

File: wc/42-4.1&6.1-9 SWRCB Order Approving Temporary Urgency Change in Permits 12947A, 12949, 12950 & 16596 (WR Order 2007-0022)

August 24, 2007

Ms. Victoria Whitney, Chief State Water Resources Control Board Division of Water Rights PO Box 2000 Sacramento, CA 95812

RE: First Report regarding Implementation of Water Rights Order 2007-022

Dear Ms. Whitney:

When the Sonoma County Water Agency (Agency) filed its Plan to meet the requirements of Term 14 of SWRCB Order WR 2007-0022 on July 13, we advised the SWRCB that we would be providing periodic reports on several Plan items. Our first report is enclosed.

The residents of the Russian River watershed have responded to the SWRCB's and Agency's calls to reduce Russian River diversions. As of August 15, storage in Lake Mendocino was about 53,800 acre feet. This is 20,400 acre feet (or 61%) more than the storage that we estimated would be in Lake Mendocino on this date had the SWRCB not approved our Temporary Urgency Change Petition and no action been taken to conserve water in Lake Mendocino. We have two more months of effort, and many warm days ahead, but we are cautiously optimistic that we will have enough water in storage in Lake Mendocino this fall to meet the needs of the Chinook salmon migration.

While we are pleased at the recent regional efforts, more must be done. As we discussed in our last letter, the Agency's ability to maintain Lake Mendocino storage and manage streamflow for the benefit of all water users would be greatly improved if diversions from the Russian River by other water users were scheduled or coordinated. The Agency has no authority to require this. Not only is there no scheduling and coordination of diversions, but the Agency does not know, with certainty, who is taking water, how much they are taking, or when they are operating their pumps. There will be practical, political, and physical problems in implementing any scheduling or coordination effort, but we believe that the regional benefits of such an effort would be significant, and that the discussion therefore must be started. We've estimated that if diversions that affect mainstem Russian River streamflow were coordinated, the Agency might be able to conserve as much as an additional 10,000 acre feet in the water supply pool in Lake Mendocino each summer.

We cannot move forward with diversion scheduling and coordination efforts without an up-to-date database identifying diversions and would appreciate your help in creating such a database. We have

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provided your staff with two maps that identify, to the extent we have data, existing diversions throughout the Russian River watershed and their authorized places of use. The maps are included on the enclosed CD. If your staff could review these maps and provide us with whatever updates and corrections may be available, it would be helpful.

We have also begun an effort to coordinate diversions on Dry Creek, a principal Russian River tributary. A copy of our agreement with landowner representatives is included on the enclosed CD. Although the Superior Court concluded that further California Environmental Quality Act analysis was needed for this Agreement, it is an example of the sort of coordination that may be possible, and we will continue to work with Dry Creek landowners on issues of mutual concern.

We have also included on the enclosed CD, for your review and comment, material regarding two upcoming Agency studies that we are recommending for funding to our Board of Directors this year. In the Russian River Water Rights Accounting Study, the Agency's consultants (Davids Engineering, Inc. and CH2M HILL) will be working to develop data and analysis tools to calculate water use throughout the basin and to determine water availability for various types of water in the basin. A March 2007 workplan report for this project is enclosed. Through a contract with the University of California, Berkeley, the Agency proposes to work with Dr. Adina Merenlender and her research team to better estimate tributary inflows to the Russian River, to complete our understanding of the water balance and to better understand habitat values and opportunities in the tributaries.

Finally, the Agency is also participating in a continuing collaborative effort among regulatory agencies, including National Marine Fisheries Service and the Department of Fish and Game, landowners, and environmental organizations who are working together to develop a conservation plan for the Dry Creek Valley, Alexander Valley and Knights Valley to assist all three listed salmonid species, coho salmon, Chinook salmon and steelhead. These efforts may facilitate habitat restoration and recovery efforts for these species, as well as promote collaboration on watershed issues among private landowners, potentially including coordination of water use.

We hope that you will support all of these efforts, and we would welcome your comments and participation. Please let us know if you have any questions or need additional information about any of the materials we have included on the enclosed CD.

