

3845 Highway 128 Geyserville, CA 95441

January 30, 2012

Mr. John O'Hagan California State Water Resource Control Board Russian River Frost Regulation 1001 I St. Sacramento, California 95812

Re: Frost Protection Resolution No. 2011-0047 - Russian River Property Owners Association WDMP

Dear Mr. O'Hagan:

Pursuant to the Russian River Frost Regulation, please find attached an initial Water Demand Management Program proposed for implementation by the Russian River Property Owners Association (Association). The Association also serves as the Governing Body.

As referenced in the Resolution certified on September 20, 2011, the Association's Water Demand Program is comprised of the following documents.

- A. Frost Protection Inventory, which includes:
- Assessor parcel number(s) and names of participating diverters; i)
- The source of water used by each diverter for frost protection purposes; and ii)
- iii) The number of acres protected by water for frost protection purposes.
- B. A map of the Alexander Valley region with a brief site description.
- C. Alexander Valley Water Demand Management Program detailing the Governing Body, locations for stream stage monitoring and a schedule for conducting a risk assessment and corrective actions (assuming an impact on stream stage is identified).

We have submitted the Water Demand Management Program to National Marine Fisheries Services and the California Department of Fish and Game to initiate consultation on program compliance.

Mr. O'Hagan, we look forward to any comments and developing program that addresses the concerns of the resource agencies, the State Water Board and the viticulture community in Alexander Valley.

Respectfully,

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Alvin Cadd

President, Russian River Property Owners Association

/cw

Russian River Property Owners Association
Water Demand Management Plan
Frost Protection Inventory - February 1, 2012

Acres

by Other Means **Acres Protected** Protected by 17.4 64.8 15.2 13.1 20 18 25 23 7 23 4 33 24 33 47 12 14 23 9 Water 1,400 gpm 1,200 gpm 1,200 gpm 1,200 gpm 2,450 gpm 2,000 gpm 1,200 gpm 2,200 gpm 1,650 gpm 4,000 gpm 1,250 gpm 280 gpm 1200 gpm 5,500 gpm 700 gpm 700 gpm 300 gpm 935 gpm 600 gpm 950 gpm Capacity (GPM) 140-050-002,140-050-005,140-050-007,140-050-010/Vimark Vineyards (2 of 3 140-050-002,140-050-005,140-050-007,140-050-010/Vimark Vineyards (1 of 3 131-170-021, 131-180-002,031-180-008/ Alexander-Clark Ranches (2 of 3 131-170-021, 131-180-002,031-180-008/ Alexander-Clark Ranches (3 of 3 131-170-021, 131-180-002,031-180-008/ Alexander-Clark Ranches (1 of 3 116-250-004,116-250-005,116-270-001/Vimark Vineyards (1 of 5 pumps) 116-250-004,116-250-005,116-270-001/Vimark Vineyards (2 of 5 pumps) 116-250-004,116-250-005,116-270-001/Vimark Vineyards (4 of 5 pumps) 116-250-004,116-250-005,116-270-001/Vimark Vineyards (3 of 5 pumps) 116-250-004,116-250-005,116-270-001/Vimark Vineyards (5 of 5 pumps) 131-210-030,131-210-031/Alexander Mountain Vineyards 131-180-003/Wasson Family Partners, LP (1 of 2 pumps) 131-050-010/Wasson Family Partners, LP (1 of 2 pumps) 131-180-003/Wasson Family Partners, LP (2 of 2 pumps) 131-050-010/Wasson Family Partners, LP (2 of 2 pumps) 140-210-019, 140-210-142,/ Ascentia Wine Estates 140-210-007, 14-210-023/Ascentia Wine Estates 140-260-013/Wasson Family Partners, LP 141-190-008/Munselle Vineyards, LLC Asessor Parcel Number /Ownership 140-200-003/Frank Pastori (sdwnd (sdwnd (sdwnd (sdwnd (sdwnd Reservoir Direct Diverted System Description Well/ground water from Russian River

