State Water Resources Control Board Order WR 2009-0027-DWR Term 15 Status Report

Milestone 1 July 15, 2009



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Preface

This report is presented by the Sonoma County Water Agency (Agency) to the State Water Resources Control Board (SWRCB) as part of the requirements of Term 15 of the SWRCB's Order WR 2009-0027-DWR.

The Agency's Term 15 Plan, submitted to the SWRCB on May 6, 2009, describes the steps the Agency will take to comply with Term 15 and commits the Agency to providing the SWRCB with monthly reports on several Term 15 Plan items. This first monthly report (Milestone 1) is a summary of the information compiled and tasks completed to-date. Detailed data and actual reports are posted on the Agency's website www.sonomacountywater.org/stateboard2009.

For the duration of the Order, Agency staff will regularly contact the retail water agencies, landscape companies, business park managers and agricultural businesses that have provided input to this report and request updates for future monthly reports. The updates will be documented in monthly reports and posted on the website. The report schedule, including this report, is as follows:

Milestone 1:	Reporting period April –June 30, 2009	Report filed on July 15, 2009
Milestone 2:	Reporting period July 1 – July 31, 2009	Report filed on August 15, 2009
Milestone 3:	Reporting period Aug 1 – Aug 31, 2009	Report filed on September 15, 2009
Milestone 4:	Reporting period Sept 1 – Oct 2, 2009	Report filed on October 18, 2009

Milestone 1.1 Work with Agency's Retail Water Customers and Russian River Water Users

Communications

Letters. In April, the Agency immediately sent letters to its retail water customers and 300 Russian River water users advising them of the approved Temporary Urgency Change Petition and the SWRCB requirements. In response to the letters, seven of the Agency's eight retail water customers and 20 of the 300 Russian River water users submitted water conservation plans, ordinances, water waste prevention plans or samples of outreach materials. The retail water customer that did not respond in April was the Town of Windsor.

Press Releases. Agency staff prepared press releases to advise the public about the State Water Board's requirements, including the ban on commercial turf irrigation, 25% reduction in diversions from the Russian River, the 25% water conservation goal in Sonoma County and 50% water conservation goal in Mendocino County.

Internet. To help get the word out regionally about the SWRCB requirements and relevant current events, the Agency developed a dedicated "2009 State Board Order" link on the Agency website. The 2009 State Board Order webpage contains the SWRCB documents (Orders, meeting and workshop notices), Agency documents/presentations (water quality and temperature monitoring, fishery and water conservation plans, staff presentations and letters) and Russian River water quality information (weekly bacteria and nutrient samples). (http://www.sonomacountywater.org/newsroom/stateboardorder2009.php)

Newspapers. The Agency runs a weekly water storage report in the legal paper of notice, the *Santa Rosa Press Democrat*. This weekly water storage report educates the public about storage levels in Lake Mendocino and provides updated information on the State Order, water use, and conservation tips.

Meetings

Staff and elected officials from retail and wholesale water agencies in Marin, Sonoma and Mendocino Counties attended the following meetings to discuss SWRCB order and terms, water shortage contingency plans and progress, water waste reduction ordinances, plans and action taken. Meeting agendas, lists of attendees, minutes and videos, if available, are located on the Agency website.

March 16	2009 - Public Meeting in Ukiah
March 17	2009 - Public Meeting in Healdsburg
March 18	2009 - Public Meeting in Guerneville
April 6	2009 – Water & Technical Advisory Committees
April 14	2009 – North Coast Water Conservation
April 15	2009 – Upper Russian River Districts
April 20	2009 – Water & Technical Advisory Committees
May 4	2009 – Water & Technical Advisory Committees
May 21	2009 – North Coast Water Conservation
June 1	2009 – Technical Advisory Committee
June 12	2009 – Technical Advisory Committee's Water Conservation Subcommittee
June 24	2009 – Upper Russian River Water Districts

Plans, Ordinances, Resolutions and Additional Actions Taken

In response to the Agency's April 17, 2009 letter requesting usage and conservation information, 27 retail water agencies in Marin, Sonoma and Mendocino Counties provided individual water conservation plans to meet the 25% (Sonoma County) or 50% (Mendocino County) water savings goal. The following are summaries of the plans submitted to the Agency in April and any updates received since that time. Copies of the submitted water conservation plans, ordinances, resolutions and correspondence are available on the Agency's website.