Sincerely,

Numpon fu RDP Randy D. Poole

General Manager/Chief Engineer

Hard copy enclosure: Report of Term 14 Compliance

Ms. Victoria Whitney, Chief State Water Resources Control Board August 24, 2007 Page 3 of 3

List of Enclosures on CD: Report Appendices; Dry Creek Agreement; March, 2007 Russian River Water Rights Accounting Study workplan from Davids Engineering, Inc. and CH2M HILL; University of California Merelender upland stream flow scope of work; maps

c: Steve Herrera; Eric Oppenheimer; Luanne Ericson - State Water Resources Control Board Toni Bertolero, City of Cotati; Mike Ban, City of Petaluma; Darrin Jenkins, City of Rohnert Park, Miles Ferris, City of Santa Rosa; Al Bandur, City of Sonoma; Chris DeGabriele, North Marin Water; Richard Burtt, Town of Windsor; Krishna Kumar, Valley of the Moon; Tony Lindstrom, Cal-American Water; George Roberts, Forestville Water; Jim Geib, Lawndale Water; Paul Helliker, Marin Municipal; Jim Downey, Penngrove/Kenwood Water Enclosures and report, complete with appendices, are available on the Agency's website at www.sonomacountywater.org.

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August 2007 Report Regarding Requirements of Term 14 -State Water Resources Control Board Order WR 2007-0022



Prepared by

Sonoma County Water Agency 404 Aviation Blvd Santa Rosa, CA 95403



August 24, 2007

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1.0 Introduction and Purpose

On July 13, 2007, the Sonoma County Water Agency (Agency) filed its <u>Plan to</u> <u>Meet Requirements of Term 14-State Water Resources Control Board Order WR</u> <u>2007-0022</u> (Term 14 Plan) with the State Water Resources Control Board (SWRCB). By letter dated August 10, 2007, the Term 14 Plan was approved by SWRCB. The Agency's Term 14 Plan described the steps the Agency was taking to comply with Term 14 and committed the Agency to providing the SWRCB with monthly reports on several Term 14 Plan items. This is the first monthly report. The next report will be filed in late September.

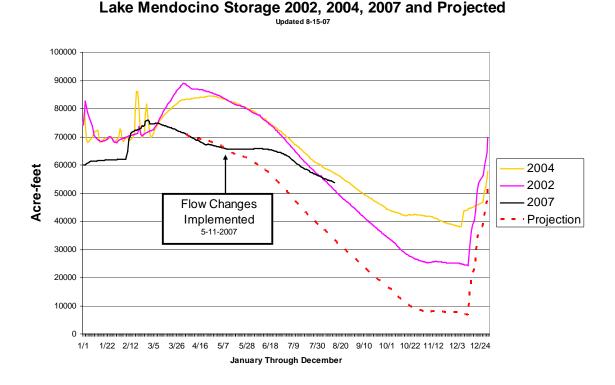
Order WR 2007-0022 was issued in response to the Agency's Petition for Temporary Urgency Change to preserve storage in Lake Mendocino. Order WR 2007-0022 reduced the Agency's Russian River minimum flow requirements. Without the Order, the Agency would have had to release significant amounts of additional water from Lake Mendocino to meet minimum flow requirements and less water would have been available to support the fall Chinook salmon migration.

The Term 14 Plan identified a number of Milestones to be achieved. To date, Milestones 3.2.1, 3.2.2, 3.3.1, and 3.3.2 have been completed and work under other Milestones is underway. Sections 3.0, 4.0, 5.0, and 6.0 of this Report summarize and provide updates of these efforts. This report also updates projections for end-of-summer storage levels and summarizes information about the amount of water preserved to date.

