January 30, 2015

John O' Hagen
Assistant Deputy Director of Water Rights
State Water Resources Control Board
P.O. Box 2815
Sacramento, CA
95812-2815

Via Email: John.O'Hagan@waterboards.ca.gov SWRCB

RE: 2015 Initial Water Demand Management Program for the Mendocino County Russian River Main Stem Diverters

Dear Mr. O' Hagen,

Attached is the submittal of the 2015 Initial Water Demand Management Program for the Mendocino County Russian River Main Stem Diverters. As you are aware, through conversations with State Water Resource Control Board (SWRCB) staff over the past few months, this WDMP is intended to be applied by individual diverters that use water for frost protection from the main stem of the Russian River in Mendocino County. Since there are still a number of questions regarding the approval of this WDMP, it was decided that it would be easier to submit one packet of information for consideration with the caveat that upon approval each WDMP participant would provide additional information to the SWRCB as requested.

We appreciate the comments that you submitted on the draft WDMP last week. A number of those points were incorporated as well as the comments that we received from the California Department of Fish and Wildlife (DFW). However, the most substantial comment provided from past correspondence with the SWRCB and the fisheries agencies is regarding the ability of this WDMP to utilize the Biological Opinion (BO) for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency (SCWA) and the Mendocino County Russian River Flood Control and Water Conservation Improvement District (RRFC) in the Russian River watershed (NMFS 2008).

Since there was not sufficient time to further discuss the use of the B.O. as applied with this WDMP prior to the February 1st submittal deadline, we respectfully request an opportunity to continue this conversation with you and SWRCB staff as well as the fisheries agencies at some point during the month of February. We would like to be able to have a meeting with all parties, so that we can work toward approval of this WDMP. If this WDMP is not approved, we would like sufficient time to incorporate the diverters participating in this WDMP into another approved WDMP before the March 15 frost season.

If you can please let us know if this request could be fulfilled, it would be appreciated. We could then work with the SWRCB staff and fisheries agencies representatives to schedule a meeting as soon as possible in February.

If you have any questions, please let us know.

Sincerely,

Devon Jones, Mendocino County Farm Bureau
Sean White, Mendocino County Russian River Flood Control and Water Conservation Improvement District

2015 Initial Water Demand Management Program for the Mendocino County Russian River Main Stem Diverters

Submitted: February 1, 2015

Governing Body: Each individual diverter from the Russian River main stem, participating in this WDMP, will act as their own Governing Body for the implementation of this WDMP.

WDMP Participants: This WDMP includes individual participants who divert water for the purposes of frost protection from sources related to the main stem of the Russian River watershed in Mendocino County below Coyote Dam to the county line (Pieta Creek area). These water sources include: direct diversion from the Russian River under appropriative rights, riparian rights, contractual agreements with the Mendocino County Russian River Flood Control and Water Conservation and Improvement District (or other municipalities wheeling water from the main stem) or through diversions from licensed Russian River underflow wells.

Inventory

Each individual diverter participating in this WDMP shall provide an initial inventory as described in 23 CCR 862 (c) (1) and State Water Resources Control Board Resolution No. 2011-0047. This shall include: the name of the diverter, source of water used for frost protection and location of diversion, a description of the diversion system and its capacity, acreage frost protected and acres frost protected by means other than water diverted from the Russian River stream system and the rate of diversion, hours of operation and volume of water diverted during each frost event for the year.

Each diverter will be responsible for recording frost water diversion data in order to report at the end of the year.

See Attachment A: Initial Individual WDMP inventory

Inventory Schedule

Participants in the WDMP will be responsible for recording frost water diversion information and providing this information to the SWRCB based on the schedule below.