Mendocino County

City of Ukiah reported that it adopted a water shortage emergency declaration on April 15, 2009. This declaration would allow the City Council to institute a number of measures to meet water conservation efforts short of instituting a Stage 2 declaration under the City's current drought ordinance. The City also reports that it enacted alternate watering days for outside irrigation and intends to enforce this measure for the summer water use months.

Redwood Valley County Water District (RVCWD) stated that it passed a combined water shortage and water waste prohibition ordinance in July 2007; and that the RVCWD's Board declared a water shortage emergency December 2007, enacted stage 1 voluntary reduction along with eliminating waste, resulting in an average of 25% reduction of water use during 2008. RVCWD also reported that on April 16, 2009, its Board enacted stage 4 mandatory 50% reduction for urban water users effective on May 1, 2009. UPDATE SINCE APRIL 2009: On May 4, 2009 the RVCWD Board held two special meetings to advise all agricultural accounts that water service would be terminated if water use was over an account's contracted water amount, and over 50% of historical usage. At this time, Redwood Valley County Water District remains at a mandatory 50% reduction (stage 4). To date, reportedly 35 out of 200 agricultural accounts have been terminated because they are over their contracted water amounts.

Mendocino County Water Agency (MCWA) stated that it cannot provide water consumption data from the water districts in the upper Russian River watershed because it is not a water purveyor. The MCWA reports that it is active in promoting water conservation and supporting the local water districts in their efforts to reduce usage. MCWA reported that the Mendocino County Board of Supervisors proclaimed "an emergency situation due to drought conditions" in March 2009, and has re-confirmed its importance every two weeks since.

MCWA also reports that the Mendocino County Counsel has drafted an "Urgency Ordinance" that requires users of Lake Mendocino water to reduce usage by 50%, and that this item will be placed on the July agenda for the Mendocino County Board of Supervisors meeting.

Sonoma County (within Agency's service area)

California American Water (Cal Am) has reportedly implemented a 3-tier rate structure for residential customer to encourage water conservation as of February 7, 2009. On March 30, 2009, Cal Am enacted voluntary water conservation measures in accordance with its tariffs on file with the California Public Utility Commission (CPUC). UPDATE SINCE APRIL 2009: Cal Am remains at a voluntary water conservation stage 1 alert. Cal Am plans to request authorization from the CPUC to move to a Mandatory Water conservation stage 2 alert should voluntary measures fail to result in the mandatory reductions. Cal Am states it will continue to implement its active public outreach program.

City of Cotati reports to have implemented a 20% voluntary conservation reduction program on June 1, 2009 and eliminated all turf irrigation at commercial irrigation accounts, stating that it believes this will reduce the overall water use by 25%. **UPDATE SINCE APRIL 2009**: In addition to the above actions, the City of Cotati reports to have implemented the following programs:

- Water budgets for all users in all customer classes. This requires directly
 contacting residential customers to confirm the number of occupants for
 gallons per capita per day calculations, and also requires commercial users
 to develop outdoor water budgets in accordance with the Order by the
 State Water Resources Control Board.
- Cash for Grass lawn retrofit rebate program.
- Supplementing the required Consumer Confidence Report with information on conservation, the City Budget Crisis (including basic information on City funding), and long range water supply challenges.
- Working with Daily Acts, a local group dedicated to sustainability and conservation issues, to provide community education and outreach through flyers, workshops in Cotati, and community canvassing.
- Updating the City Municipal Code to mandate US EPA WaterSense toilets (1.28 gallon per flush) for new construction or retrofits.
- Directly contacting customers who may still have older toilets that use more than 1.6 gallons per flush.

Implementing a pilot project to install automatic meter reading (AMR)
devices on water meters to allow customers to monitor water consumption
by the gallon, in real time.