2.0 Lake Mendocino Storage and Total Diversion Reductions

On August 15, 2007, Lake Mendocino storage was 53,800 acre-feet. The Agency estimates that, if the SWRCB had not adopted Order WR 2007-0022 and if the Agency instead had had to operate to the D-1610 requirements, then August 15, 2007, Lake Mendocino storage would have been 33,400 acre-feet. Thus, the Agency's implementation of Order WR 2007-0022, together with the regional water conservation efforts of affected municipalities and agricultural users, has conserved approximately 20,000 acre feet of water in Lake Mendocino storage. Figure 1 shows actual and previously predicted 2007 Lake Mendocino storage amounts through October 2007.





Term 14 required a 15% reduction in Agency diversions at Wohler Mirabel over 2004 totals. As of August 15, Agency diversions have been reduced by 19.1% over 2004 levels. Table 1 (at the end of this report) shows a comparison of diversions after July 1 for 2004 and 2007.

3.0 Agency Retail Customers

Since adoption of Order WR 2007-0022, the Agency has increased its efforts to assist its retail customers with their water conservation and water waste reduction programs. The Agency has also compiled copies of water waste reduction ordinances and resolutions and information about customer enforcement efforts provided by the retail customers. Copies of these resolutions and ordinances are located in Appendix A.

The Agency's retail customers' water waste reduction ordinances and resolutions direct potable-water customers to use water efficiently and to eliminate water waste and cease non-essential water use. Water waste prohibitions include prohibiting: washing hard-surfaces by direct hosing, allowing water to escape through breaks or leaks, irrigating in a manner that allows excessive run-off or unreasonable overspraying, using water for non-recycling decorative water

fountains, and using water for single pass evaporative cooling systems for air conditioning.

The Agency and its retail customers continue to implement an extensive community outreach program thorough bill inserts, media releases, messages on billboards and buses, radio stations, television and movie advertising, websites and community outreach events and meetings, which are discussed below. Agency staff has also assisted its retail customers by providing training materials to train their office, field, and extra help employees on water conservation and on water waste enforcement practices.

Agency retail customers report that, when they become aware of violations of their water waste and non-essential use prohibitions, they give verbal warnings or place notices on doors that summarize the water waste reduction rules, identify the water waste that has occurred, and request repairs be made quickly if necessary. Field and extra help employees are directed to return a portion of the notice to water conservation staff for tracking purposes. If door tags are left, staff next attempts to contact customers to encourage compliance. The Agency's largest retail customer schedules night and weekend water watch patrols.

According to the retail customers' water waste reduction ordinances, generally, if a violation continues or is repeated, the retailer may move from mailing a written notice to installing a flow restrictor or disconnecting water service. The charge for reconnection of water service would increase with each incident. To date, retail customers report that end user customers have corrected their violations, principally by fixing problems or changing irrigation practices.

The Agency's retail customers report that their July enforcement efforts included separate reports and responses at 400 different locations. These reports and responses included public or agency calls received reporting water waste, reports from nighttime water watch patrol, field visits by employees to verify water waste and hang notice tag, employees observing water waste during regular workday and hanging notice tags, and follow-up actions including additional field visits or correspondence. If the water waste violator is home during the field visit, we understand that the employee is directed to discuss the violation personally and to make suggestions on ways to stop the waste and cover general water conservation tips.

4.0 Other Municipal Water Users

The Agency is also working with other municipal Russian River water users (Other Municipal Users) that are not in the Agency's service area, seeking their cooperation in reducing their Russian River diversions.¹

4.1 Municipal Water User Response to Agency Request

In June, the Agency sent letters to the Other Municipal Users regarding the approved Temporary Urgency Change Petition and the Water Resources Control Board Water Conservation Requirements. A copy of the letter was included as Attachment D to the Agency's Term 14 Plan. In response to the June letter, more than fifty Other Municipal Users contacted the Agency with questions. Twenty-one of them (seven businesses and fourteen utilities and purveyors) submitted written water conservation and water waste reduction plans describing how they would reduce their water use by 15%. A list of the twenty-one Other Municipal Users and copies of their plans are located in Appendix B.