1. February 1: Initial WDMP Inventory as described in the State Water Resources Control Board Resolution No. 2011-0047 and referenced in the November 6, 2014 implementation schedule from the SWRCB correspondence titled, *" Regarding Water Rights: Notification of Implementation of the Russian River Frost Protection Regulation."* See Attachment B
2. Three months after approval of WDMP: the three month update as described in the State Water Resources Control Board Resolution No. 2011-0047 and Attachment B. This will include a completed inventory, not including frost water diversion data.
3. September 1, 2015: The first annual reporting requirements following the frost season as described in State Water Resources Control Board Resolution No. 2011-0047 and referenced in Attachment B to include updates to the inventory, stream stage monitoring data and progress towards development of protective stream stages.
4. Subsequent Annual Reports: Annual reports will be submitted as described in State Water Resources Control Board Resolution No. 2011-0047 and as referenced in Attachment B.

Stream Stage Monitoring Program

The main stem of the Russian River currently has a number of United States Geological Survey (USGS) gages in place along the river. The USGS maintains the gages and also provides the technical support to ensure the quality of the data that is collected. These gages are available online for reference by the individual WDMP members, the fisheries agencies and the SWRCB to access and review. Data recording intervals meet the requirements described in 23 CCR 862 (c)(2). The gages relevant to Mendocino County and to this WDMP include:

USGS gage 11462080 (Russian River Near Talmage)

USGS gage 11462500 (Russian River Near Hopland)

USGS gage 11463000 (Russian River Near Cloverdale)

Following the installation of the Talmage USGS gage in 2009 to improve river management for frost protection, no additional gages have been deemed necessary to install at this time.

Each individual participating in this WDMP will identify the USGS gage that is downstream from their diversion through the online reporting tool described below. This information will be provided to the Sonoma County Water Agency to assist with coordination of river management by reach.

Flows and ramping rates for the mainstem of the Russian River have been established by the Biological Opinion (BO) for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency (SCWA)

and the Mendocino County Russian River Flood Control and Water Conservation Improvement District (RRFC) in the Russian River watershed (NMFS 2008). All mainstem flows are managed to be compliant with the 2008 BO Reasonable and Prudent Alternative (RPA) by SCWA. The BO can be found here: http://www.scwa.ca.gov/rrifr/

It is the intent of this WDMP to be compliant with the established stages, flows and ramping rates for the mainstem of the Russian River established in the BO. Each individual WDMP participant will be responsible for coordinating their diversions with the SCWA, who is responsible for the operations of Coyote Dam and maintaining minimum instream flows as stated in the BO. Each individual participant agrees, through signing and submitting, the WDMP to report their anticipated frost water demand (both direct diversions and pond recharge) through an online reporting tool by 10 p.m. on the evening of an anticipated frost event. Each individual WDMP member will be able to print out an email receipt acknowledging that they reported anticipated frost water demand and/or diversions. These receipts will be included in the annual WDMP report. The current website on line tool can be seen here: https://docs.google.com/forms/d/1gKl6zsRlLYUuf1KJ0vC8oQv11Y9NYxO1lgYxndgP6qA/viewform?c=0&w=1

The online reporting data will be provided to SCWA to assist in the coordination of releases from Coyote Dam for frost protection as needed and to also quantify demand on each reach of the Russian River below Coyote Dam to the Mendocino County southern boundary.

This online website will be maintained by a contract paid for by the RRFC district. If there is a time when the RRFC can no longer sustain this contract in whole, each individual participant agrees through signing and submitting the WDMP, that the cost of maintaining the reporting tool will be past to the individuals participating in this WDMP.

The BO was developed in consultation with National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (DFW). Initial conversations have occurred with NMFS and DFW regarding this initial WDMP proposal in December 2014 and January 2015. See Attachment C for a list of correspondence with the agencies to date.