	140-050-002,140-050-005,140-050-007,140-050-010/Vimark Vineyards (3 of 3		,	
Well/ground water	pumps)	2,000 gpm	20	
Well/ground water	140-240-012/Mary Louise Hocking	900 gpm	37.5	
Well/ground water	131-090-004/Rancho Miguel (1 of 2 pumps)	3,000 gpm	47	
Well/ground water	131-090-004/Rancho Miguel (2 of 2 pumps)	2,300 gpm	37	
Direct Diversion from				
Russian River	131-210-270,131-210-290,131-210-040/Larsen Vineyards	1,210 gpm	21.9	
Well/ground water		2,200 gpm	40	
Well/ground water/stream	132-020-011,132-020-008,132-020-009,132-020-012,132-020-016/HOCV-AVV			
and reservoir		4,000 gpm	84.22	
Well/ground water	132-010-013,132-030-001,132-010-20,132-010-018/HOCV-AVV Joint Venture	3,000 gpm	113.44	
Stream filled Rervoir	141-180-025/Farrow Ranch	2,500 gpm	51	
Well/ground water	140-250-010/Sandy DeLorimier	3,000 gpm	40	
Well/ground water and				
reservoir	131-070-026/Sandy DeLorimier	100 gpm	10	
Well/ground water	131-170-123/Karen Passalaqua	600 gpm	12	
Well/ground water	131-070-022/Nels Property	1,200 gpm	24	
Well/ground water	131-060-029/Murphy Vineyards	2,500 gpm	40	
Well/ground water	140-260-005/Murphy Vineyards	1,000 gpm	20	
Well/ground water	140-260-012,140-250-011/Murphy Vineyards	2,000 gpm	75	
Well/ground water	131-190-009/John Saini	50 gpm	1	
Well/ground water and				
reservoir	131-200-012/Saini Dry Creek Properties, LLC (1 of 3 pumps)	70 gpm		
Well/ground water and				
reservoir	131-200-012/Saini Dry Creek Properties, LLC (2 of 3 pumps)	300 gpm		
Well/ground water and				
reservoir	131-200-012/Saini Dry Creek Properties, LLC (3 of 3 pumps)	1,300 gpm	25	
Well/ground water	131-060-024/Larry Cadd	1,275 gpm	25.5	
Well/ground water	131-060-024/Larry Cadd	625 gpm	12.5	
Well/ground water and				
reservoir	132-010-002/Belle Terre Ranch, Inc.	2,000 gpm	120	
Well/ground water	086-110-023/Louis Foppiano Ranches (1 of 2 pumps)	700 gpm		
	086-110-023/Louis Foppiano Ranches (2 of 2 pumps)	1,600 gpm	43	
Well/ground water	131-150-034/Hafner Vineyard (1 of 2 pumps)	175 gpm	7.5	
	131-150-034/Hafner Vineyard (2 of 2 pumps)	150 gpm	9	

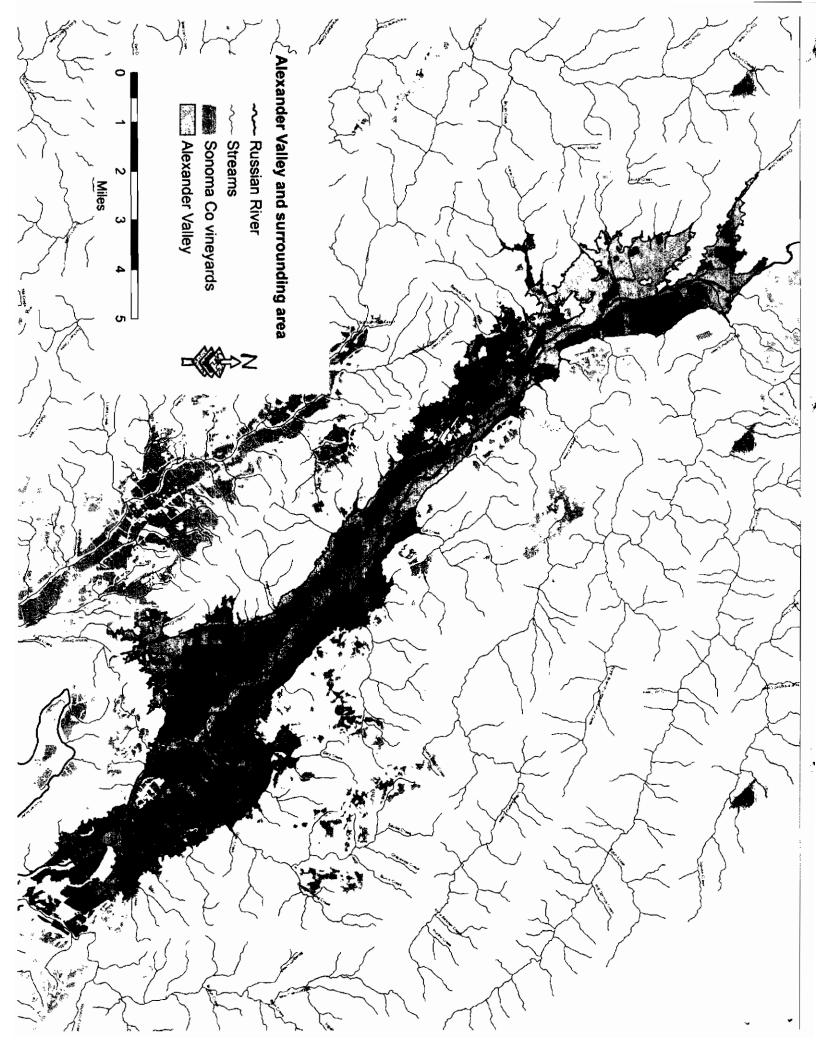
Well/ground water	131-210-002/Mauritson Farms, Inc. (1 of 2 pumps)	2,500 gpm	50	
	131-210-002/Mauritson Farms, Inc. (2 of 2 pumps)	4,500 gpm	09	
Well/ground water	131-090-027/Wes Caldwell	825 gpm	15	
Well/ground water	132-110-044/John McInerey	440 gpm	8	
Well/ground water and 20				
acre ft. reservoir (3 wells,	131-090-003,131-190-005,131-190-015,131-200-003,131-200-014,131-200-			
*gpm at later date)	021, 131-200-023/Jackson Family Investments		126.44	47.17
Well/ground water and 10				
ac. ft. reservoir(1 well *)	131-110-009,131-160-001,131-160-033/Jackson Family Investments III		55	9.2
Well/ground water	091-010-014/Jackson Family Investments III		59	53.69
Well/ground water and 10				
ac. ft. reservoir(1 well *)	131-080-011,131-090-021,131-110-007/Jackson Family Investments III		24.53	48.52
well/ground water (2	140-010-006,140-010-019,140-020-016/Jackson Family Wines		43	72.1
Total Acres Enrolled in				
<b>RRPOA Water Demand</b>				
Management Program	2,109.71 Acres		1,879.03	230.68