Seven businesses submitted plans with measures that identified physical and operational changes to their businesses, such as installing water efficient showerheads at a Russian River resort and using paper products for food service at a camp and conference center. Other plans proposed behavioral changes to reduce water use through water conservation education and training for staff and guests, reducing landscape watering, scraping barn floors and sweeping hard surfaces rather than washing them, not letting water run when doing dishes and reducing shower times for campers to two minutes. A veterinary hospital provided a proposed water conservation plan that includes installing a foot operated water valve for the surgeon's sink and replacing landscape plants with drought resistant varieties. Two businesses estimated their future, long term water savings to be 36,000 and 91,000 gallons per year.

Fourteen utilities and purveyors that serve water to end users also submitted plans. The plans include aggressive system leak detection and repair programs to reduce unaccounted for water losses and community outreach programs (water bill inserts, direct mail, radio spots, newspaper advertisements and website) to inform water customers about the SWRCB order and need to conserve. Voluntary water conservation measures identified in the plans include find and fix leaks, wash only full loads of dishes and laundry, turn off water

¹ For purposes of this Report, the Other Municipal Users are the approximately 300 public water systems identified in Attachment C to the Term 14 Plan. This list was developed by the Agency from the Department of Health Services data base and includes municipal water utilities and private water companies, and businesses that source their own water for their operations.

softeners, reduce in-home and landscape water use, sweep instead of washing down hard surfaces and distributing the Agency's Top 10 Tips. Mandatory measures to reduce irrigation by 20% include watering only at night, no irrigation water runoff, no washing hard-surfaces, no non-essential pool repairs and no filling of new pools.

A sample of the activities that the listed utilities report implementing during July 2007 includes distributing water conservation kits, installing 100 ultra-low flush toilets, and placing signs on brown lawns that read "Water Conservation In Effect, Grass may be cut longer or browning."

Some utilities adopted ordinances or resolutions or emergency rules calling for implementation of mandatory water conservation and water waste reduction. Some water purveyors report that they are now beginning to bill for water consumed using a tiered rate structure. One utility passed a resolution that adopted elements of the California Urban Water Conservation Council's Memorandum of Understanding as well as the Best Management Practices.

Water waste reduction programs and enforcement plans include notifying customers by telephone, notice tags, field visits, written notices, installing flow restrictors or terminating the water service. Utilities are working with customers that have high water consumption. Three utilities reported their historic 2004 water use and current water use information to the Agency. For those three utilities, in July 2007, the water savings ranged from 11.5 to 22.5% below the 2004 levels.

4.2 Water Conservation Technical Assistance for Other Municipal Users

The Agency is providing water conservation technical assistance to Other Municipal Users through meetings, phone calls, emails, and outreach events.

Mendocino County Water Agency (representing several local water agencies in the Ukiah area) and the City of Ukiah both requested assistance with training of staff and with selected public outreach efforts. Agency staff is developing training materials for staff members who are frequently in the field so they may perform simple water use audits and provide water conservation assistance, on a part-time basis, to homes and businesses. The training is scheduled for August 21 and August 29, 2007.

The Agency is providing Ukiah area agencies with templates for public outreach pieces and has offered to customize the pieces with their respective logo(s). More than 200 "Water on Request" display cards for restaurants were also provided to the Municipal Water Users at their requests.

4.3 Water Waste Reduction Analysis and Recommendations for Other Municipal Users

The Agency staff obtained water usage data for Other Municipal Users from the Department of Water Resources, Public Utilities Commission, and Department of Health Services in an effort to assess water usage patterns and provide recommendations to reduce water usage. The Agency's recommendations and conclusions must be considered preliminary due to the limitations in available data. Data for many Other Municipal Users were insufficient or not available. Water deliveries are not separated by sector and data from available reports may represent different parameters than that intended to be collected, depending on how the report's data fields are interpreted. Additionally, the classification of end users into sectors (single-family, multi-family, commercial, etc.) varies, making direct comparisons difficult or impossible.

Given these limitations, Agency staff focused its analysis on the single-family sector for the Other Municipal Users with complete data sets because the single-family sector represents the majority of water demand. Based on the Agency's analysis of this data, it appears that, for Other Municipal Users:

- Average monthly summer water usage doubles and sometimes triples, compared to average monthly winter usage.
- Annual water usage has not changed significantly between 2004, 2005, and 2006.
- Average indoor water use per capita is higher than in the Agency's service area.