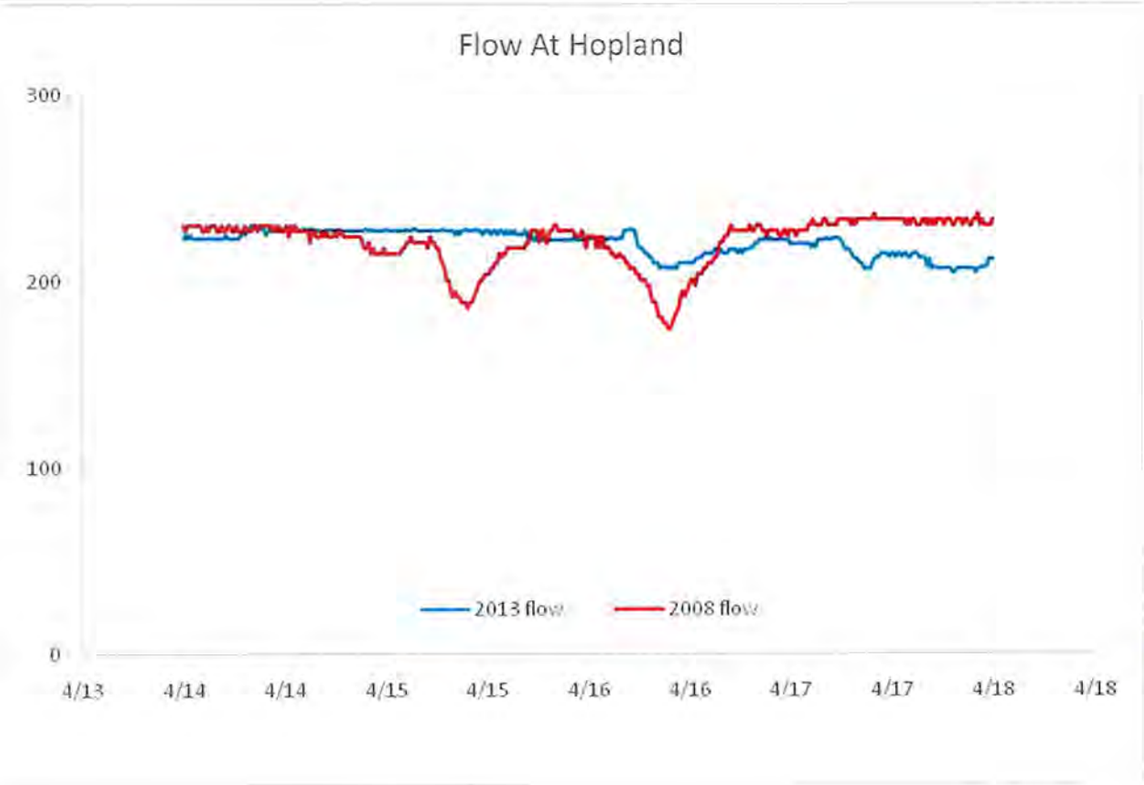
Initial and future consultations with the fisheries agencies on the WDMP stream stage monitoring program will be scheduled as needed. See Attachment D for schedule.

Risk Assessment

In 2008, the instantaneous demand that was seen on the main stem Russian River related to frost protection was approximately 70 CFS on the worst days. Since 2008, through voluntary actions a number of diverters have installed off stream reservoirs, improved water delivery systems or have incorporated non-water methods for frost protection. From 2009-2014, over 143 CFS has

