mainstem of the Russian River. Stream reaches that have significant losses of surface flow to groundwater are potential critical reaches that may be targeted to monitor and measure stream stage. Contrary to the commenter’s assertion it is likely that gage sites can be located in close proximity to the critical stream reaches and be reliably correlated to measure stage.

Comment 10.5.16: The EIR description of the stream flow gauging was not written by a person familiar with standard methods used in the hydrologic sciences or with the various types of equipment used. The single biggest factor in the accuracy of a gauge is the location chosen in the stream. There are numerous locations which will not produce a reliable dataset which meets QA/QC requirements. On page 83, the EIR states, “It is estimated that a total of 71 stream gages may need to be installed.” It is not clear where these locations are and if they can be used as gauging sites. Without proper QA/QC measures, including proper location of

gauges, the data acquired cannot be used for regulatory purposes. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter is referring to US Geological Survey's QA/QC measures of gages to measure total stream flow. The objective of the proposed regulation is to measure stage, which has different QA/QC measures than those referenced by the commenter. Furthermore, the majority of the gages are anticipated to be placed in the Russian River tributaries or the headwater reaches of the mainstem. In general tributary and headwater reaches have higher frequencies of mesohabitat types per mile than large rivers. This results in a higher number of locations where the morphological features necessary to reliably measure stage exist as compared to locating USGS rated gages on large rivers, such as the mainstem of the Russian River. Contrary to the commenter's assertion it is likely that gage sites can be located in close proximity to the critical stream reaches and be reliably correlated to measure stage.

Comment 10.5.17: The EIR description of the stream flow gauging also fails to recognize variations in stream flow processes between different types of channels and due to variations in rainfall, geology and land use in tributary watersheds. For example, on page 20 of the Draft EIR, a description of runoff processes is offered: "The bulk of precipitation typically falls during several storms each year. There is a small lag between rainfall and runoff once ground conditions become more saturated in November, reflecting low soil and surface rock permeability and a limited capacity for subsurface storage...This relationship between rainfall and ground conditions results in streams with relatively "flashy" storm runoff hydrographs." This is the only description of runoff processes in the EIR and only applies to confined canyon channels of tributaries, not all tributary channels. It is also interesting that the flashy characteristics of the hydrograph are noted as these natural abrupt changes in stream stage are likely to strand or wash out juvenile salmonids. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Variations in stream flow processes between different types of channels due to variations in rainfall, geology and land use in tributary watersheds does not affect the ability or accuracy of a gage to measure stream stage. The commenter is comparing a general description of the hydrologic processes of the entire Russian River watershed to individual subwatersheds or locations.

Comment 10.5.18: The Draft EIR is deficient in many key respects and should not be adopted or certified by the State Board. The CEQA environmental document should provide information regarding the Draft Regulation's significant environmental impacts that is sufficient to allow the State Board and the public to understand its environmental consequences. See, e.g., *Laurel Heights Improvement Association v. Regents of the University of California*, 47 Cal. 3d 376, 404 (1988). In this case, the Draft EIR does not provide an adequate description of the full range of environmental impacts of adopting and implementing the Draft Regulation. This deficiency is particularly important because the State Board will not be able to properly evaluate or compare the Proposed Action with other alternatives because it is not properly informed of the nature and extent of each alternative's environmental impacts. For example, one of the reasonably

expected environmental impacts of the Draft Regulation is the removal/modification of surface water diversion structures. These activities, which will often occur in or near riparian areas, can reasonably be expected to adversely affect, and may cause prohibited "take" within the meaning of the federal Endangered Species Act ("ESA") and/or the California Endangered Species Act ("CESA"), of a range of listed species including the California tiger salamander and California red-legged frog. However, instead of analyzing these biological impacts in any true depth, the Draft EIR provides a few sentences in scattered locations (see, for example, pages 66 and 71) noting that these impacts potentially may occur. The Draft EIR makes no real effort to identify the species at risk and quantify the expected adverse biological impacts. This omission is especially problematic because, in the name of preventing stranding of three aquatic species, the Draft Regulation may be directly causing a "taking" of a full range of other such threatened and endangered species. The DEIR's brief references to these impacts, even in a programmatic document, are demonstrably inadequate. This failure to analyze the environmental impacts of the Draft Regulation runs throughout all of the identified resource areas. Rather than making any real attempt to analyze these issues, the Draft EIR attempts to hide behind its status as a "program" EIR and to defer all real analysis to unspecified future CEQA reviews for individual projects. However, this approach is inadequate under CEQA. Because the Draft EIR fails to analyze, minimizes without support and otherwise limits its analysis of the true environmental effects of the Draft Regulation, the State Board is unable to conduct an accurate comparison of the Draft Regulation with other alternatives, thereby making the document insufficient for CEQA purposes. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: The referenced case is inapplicable to the current situation, where the Board is considering adopting a regulation, for which the appropriate CEQA analysis is programmatic.

As stated in the DEIR, project-specific impacts will be analyzed and mitigated, where applicable, in the course of the project-specific CEQA process or conditioned under local, state, or federal permits. The DEIR identified potential direct and indirect impacts that could disturb special-status species and their habitats. Site specific studies will need to be completed for individual projects to ensure the location and timing of the project does not cause a significant impact to these species. These impacts, including harm and take of special-status species, will be evaluated and mitigated for at the project specific level.

The DEIR does analyze the direct and indirect environmental impacts of the proposed regulation and adequately evaluates and compares the alternatives at a programmatic level.

Comment 10.5.19: The Draft EIR is deficient in many key respects and should not be adopted or certified by the State Board. The CEQA environmental document should provide information regarding the Draft Regulation's significant environmental impacts that is sufficient to allow the State Board and the public to understand its environmental consequences. See, e.g., *Laurel Heights Improvement Association v. Regents of the University of California*, 47 Cal. 3d 376, 404 (1988). In this case, the Draft EIR does not provide an adequate description of the full range of environmental impacts of adopting and implementing the Draft Regulation. This deficiency is particularly important because the State Board will not be able to properly evaluate or compare the Proposed Action with other alternatives because it is not properly informed of the nature and extent of each alternative's environmental impacts. For example, there is no serious effort in the Draft EIR to analyze the serious and reasonably foreseeable land conversion impacts of the regulation. These physical environmental impacts will occur because the dramatic reduction in frost protection water and the huge increases in financial costs caused by the Draft

Regulation could make it impossible for many small vineyards to continue wine grape production, thereby causing a large-scale shift in land use from vineyards to other uses. The Draft EIR attempts to avoid this required CEQA analysis by making the unsupported claim (page 87) that: "The proposed regulation does not restrict operations or financially impact the vineyard or orchard owner at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives." However, this assertion is incorrect and amounts to improper speculation by the document's drafters. This failure to analyze the environmental impacts of the Draft Regulation runs throughout all of the identified resource areas. Rather than making any real attempt to analyze these issues, the Draft EIR attempts to hide behind its status as a "program" EIR and to defer all real analysis to unspecified future CEQA reviews for individual projects. However, this approach is inadequate under CEQA. Because the Draft EIR fails to analyze, minimizes without support and otherwise limits its analysis of the true environmental effects of the Draft Regulation, the State Board is unable to conduct an accurate comparison of the Draft Regulation with other alternatives, thereby making the document insufficient for CEQA purposes. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau; Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: The referenced case is inapplicable to the current situation, where the Board is considering adopting a regulation, for which the appropriate CEQA analysis is programmatic.

There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750.

The DEIR does analyze the direct and indirect environmental impacts of the proposed regulation and adequately evaluates and compares the alternatives at a programmatic level.

Comment 10.5.20: Passing on a series of critical decisions and details of the WDMP and administration of the Project (s) to the next level of definition and institutional implementation ("and individual or governing body") fails to provide sufficient information at the current level of proposed project approvals and programmatic DEIR to adequately assess and address environmental impacts. Who are the proposed "individuals" or "governing bodies"? Without this specific information, it is impossible for the public, stakeholders and decision makers to determine the ability to carry out the regulations as proposed, and to determine the actual environmental impacts as purported in the DEIR. Further without this specific information the

ability for the public, stakeholders and decision makers to provide effective, timely, and meaningful participation in the development and implementation of the WDMP is unknown. The creation of the Russian River Water Conservation Council (RRWCC) and the development of the Sonoma County Vineyard and Orchard Frost Ordinance is an example of this issue. If details of further implementation of WDMPs and administration are to be passed on to others besides SWRCB, they must be identified with sufficient specificity within the DEIR to be meaningful, with the nature of the entity or individual becoming part of the assessment for environmental impacts of the Project and its subsequent parts. The process of reviewing those future parts of the proposed Project must be clearly identified, and subject to public CEQA review, comments and participation in the outcomes. The DEIR fails completely to address this inconsistency, incompleteness, potential incompatibilities, and the inherent problems. It must be revised and recirculated to identify and rectify these problems. *(Lisa Correia, Sonoma County Office of the Agricultural Commissioner)*

Response: The DEIR adequately evaluated the direct and indirect impacts associated with a range of anticipated actions that may occur under a WDMP, regardless of who the governing body is. Thru consultation, the resource agencies and the Board will help develop the stream stage monitoring program of the WDMP. Schedules and implementation plans will be submitted for review, revisions, and approval by the Board. The proposed regulation ensures a transparent process and does not preclude anyone from commenting on a WDMP. The proposed regulation and DEIR do not preclude future projects from complying with CEQA statutes and guidelines, where applicable.

Comment 10.5.21: High instantaneous demands on the East Branch Russian River above Lake Mendocino can have secondary impacts on the ability of the Russian River watershed to avoid mortality of salmonids. Such downstream stranding mortality may occur during the frost season, or, with substantial loss of storage capacity at L. Mendocino, later in the season and life cycles of the listed salmonids in the mainstem of the Russian River. Scarce water is not available to address drawdowns for municipal and agricultural use, including heat irrigation for grape growers. In addition, if inflows and subsequent water levels of Lake Mendocino are significantly reduced by upstream frost protection pumping, there is an added pressure, legally, politically and economically, to continue or to increase diversions from the Eel River to make up the difference through the Potter Valley Project. This has, led to significant adverse impacts to salmonids and water quality in the Eel River below Cape Horn Dam. The DEIR fails to acknowledge, analyze and address these critical issues. The proposed Regulation and DEIR fails to address these aspects of a correct and complete Project Description and Project impacts, thereby making its evaluation of environmental impacts under CEQA significantly invalid and incomplete. It should be revised and recirculated. *(Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch; David Keller, Friends of the Eel River)*

Response: The objective of the proposed regulation is to prevent cumulative diversions for frost protection from causing a reduction in stream stage that causes stranding mortality in salmonids. Because the reservoirs control releases they mitigate for instantaneous reductions in stream stage in the upstream watersheds. Frost protection activities in the watersheds upstream of the reservoirs may result in less available water for downstream uses, but little of this water is evaporated or used by the crops and therefore result in a low overall net loss to the water balance as compared to other uses.

The impacts to salmonids in the Eel River from the Potter Valley Project are outside the scope of the proposed regulation. Issues related to the operation of Eel River diversions are analyzed

and addressed under the FERC process.

Comment 10.5.22: The very efficacy of the WDMP and these Regulations to prevent damages to protected salmonids and their habitat is severely undercut unless instantaneous reporting of stream stage data is required in the Regulations. Without that provision, there can be no assurance that water used for frost protection will indeed be "reasonable and beneficial". Further, unless the Regulation requires real-time monitoring data to be available to the interested public, agencies and stakeholders, the DEIR disastrously understates the impacts of the Regulation, and must be rewritten and re-circulated as a Revised DEIR. (*David Keller, Friends of the Eel River*)

Response: The proposed regulation does require instantaneous reporting of stream stage in streams where the risk assessment determines that diversions for frost protection are at risk of stranding salmonids.

Comment 10.5.23: Chapter 6 lists Actions that may be taken by persons affected by the proposed Regulations. We offer some additional options and supporting information. The use of crop insurance to reduce the risk of losses due to weather related events is a common tool used throughout the United States for a wide variety of crops, including grapes. The use of crop insurance in successfully ameliorating losses in grape production is discussed in the article, "Choosing Crop Insurance", Stephen Yafa, *Wines & Vines*, January 2011. It is standard agricultural practices for the growers to internalize the costs of weather-related risks by purchasing crop insurance, so as to take on the consequences of planting a particular crop on their land within a normal range of weather events, as part of their reasonable costs of doing business. (*David Keller, Friends of the Eel River*)

Response: Comment noted.

Comment 10.5.24: Chapter 6 lists Actions that may be taken by persons affected by the proposed Regulations. We offer some additional options and supporting information related to selective inverted sink fans, microwave heating technology, and an overview of frost protection options. We are attaching several articles and manufacturer's information and research links, showing the use of "selective inverted sink" fans (SIS) as an effective alternative to frost water irrigation for vineyards. See: "To blow up or down?", Paul Franson, *Wines & Vines*, December 2009; "Saving Water and Energy with the Cold Air Drain", associated research studies and test cases, applications, Shur Farms, www.shurfarms.com; "Grapevine Frost Protection Technology Tested", Hudson Cattell, *Wine & Vines*, April 30, 2010; and "Frost Protection Considerations", G. McGourty, R. Smith, UC Cooperative Extension, n.d. (*David Keller, Friends of the Eel River*)

Response: Comment noted. The DEIR evaluated the use of sink fans as a type of wind machine in Section 6.6.