City of Petaluma reported that it plans to achieve the 25% reduction goal through implementation of its Water Conservation Plan, which includes nineteen progressive conservation programs that will provide over 495 million gallons of water savings through the year 2025. In addition, the City reportedly plans to implement a water recycling expansion program which will offset consumption of potable water by 650 million gallons through 2025. The City will also implement its Water Shortage Contingency Plan (WSCP) as outlined in its Urban Water Management Plan, if needed. (The WSCP stage two mandates a 25% reduction in consumption.)

City of Rohnert Park forwarded to the Agency copies of its Water Shortage Emergency Plan and Water Waste Regulation Ordinances adopted in 2004 and Rules and Regulations regarding the Sale of Water in the City of Rohnert Park Resolution adopted in 2005.

City of Santa Rosa states that it will rely on its water shortage contingency plan to achieve the appropriate level of conservation based on the water shortage allocation methodology.

City of Sonoma reported that it has declared a water shortage emergency and enacted stage 2 mandatory 25% water conservation through October 2, 2009, with dedicated irrigation days. **UPDATE SINCE APRIL 2009:** The City of Sonoma states that its water conservation goals and objectives include implementing stage 2 restrictions, a public outreach plan, water conservation measures for City facilities and customers, and analyzing cost/benefit of monthly billing.

Penngrove Water Company reports that it will file a letter with the CPUC requesting a 3rd conservation billing tier.

Valley of the Moon Water District reports that it will continue to implement the California Urban Water Conservation Council's best management practices. It states that District staff is trained to assist customers in identifying possible ways to reduce water use and measures necessary to repair any leaking pipes and or equipment. It anticipates a savings of approximately 25% over the July-October 2004 actual water usage.

The Town of Windsor. The Agency received no response to its April 2009 request for usage and conservation information from the Town of Windsor. **UPDATE SINCE APRIL 2009:** On July 13th, the Town of Windsor reported that, in

response to the SWRCB order and in accordance with the Town's water shortage emergency plan, it has declared by resolution a Stage 2 Water Shortage Emergency condition effective July 1, 2009. The resolution mandates an overall 25% reduction in water use compared to 2004 and limits residential irrigation to three days per week with irrigation days specified by location within the Town. The Town also reports water use audits have identified 178 - 3.5 gpf toilets to be replaced using HET rebates of \$150 per toilet in a mobile home park. The Town states it has created an inter-departmental water conservation team comprised of staff members from Planning, Parks, Community Services, Public Works and Utility Billing to work in concert to achieve the water savings mandated by the order. Water conservation staff is available at Town Green events to answer questions and offer assistance to the public, and an awareness campaign is under way, utilizing mailers, banners, bill inserts, web site information, television and newspaper coverage and other publicity measures.

Sonoma County (outside Agency's service area)

Camp Meeker Recreation and Parks District's Board stated that its low daily usage per service, which ranges between 120 gallons per day per service to 160 gallons per day per service, is proof of adequate water conservation.

Gill Creek Mutual Water Company reported that it has placed the following steps in force to conserve water: 1. Customers are urged to set landscape irrigation systems to run only at night; 2. Customers have been asked to call the manager if they see water escaping the system; and 3. During drought circumstances, customers are requested to reduce their usage as much as possible.

Geyserville Water Works stated that it sent a notice of the possibility of water rationing to all its customers in the March 20, 2009 water bills; and that a notice that the State was demanding a 25% cut in the taking of water from the Russian River was sent to customers in the April 20, 2009 water bills.

City of Healdsburg reported that it issued a call in February 2009 for voluntary conservation, using a list of specific water conservation measures to achieve a 20% reduction in water use from 2008 levels.

Holland Heights Mutual Water Company reported that it requested voluntary water conservation of its customers, emphasizing reductions in the major water uses in its area – outdoor irrigation and swimming pools.

Madrone Mutual Water Company stated that it is a volunteer run organization, and that it depends on the community to reduce water usage. It installed water meters in late 2006 and has been monitoring usage on a monthly basis.

Mt. Weske Estates Water Company reported that it sent a letter advising its water consumers of the SWRCB actions regarding water conservation.