### Russian River Property Owners Association Water Demand Management Program February 1, 2012 Site Description (Alexander Valley)

Alexander Valley is a grape-growing region in the northern portion of Sonoma County, CA, in the center of the Russian River watershed.

The Russian River flows from northwest to southeast through Alexander Valley, entering the valley north of Cloverdale and leaving to the south downstream of Healdsburg. Alexander Valley contains approximately 10,000 acres of vineyards, and has five tributaries flowing through the valley into the Russian River that have been identified as critical habitat for steelhead trout by the National Marine Fisheries Service.

(See Attached Map)



## Russian River Frost Protection Alexander Valley Water Demand Management Plan

Data Collected Mar 15 to May15 Submitted by: Russian River Property Owners Association 3845 Hwy 128 Geyserville Ca. 95441

Governing Body: Russian River Property Owners Association 3845 Hwy 128 Geyserville Ca. 95441 Attention: Al Cadd (707) 477 2186

This Water Demand Management Plan for the Alexander Valley portion of the Russian River watershed recognizes that the State Water Board's (Board's) adopted regulation specifically provides for continuation of the use of water for frost protection purposes in the Russian River watershed by growers participating in a Board-approved WDMP.

The Russian River Property Owners Association (RRPOA) WDMP Program includes 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) an annual reporting of program data, activities, and results.

#### 1. Inventory

Each grower in the Sonoma County portion of the Russian River watershed using water to protect their crops from frost damage is required to register with the Agricultural Commissioner. This requirement is met by submitting mapped information on the nature of each frost diversion system, including a description of each water source. Each point of diversion must be mapped (streams and wells) as part of a Water Demand Management Plan. These data will be provided by growers in the form of registration forms describing the capacity of the diversion or well and the location; additional data for wells will include distance from nearest stream, well depth, and seal depth.

Registration will include formal recognition of participation in the WDMP, and payment in the Program's annual fees. Additionally, participants in the program will report at each time when water is used for frost protection the rate of diversion, hours of operation, and volume of water diverted during each frost event.

Registration for participation of the RRPOA WDMP will occur from January 15 until February 15, 2012.

#### 2. Stream Stage Monitoring

In order to determine the effects (if any) of pumping water for frost protection in the main stem of the Russian River and certain tributaries in the Alexander Valley reach, we propose to install three gauges in the mainstem Russian River and nine additional gauges in three tributaries identified as critical steelhead habitat, according to the following schedule:

Mar.1 to Mar 15

Install pressure transducers in the following locations:

River @ Asti Elevation: 255.78 Location: N 38 45 57 W 122 58 24

River @ Gill Cr: Elevation: 213.73 Location: N 38 43 34 W 122 54 47

River @ Gird Cr: Elevation: 178.04 Location: N 38 40 39 W 122 50 48

Lower Gill Cr: Elevation 221.32 Location: N 38 43 45 W 122 55 05

Middle Gill cr. Elevation: 226.06 Location: N 38 43 54 W 122 54 58

Upper Gill Cr. Elevation: 241.28 Location: N 38 44 06 W 122 54 57

Lower Gird Cr: Elevation: 181.17 Location N3840 48 W 122 50 52

Middle Gird Cr. Elevation: 186.82 Location: N 38 40 59 W 122 50 48

Upper Gird: Elevation: 238.30 Location: N 38 41 34 W 122 50 01

Lower Sausal: Elevation: 165.96 Location: N 28 39 12 W 122 48 30

Middle Sausal: Elevation: 193.68 Location: N 38 39 57 W 122 48 33

Upper Sausal: Elevation: 226.42 Location: N 38 40 50 W 122 48 13

Well adjacent to Sausal Cr. Elevation 179.63 Location: N38 39 32 W 122 38 44

This monitoring program is a continuation of the monitoring program begun by RRPOA in 2009 and continued in 2010 and 2011. Spring 2012 will be the fourth year of a frost protection monitoring program conducted by RRPOA.