Comment 10.5.25: Generally speaking, the DEIR overstates the adverse environmental impacts to the industry, and the environment, of the regulation of diversions. This type of characterization of the potential adverse impacts of this regulation undermines a credible alternatives analysis. Dam modification or removal and reservoir construction (with a valid claim to pump, appropriate, and store the state's water) are activities that are supervised by resource agencies with a keen interest in species recovery and are likely, therefore to have minimal impacts. (*Larry Hanson, Northern California River Watch*)

Response: The DEIR appropriately analyzes the environmental impacts that may occur due to the proposed project. As discussed in section 6.1.1, it is impossible to predict which affected parties will take which corrective actions, or exactly how many affected parties will take any of those actions. A programmatic level analysis is more general in nature and evaluates the effects on the environment on a broad level. Given this level of analysis, a conservative approach was taken to ensure potential environmental impacts were fully analyzed. Estimates of how many affected parties will take any of the described actions were conservative in nature, and include high and low estimates of the magnitude of the potential actions that could be taken in response to the proposed regulation. In addition, if any reasonably foreseeable outcome of implementing the proposed regulation for any one project could conceivably have a significant effect on an environmental resource, that effect was judged to be significant in all cases.

Comment 10.5.26: With respect to the Draft EIR, the County notes that the "worst case" estimate of the number of acres that may be affected by the regulation appears to be overstated. As noted on page 59, the estimate does not take into account existing acreage that is frost protected by means other than diversions from streams within the Russian River watershed. Typically, a "worst case" assessment in an EIR attempts to assess the maximum impact likely to occur. By including acreage that does not rely on diversions at all and thus will not be required to change existing practices, the estimate appears to overstate the likely effect of the proposed regulation. (*Lisa Correia, Sonoma County Office of the Agricultural Commissioner*)

Response: The DEIR used the best information available to ensure the analysis was conservative and did not underestimate the potential significant impacts.

Comment 10.5.27: In its analysis of potential impacts, the Draft EIR finds many of the impact areas to be "potentially significant" that in the County's view are likely to be less than significant given that some current diversions will cease. For example, on page 63, the Draft EIR finds that increased extraction of groundwater as a result of the regulation could result in reduced summer flows of surface water. However, the groundwater extractions undertaken in response to the new regulation would be replacing direct diversions of surface water. Given that the regulation does not authorize any new extractions or diversions, the conclusion that there could be a significant reduction in summer surface water flows as a result of the regulation seems unwarranted. (*Lisa Correia, Sonoma County Office of the Agricultural Commissioner*)

Response: The proposed regulation does not authorize any new projects. However, the DEIR must evaluate the potential cumulative direct and indirect impacts that may occur in compliance with the proposed regulation. Groundwater extractions affect stream stage at a different time scale than direct diversions and do not represent a direct tradeoff. The DEIR therefore appropriately identifies potential impacts due to increased groundwater extraction.

Comment 10.5.28: This section deals with the range of potential impacts that can occur when actions are taken to limit diversions from streams for frost protection. This section recognizes actions from groundwater use, wind turbine use, to water storage - and the related impacts of each action which are noted to be potentially significant. These potential impacts are noted. The implication of this discussion in the Draft EIR appears to make assuring salmon survival from improper diversion practices might hurt the environment more than just letting the streams dry up. It should be pointed out that these practices (turbines, storage, and ground water

pumping) are now in place and used. It would seem logical if proper land use considerations and measures used in application of alternative frost controls (including not planting in frost prone zones, water storage, wind, etc., with protection in place for resources) that potential impacts can be minimized to less than significant levels. In fact, where water is needed and absolutely necessary to protect grape vine buds in a frost situation, and if alternative frost protections is out of the question, water storage with diversion during high flows is a reasonable solution (please review the Joint DFG/NMFS Guidelines) - a reasonable WDMP should consider this. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The DEIR evaluates the impacts of direct and indirect impacts that may have an adverse effect on the environment. CEQA directs the preparer to consider the current condition as the baseline. The Environmental Impact Analysis does not evaluate positive impacts to current conditions. Section 6.10, Comparison of Alternatives, evaluates each alternative's ability to meet the goals and objectives of the DEIR and through this analysis evaluates the positive outcomes for the environment.

The DEIR appropriately analyzes the environmental impacts that may occur due to the proposed project. As discussed in section 6.1.1, it is impossible to predict which affected parties will take which corrective actions, or exactly how many affected parties will take any of those actions. A programmatic level analysis is more general in nature and evaluates the effects on the environment on a broad level. Given this level of analysis, a conservative approach was taken to ensure potential environmental impacts were fully analyzed. Estimates of how many affected parties will take any of the described actions were conservative in nature, and include high and low estimates of the magnitude of the potential actions that could be taken in response to the proposed regulation. In addition, if any reasonably foreseeable outcome of implementing the proposed regulation for any one project could conceivably have a significant effect on an environmental resource, that effect was judged to be significant in all cases.

Comment 10.5.29: The EIR should be able to demonstrate through predictive modeling of the subject tributaries and Russian River that the flows remaining in the Russian River and tributaries following approval and adoption of the Project's regulations and WDMP will indeed not be harmful to the protected species of salmonids and other public trust resources. (*David Keller, Friends of the Eel River*)

Response: Section 6.10 of the DEIR adequately analyzes the alternatives' ability to meet the goals and objectives of the DEIR.

Comment 10.5.30: Any continued dependence upon water stored and released from Lake Mendocino for providing adequate flows in the Russian River requires a complete description in the EIR of the impacts of continued diversions from the Eel River through the PG&E Potter Valley Project which flow into Lake Mendocino. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 870-71. The EIR must describe the impacts of any potential water storage, releases or permitting regimes for supplementing inadequate Russian River mainstem flows with water derived from the Eel River diversions and released from Lake Mendocino. (*David Keller, Friends of the Eel River*)

Response: The impacts to salmonids in the Eel River from the Potter Valley Project are outside the scope of the proposed regulation. Issues related to the operation of Eel River

diversions are analyzed and addressed under the FERC process.

Comment 10.5.31: The inability to frost protect will essentially eliminate viticulture in the Upper Russian River. Due to the fixed costs associated with the ownership of agricultural land, the unintended consequence of this prohibition will be either crop conversion or urbanization. 1) Crop Conversion- There is currently no economically feasible alternative crop for this region that does not require frost protection. In addition all potential alternatives have a significantly higher annual water demand than viticulture. It is likely that any replacement crop will not only increase demand but also shift peak demand to the low flow season. It is important to remember that viticulture's peak demand occurs during the wet season, and is only problematic during prolonged drought. The District feels that this scenario is more readily managed than an alternative crop with a peak demand that occurs during the driest time of the year. 2) Urbanization- The risk of urbanization is significant. Several large tracts of former agricultural land have already been re-zoned and are under consideration by the City of Ukiah for annexation. Commercial or residential land use conversion will likely increase water demand as well as lead to degradation of water quality and permanent elimination of terrestrial habitat. While the proposed regulation is intended "to benefit biological resources", the District feels that a careful analysis of likely outcomes will show that the biological resources of the Upper Russian River could be negatively impacted. The EIR should fully consider the effects of the proposed regulation on crop conversion, urbanization, annual water demand, and shifts in the season of peak demand. (*Sean White, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The DEIR adequately analyzes the direct and indirect environmental impacts of the proposed regulation. The proposed regulation does not prohibit frost protection or the use of water as a method of frost protection; it only requires that the water diverted be accordance with a Board approved Water Demand Management Program.

Landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750. Impacts of increased diversions of water and its availability for summer irrigation are subject to the conditioning of water right permits and licenses under the AB 2121 policy.

There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur.

Comment 10.5.32: The NOP notes that the proposed regulation may lead to the increased use of copper-based compounds. It is important to note that copper is deleterious to many aquatic organisms including invertebrates, amphibians, as well as fish. In addition to protected salmonids, the Russian River watershed is habitat to endangered invertebrates (e.g. California

freshwater shrimp) and several protected amphibian species such the California tiger salamander and the red-legged frog. The EIR should fully consider the effects of increased use of copper based compounds on these species. (*Sean White, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The DEIR concludes that the use of copper compounds is not a reasonably foreseeable method of compliance because current scientific data and limited documentation of successful applications from growers do not provide enough feasible data to support this frost protection method.

Comment 10.5.33: The NOP states that the proposed regulation could cause diverters to seek "alternative sources of water from water purveyors". The District would like to remind the SWRCB that the District has already put its 8,000 af to full beneficial use and does not have sufficient water rights to absorb increased demand from crop conversion or urbanization. Most of the other water purveyors in the Upper Russian River have similar constraints or are operating under existing moratorium. The EIR should consider the impacts of reallocating demand from direct diversions to municipal systems. (*Sean White, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: Comment noted.

Comment 10.5.34: The NOP understates the far-reaching direct impacts that would occur if the regulation is adopted. Since there is no clear definition of what the SWRCB would consider as an acceptable WDMP, the proposed regulation would essentially be a ban on diversions for frost protection. The NOP states that adoption of the proposed regulation could have indirect impacts. We believe the impacts from implementation of the regulation would be immediate and direct. The economic study prepared by Professor Robert Eyer of Sonoma State University and recently submitted to the SWRCB clearly identifies the impacts to local tax revenue, land values, and jobs in Mendocino and Sonoma Counties. These effects should be fully analyzed by the SWRCB in the EIR. (*Scott Wilson, State of California Department of Fish and Game; Paula Whealen, Wagner and Bonsignore*)

Response: The proposed regulation and Initial Statement of Reasons adequately define what is required of an acceptable WDMP. The proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed. The direct and indirect impacts from implementation of the proposed regulation were fully analyzed in the DEIR.

Comment 10.5.35: The EIR should identify all potential impacts to listed fish and other aquatic species which may occur due to frost protection diversions (e.g. stranding of listed fish, dewatering or impairment of stream flow, etc.) and elements of the WDMP should be designed to address those impacts. The EIR should also evaluate the effects of frost protection on sensitive amphibians such as the California red-legged frog (*rana draytonii*), the foothill yellow-legged frog (*rana boylei*) and other aquatic species, in addition to listed salmonids. While adverse conditions for fish and aquatic species may occur in part due to activities, circumstances, or events unrelated to frost protection, the EIR should evaluate whether frost protection activities contribute to conditions that adversely affect listed fish and other aquatic life. (*Scott Wilson, State of California Department of Fish and Game*)

Response: The commenter appears to be misunderstanding the requirements of CEQA. One of the stated purposes of a CEQA analysis is to “inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) “A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” (Id., subd. (g).) The adverse impacts of not taking action are not considered pursuant to a CEQA analysis, but are separately considered and balanced against the potential “environmental impacts” analyzed by in the DEIR in the determination of whether to take action. The DEIR appropriately evaluates the direct and indirect impacts to fish and aquatic species that may occur as a result of the proposed regulation.

Comment 10.5.36: If we were to suffer a frost episode and we did not have the ability to frost protect, we would not be able to continue our farming operation and would not be sustainable. Some have suggested that farmers switch to another crop. If we had to switch to another crop it has been reported, repeatedly, and that other viable crops could use up to 5 to 10 times more water than what we currently use. (*Lea and Harry Black*)

Response: The proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed. The direct and indirect impacts from implementation of the proposed regulation were fully analyzed in the DEIR. Impacts of increased diversions of water and its availability for summer irrigation are subject to the conditioning of water right permits and licenses under the AB 2121 policy.

Comment 10.5.37: This EIR implies that in the future where TDML impaired waters accrue that this also would be considered an unreasonable use of water and now we would be talking real money, statewide. With 3,507; 303 (d) listings in 2010, what are your projections of the negative financial impacts the State and Counties could expect? One would think it prudent to inform the Governor and Legislature of any potential revenue losses or GDP reductions, which could be anticipated and attributed to SWRCB’s and CDFG new regulatory efforts related to unreasonable use of water. How will those losses affect economic output and property values throughout State? What magnitude of budget reductions can be anticipated for the State and Counties? What collateral bankruptcy damages is SWRCB projecting will occur. (*T. Connick*)

Response: The DEIR does not imply “that in the future where TDML impaired waters accrue that this also would be considered an unreasonable use of water”. Total maximum daily loads (TMDLs) are not within the scope of this regulation. TMDLs fall under Section 303 (d) of the federal Clean Water Act (33 U.S.C. § 1313 (d)), and 40 Code of Federal Regulations section 130.7 requires states to identify water bodies that do not meet water quality standards and are not supporting their beneficial uses. Under the Clean Water Act, states must identify these waters and determine a TMDL.

Comment 10.5.38: III. Assessment of the Environmental Impacts & Mitigation SWRCB has stated several specific actions that affected persons could potentially take. I will specifically address each one of these and the listed mitigations. Increase in groundwater use The legislature has repeatedly tried to regulate groundwater use because the public views groundwater use in California at an already detrimental high. Should legislation, as introduced every year, eventually be passed, new groundwater rights will not be a feasible option. Also,

local ordinances require permitting processes for new wells and air quality regulations hinder the availability and cost of well pumps. Therefore, the ability to switch to groundwater instead of using surface water rights is not truly a feasible action. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards*)

Response: The commenter's statement is unsupported and speculative.