Palomino Lakes Mutual Water Company (PLMWC) reported that its short term reduction measures include a request to users reduce overall water use, to follow a list of mandatory measures and additional suggestions in order to meet the state-mandated reduction.

River Bend Resort reported that it has experienced serious declines in RV business due to the economic issues in Santa Rosa and overall reduced RV travel. Because of this reason, it reports that the actual water usage has decreased over 50% from last year.

Russian River County Water District reported that its water conservation program includes 100 toilets distributed in 2001 and again in 2007 and an analysis of potential water saved from the distribution.

Russian River Utility, which covers Camp Meeker and Occidental Community Service District, reported that it scheduled a board meeting in May where showerheads, sink flow restrictors, and conservation literature were distributed to interested customers.

South Cloverdale Water District reports that it sent out conservation materials to all customers asking for their help in reducing water usage by a minimum of 25%.

Sweetwater Springs Water District (SSWD) reported that it supports voluntary conservation, whereby District customers are encouraged to use water wisely and to search for and fix leaks on their property. The District reports it will continue with capital projects aimed at reducing system losses, pay attention to water waste in the District, fix surfacing leaks as quickly as possible and look for other opportunities to reduce system losses. Sweetwater Springs Water District's reduction target is up to a 25% reduction, based on 2004 water use and production for the months of May through September.

UPDATE SINCE APRIL 2009: SSWD reports that its Board acted on the proposed Stage I Water Shortage, calling it a Water Conservation Program to emphasize the importance of saving water at all times.

VCA Forestville Animal Hospital reports that its water volumes for this year will be substantially less than last summer due to the correction of a significant leak. This leak was discovered and repaired last fall.

Marin County (within Agency's service area)

North Marin Water District reports that an Emergency Conservation Ordinance went into effect on March 1, 2009. This ordinance contains water waste and non-essential use prohibitions/restrictions and enforcement procedures. UPDATE SINCE APRIL 2009: On May 19th NMWD Board approved a 25% Mandatory Conservation reduction effective June 1, 2009. NMWD's *Water Line* newsletter was sent to all residential customers, containing an individualized graph which showed each customer's 2004 usage, 2008 usage and the 25% reduction target goal (from the 2004 usage). NMWD sent a letter to all commercial customers within the North Marin Water District service area, informing them of 2009 Water Use Restrictions (including those on commercial turf).

Water Waste Reduction Enforcement Actions Taken

All of the Agency's retail water customers, as well as Redwood Valley Water District and the City of Ukiah, have adopted water waste reduction ordinances. Water waste reduction programs and enforcement plans include notifying customers by telephone, notice tags, field visits, written notices, installing flow restrictors or disconnecting the water service. Utilities are working with customers that have high water consumption. The Agency will continue with its efforts to work with all other municipal water users and encourage them to increase the efficiently of outdoor water use, and adopt and enforce a water waste ordinance.

Reported Water Savings

California American Water reports that it has reduced its water use by 32% compared to April and May in 2004.

Geyserville Water Works reports that it has reduced its water use by 31% in May and June 2009 compared to 2004.

Redwood Valley Water District reports that it has reduced its water use by 57% in April, May and June 2009.

The Agency's retail water customers' reductions will be reported in the Term 15 Milestone 2 Status Report.

Public Outreach Campaigns

The Sonoma County Water Agency and its retail contractors, including the cities of Santa Rosa, Windsor, Rohnert Park, Cotati, Petaluma, Sonoma and the Valley of the Moon and North Marin Water Districts are participating in the statewide "Save Our Water" conservation campaign this year. The campaign educates Californians about ongoing local and statewide water supply challenges and promotes conservation through public service announcements, educational outreach, and a comprehensive Web site. Local advertisements feature a variety of outdoor water conservation tips and ask residents to reduce their water use by 25 percent. The campaign is organized by the California Department of Water Resources and the Association of California Water Agencies, and supported by Governor Schwarzenegger. The advertisements are running on local radio stations, banners in local malls and transit buses, along with a movie theater trailer playing in local theaters. To view the ads, visit www.sonomacountywater.org. Additional information about the "Save Our Water" campaign can be found at www.saveourh2o.org.