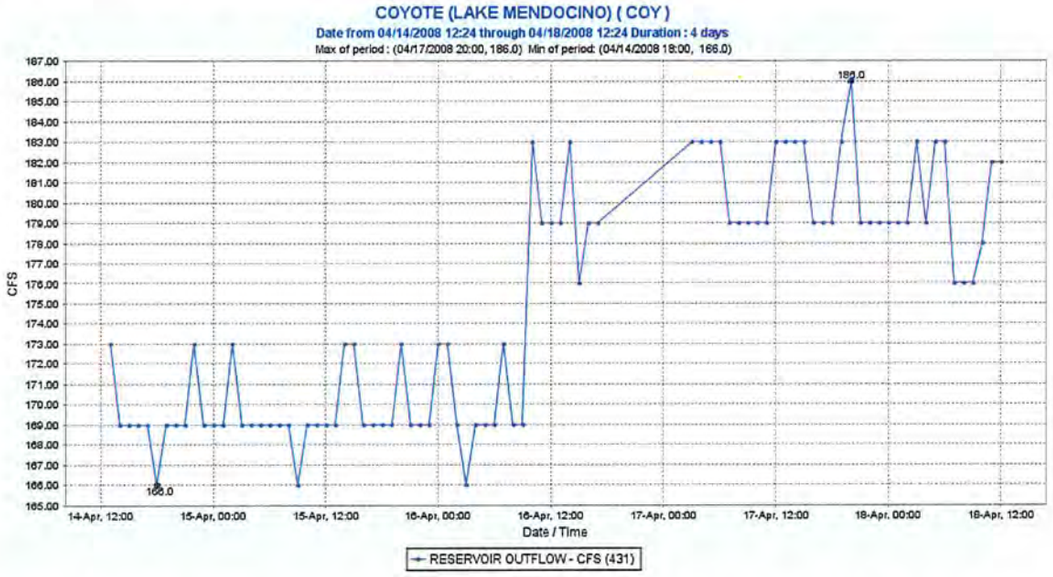
been offset in direct diversion through the use of off stream reservoirs. These actions have reduced the instantaneous demand on the main stem related to frost protection water use. See Attachment E.

Comparing data from similar frost events in 2008 and 2013 indicates that fluctuations in flow and stage have been significantly reduced. Frost events on April 15 and 16th 2008 had a maximum flow change of 55CFS and maximum stage change of 0.18 feet. Analogous frost events on April 16th and 17th of 2013 had a maximum flow change of 19 CFS and a maximum stage change of 0.10 feet. This represents 65% decrease in flow fluctuation and stage change reduction of 44%. See graph below.

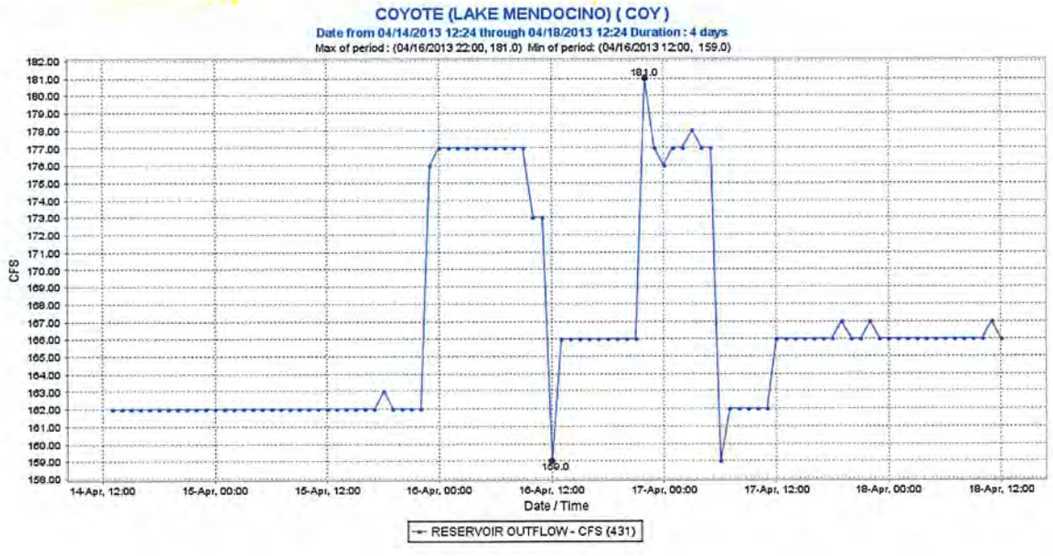


Since 2008 improved communications between diverters, the RRFC and SCWA has increased accuracy for anticipating demand related to water for frost protection. The online reporting tool that will be incorporated into this WDMP will further improve the communication between the water users and the system managers.

In 2008 without feedback from upper basin diverters response to frost demand was linear. Releasing water from Lake Mendocino using this approach did not mitigate for short term increases in demand and simply increased the base flow. The graph below, from the frost events on April 15 and 16th 2008, are representative of the old approach.