Comment 10.5.39: III. Assessment of the Environmental Impacts & Mitigation SWRCB has stated several specific actions that affected persons could potentially take. I will specifically address each one of these and the listed mitigations. The construction of new offstream storage facilities is only a feasible option once approved by the County and SWRCB. The impediments to such approvals are extraordinarily high due to the topography and economic climate of Sonoma County specifically. Therefore, offstream storage is also not a viable option to surface water use for frost protection. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards*)

Response: The Board has expedited its water right permitting process by prioritizing processing of offstream storage projects in the Russian River watershed. An expedited permitting and change petition process has been used for recent reservoirs in the watershed. The commenter's statement that "impediments to such approvals are extraordinarily high due to the topography and economic climate of Sonoma County specifically" is unsupported and speculative.

Comment 10.5.40: III. Assessment of the Environmental Impacts & Mitigation SWRCB has stated several specific actions that affected persons could potentially take. I will specifically address each one of these and the listed mitigations. The removal of such facilities [diversion structures] will increase the below mentioned alternatives [wind machines and orchard heaters], all of which will have a detrimental effect on the environment and are not as environmentally and economically efficient as using surface water. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards*)

Response: It is anticipated that the removal or modification of surface water diversions would occur if the current demand for water supplied by these diversions structures is replaced with alternative methods of diversion or sources of water. The proposed regulation does not require the removal of surface water diversion structures.

The commenter's statement that "[wind machines and orchard heaters], all of which will have a detrimental effect on the environment and are not as environmentally and economically efficient as using surface water" is unsupported and speculative. Regardless, the DEIR adequately addresses the direct and indirect impacts of the increased use of wind machines and heaters as an alternative to water for frost protection.

Comment 10.5.41: III. Assessment of the Environmental Impacts & Mitigation SWRCB has stated several specific actions that affected persons could potentially take. I will specifically address each one of these and the listed mitigations. Wind machines, while potentially helpful in frost conditions if the certain topographic and climatic elements are present, simply are not

as effective or cost efficient as using surface water. Wind machines also have an adverse effect on air quality and likely will be regulated to the point of extinction by the California Air Resources Board. Again, this is not a viable option when its longevity is likely jeopardized by other environmental concerns. Some wind machines use cleaner burning fuels such as propane. These machines may continue to be operational despite new air quality regulations. However, as is testament to other parts of the State, during a devastating freeze propane and oil inventories both rapidly deplete in quantity and increase in price, leaving the option both unavailable and/or uneconomical. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards*)

Response: The direct and indirect economic and environmental impacts, including impacts to air quality, of switching frost protection methods from water to wind machines were adequately analyzed in Section 6.5 and Appendix D of the DEIR. The commenter's statement that "Wind machines also have an adverse effect on air quality and likely will be regulated to the point of extinction by the California Air Resources Board" is unsupported and speculative.

Comment 10.5.42: III. Assessment of the Environmental Impacts & Mitigation SWRCB has stated several specific actions that affected persons could potentially take. I will specifically address each one of these and the listed mitigations. Like wind machines, orchard heaters are to the point of extinction due to air quality concerns. In other parts of the state, orchard heaters are no longer permitted due to the detrimental effects on air quality. To say that Sonoma and Mendocino counties will not also be subject eventually to the same regulations is irresponsible and naive. The same issues arise with oil and propane commodities stated above. (*Carole Mascherini; Don Wallace, Dry Creek Vineyard; Louis Foppiano, Foppiano Vineyards; Paul Foppiano, Foppiano Vineyards; Blake and Aubrey Mauritson; Thom Mauritson, Thomas Mauritson Vineyards; Richard Rued*)

Response: The commenter's statement regarding orchard heaters is unsupported and speculative. The California Air Resources Board regulates the use and sale of orchard heaters. Health and Safety Code section 41860 states that no person shall use any orchard heater unless it has been approved by the Air Resources Board or does not produce more than one gram per minute of unconsumed solid carbonaceous material. The DEIR adequately analyzed direct and indirect environmental impacts, including impacts to air quality, of switching frost protection methods from water to orchard heaters in Section 6.6.

Comment 10.5.43: If these enormous fees are put into law California agricultural will be economically forced out and we will have all our beautiful farm land covered by homes. (*Richard Rued*)

Response: There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop

Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750.

Comment 10.5.44: The use of just wind machines is not the answer. While potentially helpful, they are not as effective or cost efficient. Just turning on a wind machine doesn't mean you can control the temperature. Has anyone addressed the need for heat in combination with a wind machine? Some Return Stack Heaters hold 10 gallons, lasting about 8 hours, and heat a very small area which would require many heaters. A 10 acre vineyard may cost \$1,000.00 to \$10,000.00 a night, plus the particulate matter. The fossil fuel use would be a huge impact (with current fuel cost of \$3.50 to \$4.50 per gallon) along with the noise complaints. (*John and Patti Saini*)

Response: The direct and indirect environmental impacts related to the use of wind machines in conjunction with orchard heaters were evaluated in Sections 6.5 and 6.6 of the DEIR.

Comment 10.5.45: We feel the estimations for the changes are not realistic. The formula of 1 wind machine covering 10 to 17 acres is not always accurate. There are so many different shapes, sizes, and elevations in a single vineyard operation, that you could need several on less than 10 acres. (*John and Patti Saini*)

Response: The DEIR states that the effectiveness of wind machines depends on terrain, vineyard/orchard layout and inversion layer conditions. Depending on the terrain and contour, an individual wind machine can effectively protect, on average, 10 acres of crops.

Comment 10.5.46: It is our belief that the proposed Russian River Frost Regulation should be completely rejected. If implemented, this Proposed Regulation will lead to the extinction of our local family farms. (*Don and Joe Guadagni, Guadagni Brothers Welding*)

Response: The commenter's concern was fully analyzed in the DEIR and is unfounded. There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses. The 2010 Sonoma County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$6,550; Vegetables = \$11,500; and Apples \$2,250. The 2010 Mendocino County Crop Report reports the following total values per acre of agricultural crops: Grapes = \$4,450; Pears = \$7,350; Apples = \$5,800; and Vegetables = \$3,750.

Comment 10.5.47: Russian River Frost Regulation Draft EIR 3.1 Demand management (page 13)- The DEIR does not examine the impacts to climate change that would result from implementing the suggested alternatives including (3) wind machines; (4) cold air drains; (5)

heaters. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: Contrary to the commenter's statement, the DEIR adequately evaluates the impacts to climate change in Section 8.1.

Comment 10.5.48: Will this regulation identify cumulative impacts on creeks and rivers prior to ministerial and discretionary permit approval? If so, will this regulation have the potential to prevent forests and riparian areas from unnecessary destruction? Would mapping of all areas prone to frost which contain natural vegetation and forests inform decision makers as to the acreages containing, air-cleansing and pollution-sequestering trees that might otherwise be destroyed if vineyard planting were allowed in frost prone areas with inadequate water supplies? Would this regulation have the potential of discouraging deforestation and land disturbing (CO₂-releasing) activities by identifying inappropriate areas in which to divert creek water for frost activities prior to clearing or conversion? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The proposed regulation does not apply to ministerial and discretionary permit approval. This comment does not address the current scope of the DEIR or the proposed regulation.

Comment 10.5.49: What positive impacts on cultural resources might a regulation of this type have? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The DEIR adequately evaluates the direct and indirect impacts to cultural resources.

Comment 10.5.50: Would the mapping of all areas prone to frost be a valuable and important step in the environmental review in order to assist local government, the public, and the state in avoiding unnecessary impacts? Will the regulation have the potential to prevent destabilizing activities and erosion, by an initial determination of where frost occurs thereby avoiding potentially inappropriate areas? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The proposed regulation does not apply to ministerial and discretionary permit approval. This comment does not address the current scope of the DEIR or the proposed regulation.

Comment 10.5.51: Attached as Exhibit G is an economic study commissioned by my client by Prof Robert Eyler of Sonoma State University. This study shows that even if the [January 2010] regulation were to result in a minimal 10% crop loss, it would cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. Second, assuming the [January 2010] regulation is implemented within a reasonable time, not every vineyard owner will be able to comply with its terms for either financial or practical reasons. For example, the costs to become a member of a water demand management program are estimated to be between \$10 and \$20 per acre. Many small family farms will not be able to absorb this cost, so they will be forced to shift to another crop if they can afford to or sell the land. (*Jesse Barton, Gallery and Barton Law*)

Corporation)

Response: This comment does not address the current scope of the DEIR or the current proposed regulation. However, as discussed in multiple responses in this section the proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur. Furthermore, landowners who choose to discontinue frost protection altogether would likely explore other profitable crop options before selling and converting farm land to other uses.

Comment 10.5.52: Attached as Exhibit G is an economic study commissioned by my client by Prof Robert Eyster of Sonoma State University. This study shows that even if the [January 2010] regulation were to result in a minimal 10% crop loss, it would cost the California economy more than \$2 billion annually, including \$143 million in lost tax revenue to local governments and Sacramento, \$113 million in decreased land values and more than 8,000 jobs in Sonoma and Mendocino counties. These losses are realistic yet very conservative because it is important to recognize several facts about this regulation. There may be cases where water can no longer be used for frost protection. In these cases, the farmer must find an alternative form of frost protection (e.g. wind, heaters, etc.). If no alternative form of frost protection is feasible, either because it is too expensive or because alternative forms are not effective (e.g. in Mendocino County where frost events are particularly extreme and where no inversion layer typically exists), then that farmer could lose his entire crop. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: This comment does not address the current scope of the DEIR or the current proposed regulation. However, as discussed in multiple responses in this section the proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur.

Comment 10.5.53: These realities [prohibition on water use for frost protection until water demand management program is developed, the possible inability of some vineyard owner to absorb the financial costs of the program, and the possibility of no feasible alternative form of frost protection] will result in significant adverse environmental effects, beginning in the form of lost crops, lost profits, or lost jobs, and then resulting in land fallowing, land conversion, and development. Based upon the importance that California ascribes to agriculture, mitigation for loss of cropland will be necessary. Our Legislature has confirmed many times that the preservation of agricultural land is a significant goal of the state. (See, e.g. Govt. Code § 51220 (Williamson Act findings that agriculture preservation is valuable and necessary); Civil Code § 815 (legislative declaration that preservation of agricultural lands is "among the most important environmental assets of California"); Public Resources Code §§ 21061.1, 21061.2, 21095 (CEQA provisions requiring the Resources Agency to take steps to ensure that the environmental effects of agriculture land conversion are quantitatively and consistently considered in the environmental review process); Stats. 1993 ch. 812, § 1, subd. (d) (declaring a legislative intent that CEQA should play an important role in the preservation of agricultural lands).) In preparing the EIR, the SWRCB should address these legislative declarations, via mitigation, with the inevitable loss/conversion of cropland this regulation will cause. (*Jesse*

Barton, Gallery and Barton Law Corporation)

Response: The DEIR already analyzes the potential for conversion of agricultural land to non-agricultural purposes. There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur.

Topic 10.6 CEQA - Comparison of Alternatives

Comment 10.6.1: The DEIR improperly rejects and does not consider feasible alternatives with fewer environmental effects. CEQA requires an EIR to evaluate “alternatives that might eliminate or reduce the Project’s significant adverse environmental effects.” There is a four-part test for suitable alternatives discussed in an EIR. Potential alternatives are reviewed to determine whether they: 1. can substantially reduce significant environmental impacts 2. can attain most of the basic project objectives 3. are potentially feasible 4. are reasonable and realistic. An alternative need not fully satisfy all project objectives/purpose. The CEQA Guidelines provide that an alternative need only feasibly attain most of the project’s basic objectives while reducing any of its significant effects. The DEIR (page iii) correctly concludes that, other than the no action alternative, the “local stakeholder voluntary programs” alternatives are environmentally superior to the proposed project. The DEIR (page iii) impermissibly rejects these environmentally superior alternatives: “[n]either of these two alternatives however, fully meets the basic project objective of preventing salmonid stranding mortality.” A DEIR cannot reject an alternative because it does not “fully” meet the project objectives, where those objectives were drawn so narrowly as to reject all but the proposed project. The SWRCB attempts to reject the local stakeholder voluntary programs alternatives by narrow criteria (DEIR, page 90). The DEIR could have made three simple additions to the local stakeholder voluntary program alternative - mandatory participation, transparency of information, and enforcement by the State Board - that would preserve the environmentally beneficial aspects of the alternative while addressing State Board objectives and goals. The local stakeholder voluntary programs with the above changes should be adopted as the preferred alternative and proposed project in the Final EIR. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr’s Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The alternative analysis in the DEIR found the “no project” alternative and the “local stakeholder voluntary programs” alternatives to be environmentally superior alternatives because they have the least amount of potential negative impacts to the existing environmental setting. CEQA requires the decision-maker to balance the benefits of a proposed project against the environmental risks in determining whether to approve the project. If this analysis determines the benefits of the proposed action outweigh the negative impacts then the proposed action should be chosen over the “no action” alternative. Furthermore CEQA directs the lead agency to discuss the existing conditions as well as what would reasonably be expected to occur in the foreseeable future if the project is not approved. In the case of this

DEIR the ability of an alternative to fulfill the objectives and goals of the project was used to determine the alternative's benefits in the foreseeable future. Each alternative was evaluated and compared to the others to determine the alternative that provided the greatest beneficial outcome in comparison to the potential negative outcomes resulting from either no action or implementing an alternative. The analysis determined that the alternative which provided the greatest beneficial outcome in comparison to negative outcomes was the proposed regulation.