Given these conclusions, Agency staff recommends that the Other Municipal Users focus their water conservation efforts on reducing residential summer water usage. The two to three fold increases in summer water usage indicate that outdoor water usage is a major component of water demand. It is important to note that the characteristics of a single-family home are different outside urban areas. There may be larger lot sizes and some agricultural usage, which increases summer water use.

The Agency will continue with its efforts to work with all Other Municipal Users and will encourage them to increase the efficiency of outdoor water use. Increasing water use efficiency in the residential sector can be achieved without negative impacts to the quality of life. Actions to increase efficiency and prevent water waste that the Agency will encourage include:

- Adopt and enforce a water waste ordinance.
- Implement water waste patrols/reporting hotline.

- Adopt a landscape ordinance for new developments.
- Limit turf areas in new developments.
- Provide outreach and education on how to efficiently water landscapes.
- Workshops on sprinkler and drip system design, maintenance, and operation.
- Restrict landscape watering during daytime hours to reduce the evaporative effects of the sun and wind.
- Provide rebates for smart (weather-based) irrigation controllers that automatically adjust watering schedules with daily weather conditions.
- Provide rebates for reducing turf area.

Other Municipal Users will also be encouraged to develop a positive public image and enforce the water conservation message by effectively managing their own water usage. Agency staff will encourage Other Municipal Users to lead by example by:

- Improving irrigation system efficiency at municipal sites such as parks and public area landscaping.
- Installing demonstration gardens to showcase low water use plants and irrigation techniques.
- Removing unnecessary or unused turf areas.
- Eliminating irrigation system runoff and gutter flooding
- Restricting landscape watering during daytime hours to reduce evaporative effects of sun and wind.

Opportunities for water conservation also exist for indoor water usage. The residential winter average uses for some Other Municipal Users are higher than those of the Agency's retail water agencies. The high winter average usages indicate that indoor water using fixtures and appliances may be older, inefficient models.

Indoor water efficiency recommendations that the Agency will provide to Other Municipal Users will include:

- Provide free low-flow showerheads (2.0 gallons per minute (gpm) or less) and faucet aerators (1.5 gpm for bath, 2.0 gpm or less for kitchen).
- Implement a home water survey program to assist residents in assessing water saving opportunities in the home and to help find leaks.
- Provide educational materials to help residents find and fix leaks.
- Provide leak detecting dye tablets with instructions for testing toilets for silent leaks.

- Educate residents on how to read and use the water meter to check for leaks.
- Implement a High-Efficiency Toilet (HET) rebate program HETs use 1.28 gallons per flush (gpf) or less, 20% less water than current standard 1.6 gpf toilet.
- Implement a High-Efficiency Clothes Washer (HEW) rebate program -HEWs use up to 50% less water per load than standard top-load clothes washers.

In addition, Agency staff recommends that all water utilities implement the California Urban Water Conservation Council Best Management Practices (BMPs) and will continue to work with Other Municipal Users to encourage BMPs. The BMPs include both indoor and outdoor water conservation practices in addition to system operation and rate setting practices.

To assist the Other Municipal Users to reduce water waste, Agency staff will meet with the Other Municipal Users to discuss these recommendations and provide technical assistance with implementation. Agency staff will provide water conservation training and detailed information about the analysis. The meeting is scheduled to take place on August 29, 2007, and the Agency has invited representatives of all identified Other Municipal Users to attend.

5.0 Agency Additional Water Conservation Activities since adoption of Order WR 2007-0022

The Agency has been working with both its Retail Customers and with Other Municipal Users throughout the Russian River watershed since adoption of Order WR 2007-0022.

5.1 Water Conservation Meetings

On August 9, 2007, Agency staff coordinated and hosted a water conservation meeting for water conservation staff from Sonoma, Marin and Mendocino counties. Representatives from all three counties attended. The meeting agenda is located in Appendix C. The next meeting is scheduled for September 10, 2007, and water conservation staffs from all three counties are expected to attend.