In addition, there has been a substantial amount of local press coverage, which helps keep the water shortage emergency a priority for the residents and businesses in the three counties (see http://www.scwa.ca.gov/newsroom/headlines.php).

Agency's 2009 Water Conservation Media Plan

Radio	Maverick Media (101.7 Fox, 1350 KSRO,	
	92.9 Froggy, 97.7 River, 104.9 Mix)	
Television	NBC Bay Area "Water matters" segment	
Print	Press Democrat - includes weekly water	
	storage ad	
B. G. and	Courts Door / MGs door the sate of	
Movies	Santa Rosa/ Windsor theaters	
Multicultural Outreach	Radio (89.1 KBBF, 1490 AM La Vaquera,	
	Exitos, 107.1 Lazer, 104.1, Mejor)	
Bus Panels	Sonoma County Transit – 15 back panels	
Dus Faileis	Soliolia County Transit – 13 back panels	
Mall Banners	Santa Rosa Plaza and Coddingtown Mall	
Sonoma County Fair	Signage and booth	
Johoma County Fair	Signage and booth	
Park and Ride Kiosks	Signage	

Milestone 1.2 Work with Businesses and Landscape Industry

Overview

The business and landscape community in Sonoma County formed a stakeholder coalition that represents the majority of commercial park ownership in Sonoma County. The coalition goals are specific to addressing SWRCB prohibition of commercial turf grass irrigation within the Agency service area by proposing a program that significantly reduces the amount of water used to irrigate the entire commercial site, replaces high water using fixtures with the most efficient fixtures and commits to retrofit commercial landscapes to achieve a water budget based on 60% ET by 2017.

Landscape professionals that are members of the California Landscape Contractors Association (CLCA) met with local water agencies to discuss the SWRCB prohibition of irrigation of turf grass in commercial areas and to develop a proposal to submit to the SWRCB.

Meetings

Sonoma County Commercial Business Park Coalition

June 8, 2009: A meeting was held at Agency to discuss implementation of the State Board Order in the commercial sector. Seven property owners from a large business park were in attendance. A discussion was held to explain water budgets to the group and a determination was made that a monitoring plan was to be established. The business park was strongly encouraged to obtain participation from the other tenants.

Landscape area measurements were discussed, and it was determined that the Town of Windsor had completed measurements for many sites within the business park. These measurements were to be provided to the property manager for dissemination.

June 10, 2009: An additional meeting was held at Agency to discuss implementation of the State Board Order in the commercial sector with landscape contractors and property managers.

One property manager, three landscape contractors and one manufacturer were in attendance.

A tentative monitoring plan was developed. The plan includes:

- Landscapers or facility staff will do weekly meter reading and track this data on a spreadsheet.
- Weekly water use will be compared to the MAWA for the site.
- MAWA will use a 75% ET adjustment factor based on the State Board order; weather data can come from CIMIS or another reasonable source.
- Landscapers will recommend participation to their customers (outlining that the alternative is a ban on commercial turf irrigation)
- Landscapers will report monthly to Agency the number of participating sites that have met their water budgets (deadline of the 10th of each month for the previous month's budget).

The landscapers were going to discuss any needed edits and will provide the information to the group.

Retail Customers' Programs that Ban Irrigation of Turf Grass

City of Cotati states that it has eliminated all turf irrigation at commercial irrigation accounts.

North Marin Water District sent a letter to all commercial customers within the NMWD service area, informing them of 2009 Water Use Restrictions. The requirements (including commercial turf) are summarized below:

"Non-residential accounts are required to reduce water use by 25% from the corresponding billing period in 2004. This will be enforced through the "Water Watch" patrol program and initially will not be enforced through the billing system. Failure to comply could result in disconnection of water service."

City of Santa Rosa reports that its water bills are based on a water budget for all dedicated irrigation customers - commercial, industrial, institutional and multi-family residential customers that have a dedicated irrigation meter. The water budgets are "real-time" budgets that take into account the amount of square footage of high water use, moderate water use and low water use plants and calculate budgets based on the Net ET for the billing period. The ET data is taken from its CIMIS Station. Santa Rosa states that it will receive monthly

reports on dedicated irrigation water usage and will follow up with customers, offering assistance if any have usage beyond SWRCB conservation goal.