The addition of mandatory participation, transparency of information, and enforcement by the board to the local stakeholder voluntary program alternative would increase the potential significant environmental impacts of this alternative. This alternative did not include monitoring over the entire area where there is potential for diversions for frost protection to cause salmonid stranding mortality. This type of program would not prevent salmonid stranding mortality in the tributaries that would not be directly monitored. Therefore even with these additions the proposed regulation still provides the greatest beneficial outcome in comparison to negative outcomes. The DEIR correctly identified the proposed regulation as the preferred alternative.

Comment 10.6.2: There is no evidence in the record to support the SWRCB's conclusion that the less restrictive alternatives will not achieve the program's objectives. In fact, all of the evidence in the record indicates that program objectives are addressed very effectively without a regulation in every instance where stranding mortality is known to occur. The possible effects of diversions for frost protection on the stranding events on both Felta Creek and the mainstem of the Russian River near Hopland were resolved. Furthermore, numerous improvements have been made in locations where no stranding occurred, but where there were concerns that diversions for frost protection could be harmful. These facts, thoroughly documented in the record, completely contradict the SWRCB's assertion that the project objective cannot be achieved through less restrictive alternatives. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, there is ample evidence in the record that none of the reasonably identified alternatives will adequately achieve the program's objectives. Nor can the Board determine with reasonable certainty that only two fish strandings occurred – only two fish strandings were reported by NOAA, with sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences.

Comment 10.6.3: One key to an adequate EIR is its identification and detailed discussion of alternatives to the Proposed Action (the Draft Regulation). In this case, the Draft EIR does not analyze and compare the alternatives in a legally proper manner. The Draft EIR improperly rejects the no-project alternative because it supposedly does not meet the project objective of preventing stranding mortality. At the same time, the Draft EIR admits that this alternative is the "environmentally superior" alternative. In fact, the analysis of this alternative (pages 88-89) makes it evident that the Draft EIR has no good basis for discounting this alternative. Rather than failing to meet the project objective, it appears instead that the alternative could meet the objective, but that the drafters of the document thought the range of available regulatory tools "would not be the most effective regulatory mechanism" for addressing the problem. In fact, as this analysis implicitly concedes, there are currently many regulatory tools available to the State Board to effectively address the problem. However, the Draft EIR purports to reject them as

infeasible because they might take longer or cost the State a little more money. This analysis is patently insufficient and the no-project alternative is legally feasible under CEQA. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: The alternative analysis in the DEIR found the “no project” alternative and the “local stakeholder voluntary programs” alternatives to be environmentally superior alternatives because they have the least amount of potential negative impacts to the existing environmental setting. CEQA requires the decision-maker to balance the benefits of a proposed project against the environmental risks in determining whether to approve the project. If this analysis determines the benefits of the proposed action outweigh the negative impacts then the proposed action should be chosen over the “no action” alternative. There is adequate evidence in the record to support the conclusions that the no project alternative will not sufficiently achieve the program’s objectives because the existing regulatory tools would not adequately address the problem.

Comment 10.6.4: One key to an adequate EIR is its identification and detailed discussion of alternatives to the Proposed Action (the Draft Regulation). In this case, the Draft EIR does not analyze and compare the alternatives in a legally proper manner. The Draft EIR purports to reject, with only superficial analysis, the many innovative alternatives that are being pursued both by private individuals and governmental agencies. Thus, it improperly rejects the local stakeholder voluntary programs (Alternative 2) because they are only “voluntary” and supposedly do not cover monitoring over the entire area. The document asserts, without support, that “[r]eliance on voluntary participation is not enough to ensure all frost irrigators will work to reduce their cumulative instantaneous demand.” However, given the large and growing participation in these programs, this statement has no basis in fact. Similarly, the Draft Regulation rejects the Sonoma County regulatory approach (Alternative 3) because it too is voluntary and supposedly will not have as comprehensive an impact. Once again, the basis for these conclusions is not provided. Contrary to the Draft EIR’s assertions, both alternatives appear to be legally feasible. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: There is adequate evidence in the record to support the conclusions that the new and developing “voluntary” programs will not sufficiently achieve the program’s objectives, precisely because they are voluntary. There is evidence in the record from growers who indicate they will not participate in any program unless required to. The Sonoma County Ordinance is not voluntary. This alternative (Alternative 3) was rejected as the preferred alternative because it does not include specific details of a monitoring program and does not set firm timelines for developing and implementing the monitoring program. Therefore, the alternative does not currently provide adequate stream or diversion monitoring. In addition, any monitoring program that is developed may not be adequate if it does not provide for transparency of records. The programs that are currently being developed, however, may be submitted for Board approval under the proposed regulation.

Comment 10.6.5: One key to an adequate EIR is its identification and detailed discussion of alternatives to the Proposed Action (the Draft Regulation). In this case, the Draft EIR does not analyze and compare the alternatives in a legally proper manner. The Draft EIR does not recognize the comprehensive voluntary efforts of many vineyards in Mendocino County with the organization formerly known as the Russian River Flood Control District, which is actively working in close cooperation with the U.S. Army Corps of Engineers to ensure that frost protection diversions do not have adverse impacts on aquatic species. The Draft EIR is

deficient because, in its effort to discount such voluntary efforts, it is not appropriately recognizing the comprehensive nature and effectiveness of these ongoing efforts. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: There is adequate evidence in the record to support the conclusions that the new and developing “voluntary” programs will not sufficiently achieve the program’s objectives, precisely because they are voluntary. There is evidence in the record from growers who indicate they will not participate in any program unless required to. The programs that are currently being developed, however, may be submitted for Board approval under the proposed regulation.

Comment 10.6.6: The rationale given to discard this alternative [5] makes no sense. Without real time monitoring, those streams that do experience stranding conditions have no effective protection. For the sake of sparing some minor costs for real-time monitoring on streams where no low-water stranding occurs, the analysis gives up the benefits of preventing or quickly alleviating conditions where salmonids are indeed put in jeopardy or conditions of take under Endangered Species Act. This is supposed to be the primary purpose of the SWRCB’s proposed Regulation, yet that is abandoned here with no supporting evidence of undue costs. (*David Keller, Friends of the Eel River*)

Response: There is sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences. However, Alternative 5 does not consider that there might be streams where the risk to salmonids is low due to flow conditions, channel morphology, or water demand. In these streams real-time monitoring may not be necessary to protect salmonids from stranding and it would therefore be unreasonable to require all frost diverters to install real-time diversion and stream stage monitoring systems. On stream systems where the frost diversion inventory, stream stage monitoring program, or risk assessment determines frost diverters have the potential to cause stranding of salmonids real-time stream stage monitoring will occur. The WDMP can choose to implement real-time diversion monitoring systems as a corrective action to improve forecasting of frost diversion demand, manage the rule of priority, or manage the rate at which the cumulative diversions affect stream stage.

Comment 10.6.7: While Alternative 5, Adopt a Regulation That Requires Real-Time Diversion Monitoring and Reporting, comes closest to real-time reporting of diversions, it still leaves the reporting to suffer from up to a 36 hour lag time, during which time the damages to salmonids may well be inflicted and irremediable. There is no effective reasoning offered in the DEIR to reject instantaneous reporting of monitoring results from diverters. (*David Keller, Friends of the Eel River*)

Response: Under Alternative 5 the governing body would receive real-time diversion and stream stage monitoring data. The stream stage data would be posted in real-time on a public internet site. The governing body would have 36 hours to organize and post the diversion data, which was received in real-time, on a public internet site. However, Alternative 5 does not consider that there might be streams where the risk to salmonids is low due to flow conditions, channel morphology, or water demand. In these streams real-time monitoring may not be necessary to protect salmonids from stranding and it would therefore be unreasonable to require all frost diverters to install real-time diversion and stream stage monitoring systems.

Comment 10.6.8: Alternative 4, Adopt a Regulation Similar to California Code of Regulations, Title 23, Section 735, appears to eliminate the entire issue of real-time monitoring and reporting of diversions by reasonably requiring off-stream storage for frost irrigation. (*David Keller, Friends of the Eel River*)

Response: There are several differences between the proposed regulation and the Napa frost regulation. The Napa frost regulation was intended to deal the fact that there was insufficient flow during the frost season to supply the instantaneous demand of all vineyardists entitled to water. (See *People v. Forni* (1976) 54 Cal.App.3d 743) The proposed regulation is predicated on the fact that, as explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection in the Russian River watershed may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. The Napa River watershed is also much smaller than the Russian River watershed, and diverters for frost protection from the Napa River had greater capabilities for constructing offstream storage facilities to resolve the issue. There are also more tributaries and a larger number of smaller diverters in the Russian River watershed. It is expected that stranding mortality in the Russian River watershed can be avoided through coordination or management to reduce the cumulative instantaneous impact of frost diversions. That is why the proposed regulation provides more flexibility for addressing the unique problem faced in the Russian River watershed than the Napa frost regulation did, including on-the-ground management by WDMPs, to be based on the unique circumstances faced by participants of each WDMP.

Comment 10.6.9: Alternative Five is the regulation plus real-time publicly accessible monitoring. Alternative Five best fits a robust Project Description which is lacking in this case. Among the limited alternatives provided, Alternative Five best achieves the purpose of the regulation. The state must use all the tools in its toolbox when adopting a regulation. In the context of this DEIR, Alternative Five combines an essential tool with the draft proposed regulation. The minimal requirement of real time accessible monitoring as part of a Water Demand Management Program is essential. Such a requirement is feasible, of minimal expense, does not in and of itself disrupt frost protection activities, and is a preferred alternative to the regulation alone. The state must not settle for half measures or be convinced that real time monitoring is burdensome especially when the DEIR states that such monitoring is effective at protecting the rare species that are the subject of this regulation. "This alternative would be the most effective in terms of ensuring fast response to situations in which salmonids are at risk for mortality due to stranding. This information may be used by growers to adjust diversions, restore stream stage, and protect salmonids as soon as the risk is identified." (DEIR p.93). Furthermore, there are significant funds available from numerous agencies and non-profits (California Land Stewardship Institute, Resource Conservation Districts, and the like) that may be obtained to defray the minimal costs associated with properly monitoring and reporting diversions from critical habitat during times of the year when low flows are likely. (*Larry Hanson, Northern California River Watch; Alan Levine, Coast Action Group*)

Response: There is sufficient evidence and reasonable inferences supporting the conclusion that the two reported stranding incidents are unlikely to be isolated occurrences. However, Alternative 5 does not consider that there might be streams where the risk to salmonids is low due to flow conditions, channel morphology, or water demand. In these streams real-time monitoring may not be necessary to protect salmonids from stranding and it would therefore be unreasonable to require all frost diverters to install real-time diversion and stream stage monitoring systems. On stream systems where the frost diversion inventory, stream stage

monitoring program, or risk assessment determines frost diverters have the potential to cause stranding of salmonids real-time stream stage monitoring will occur. The WDMP can choose to implement real-time diversion monitoring systems as a corrective action to improve forecasting of frost diversion demand, manage the rule of priority, or manage the rate at which the cumulative diversions affect stream stage.

Funding from non-profits and government agencies exists, but the significance of this amount and types of projects it is reserved for is not provided. The commenter's statement that it may be obtained to defray the costs associated with monitoring and reporting of diversions is unsupported and speculative.

Comment 10.6.10: This quote (from Analysis of Alternatives - just prior to the Introduction) from the Draft EIR makes no sense at all: "From a CEQA standpoint, the environmentally superior alternative is the no-project Alternative. Among the remaining alternatives, the environmentally superior Alternative is the local stakeholder voluntary programs. Neither of these two Alternatives, however, fully meets the basic project objective of preventing salmonid stranding mortality." It is true that none of the above alternatives in the quote meet the project objectives (project objectives must include, both, protection from stranding and from low flow habitat modification from diversions for water use for frost protection. The idea that the no-project alternative and/or stakeholder voluntary programs can be claimed environmentally superior has no foundation in logic. The quote goes on to be logically challenged: "The proposed regulation and the alternative that requires real-time diversion monitoring and reporting both meet the project objective of preventing salmonid stranding mortality, but both are anticipated to result in more incidental environmental impacts due to water diverters implementing best management practices in response to the regulation." What evidence or logic would lead to the conclusion that real time monitoring could adversely effect salmon survival - or - incidental adverse impacts? What is the issue with the use of BMPs? Is not the WDMP based on management and science - and to include the use of BMPs to attain management goals. This wording or thinking just does not compute. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The commenter appears to be misunderstanding the requirements of CEQA. One of the stated purposes of a CEQA analysis is to "inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities." (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) "A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project." (Id., subd. (g).) The quoted language is therefore consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential "environmental impacts" analyzed by in the DEIR.

Comment 10.6.11: The CEQA analysis is legally adequate. However, it is not particularly informative. CEQA can be an unsatisfactory tool to evaluate regulatory programs that will benefit the environment. This is because lead agencies typically evaluate changes to the status quo. If the status quo is bad, and the program results in improvements to the status quo, those improvements do not show up in the CEQA ledger. However, if the program results in incidental adverse changes to the environment, those changes will show up as CEQA "impacts," even if they are less significant than the beneficial changes to the status quo. So it is with the CEQA analysis for the proposed Frost Rule. For instance, if a diverter changes from a relatively harmful direct diversion to a less harmful diversion to storage, the diversion to storage shows

up in the CEQA "impact" ledger but the cessation of the more harmful direct diversion does not register. This can be explained in CEQA terms, but it could also obscure the more important point, which is that the proposed Frost Rule would have dramatically positive effects on the environment. (*Brian Johnson, Trout Unlimited*)

Response: Comment noted.