5.2 Water Conservation Training

Agency staff developed an in-house water conservation training program to promote water conservation education and understanding of this summer's water situation. The program evolved to become the Water Conservation Briefing Program (Briefing) and has been expanded beyond an internal program to include the Army Corps of Engineers' Park Rangers and water agencies both inside and outside of the Agency's service area.

The Briefing was presented to about 150 employees of the Sonoma County Water Agency and Army Corps of Engineers and to another 276 employees of the Cities of Santa Rosa and Cotati, North Marin Water District, Valley of the Moon Water District, and the Town of Windsor. Topics covered in the Briefing include:

- Top 10 Water Conservation Tips (Top 10 Tips)
- Taking advantage of existing programs
- How to read your water meter (leak detection and use)
- Conserving vs. non-conserving behaviors and hardware
- Current rebate and incentive programs throughout Sonoma County
- Contact information for Sonoma County water providers

A schedule of briefings and the materials provided, including the Top 10 Tips, are included in Appendix D.

5.3 Program to Reduce Landscape Water Use

The Agency has been working with landscape contractors to decrease landscape water use. Agency staff contacted seven major landscape companies in the region to solicit assistance with landscape water use reduction. Six of the companies agreed to work with their clients in Sonoma, Marin and Mendocino Counties to reduce landscape water use by 15% compared to 2004.

In addition, participating landscape companies agreed to read meters and report monthly meter readings at landscape sites outside the Agency service area, but within the Russian River watershed, to demonstrate the reduction in water use that can be made by the landscape industry. The Agency will provide updates on the landscape water savings in future SWRCB reports. The participating landscape companies have agreed to each prepare a summary of an innovative program that each is implementing in the Agency's service area for the final 2007 report.

The Agency also hosts and coordinates Landscape Water Advisory Group (LWAG) meetings. LWAG members represent the landscape industry, local colleges and university, and water agencies. In addition, the Agency distributed the Top 10 Tips to the California Landscape Contractors Association members in the CLCA North Coast Chapter Journal.

5.4 Agency Regional Public Outreach Campaign

The Agency extended its annual Water Wisely Campaign to include paid advertisements in the publications, media outlets and events listed in Appendix E. All advertisements include the Top 10 Tips developed and approved by the North Coast Water Conservation Group on May 16, 2007. The media campaign began on April 12, with general conservation tips adapted to include the approved Top 10 Tips. Copies of select media outreach materials are also included in Appendix E.

6.0 Agricultural Water Users

The Agency is also working cooperatively with the agricultural community to achieve water savings. These efforts include public outreach, development of water conservation best management practices (BMPs) and development and analysis of agricultural surveys. The Agency retained Dr. Mark Greenspan, a consulting viticulturist with Advanced Viticulture, LLC, based in Sonoma County, to assist in this effort.

6.1 Development of BMPs

The Agency and Dr. Greenspan have developed draft vineyard water management BMPs for the region. A copy is included in Appendix F. These BMPs were developed by identifying the water use categories for the agricultural community in the area. The list was then narrowed to the top practices that the Agency and Dr. Greenspan expected to yield the highest water savings and require the least operational shift and cost. The BMPs have been distributed at the agricultural meetings and workshops described below and were also made available online via both the Sonoma Winegrape Commission and the Advanced Viticulture websites. See <u>http://www.advancedvit.com/links.html</u>. The BMPs have been refined once and the Agency and Dr. Greenspan are working to reach agreement on measurement of the key parameters for documenting water usage and savings. This BMP outreach effort will continue through this fall.