The instruments used are Global Water pressure transducers model #wl16u-3-60 recording stream stage at 15 minute intervals. Also, Global water model#wl16u-

015-30 recording water table stage at 30 minute intervals. For additional data we plan to measure streamflow in the tributaries from time to time using a Global Water Flow Probe model FP111.

All monitoring activities will be under direction of Matthew Deitch, PhD, of the Center for Ecosystem Management and Restoration. Data will be collected on a two week basis to provide quality control.

Any data showing significant reduction of stream stage (other than natural seasonal recession) will be reported to the suspected diverter and a risk assessment will be required and a corrective action plan developed.

The filling of reservoirs from wells in the Russian River watershed for frost protection From Mar. 15 to May15 will be included in this WDMP.

Fill and spill reservoirs shall install an approved method of bypass to prevent downstream dewatering during a frost event, resulting in fish mortality. However, when inflow ceases and the spillway turns dry, the owner should not be required to provide stored water to maintain aquatic life downstream. Under normal conditions, fish that migrate up empirical streams never survive.

(Since these are wild threatened fish that made a mistake Cal Fish and Game might consider a rescue program.)

All frost protection pumping activities shall be reported to the governing body no later than June 15<sup>th</sup>.

All data regarding frost protection water use and stream stage records will be reported to the State Water Board annually by September 1

This is Phase 1 of RRPOA WDMP. Risk Assessment and Corrective Action plans will be addressed as needed in Phase 2.

#### 3. Risk Assessment.

Risk will be evaluated based on correlation between sudden changes in water level and water use for frost protection. Data collected over the past three years by RRPOA have indicated that streams frequently stop flowing independent of water use for frost protection, and that the few instances of water use for frost protection have not occurred with changes in water levels. However, the low sample number of frost protection events in the region makes this evaluation and monitoring program important.

The Board's regulation provides that both NMFS and CDFG must be consulted for determination of stream stages that are needed to prevent salmonid mortality and for the risk assessment process. In the event that the RRPOA data indicate that water levels in tributaries change irregularly at times when growers are using water for frost protection,

then RRPOA will work with NMFS and CDFG to develop a more comprehensive evaluation of impacts to fish habitat. In addition, a notice letter will be provided by RRPOA to the specific grower(s) believed to be responsible for the change in stage, along with options to help mitigate that risk.

#### 4. Corrective actions.

The Board's regulation will likely not require all growers to implement changes to their existing operation. However, corrective actions will be necessary if grower operations are believed to adversely affect fish habitat when water is used for frost protection. The regulation allows adaptive management as an avenue for taking corrective actions to solve any identified problems, and RRPOA will work with growers individually to develop adaptive management plans as needed.

# RUSSIAN RIVER PROPERTY OWNERS ASSOCIATION 3845 HWY, 128 GEYSERVILLE CA, 95441

MAR. 6 2012

#### ADDENDUM TO SUBMITTED WATER DEMAND MANAGEMENT PLAN

#### RISK ASSESMENT FOR TRIBUTARIES TO THE RUSSIAN RIVER

Collected data shows that the tributaries in Alexander Valley are perched above the water table and are not supported by the water table. Therefore, if pumping for frost protection lowers the water table, the creeks will not be affected.

Collected data determines that flow starts to diminish as soon as the creek enters the valley floor and reaches the main stem only sporadically.

A recent survey showed the bed of a creek to be 11.8 feet above the water table.

Official data will be included in the Sept. 2012 report.

At this time we determine that there is no risk.

We will continue to monitor until this theory is either proven or disproven.

This theory applies only to the valley floor, Upper reaches may be totally different.

#### MILESTONE DATES

Mar 1 2012 Start installing data loggers

Mar 9 2012 Consultation with Cal Fish & Game and NOAA Fisheries.

Mar.10 2012 Complete gage installation

Mar 30 2012 Collect data from loggers

Apr. 15 2012 Clean sensors and collect data

May1 2012 Collect data

May 15 2012 Final data collection for 2012

July 1 2012 All water used for frost protection to be reported to the Governing Body.

Sept. 1 2012 File annual report to agencies.

Mar 1 2013 Start monitoring process again

Mar 1 2014 Repeat process again

May.15 2014 Final collection of data

Sept 1 2014 File final report. STUDY COMPLETED ??