Comment 10.6.12: SCWC finds that the DEIR undermines a credible alternatives analysis by overstating adverse economic impacts to the wine industry from regulating diversions. As the regulation is now written, we find the No Project Alternative more protective, since continuing without a regulation would necessitate promulgation of emergency regulations and/or a prohibition on diversion of surface and hydraulically connected groundwater in order to avoid "take." The DEIR found the No Project Alternative unable to meet the goal of avoiding stranding mortalities and so not environmentally superior. But a "protective" regulation requiring no real time monitoring requirement, among other serious flaws, can be worse than no regulation at all. Due to the narrowly worded purpose and description of this regulation, having a primary goal of minimizing impacts on frost protection activities, no goal of protecting listed species from harm, vesting control with non-public local governing bodies or individuals, requiring only annual provision of monitoring data, and providing cover to activities that threaten "take," the No Project Alternative conceivably could be of greater help to the salmonids survivability. The No Project alternative, for example, could force the state to take other measures that would be more protective, such as emergency regulations and/or enforcement of a prohibition on the use of water for frost protection without regard for the industry's economics. The DEIR must acknowledge this uncomfortable reality: in the absence of a regulation, Sonoma County growers in the Grape Creek watershed have apparently turned to alternative frost protection measures, and reduced diversions from the Grape Creek. For this regulation to be better than the No Project Alternative, the SWRCB must revise the DEIR to include a broader description of the proposed action and its goals, and properly allow for a reasonable range of alternatives, including adoption of a regulation that avoids "take" and minimizes threats from frost protection whenever feasible. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek; Larry Hanson, Northern California River Watch*)

Response: It is unclear how the commenter determines that adoption of the "No Project alternative" would necessarily lead to the State Water Board adopting an emergency regulation when several of the proposed alternatives are permanent regulations. There is no legal requirement that the State Water Board adopt an emergency regulation at the request of another agency with concurrent authority over a resource also managed by the State Water Board. Furthermore, nothing in the proposed regulation would enlarge or limit those agencies' authority with regard to any "take" of listed species.

Pursuant to the proposed regulation, Water Demand Management Programs (WDMP) must be approved by the Board. The ultimate authority remains with the Board and has not been delegated to the individuals or governing bodies administering the WDMPs.

The State Water Board considered a number of reasonable alternatives to the proposed regulation in the draft EIR. The Board is not required to "consider in detail each and every conceivable variation of the alternatives stated." (*Residents Ad Hoc Stadium Com. v. Board of Trustees* (1979) 89 Cal.App.3d 274, 287-288.)

Comment 10.6.13: Russian River Frost Regulation Draft EIR Summary, Analysis of

Alternatives (Page iii)- This section states that the No-Project alternative and the Local Stakeholder alternative are the top two environmentally superior alternatives. However both alternatives are dismissed by stating "alternatives that are less restrictive on diversions of water for frost protection use are less likely to meet the project objective ... ". There is no evidence to support this dismissal, and there is substantive evidence to the contrary. Since 2008 water users in Mendocino County have developed 90.6 cfs of offstream storage, installed new USGS gages, successfully implemented coordinated reservoir releases and improved frost forecasting. In combination, these measures have reduced the magnitude and duration of flow reductions during frost events as much as 75%. Despite lower flows in 2009 than in 2008, no additional strandings were found. (*Lee Howard, Mendocino County Russian River Flood Control and Water Conservation Improvement District*)

Response: The commenter suggests that the No-Project alternative and the Local Stakeholder alternative are supported by substantial evidence indicating that since 2008, water users in Mendocino County have successfully reduced the magnitude and duration of flow reductions during frost events as much as 75%. The State Water Board acknowledges and commends the success of these local solutions that will improve forecasting and project release scheduling on the main stem of the Russian River above Hopland. However, these solutions do not address frost diversions on the West Fork Russian River and its other tributaries. Additionally, some of the new offstream storage facilities constructed by local efforts must rely on the availability of water that can be withdrawn from Lake Mendocino storage under the Mendocino County Flood Control and Water Conservation Improvement District's water right Permit 12947B. The State Water Board's letter dated November 9, 2009, identifies the specific limitations of using this water for offstream storage delivery. These limitations may sometimes restrict the season water is available for growers to fill the reservoirs, especially from January through May when Lake Mendocino is filling.

Topic 10.7 CEQA - Mitigation Measures

Comment 10.7.1: The Regulation and DEIR mitigation measures do not have a substantial nexus to the regulated frost water use, and accordingly are constitutionally invalid. The CEQA Guidelines section 15126.4 (a) (4) provides that mitigation measures must have an "essential nexus" to a legitimate governmental interest and must be "roughly proportional" to the impacts of the project. There must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest. The DEIR would impose substantial costly requirements on hundreds of frost water users on the unsubstantiated assumption that their actual diversions are adversely affecting stream stage and salmonids. The rationale is that this class of diversion is presumptively "unreasonable." The SWRCB does not have evidence of a water diversion's specific, particular harm and unreasonableness. Accordingly, there is no nexus between the regulation's and DEIR's exactions on water use. The DEIR mitigation measures are not "roughly proportional" to the actual impact of water use because the actual impacts on stream stage and species are not known. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter seems to be misreading the DEIR. The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular

mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. As such, CEQA Guidelines section 15126.4, subdivision (a) (4) is inapposite to the DEIR in this case. The impacts to frost water users are analyzed as potential impacts of the proposed action and alternatives, not as mitigation measures.

Comment 10.7.2: The DEIR mitigation measures are not feasible. Throughout the draft EIR, the SWRCB identifies several potentially significant impacts. For each of these potentially significant impacts, the SWRCB's mitigation is nearly identical: "Project proponents will comply with any mitigation measures imposed by (fill in the blank)." Depending upon the context, this is not mitigation. This is deferral of mitigation without standards. In many cases, a Lead Agency may require "compliance with environmental regulations [a]s a common and reasonable mitigating measure." However, this approach is permissible only when the agency has "meaningful information reasonably justifying an expectation of compliance." With regard to several of the mitigation measures, the SWRCB has no "meaningful information" that reasonably justifies an expectation of compliance. With respect to groundwater pumping, the SWRCB states in mitigation measure GW-MM-1 that "groundwater pumpers shall comply with any mitigation measures imposed by state and local agencies to mitigate potentially significant impacts associated with action taken in response to the regulation." The problem with this "mitigation measure" is that the SWRCB has not identified a regulatory agency that will be responsible for mitigating any significant impacts. The SWRCB has no meaningful information that reasonably justifies an expectation of compliance with this mitigation measure. The mitigating agencies, and therefore the measures, are purely fictional. The same is true of GW-MM-2 and GW-MM-5. As such, this regulation could result in significant unmitigated impacts to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology, hazardous materials, hydrology, land use and planning, noise, transportation, utilities services, groundwater depletion, saltwater intrusion, degradation of groundwater quality, land subsidence, and aquifer overdraft. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. Where there may not be project-specific CEQA review or adequate conditioning of individual projects required in response to the proposed regulation, the State Water Board has determined that, to the extent that implementation of regulatory requirements and mitigation measures do not fully mitigate direct and indirect impacts, or are not deemed feasible by the agencies implementing or approving individual projects, the economic, social, and environmental benefits of the regulation outweigh any unavoidable adverse environmental effects. (See Pub. Resources Code, §§ 21002.1 and 21081; Cal. Code Regs., tit. 14, § 15093.)

Comment 10.7.3: The DEIR mitigation measures are not feasible. Throughout the draft EIR, the SWRCB identifies several potentially significant impacts. For each of these potentially significant impacts, the SWRCB's mitigation is nearly identical: "Project proponents will comply with any mitigation measures imposed by (fill in the blank)." Depending upon the context, this is not mitigation. This is deferral of mitigation without standards. In many cases, a Lead Agency may require "compliance with environmental regulations [a]s a common and reasonable mitigating measure." However, this approach is permissible only when the agency has "meaningful information reasonably justifying an expectation of compliance." With regard to

mitigation measures for the use of wind machines (WMMM-1, WM-MM-2), the SWRCB has no “meaningful information” that reasonably justifies an expectation of compliance. The installation, operation, and maintenance of wind machines are not regulated by any identified agency and therefore the impacts from their use will not be mitigated. As a result, this regulation could result in significant unmitigated impacts to air quality, biological resources, cultural resources, geology, hazardous materials, hydrology, land use and planning, noise, traffic, utilities, and aesthetics. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. Where there may not be project-specific CEQA review or adequate conditioning of individual projects required in response to the proposed regulation, the State Water Board has determined that, to the extent that implementation of regulatory requirements and mitigation measures do not fully mitigate direct and indirect impacts, or are not deemed feasible by the agencies implementing or approving individual projects, the economic, social, and environmental benefits of the regulation outweigh any unavoidable adverse environmental effects. (See Pub. Resources Code, §§ 21002.1 and 21081; Cal. Code Regs., tit. 14, § 15093.)

Comment 10.7.4: The DEIR improperly defers development of mitigation to a later time. The WDMP, the central element of the regulation, is a form of mitigation to be developed after the EIR. It is impermissible to defer discussion and analysis of this critical mitigation. The DEIR does not define what acceptable stage means and how a WDMP would develop a plan for ensuring acceptable stage, and accordingly the DEIR is flawed for failing to define this mitigation in the DEIR. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. The impacts to frost water users are analyzed as potential impacts of the proposed action and alternatives, not as mitigation measures.

Comment 10.7.5: The mitigation measures are overbroad and may cause significant redirected impacts. The DEIR mitigation measures themselves have significant redirected impacts due to extensive cost of compliance. For example: measure OFS-MM-6 would require obtainment of a permit or waiver from the Army Corps of Engineers for wetland impacts without any reason to presume that a project will affect wetlands. The Army Corps of Engineers will not provide a letter that a permit is not needed without the water diverter completing a wetland survey called a “jurisdictional determination,” a report that often costs tens of thousands of dollars to prepare. In practice, an environmental consultant will not undertake such an effort unless required in his or her professional judgment. The added cost of compliance for this unnecessary mitigation measure was not included in the economic analysis. This added cost will increase the financial pressure on agriculture and result in additional conversion of agricultural land to non-agricultural purposes. These impacts were not analyzed in the DEIR.

(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)

Response: The commenter seems to be misreading the DEIR. The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. The impacts to frost water users are analyzed as potential impacts of the proposed action and alternatives, not as mitigation measures. Mitigation measure OFS-MM-6 is a feasible mitigation measure involving the Army Corps of Engineers only if there are potential short-term impacts to wetlands that may result from a project-specific approval of storage facility construction activities. The DEIR already analyzes the potential for conversion of agricultural land to non-agricultural purposes.

Comment 10.7.6: The mitigation measures are overbroad and may cause significant redirected impacts. Some mitigation measures are undefined and overbroad such that the impacts associated with compliance cannot be assessed. For example, Mitigation Measures SWD-MM-3 and SWD-MM-4 may themselves have significant impacts or may be so costly to comply with that they result in additional conversion of agricultural land to non-agricultural purposes. *(Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau)*

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. The potential impacts of any individual projects, along with any mitigation measures for those impacts, are anticipated to be determined pursuant to any required project-specific review for any necessary approvals for those projects. The DEIR already analyzes the potential for conversion of agricultural land to non-agricultural purposes.

Comment 10.7.7: An EIR must include "mitigation measures to avoid or reduce any significant or potentially significant effects that the project may have on the environment." CEQA Guidelines, § 15252 (a) (2) (A). This requirement applies to all types of discretionary agency actions, including this proposed action. In such case, "mitigation measures can be incorporated into the plan, policy, regulation, or project design." CEQA Guidelines, § 15126.4 (a) (2); see also Public Resources Code § 21081.6 (b). It is undisputed that, in the Draft EIR, the State Board has made no effort whatsoever to identify mitigation measures to lessen the potentially significant environmental impacts of the Draft Regulation. There is a section (beginning on page 98) in which the document supposedly identifies mitigation measures to reduce the proposed action's impacts. However, these measures almost uniformly constitute illegal "deferred mitigation" because they do not contain performance standards, specific criteria or other safeguards to ensure that they are well defined and will be implemented. Instead, almost every mitigation measure is a requirement that applicants comply with unspecified future mitigation measures imposed by other regulatory agencies for particular projects. This type of mitigation measure fails to ensure that the reasonably foreseeable environmental impacts of the Draft Regulation are effectively addressed or mitigated to less than significant levels. *(Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards"))*

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures for potentially significant impacts, instead relying on appropriate mitigation and conditioning as project-specific approvals are required. As stated in the DEIR, it is impossible to predict which affected parties will take any particular action in response to the proposed regulation. "Where... an EIR cannot provide meaningful information about a speculative future project, deferral of an environmental assessment does not violate CEQA." (Rio Vista Farm Bureau Center v. County of Solano (1992) 5 Cal.App.4th 351, 373.)