6.2 Agricultural Community Outreach

The Agency has used direct mailings, the Agency's website, community meetings, and workshops to develop and convey the need for agricultural water conservation. Working with the Sonoma County Farm Bureau, Mendocino County Farm Bureau and other similar organizations, Agency staff and Dr. Greenspan have held numerous workshops and meetings to discuss best management practices for irrigation and water management in vineyards, demonstrate the use of vineyard water monitoring technologies, and exchange information among growers about their experiences with water conservation practices. Approximately 17 meetings and workshops were held through August 15. These included an irrigation workshop, held in conjunction with the Sonoma Winegrape Commission's regularly-scheduled integrated pest management field meetings, workshops held during four field workshops in four separate growing regions of Sonoma County, and one field day held for all of the Sonoma County grower community. Additionally, individual appellation meetings were held for the Alexander Valley grower community, the Santa Rosa regional grower community, and the Mendocino County grower community. Dr. Greenspan was also the featured speaker at a monthly grower breakfast, where the water conservation concepts were discussed and he presented the BMPs at the Alexander Valley Growers Association barbeque.

A special meeting was held for the larger growers in the region for the purpose of refining the BMPs and reaching agreement on measurement of the key parameters for documenting water usage and savings. The initial meeting with larger growers resulted in a positive consensus on the issue of participation in the surveys and the implementation of the proposed BMPs. It also provided a unique opportunity to expand the BMPs by incorporating other existing water conservation methodologies. The Agency anticipates that smaller growers will benefit from the lessons learned by the larger growers. The Agency is scheduling a followup meeting to review progress made by these specific growers in an effort to fine tune the current BMPs and see if others need to be added or even removed.

Dr. Greenspan has been invited to speak at several other venues, including the Russian River Winegrowers Association meeting, the Sonoma County Viticulture Technical Group meeting, a second Mendocino County growers' workshop, as well as the follow-up meeting with the larger grower community.

Hundreds of growers have been contacted in this manner and grower interest has been encouraging. Some growers have contacted the Agency or Dr. Greenspan voluntarily to report that they have been modifying some irrigation practices and have seen positive benefits to water savings and to the health of their vineyards.

6.3 Agricultural Surveys and Analysis

Dr. Greenspan has developed a confidential vineyard water use survey, included in Appendix G. The Agency determined to ask Dr. Greenspan to act as a thirdparty liaison to the agricultural community, particularly with regard to the data collection activities. This was done in an effort to allay privacy concerns of growers and increase the quality and quantity of the data collected. The purpose of the survey is to collect baseline data on current water use practices in the agricultural community. The survey was distributed at each meeting to growers, with the understanding that the growers' names would be held in confidence. That was necessary to gain the trust and cooperation of the growers, who would be unwilling to provide proprietary information to a public agency. To date, 59 surveys have been received, representing almost 15,000 acres (about 25%) of vineyards in Sonoma and Mendocino counties. The Agency continues to receive surveys, usually following each meeting or workshop. After this season's agricultural outreach effort has been completed, Dr. Greenspan will tally the surveys and provide baseline information regarding typical water usage per growing season, irrigation systems used, monitoring systems used, and other information regarding time of day for irrigation, use of overhead sprinklers for heat suppression and water source. These data should help the Agency and the agricultural community to understand how much vineyards have been irrigating as well as the potential for water savings during the current growing season.

Dr. Greenspan will continue to meet with various grower groups and to collect baseline data concerning general system configurations and water sources and demands on those sources. This data collection effort will continue through the fall.

The Agency has also made Dr. Greenspan available for limited individualized consultations with growers for irrigation and water management, and will continue to do so, but no growers have yet made use of this offer.

6.4 Coordination Efforts among the Agricultural Community

If Russian River mainstem diversions were coordinated, then flow fluctuations and the operational buffer in Russian River flows could be reduced, and the Agency estimates that it might be able to conserve up to an additional 10,000 acre feet in the water supply pool in Lake Mendocino each summer. This sort of coordination would require a new and significant cooperative effort by the Sonoma and Mendocino County agricultural community. The Agency and Dr. Greenspan are beginning to discuss this issue with representatives of the agricultural community. As a first effort in coordinating diversions to reduce flow fluctuations in the River, some farmers volunteered to irrigate at night. The Agency believes that the agricultural community understands the importance of these efforts, although the discussion is at an early stage.