Since 2008 diverters, in cooperation with SCWA have developed an effective protocol of releasing pulse flows. Releasing water from Lake Mendocino using this approach, SCWA makes preemptive "pulse" releases that anticipate the onset and cessation of frost water demand. This approach is intended to "fill" demand without increasing base flow thereby reducing variation in flow up or down. The graph below, from the frost events on April 16th and 17th of 2013, are representative of the new protocol.



Each individual WDMP member will describe the specific risk assessment actions taken to date as related to their frost diversion in the WDMP inventory that is submitted. A schedule of future risk assessment actions, if applicable, will be provided in the annual report provided by each WDMP member.

Initial conversations have occurred with NMFS and DFW regarding this WDMP proposal in December 2014 and January 2015. See Attachment C for a list of correspondence with the agencies to date.

Initial and future consultations with the fisheries agencies on the WDMP risk assessment will be scheduled as needed. See Attachment D for schedule.

Corrective Actions

Each individual WDMP member will be responsible for evaluating their own risk affiliated with their water diversion(s) for frost protection.

Each individual WDMP member will be able to describe any specific corrective actions taken to date or a schedule for anticipated future actions as related to their frost water diversion on the WDMP inventory that is submitted.

Due to the number of diverters participating in these coordinated WDMPs, each individual participant agrees through signing and submitting the WDMP, to authorize the Mendocino County Russian River Flood Control and Water Conservation and Improvement District and the Mendocino County Farm Bureau to consult on their behalf with the fisheries agencies and the SWRCB, if desired, regarding cumulative risk assessment from the individual WDMPs and proposed changes to the program. Prior to changes being made, the Mendocino County Russian River Flood Control and Water Conservation and Improvement District and the Mendocino County Farm Bureau will coordinate with the affected WDMP participants to discuss corrected action plans and implementation and any proposed changes. The Mendocino County Russian River Flood Control and Water Conservation and Improvement District and the Mendocino County Farm Bureau will contact the SWRCB and/or fisheries agencies with the agreed WDMP changes or a corrective action plan.

WDMP participants can identify other frost water diverters non-participating in a WDMP or other WDMP participants failing to take corrective actions to the SWRCB. The SWRCB is responsible for enforcement of the Russian River frost water regulation.

Annual Reporting

Each individual WDMP member shall submit an annual report as described in 23 CCR 862 (c) (5) and in the State Water Resources Control Board Resolution No. 2011-0047.

Signature: _____ Date: _____

Name of WDMP Participant (contact name and/or business name)

_____

Attachment A

Initial Inventory for the Water Demand Management Program for the Mendocino County Russian River Main Stem Diverters