Comment 10.7.8: Since future project implementations may well not be under the authority of SWRCB as a lead CEQA agency, defining a continued and identifiable chain of responsibility is difficult or impossible to achieve. The DEIR fails to analyze the potential pitfalls and problems likely with different agencies, institutions, organizations or individuals who would be charged with implementing the "individual projects" and their identifiable environmental impacts under CEQA. This DEIR must be revised and recirculated by SWRCB when these future critical components of the Project are identified and/or created and analyzed under CEQA for their competency, credibility, ability to carry out and fund the programs, authority and effectiveness. Without further scrutiny within a revised and recirculated DEIR, the CEQA mandates for a clear and stable project description are not met, and such a truncated process significantly impairs the public's and decision makers' ability to provide informed analysis and recommend changes in the Project while it is still flexible. (*David Keller, Friends of the Eel River*)

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. The potential impacts of any individual projects, along with any mitigation measures for those impacts, are anticipated to be determined pursuant to any required project-specific review for any necessary approvals for those projects. As such, additional later scrutiny pursuant to this programmatic DEIR is unnecessary and not required by CEQA.

Comment 10.7.9: The exact final programs envisioned within the proposed WDMPs will need to be reviewed with SWRCB as the lead agency under CEQA, for their effectiveness, completeness, relevance, validity, and inherent ability to enact the Project objectives proposed in this DEIR and draft Regulation. Failure to do so leaves the public and decision makers in the dark as to the actual likely environmental impacts of specific subsequent individual projects, the ability to review and revise them while still in a flexible stage of development, and the ability and willingness to comply fully with SWRCB's Project purpose, responsibility and authority. This DEIR must be revised and recirculated by SWRCB when these future critical components of the Project are identified and/or created and analyzed under CEQA for their competency, credibility, ability to carry out and fund the programs, authority and effectiveness. (*David Keller, Friends of the Eel River*)

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. The potential impacts of any individual projects, along with any mitigation measures for those impacts, are anticipated to be determined pursuant to any required project-specific review for any necessary approvals for those projects. As such, additional later scrutiny pursuant to this programmatic DEIR is unnecessary and not required by CEQA.

Comment 10.7.10: Local agencies, where possible, will be motivated by grape and wine industry pressures and demands, to use mitigated negative declarations and administrative approvals of project specific implementations and local WDMPs and/or Best Management Practices guides. This will severely undercut the likely effectiveness of the work that the SWRCB has started with this important set of Regulations. This must be prevented from happening by SWRCB mandates and future environmental review under its own authority as a lead agency under CEQA. The DEIR and revised Regulations should clearly address this. *(David Keller, Friends of the Eel River)*

Response: The DEIR appropriately assesses the proposed action on a programmatic level and does not impose any particular mitigation measures, instead relying on appropriate mitigation conditioning as project-specific approvals are required. The potential impacts of any individual projects, along with any mitigation measures for those impacts, are anticipated to be determined pursuant to any required project-specific review for any necessary approvals for those projects. As such, additional later scrutiny pursuant to this programmatic DEIR is unnecessary and not required by CEQA.

Comment 10.7.11: The Draft EIR assumes that for each of the actions likely to be taken in response to the new regulation, future environmental review can be expected to identify and mitigate site-specific environmental effects. However, in Sonoma County, some of those actions, such as agricultural wind machines and groundwater extraction, do not require a permit or are subject to ministerial permits that do not involve discretionary approvals that would trigger review under CEQA. In the absence of a discretionary permit requirement by some other governmental agency, additional CEQA review would not occur. We suggest that the language regarding future environmental review be revised to be more general in nature, recognizing that not all actions will require a discretionary permit or approval. *(Lisa Correia, Sonoma County Office of the Agricultural Commissioner)*

Response: The State Water Board acknowledges that projects that are subject to ministerial permits or otherwise exempt from CEQA would be required to implement any applicable requirements but would not be subject to project-specific analysis and mitigation measures under CEQA.

Comment 10.7.12: These realities [prohibition on water use for frost protection until water demand management program is developed, the possible inability of some vineyard owner to absorb the financial costs of the program, and the possibility of no feasible alternative form of frost protection] will result in significant adverse environmental effects, beginning in the form of lost crops, lost profits, or lost jobs, and then resulting in land fallowing, land conversion, and development. Based upon the importance that California ascribes to agriculture, mitigation for loss of cropland will be necessary. Our Legislature has confirmed many times that the preservation of agricultural land is a significant goal of the state. (See, e.g. Govt. Code § 51220 (Williamson Act findings that agriculture preservation is valuable and necessary); Civil Code § 815 (legislative declaration that preservation of agricultural lands is "among the most important environmental assets of California"); Public Resources Code §§ 21061.1, 21061.2, 21095 (CEQA provisions requiring the Resources Agency to take steps to ensure that the environmental effects of agriculture land conversion are quantitatively and consistently considered in the environmental review process); Stats. 1993 ch. 812, § 1, subd. (d) (declaring a legislative intent that CEQA should play an important role in the preservation of agricultural lands).) In preparing the EIR, the SWRCB should address these legislative declarations, via

mitigation, with the inevitable loss/conversion of cropland this regulation will cause. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The DEIR already analyzes the potential for conversion of agricultural land to non-agricultural purposes. There is not supporting evidence to conclude that the proposed regulation would result in conversion of prime farmland, unique farmland, or farmland of Statewide importance. The proposed regulation does not restrict operations or financially impact the vineyard or orchard owners at a significant enough level to assume that an owner would forfeit the agriculture business and explore other land use alternatives. The proposed regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems. This allows for a business to comply with the proposed regulation at the least cost, making it highly unlikely that land conversion would occur.

Comment 10.7.13: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 1. Include all water right activities associated with the Russian River water system within the scope of the regulation, including municipal and residential wells, while maintaining the rule of priority, and it should prohibit nighttime diversions unrelated to frost protection. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The proposed regulation applies specifically to stranding that occurs due to the cumulative instantaneous demand for water during frost protection that creates a rapid reduction in stream stage. Other diversions do not contribute to the instantaneous reduction in stage. The Board will, in approving WDMPs, exercise “every effort ... to respect and enforce the rule of priority.” (*El Dorado Irrigation District v. State Water Resources Control Board* (2006) 142 Cal.App.4th 937, 966.)

Comment 10.7.14: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 2. Exclude the main stem Russian River, or at least the main stem below Cloverdale because the problems that once existed have been addressed. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The problem as currently understood is based on cumulative instantaneous demand for water for frost protection, necessitating a comprehensive response to those diverters. The installation of offstream reservoirs, new Talmage Gauge, better frost forecasting and improved communication between Mendocino growers and the Sonoma County Water Agency (SCWA) has improved SCWA’s ability to increase releases for specific frost diverters using the Russian River mainstem for frost protection. These local cooperative efforts are real meaningful improvements. However, these solutions do not address the risk present in tributaries of the Russian River in which salmonids exist.

Comment 10.7.15: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 3. Exclude Dry Creek because this stream system is highly regulated by releases from Lake Sonoma and there is no evidence to suggest additional regulation is necessary. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: . The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection throughout the Russian River watershed (below Warm Springs and Coyote Dams). Warm Springs and Coyote Dams cannot physically or operationally provide water to the Russian River tributaries, and therefore releases from those dams cannot effectuate the goals of the proposed action in those areas. The information gathered by the WDMPs will help Sonoma County Water Agency better anticipate the demand for water for frost protection and manage its releases from Warm Springs and Coyote Dams so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

Comment 10.7.16: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 4. Exclude "closely" or "hydraulically connected groundwater" because there is no evidence to suggest that pumping groundwater has caused any of the problems that precipitated the need for the regulation. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The pumping of hydraulically connected groundwater is currently understood to contribute to the rapid drop in stream stage that impacts salmonids, and is therefore appropriate for inclusion in the regulation at this time.

Comment 10.7.17: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 5. Extend the effective date of the regulation to one year after SWRCB has approved a water demand management program and has adopted the regulatory standards defining a "negligible effect." It will take a significant amount of time to develop a water demand management program, have the SWRCB review and adopt that plan, and then install all the necessary equipment necessary to implement the plan and monitor every single diversion within the Russian River (i.e. acquisition of the devices, permitting, and any associated environmental documentation), and nearly one hundred stream stage monitoring devices. Similarly, without a better definition, it will take additional time for the SWRCB to define and then exclude diversions from the regulation due to their "negligible" impact. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The proposed regulation has been substantially modified since the January 2010 draft. The State Water Board will consider including clarifying language in the adopting Resolution that describes the minimum amount of information that would be deemed acceptable in an initial Water Demand management program that is submitted prior to February 1, 2012. The State Water Board will also consider including in the Resolution a suggested implementation schedule for the first few years after the adoption of the regulation. The State Water Board anticipates periodic updates will be made to Water Demand Management Programs that reflect the data and information contained in annual reports. The word "negligible" is no longer in the proposed regulation.

Comment 10.7.18: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 7. Provide a more

comprehensive definition of a "water demand management program," otherwise the development of such a program could be delayed for years until a more comprehensive definition is reached. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The proposed regulation has been substantially modified since the January 2010 draft and now contains adequate information regarding the water demand management programs for regulated entities to know what is expected of those programs.

Comment 10.7.19: If the SWRCB refuses to choose the alternatives to the regulation listed on the preceding pages, then in order to reduce the impacts this [January 2010] regulation causes, the SWRCB should consider in its EIR the following mitigation measures: 8. Provide a more comprehensive definition of "negligible," and the scientific means of satisfying this definition. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The proposed regulation has been substantially modified since the January 2010 draft. The word "negligible" is no longer in the proposed regulation..

Topic 10.8 CEQA - Cumulative and Long Term Impacts

Comment 10.8.1: The DEIR fails to discuss specific impact mechanisms and assessment methodologies, including impacts that are affected by factors not in the proposed regulation, and thresholds of significance that are essential for assessing the proposed regulation. The DEIR fails to identify what "adequate stream stage" (DEIR pg 125) is, and therefore does not provide an analysis of impacts associated with changing stream flow and stage. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: A programmatic DEIR does not analyze environmental impacts at the project level and is therefore more general in nature. Individual projects are not exempt from the CEQA process and impacts will be addressed and mitigated at the project level where required. At the programmatic level it is not always practical to establish thresholds of significance and it does not always improve the process of identifying significant effects. The Governor's Office of Planning and Research does not suggest that an agency establish a threshold for every conceivable environmental effect. This may be neither practical nor desirable. (See <http://ceres.ca.gov/ceqa/more/tas/Threshold.html>). The DEIR appropriately analyzes the potential direct and indirect impacts to the environment at a programmatic level.

Comment 10.8.2: The DEIR fails to discuss specific impact mechanisms and assessment methodologies, including impacts that are affected by factors not in the proposed regulation, and thresholds of significance that are essential for assessing the proposed regulation. Potential beneficial impacts to biological resources of the alternatives are compared on a "net-benefit" standard rather than through analysis of actual environmental impacts to individual species. The DEIR relies on sweeping conclusions of net-benefit to avoid analysis of the varied impacts to different species. Page 125 of the DEIR states "As stated above, however, the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during

the frost season.” Such an analysis is not permissible (CEQA Guidelines section 15125 (c)). (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: The commenter appears to be misunderstanding the requirements of CEQA. One of the stated purposes of a CEQA analysis is to “inform the governmental decision makers and the public about the potential, significant environmental effects of proposed activities.” (Cal. Code Regs, tit. 14, § 15002, subd. (a) (1).) “A significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” (Id., subd. (g).) The quoted language is therefore consistent with the requirements of CEQA. The expected positive outcomes that form the basis for consideration of the proposed action are separately considered and balanced against the potential “environmental impacts” analyzed by in the DEIR.

Comment 10.8.3: The DEIR impermissibly uses a net-biological benefit standard to compare alternatives (Page 125 of the DEIR: “As stated above, however, the proposed regulation as a whole will protect biological resources, including salmonids, by providing adequate stream stage to prevent stranding mortality of juveniles and redds during the frost season”) even though the DEIR, on page 69, discloses that certain measures to protect salmonids (e.g., removal of onstream diversions) may harm the habitat for non-salmonid species. This approach underestimates the significant adverse effects to certain non-salmonid species including amphibians. (*Jesse Barton, Gallery and Barton Law Corporation; Williams Selyem; California Farm Bureau Federation; Fetzer Vineyards; Whispering Oak Vineyards, LLC; AG Unlimited; Lyman/Tremont; Saini Farms Inc.; Yokayo Wine Company; Orr's Creek Vineyard LP; Mendocino County Farm Bureau; Napa County Farm Bureau*)

Response: Contrary to the assertions of the commenter, the DEIR adequately analyzes all reasonably foreseeable direct and indirect impacts of the proposed alternatives, consistent with the requirements of CEQA.

Comment 10.8.4: It is undisputed that an EIR is required to include a discussion of the Draft Regulation's cumulative impacts. See CEQA Guidelines, § 15130 (a). In this case, the Draft EIR contains only a short section on cumulative impacts which does not contain any real analysis of such impacts. This failure to identify, discuss and analyze cumulative impacts is a fundamental legal deficiency in the document. It is absolutely essential, when issuing a policy that will have the scope and magnitude of environmental effects that the Draft Regulation will, to include a thorough discussion of cumulative environmental impacts. For example, the Draft Regulation could well force large scale physical changes in land use, environmental, social and economic patterns in the affected counties, particularly given its direct adverse impact on the wine grape industry. None of these changes are addressed in the cumulative impact discussion. Moreover, there is only an inadequate attempt to formulate mitigation measures to address such cumulative impacts. (*Paul Spaulding III, Farella Braun and Martel, LLP; Golden Real Estate, LLC ("Golden Vineyards")*)

Response: Contrary to the assertions of the commenter, the DEIR adequately analyzes all reasonably foreseeable direct and indirect impacts of the proposed alternatives, consistent with the requirements of CEQA.