Table 1

Comparison of Russian River Diversions for 2004 and 2007 Sonoma County Water Agency Sonoma County, California

	Accumulatve Diversions (acre-feet)							
Date	2004 Actual	2007 Actual	Goal	Difference between 2007 Diversions and Goal	Reduction from 2004 Diversions			
					Percent			
1-Jul	213.0	227.6	181.0	46.6	-6.9%			
2-Jul	458.6	418.5	389.8	28.8	8.7%			
3-Jul	683.7	615.6	581.2	34.4	10.0%			
4-Jul	931.7	853.1	792.0	61.2	8.4%			
5-Jul	1176.6	1062.9	1000.1	62.8	9.7%			
6-Jul	1383.6	1285.6	1176.1	109.5	7.1%			
7-Jul	1593.4	1495.3	1354.4	140.9	6.2%			
8-Jul	1806.1	1691.3	1535.2	156.1	6.4%			
9-Jul	2016.5	1880.8	1714.1	166.7	6.7%			
10-Jul	2224.7	2079.7	1891.0	188.7	6.5%			
11-Jul	2471.1	2272.0	2100.4	171.5	8.1%			
12-Jul	2688.0	2444.2	2284.8	159.4	9.1%			
13-Jul	2911.1	2631.0	2474.4	156.6	9.6%			
14-Jul	3127.9	2824.6	2658.7	165.9	9.7%			
15-Jul	3348.9	3017.4	2846.6	170.8	9.9%			
16-Jul	3565.8	3174.6	3030.9	143.6	11.0%			
17-Jul	3801.5	3344.4	3231.3	113.1	12.0%			
18-Jul	4055.3	3524.0	3447.0	77.0	13.1%			
19-Jul	4267.7	3707.2	3627.5	79.7	13.1%			
20-Jul	4504.9	3900.4	3829.2	71.2	13.4%			
21-Jul	4738.8	4075.2	4028.0	47.3	14.0%			
22-Jul	4979.1	4251.7	4232.3	19.4	14.6%			
23-Jul	5193.8	4420.2	4414.7	5.4	14.9%			
24-Jul	5451.1	4606.6	4633.5	-26.9	15.5%			
25-Jul	5683.8	4790.4	4831.3	-40.8	15.7%			
26-Jul	5921.4	5002.5	5033.2	-30.7	15.5%			
27-Jul	6161.2	5186.3	5237.0	-50.7	15.8%			
28-Jul	6387.5	5370.2	5429.3	-59.2	15.9%			
29-Jul	6617.6	5554.9	5624.9	-70.0	16.1%			
30-Jul	6851.8	5712.6	5824.0	-111.4	16.6%			
31-Jul	7062.4	5893.8	6003.0	-109.2	16.5%			
1-Aug	7322.7	6082.2	6224.3	-142.2	16.9%			
2-Aug	7524.7	6275.0	6396.0	-120.9	16.6%			
3-Aug	7779.7	6457.9	6612.8	-154.9	17.0%			
4-Aug	8002.8	6662.2	6802.3	-140.1	16.8%			
5-Aug	8230.0	6826.6	6995.5	-169.0	17.1%			
6-Aug	8462.8	6975.0	7193.4	-218.3	17.6%			

Accumulatve Diversions (acre-feet)								
Date	2004 Actual	2007 Actual	Goal	Difference between 2007 Diversions and Goal	Reduction from 2004 Diversions			
7-Aug	8687.1	7130.4	7384.0	-253.6	17.9%			
8-Aug	8949.4	7324.1	7607.0	-282.9	18.2%			
9-Aug	9179.3	7515.9	7802.4	-286.5	18.1%			
10-Aug	9416.3	7670.7	8003.8	-333.1	18.5%			
11-Aug	9652.2	7846.7	8204.4	-357.6	18.7%			
12-Aug	9900.5	8017.6	8415.5	-397.8	19.0%			
13-Aug	10118.7	8212.0	8600.9	-389.0	18.8%			
14-Aug	10325.7	8363.4	8776.8	-413.4	19.0%			
15-Aug	10561.6	8545.6	8977.3	-431.7	19.1%			