CONTACT NAME	BUSINESS/RANCH NAME	SOURCE OF FROST WATER	ACRES FROST PROTECTED WITH WATER
Brandon Axell	Beckstoffer Vineyards, Beck III Ranch	Riparian Right and License 10383	60
Brandon Axell	Beckstoffer Vineyards, Mendo. 101 Ranch	Permit 17206B and License 11173	124
Brandon Axell	Beckstoffer Vineyards, Russian River Ranch	License 10275, 6191B and 13318	106
Brandon Axell	Beckstoffer Vineyards, Vinefera Vineyard	License 13287, 13288 and groundwater	456
Brandon Axell	Beckstoffer Vineyards, Hopland Ranch	License 11060B, Riparian Right and RRFC Contract	321
Chuck Vau	Cox Vineyards	RRFC Contract	47
Daniel Fetzer	Jeriko Vineyards	License 13195 and Pemit 17927B	120
David Koball	K2 Farming LLC, Tres Patas Ranch	RRFC Contract	15
David Koball	Fetzer/Bonterra Vineyards: Hopland Ranches	License 9823,Permit 21346, Riparian Right S015313, S015314,S015315,S015316, S015317 and S015318, RRFC Contract	225.2
David Koball	Fetzer/Bonterra Vineyards: Ledford & Chalfont Ranches	Russian River Underflow, Riparian Right S021309_01 and RRFC Contract	125
Devin Gordon	Whispering Oak Vineyards, El Roble Ranch	RRFC Contract	26.49
Devin Gordon	Whispering Oak Vineyards, Zaina Ranch	RRFC Contract	22.18
Fred Nickel	Jaxon Keys/Jepson Vineyards	License 1356, Permit 1710 and RRFC Contract	26
Glen McGourty	McGourty Vineyards	Water Right License 9382	8
Greg Nelson	Nelson & Sons Inc.	RRFC Contract, Permit 17331, Applications: 29763,29764 and 29765	192.5
Inger and John Mattern	Mattern Vineyards	RRFC Contract	24
James Nelson	James Vineyards LLC	RRFC Contract	23.85
Janet Pauli	Bay Tree Vineyards	RRFC Contract	86.81
Janet Pauli	Orr's Creek Vineyard	S01520 and S015210 and RRFC Contract	146
Janet Pauli	Tradition L.P.	RRFC Contract	161.87
Jason McConnell	Schrader Ranch	License 9460 and 5920 Permit 13407 and 8101	174
John Thomas	Hopper-Watson Ranch	License 008820 and 006191A ,Riparian S015208 and S015206, RRFC Contract	18
Julie Golden	Fairbairn Ranch	RRFC Contract	21.5
Kurt Ashurst	Shadowbrook Farms	Riparian Right, License 11666, RRFC Contract	45
Kurt Ashurst	Shadowbrook Farms	Pre 1949 right, Riparian Right and RRFC Contract Water	42
Kurt Ashurst	Shadowbrook Farms	Pre 1949 right, Riparian Right and RRFC Contract	17
Kurt Ashurst	Shadowbrook Farms	Riparian Right and RRFC Contract	54
Kurt Ashurst	Shadowbrook Farms	License 5895, Riparian Right and RRFC Contract	40
Kurt Ashurst	Shadowbrook Farms	East Sanel Irrigation District Water, Permit 17399A and 17399B, RRFC Contract	27
Kurt Ashurst	Lakeview Vineyards	East Sanel Irrigation District Water, License 11727, RRFC Contract	90
Len Brutocao	Brutocao Vineyards, Bliss Ranch	RRFC Contract; East Sanel Irrigation Co. licensed water: A25596	164

Max Landes	McNab Creek Vineyard	License 4777B, RRFC Contract	24.8
Max Schlienger	River Bend Vineyards	License 4777A, Application 031465, Statement S019291	100
Michael Hildreth	Hildreth Farms Inc	Riparian S008596 and S016369, groundwater, License 10399, RRFC Contract	16.5
Michael Hildreth	Hildreth Farms Inc	Riparian S016366 and S016370, groundwater, License 11033 and 10383, RRFC Contract	60
Michael Milovina	Milovina Brothers, Home Ranch	License 11060A and RRFC Contract	40
Michael Milovina	Milovina Brothers, Largo Ranch	License 13388 and RRFC Contract	20
Michael Milovina	Milovina Brothers, Parducci Ranch	License 013168 and 012367 and RRFC Contract	116
Michael Milovina	Milovina Brothers, Robinson Creek Ranch	RRFC Contract	50
Peter Chevalier	Hop Kiln Vineyards	License 5118, Permit 9386 and RRFC Contract	47
Peter Chevalier	Saracina Vineyards	S024445 and S024464, RRFC Contract	105.6
Peter Chevalier	Orsi Vineyards	S024445 and S024464, RRFC Contract	88.8
Peter Chevalier	Larramendy Vineyard	RRFC Contract	20
Peter Chevalier	Ghianda Rose Vineyard	RRFC Contract, Application: 31091, 31105	40
Peter Chevalier	Madonna Vineyards	License 6448, RRFC Contract	48
Peter Johnson	Johnson Family Vineyards Inc	Pemit 21052,21053 and 21054, statement S021384 and S021385 and RRFC Contract	32.5
Richard and Bobbye LaMalfa		Riparian Right, License 9559 and RRFC Contract	49
Richard Henwood	Hansen Ranch/Hopland Hills Vineyard	Riparian right, Permit 17388/ Application 24141,RRFC Contract	30
Terry Rosetti	Rosetti Brothers	Riparian Statement 15403, ground water	8
Terry Rosetti	Rosetti Vineyards/Hiatt Ranch	RRFC Contract Water	15
Terry Rosetti	Rosetti Brothers	RRFC Contract Water	14
Terry Rosetti	Rosetti Brothers	Riparian Statements 15041,15042,15047. License 3855, RRFC Contract	44
Tim Thornhill/Al White	Thornhill Vineyard Properties LLC, La Ribera Vineyards	Riparian Right, License 13408 and RRFC Contract	145
Tyler Rodrigue	Haiku Vineyards	Riparian S015677 and S016329. License 9432A and 9432B. Application A017911A and A017911B, RRFC Contract	165
	RRFC: Russian River Flood Control and Water Conservation Improvement District		