11.0 Miscellaneous

Comment 11.0.1: Encourage other solutions for controlling frost damage - without the need to use water. (*Alan Levine, Coast Action Group; Larry Hanson, Northern California River Watch*)

Response: The Draft EIR discusses the environmental impacts of potential actions that may be taken in response to the proposed regulation.

Comment 11.0.2: DFG currently has a small number of staff devoted to water right and water diversion issues in the Russian River, and more staff may be necessary to fulfill its role as both trustee agency and responsible agency and to fully participate in this process. DFG believes providing adequate staff levels for this effort will: 1) reduce review time for frost protection diverters because we will be able to review and provide timely input, 2) ensure CESA and Fish and Game Code 1600 oversight can be provided, 3) allow us to adequately review inflection point cross section information, and 4) help us participate in monitoring and compliance efforts. (*Carl Wilcox, California Department of Fish and Game*)

Response: The fiscal impacts of the proposed regulation are discussed in Appendix D of the Draft EIR, and in the Notice of Proposed Rulemaking.

Comment 11.0.3: Comments on Chapter 11 B, Vineyard and Orchard Frost Protection Ordinance, scheduled for final vote on Tuesday, December 12, 2010. The new Registration Ordinance is still flawed in a series of potentially correctable ways. However, correction will require some substantial additional work before approval and adoption. These opportunities for improvement include: The existing ordinance fails to explicitly require, or even suggest, consultation with and the inclusion of environmental and fisheries stakeholder groups to "develop, implement, and change or modify the [Russian River Frost Protection Monitoring] Program" with the agricultural commissioner, NMFS, CDFG, SWRCB, SCW A, UC Cooperative Extension (Sec. 11 B.04.020); the monitoring data is still not all transparent, nor is it available from all proposed gages in real time basis; no inclusion of environmental and fisheries stakeholder groups in the RRWCC, Inc. and the monitoring data itself from all non-real time gages is likely to be held as proprietary data by the Russian River Water Conservation Council Inc, a grower-formed and owned non-profit corporation; the application for Registration of frost water irrigation users does not include a statement as to whether or not they hold legal water rights, riparian, appropriative, for storage or otherwise; and the Sonoma County's program should coordinate with the SWRCB's efforts to craft a working and productive program and guidelines for the region. (*David Keller, Friends of the Eel River*)

Response: This comment is in regard to the Sonoma County Vineyard and Orchard Frost Protection Ordinance. Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 11.0.4: 1) Could we please have all future deadlines concerning Russian River Frost, or any other matter concerning our water, happen during winter months. July 5th is tough. Summer is a grape grower's busiest time. It's hard for us to focus on such important issues as water (the life blood of our business) during the busiest time of the year. I don't think it's fair. (*Jim Newsome*)

Response: The Board made all documents available as soon as it was able and it is merely a coincidence that the end of the comment period falls one day after a three-day weekend rather than a two-day weekend.

Comment 11.0.5: We don't abuse our water rights. Never have. We too care about the fish and our environment. We are good stewards to our land. (*Jim Newsome*)

Response: Comment noted.

Comment 11.0.6: In general, CSPA commends the Board for developing a mandatory regulation to address the cumulative effects of frost control diversions in the Russian River watershed. The Board should adopt the Frost Control amendment without further delay. (*Chris Shutes, California Sportfishing Protection Alliance*)

Response: Comment noted.

Comment 11.0.7: Simply imposing a regulation behind closed doors, without the basis of science, and without meaningful public input is simply bad public policy making and an embarrassment to the State of California and its constituents who live and work in this portion of the State. We ask the Board to vote NO and reject this unnecessary and unjustified Russian River Frost Protection regulation. (*Barbara Reed, Employers Council of Mendocino County*)

Response: The State Water Board provided numerous opportunities for public comment prior to the start of the rulemaking period in May 2011. The State Water Board held several workshops in 2009 and 2010 to receive information regarding (1) the need for and the effect of water diversions for purposes of frost protection of crops, (2) local voluntary efforts at managing water diversions for frost protection, and (3) the need for short- or long-term regulatory action by the State Water Board. On November 17, 2010, the State Water Board held a CEQA scoping meeting to obtain comments concerning potential regulation alternatives, significant environmental impacts, and mitigation measures. In April 2011, the State Water Board held a public workshop to obtain comments on a draft of the proposed Regulation, a draft of the Initial Statement of Reasons, and an Economic Analysis Report.

Comment 11.0.8: We incorporate by reference the comments submitted by the California Farm Bureau Federation on the proposed regulation. (*Jim Lincoln, Napa County Farm Bureau*)

Response: Inasmuch as the comments incorporated by reference do not address the current proposed regulation or draft EIR, they require no response here. The referenced comments submitted by the California Farm Bureau Federation that pertain to the current proposed draft regulation or DEIR have been responded to elsewhere in this document.

Comment 11.0.9: Please add these comments to the official administrative record of the State Water Resources Control Board's review of water diversion practices for frost protection of crops in the Russian River watershed in Mendocino and Sonoma counties. We also hereby incorporate by reference all comments previously submitted to the State on the subject of diversions for frost control by the Sonoma County Water Coalition, its agents, and its member organizations. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen Krimel, Save Mark West Creek*)

Response: Comment noted. The referenced comments submitted by SCWC that pertain to the current proposed draft regulation or DEIR have been responded to elsewhere in this document.

Comment 11.0.10: If the State extends the DEIR timeline due to changes in the draft proposed regulation, it must quickly institute emergency rules to avert "take" in the interim period. Such emergency rules were recommended in February, 2009. Since the State chose not to act on that recommendation, fish kills have continued. (*Stephen Fuller-Rowell, Sonoma County Water Coalition; Jim Doerksen and Stephen KrimeI, Save Mark West Creek*)

Response: Comment noted.

Comment 11.0.11: We sincerely hope that unseasonal use of water will not be confused with unseasonal use of power. (*Al Cadd, Russian River Property Owners Association*)

Response: Comment noted.

Comment 11.0.12: I have lived in Dry Creek Valley my entire life. My family has lived and farmed here for five generations. During this time, I have seen the streams and tributaries rise and fall naturally without any withdrawal for frost protection. Specifically, every year I see the Sausal Creek rise and fall naturally without any withdrawal from growers. I urge the Board to look more closely at the data before it. (*Thom Mauritsen, Thomas Mauritsen Vineyards*)

Response: It should be clear that the proposed regulation is intended to apply and does apply only to diversions of water, including diversions from tributaries. If natural stranding occurs, the proposed regulation does not place fault or responsibility on the frost protection diverters who are participating and complying with a Board approved WDMP or diverters exempted by the Board. However, the proposed regulation is drafted so that cumulative frost diversions do not exacerbate natural conditions that already cause stranding mortality.

Diversions for frost protection can create an unnatural flow recession that can be monitored for and evaluated. (See Deitch et al, 2009.) In addition, Mr. Deitch's July 5, 2011 comment letter explicitly recognizes that "Continuous data collection and monitoring are necessary to establish whether changes in streamflow occur because of frost protection use." This is consistent with the proposed regulation.

Comment 11.0.13: At [the November 19, 2009] workshop, Steve Edmondson and Bob Hoffman of NOAA Fisheries cited the August 15, 1997 Report written by Division of Water Rights staff Frank Roddy and Ernest Mona. Mr. Hoffman asserted that the staff report claimed using water for frost protection should be banned. What Mr. Hoffman ignored is that the staff report said there is a lot of water available for storage, provided it is diverted at the appropriate time. In the case of the West Fork Russian River with an average annual flow of 128,000 acre-feet (100,000 acre-feet between 15 December and 31 March), the staff report authors said in a normal year as much as 75,000 acre-feet could be stored in ponds in the West Fork Russian River watershed, and in a dry year, about half of that. Actual storage is less than 3,000 acre-feet, so the authors concluded there is a lot of water available. These authors were specifically taking the needs of anadromous fish into account because that was the primary purpose for writing it. Please read this report. It is excellent. (*Rudolph Light; Rudolph Light*)

Response: Comment noted.

Comment 11.0.14: Farm Bureau respectfully submits these comments on the Proposed Russian River Frost Protection Regulation ("proposed regulation") and Draft Environmental Impact Report ("DEIR") for the State Water Resources Control Board's consideration. Farm Bureau is also a signatory to the letter submitted by Williams Selyem et al" which is fully incorporated herein by this reference. Since many of the points raised in this letter are also relevant to the Economic and Fiscal Impact Report and Initial Statement of Reasons, Farm Bureau requests the State Water Resources Control Board ("SWRCB" or "Board") consider these comments in regard to those documents as well. In the interest of readability, this letter refers to the DEIR, Economic and Fiscal Impact Report, Initial Statement of Reason, Fact Sheet, and related notices collectively as "supporting documents." (*Jack Rice, California Farm Bureau Federation*)

Response: Comment noted. The referenced comments submitted by Williams Selyem et al that pertain to the current proposed draft regulation or DEIR have been responded to elsewhere in this document.

Comment 11.0.15: The Sonoma County proposed stream flow and monitoring program was (is being) developed behind closed doors. Thus, no managing responsible agency or the public has had an opportunity to review and comment on the efficacy of such a program. This seems like a very inappropriate way to do business (and may be illegal under Public Resources Code requirements for noticing and public review for such projects). (*Alan Levine, Coast Action Group*)

Response: This comment is in regard to the Sonoma County Vineyard and Orchard Frost Protection Ordinance. Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 11.0.16: The structure of any policy and rule making for diversion of water for frost protection, and any related monitoring program, falls under State Water Resources Control Board responsibility. The SWRCB has sent notice to Sonoma County that it is the ultimate authority in frost protection water use regulation. Given SWRCB authority and recent rule making in the form of recently adopted Policy for Maintaining Flows in Northern California Streams, diversion for frost protection and issues related to such diversion (including monitoring of stream flows and diversion), logically should fall under the general stream flow maintenance policy. Thus, it is the responsibility of the SWRCB to review any stream flow monitoring program proposed by Sonoma County for consistency with the language and intent of the above mentioned flow maintenance policy and reject any monitoring regime and data that is not consistent with State policy for maintaining flows in northern California Streams. (*Alan Levine, Coast Action Group*)

Response: New appropriative water rights for frost diversion will need to comply with the Policy for Maintaining Instream Flows in Northern California Coastal Streams. Existing frost diverters will need to comply with the proposed frost regulation, which would require diversions to be managed to prevent salmonid stranding mortality.

Comment 11.0.17: The SWRCB has failed to their responsibility to set Stream Flow

Objectives on north coast streams. Stream flow objectives are necessary for managing the SWRCB Policy to Maintain Flows in Northern California Streams and also to effectively manage diversion of water for frost protection. This failure is one aspect of how SWRCB, as responsible agency, has not met the flow management obligations that are responsible for "Take" under the Federal Endangered Species Act. (*Alan Levine, Coast Action Group*)

Response: New appropriative water rights for frost diversion will need to comply with the Policy for Maintaining Instream Flows in Northern California Coastal Streams. Existing frost diverters will need to comply with the proposed frost regulation, which would require diversions to be managed to prevent salmonid stranding mortality.

The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State's public trust resources.

Comment 11.0.18: We would like to point out that the structure of any policy and rule making for diversion of water for frost protection should fall under State Water Resources Control Board Policy for Maintaining Flows in Northern California Streams. Diversion for frost protection, and issues related to such diversion, logically should fall under the general stream flow maintenance policy. Specific rules for controlling water use for frost protection may be appropriate. Coast Action Group is re-submitting comments on flows policy (by attaching previous comments on flow maintenance policy - Comment: Instream Flow Policy - Northern California Streams, April 15, 2008) for your consideration in the rule making process. The EIR process should consider these documents and related discussion in the rule making process. (*Alan Levine, Coast Action Group*)

Response: New appropriative water rights for frost diversion will need to comply with the Policy for Maintaining Instream Flows in Northern California Coastal Streams. Existing frost diverters will need to comply with the proposed frost regulation, which would require diversions to be managed to prevent salmonid stranding mortality.

Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 11.0.19: The SWRCB has failed to their responsibility to set Stream Flow Objectives on north coast streams. Stream flow objectives are necessary for managing the SWRCB Policy to Maintain Flows in Northern California Streams and also to effectively manage diversion of water for frost protection. This failure is one aspect of how SWRCB, as responsible agency, has not met the flow management obligations that are responsible for "Take" under the Federal Endangered Species Act. (*Alan Levine, Coast Action Group*)

Response: New appropriative water rights for frost diversion will need to comply with the Policy for Maintaining Instream Flows in Northern California Coastal Streams. Existing frost diverters will need to comply with the proposed frost regulation, which would require diversions to be managed to prevent salmonid stranding mortality.

The proposed regulation is not based on and does not rely on either Federal or state endangered species laws. As described in the Initial Statement of Reasons, the proposed regulation is necessary to protect the State's public trust resources.

Comment 11.0.20: The EIR should consider how the SWRCB will deal with situations where local rulemaking occurs - and how local rule making might be considered by the SWRCB. For example; Sonoma County was considering local rule making in the form of a Frost Protection Ordinance. The proposed ordinance was to include rules (BMPs) for water use for frost protection and proposed monitoring and reporting. Legal standards caused the County to rethink the proposed ordinance language. Thus currently, there may no issue in the most recent iteration of the Sonoma County Frost Protection Ordinance that may be considered a violation of State Public Resources Code. The Ordinance, plain language, says that all vineyards using water for frost protection must register with the County Ag Commissioner and participate in a comprehensive monitoring program. The issue is that what such a "Comprehensive" Program may look like? There is no definition or description of what is to occur in a "Comprehensive" monitoring program. (*Alan Levine, Coast Action Group*)

Response: Water Demand Management Programs will vary by geographic area, number of participants, and number of streams potentially requiring project-specific consideration for implementation schedules. As such, the DEIR appropriately assesses the proposed action on a programmatic level. The Draft EIR, proposed regulation and supporting documents provide a full description of the Water Demand Management Program, its requirements and the foreseeable potential environmental impacts if the regulation is implemented.

Comment 11.0.21: The current consideration of regulation of diversions for frost protection is needed. It must be recognized that the frost protection issue is a subset of the greater issue of maintaining instream flows. Long term policy can not deal with the frost protection issue without integrating it into the long awaited flow maintenance policy. (*Alan Levine, Coast Action Group*)

Response: Comment noted.

Comment 11.0.22: We believe that the Frost Protection issue is related, part and parcel, to the need for the State Board to express its authority and regulate both permitted and un-permitted diversion and use of water in the Russian River Basin. CAG's recommendation (s) include application of the NMFS/DFG 2002 Joint Guidelines for Maintaining Flows in North Coast Streams and removal of un-permitted impoundment structures that are blocking stream habitat. With these actions by the SWRCB to occur immediately. The SWRCB has been dawdling of making decisions on this issue for too long. The result is now a mess with Order WR 2009-0027-DWR - SWRCB mandatory Flow Reductions that will complicate issues of maintaining sufficient flows for fish and supplies for urban areas and agriculture in the Russian River. While attempting to grapple with supply issues and drought, the cumulative diversion by legal and illegal agricultural use is an unmeasured obstacle confounding the whole issue. With the issue of agricultural use, illegal and legal; how will compliance assurance occur for Condition #15 - voluntary/cooperative compliance will be secured for withdrawal reduction target of 25 % in Sonoma County and 50% in Mendocino County from Ag and Municipal Users? Who will be monitoring Ag compliance? Will there be numbers attached? Or - is this all going to rest on Sonoma County Water Agency flow modeling, that is unverified and inaccurate? It should be obvious that sort of half way addressing the issue, without dealing with important constituent aspects, the problem will become uncontrollable and/or damaging to all parties. And, if periods of low rainfall continue, beneficial uses will not be maintained. (*Alan Levine, Coast Action Group*)

Response: The proposed regulation is intended to address impacts to fisheries from the sudden drop in water levels due to instantaneous demand for water for frost protection

throughout the Russian River watershed (below Warm Springs and Coyote Dams). Warm Springs and Coyote Dams cannot physically or operationally provide water to the Russian River tributaries, and therefore releases from those dams cannot effectuate the goals of the proposed action in those areas. The information gathered by the WDMPs will help Sonoma County Water Agency better anticipate the demand for water for frost protection and manage its releases from Warm Springs and Coyote Dams so as to remain in full compliance with its bypass terms at the time of these events. But due to the location and operational limitations of the dams, releases from Lakes Mendocino and Sonoma simply cannot independently mitigate for the rapid increase in demand for water for frost protection.

It is unclear from the comment what Order WR 2009-0027-DWR has to do with the proposed regulation. Regardless, Order WR 2009-0027-DWR expired on October 2, 2009.

Comment 11.0.23: Regulatory agencies - lead, trustee, and responsible, have many tools at their disposal to prevent further loss of populations of species struggling to survive. Action and fortitude is demanded. Given what is known, what has been observed, measured, and predicted, and what additional water usurping projects have been planned, strict regulation is overdue. Diverters have not held up their end of the bargain and seek only to delay the time when either the fish are gone and thus no longer protectable or the agencies miss the opportunity to be heroes and save the fish. The general public eagerly awaits the day when an agency determines that it will NOT be on its watch that listed species, counting on it, perished. Although politically uncomfortable, an immediate prohibition on pumping for frost protection of non food or non essential crops would be appropriate, as well as institution of metering, monitoring, and additional moratoriums. To do less is to actively decide to abdicate local, state and federal responsibility to protect critical habitat and listed species. And finally, "[r]iver restoration tends to emphasize physical channel rehabilitation (Palmer et al., 2005; Wohl et al., 2005), but such actions can be beneficial to biota only if streamflow is sufficient to support the necessary ecological processes (Richter et al., 1998; Arthington et al., 2006; Stromberg et al., 2007). Management and restoration practitioners can use the surface water balance to evaluate the extent to which water management practices may limit streamflow necessary for important ecological processes." As the scientist affirm, maintaining year round stream flows must be the top priority. (*Alan Levine, Coast Action Group*)

Response: As explained in the proposed regulation, Initial Statement of Reasons and the Notice of Proposed Rulemaking, the high instantaneous demand for water for frost protection may cause a rapid decrease in stream stage resulting in stranding mortality to salmonids. Stranding mortality can be avoided by coordination or management of those diversions to reduce the instantaneous impact. Because a reasonable alternative to current practices exists, the proposed regulation would require frost diversions to be managed in accordance with a Board-approved water demand management program to reduce their instantaneous impact.

Comment 11.0.24: We find that the current proposed Sonoma County Vineyard and Orchard Frost Registration Ordinance is significantly flawed, and should not yet be adopted until further modifications and consultation with other stakeholders, including the regulatory and responsible public agencies, has been accomplished in a publicly-accessible process. Unfortunately, in the rush since April 30, 2010 (when the Russian River Water Conservation Council, Inc. was registered with the California Secretary of State), and since June 1, 2010 (with the approval by the Board of Supervisors of the Minute Order) to develop a frost protection program, the County, grape growers and their representative have failed to include the non-grape growing public interest stakeholders and other landowners within a meaningful and participatory

process of writing, reviewing and correcting the proposed ordinances. In fact, the non-grape growing public and stakeholders were completely kept in the dark until mid-October, when our Public Record Act request was sent to the County, and the private negotiations were revealed. As a result of the closed-door negotiations, the original proposed Permitting Ordinance was produced, which failed a number of legal, scientific, environmental and public policy tests. The new Registration Ordinance is still flawed in a series of potentially correctable ways. However, correction will require some substantial additional work before approval and adoption. (*Casey Caplinger, New Old Ways Wholistically Emerging*)

Response: This comment is in regard to the Sonoma County Vineyard and Orchard Frost Protection Ordinance. Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 11.0.25: The Sonoma County Vineyard and Orchard Frost Protection Ordinance has the following opportunities for improvement: 1. Inclusion of environmental and fisheries stakeholder groups in development and oversight of the program. The existing ordinance fails to explicitly require, or even suggest, consultation with and the inclusion of environmental and fisheries stakeholder groups to "develop, implement, and change or modify the Russian River Frost Protection Monitoring] Program" with the agricultural commissioner, NMFS, CDFG, SWRCB, SCWA, UC Cooperative Extension. The omission of environmental and fisheries groups is a significant oversight in the work to make frost protection water use beneficial and effective, and the omission at this point is inexcusable. 2. Transparency of monitoring data and real time reporting from gages. The monitoring data is still not all transparent, nor is it available from all proposed gages in real time basis. In order to learn how to best manage grape growing and frost protection practices, and in order to best prevent takes and strandings and assure improved watershed management practices and results, real time monitoring in a sufficient number of well-located gages is critical. 3. Inclusion of environmental and fisheries stakeholder groups in the Russian River Watershed Conservation Council, Inc. (RRWCC). The monitoring data itself from all non-real time gages is likely to be held as proprietary data by the RRWCC and each frost season's accumulated data will be collectively reviewed, analyzed and reported only after the frost season is over, by a so-called 'Independent Science Review Panel', with no access or participation by any public agencies or other non-grape growing stakeholders. 4. Request for information about water rights held from all applicants for Registration. To date, county staff has completely refused any request that the application for Registration of frost water irrigation users include a statement as to whether or not they hold legal water rights, riparian, appropriative, for storage or otherwise. 5. Coordinate the Sonoma County program with the evolving SWRCB frost control irrigation planning, best management practices, and oversight. We are very supportive of all efforts to create a working, successful program for maximizing the efficiency and effectiveness of water practices and policies for agriculture, while minimizing the damages that come from frost water irrigation practices. We look forward to the coordination of the County's program with the SWRCB's efforts to craft a working and productive program and guidelines for the region. We look forward to substantial transparency in the collection of good data, valid and relevant data analysis and improvement of watershed practices. We look forward to the recovery of salmonid fisheries in the Russian River watershed, and the expansion of good practices to other watersheds around the state, including the Mark West Creek. (*Casey Caplinger, New Old Ways Wholistically Emerging*)

Response: This comment is in regard to the Sonoma County Vineyard and Orchard Frost Protection Ordinance. Comments that do not address the current proposed regulation or draft EIR do not require a response here.

Comment 11.0.26: I am 65 years old. A proud Vietnam Veteran and this is the first time I have been truly afraid of our government. I view this as a fast tract to socialism and a blatant disregard for capitalism. I hope when you go to sleep at night you see the faces of the men and women who have pleaded with you to retract this proposed rule and are scared to death they are going to loose there livelihood. What a way to rebuild with yet another regulation. (*Richard Lamalfa*)

Response: Comment noted.

Comment 11.0.27: The community, right or wrong, has adopted the view that farmers should do things differently, and they want things to change NOW. Whether or not this is "reasonable" is subject to debate. But the state is proposing to take something from us, something of substantive value. We will be harmed by this taking. That is beyond question. (*Stephen Hawkes*)

Response: The proposed regulation does not "take" any vested property right - both the public trust and the prohibition against unreasonable use are inherent in all water rights. Furthermore, the proposed regulation contemplates the continued use of most if not all water rights for frost protection, albeit in compliance with a WDMP to ensure that diversions for frost protection use do not cause stranding mortality of salmonids in the Russian River watershed.

Comment 11.0.28: Although determined to be wasteful and unreasonable, and therefore contrary to the state Constitution, the use of water for frost protection is still being considered at the risk of dewatering critical habitat of threatened and endangered species this spring [2010]. (*Larry Hanson, Northern California River Watch*)

Response: The proposed regulation would require a WDMP to monitor stream flows to evaluate whether reductions in stream stage are due to diversions for frost. If the monitoring data shows potential for stranding mortality due to frost diversion, the WDMP would be require diverters to take corrective action.

Comment 11.0.29: In the past, County land use decisions that affect water use have not been adequately supervised by the state. Will this regulation adequately protect listed species from inappropriate County land use decisions with respect to water use? Specifically, how would the proposed regulation affect county land use decisions? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The proposed regulation is not intended to and does not affect County decision making processes. Where project-specific approvals are required, the regulatory bodies with authority over those approvals are expected to review those projects according to their standard processes.

Comment 11.0.30: Has the proposed regulation been modified since the last public hearing on March 30, 2010? What if any changes were incorporated that were suggested by any member of the wine industry since that time? The version available to the public on the State Board's website states that frost protection regulation is proposed between March 15 and June 1 of each year. The Notice of Preparation now describes the regulatory period as March 15 through May 15. Which date is being proposed by the state, and if it was changed to May 15

subsequent to the March 30, 2010 hearing, when was that done, why, and with whose consent? (*Larry Hanson and Jeff Miller, Northern California River Watch*)

Response: The current proposed regulation is dated May 2011. The commenter is referring to a working group meeting that occurred on March 30, 2010. The effective season of the proposed regulation was modified to March 15 through May 15 as part of a suggestion presented at the March 30, 2010 working group meeting. The currently proposed effective season is consistent with the frost season defined in California Code of Regulations, title 23, section 735.

Comment 11.0.31: We recognize the importance of this matter, however the SWRCB [January 2010] regulation is simply not narrowly tailored enough to address the ills it seeks to remedy. Improvements can be made in the Russian River Valley, but this regulation runs the risk of encompassing and eliminating a wide variety of activities that will not help salmonids, while at the same time ignoring other activities that do, and destroying livelihoods. We recommend that the SWRCB consider, in full, the comments and suggestions made in this letter and let us know if you have any questions. (*Jesse Barton, Gallery and Barton Law Corporation*)

Response: The current proposed regulation is dated May 2011. This comment is in regard to the January 2010 draft. Inasmuch as the comment does not address the current proposed regulation or draft EIR, it requires no response here.

Comment 11.0.32: Tim Schmelzer on behalf of the Wine Institute submitted late comments. The comments were red-lined versions of the proposed regulation with suggested edits and changes. (*Tim Schmelzer, Wine Institute*)

Response: Some of the suggested edits and changes have been incorporated into the proposed regulation. The points raised by the suggested edits and changes that have not been accepted and incorporated into the proposed regulation have been responded to elsewhere in this document.