Attachment B

November 6, 2014 Implementation Schedule from the SWRCB Correspondence Titled, *"Regarding Water Rights: Notification of Implementation of the Russian River Frost Protection Regulation."*

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

NOV 0 6 2014

Dear Sir or Madam:

REGARDING WATER RIGHTS: NOTIFICATION OF IMPLEMENTATION OF THE RUSSIAN RIVER FROST PROTECTION REGULATION

On September 20, 2011, the State Water Resources Control Board (State Water Board) adopted a frost protection regulation for the Russian River watershed (California Code of Regulations, title 23, section 862) that was subsequently challenged in court, and a stay of the regulation was issued. With the October 1, 2014 denial by the California Supreme Court for review of the lower court's decision, the regulations are no longer stayed from implementation. State Water Board staff has begun meeting with individual growers and organizations on the steps necessary to prepare for the 2015 frost season. The letter provides a summary of the regulations and next steps.

Overview of the Regulation's Requirements

The frost protection regulation provides that, with the exception of diversions upstream of Warm Springs Dam in Sonoma County or Coyote Dam in Mendocino County, any diversion of water from the Russian River stream system, including the pumping of hydraulically connected groundwater for purposes of frost protection from March 15 through May 15, must be diverted in accordance with a State Water Board approved Water Demand Management Program (WDMP). The purpose of a WDMP is to both assess the extent to which diversions associated with frost protection can affect stream stage as well as to manage the combined effect of those diversions to prevent salmonid stranding and mortality.

A WDMP should be administered by an individual or governing body capable of ensuring that the goals of the program will be met. In addition, the WDMP is required to include the following: (1) an inventory of the frost diversion systems within the area subject to the program; (2) a stream stage monitoring program; (3) an assessment of the potential risk of stranding mortality due to frost diversions; (4) development and implementation of a corrective action plan if necessary to prevent stranding mortality; and (5) annual reporting of program data, activities, and results. Please see the entire regulation at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/hearings/russian_river_frost/docs/approved_reg.pdf.

Implementation Schedule

The State Water Board will be implementing the regulation immediately for the upcoming 2015 frost diversion season with a phased approach consistent with the approach originally outlined in State Water Board Resolution No. 2011-0047. As a result of the delay caused by the now

Comparison of Original and Updated Implementation Schedules

Milestone	Original Schedule	Updated Schedule	Required Items
Regulatory Requirement	December 29, 2011	October 1, 2014	Original: Office of Administrative Law approval of Frost Protection Regulation
			Revised: CA Supreme Court denies petition to review Court of Appeal decision in *Light v State Water Board*
Initial Water Demand Management Program	February 1, 2012	February 1, 2015	Identity of governing body; participating diverters, including source and acreage frost protected; schedule for completing frost inventory, monitoring program, and risk assessment
Three-month update	3 Months after approval of WDMP	3 Months after approval of WDMP	Complete inventory, not including diversion data
First annual report	September 1, 2012	September 1, 2015	Updates to inventory; stream stage monitoring data, progress towards development of protective stream stages
Second annual report	September 1, 2013	September 1, 2016	Updates to inventory and stream stage monitoring data; installation of medium priority stream gages; completed risk assessment; preliminary corrective actions
Third annual report	September 1, 2014	September 1, 2017	Updates to inventory and stream stage monitoring data; completed stream gage installations and protective stream stage determinations; risk assessment revision; corrective action plan if indicated by risk assessment

Attachment C

List of Correspondence with Agencies on the Initial Water Demand Management Program for the Mendocino County Russian River Main Stem Diverters

November 17, 2014
An initial conversation regarding the proposal related to the development of this WDMP for Russian River main stem frost water diverters was discussed at a meeting with State Water Resources Control Board staff in Sacramento.

December 16, 2014

A conference call was held with representatives from the State Water Resources Control Board, National Marine Fisheries Service, the California Department of Fish and Wildlife, the Sonoma County Water Agency, the Russian River Flood Control and Water Conservation Improvement District and the Mendocino County Farm Bureau to discuss the WDMP proposal. Action items proposed: 1) to further develop a WDMP project description to address the questions/comments from the call 2) to schedule a follow up conference call with the State Water Resources Control Board, National Marine Fisheries Service and the California Department of Fish and Wildlife to further discuss the draft WDMP.

January 15, 2015
A conference call was held with representatives from the State Water Resources Control Board, the California Department of Fish and Wildlife, the Russian River Flood Control and Water Conservation Improvement District and the Mendocino County Farm Bureau to discuss further refinement of the WDMP proposal.

January 16, 2015
A draft WDMP was submitted to the State Water Resources Control Board, National Marine Fisheries Service and the California Department of Fish and Wildlife for review. Comments on the draft WDMP were received from the State Water Resources Control Board and the California Department of Fish and Wildlife on January 22nd. No comments were received from the National Marine Fisheries Service.

Attachment D

Schedule of WDMP Implementation

2015

February 1: Initial WDMP Inventory Submitted

February 1: Request sent to SWRCB and fisheries agencies to schedule a meeting during February 2015 to further discuss the ability to use the Biological Opinion on the Russian River for the stream stage monitoring program and risk assessment sections of the WDMP.

February/ March: Finalize on line reporting tool format and provide information to WDMP participants

Date to be determined by SWRCB: Submittal of three month update and completed inventory

September 1: Submittal of first annual report

Consult with fisheries agencies as needed

Review WDMP as needed

2016

Consult with fisheries agencies as needed

Review WDMP as needed

Address corrective actions as needed

September 1: Submit annual report

2017

Consult with fisheries agencies as needed

Review WDMP as needed

Address corrective actions as needed

September 1: Submit annual report

Attachment E

Table of Off Stream Ponds Built Since 2009 and Direct Diversion Reduction (CFS)

Project Type	Year	Acres *	Pond Size (AF)	Cost	Demand Reduction (CFS)
pond	2009	34	17.6	$47,000	3.8
pond	2009	40	17	$20,000	4.4
pond	2009	150	67	$650,000	18
pond	2009	80	33	$529,000	10.8
pond	2009	43	19.7	$334,000	5.4
pond	2009	100	50	$400,000	13.4
pond	2009	45	8	$80,000	5.5
pond	2010	60	11	$100,000	7.3
pond	2010	75	30	$170,000	2.95
pond	2011	73	13.5	$173,000	8.9
pond	2011	115	26	$500,000	14.1
pond	2011	115	49	$500,000	17.8
pond	2013	56	11	$100,000	6.5
pond	2013	155	46	$480,000	19
pond	2013	33	9	$115,000	2.4
pond	2014	15	11	$175,000	1.67
TOTAL		**1200**	**418.8**	**$4,408,000**	**143.12**

*Acres now protected using off stream storage