Santa Rosa reports it is sponsoring a workshop to educate property owners/managers and landscape contractors about the State Water Board Order, what various North Bay retailers are doing about the water shortage situation (a panel representing most of the larger North Bay retailers is scheduled to attend), and to present some landscape water management strategies that will help reduce consumption.

City of Sonoma passed a resolution that landscape irrigation of residential and commercial water customers is not permitted except on Tuesday, Thursday, Saturday and Sunday from 7pm to 7am.

GreenPlumbing Courses

May 27, 2009: Caring For Our Water

Twenty-eight plumbers attended a workshop that focused on understanding the water cycle process, the new technologies and behaviors that contribute to increased conservation. Topics covered include:

- Water Efficient Products
- New Technology
- Reducing Household Water Consumption
- Storm Water runoff pollution and prevention
- Introduction to household water audits

June 25, 2009: Climate Care

Thirty-five plumbers attended a workshop that provided comprehensive instructions on climate care including gas emissions in home and business. Topics covered include:

- Hot water heating
- Energy consumption
- Heating appliances
- Cooling appliances

Hospitality Event Promoting Conservation in the Hotel Industry

This event has been rescheduled in the Fall of 2009.

Bottom Line Newsletter

Bottom Line newsletter's Spring 2009 issue included the following articles. See http://www.sonoma-county.org/bea/pdf/bottom_line/spring_2009.pdf

- In the BEA Spotlight: M.A. Silva Corks USA
- Equinox Landscapes: Building a Sustainable Landscape
- Sonoma County Energy Independence Program
- Eight Businesses Certified as Green
- State Water Board Order Bans Commercial Turf Irrigation

Report Water Savings Achieved through CLCA's Water Management Certification Program

Many landscape companies are working with retail water agencies and business park managers to set up water management programs that are compliant with the SWRCB order and the local water agency programs. So far, 20 landscape managers have been QWEL certified (see below) and there are 42 participating sites. They will report on water savings in the Term 15 Milestone 2 Status Report.

The Qualified Water Efficient Landscaper (QWEL)

The Qualified Water Efficient Landscaper (QWEL) training is recognized by the U.S. EPA as an Irrigation Auditor training program and graduates of this course are eligible to become WaterSense Irrigation Partners.

The QWEL training is comprised of 12 classes, for a total of 20 hours of hands-on education that focuses on all aspects of the landscape as they relate to water conservation (e.g., irrigation equipment, design, plant selection, soil types, irrigation audits, water budgets, irrigation scheduling). The QWEL training graduated fifty-seven Sonoma and Marin county landscape professionals in the months of April through June, 2009.

The first ever QWEL "Train the Trainer" event was offered to water management professionals (agencies, cities, private individuals) so they may bring the QWEL trainings to their local areas. An abbreviated version of QWEL was presented along with insight on how to best teach and market QWEL. This training event took place on June 8th – 10th in Santa Rosa and thirteen of the fourteen attendees passed the course to become QWEL Trainers.

Milestone 1.3 Working with Vintners

Overview

The 2-3 inches of rainfall received during early May recharged much of the soil's water profile, thus allowing growers to delay irrigation, often into the month of July. Approximately 3-4 weeks of irrigation needs were eliminated because of the timely rainfall event. Grower outreach efforts geared towards delaying the beginning of irrigation helped to prevent "habitual irrigators" from beginning irrigations during May, as many had done in the past.

Milder spring temperatures brought only about 57% of the frost events relative to 2008. Outreach efforts asking growers to individually measure onsite temperature and dew point, combined with guidelines about system startup thresholds, resulted in the elimination of numerous overhead sprinkler episodes during the spring of 2009.

Meetings and Seminars

- Dollars and \$ense seminar attended by nearly 400 growers in January 2009 included Climate Variability and Changes in the North Coast Wine Regions of California Dr. Gregory Jones, Southern Oregon University, that presented information on rainfall and frost patterns, including predictions for 2009.
- Sonoma County Water Agency made a presentation to the Sonoma County Winegrape Commission Board on Water Supply Strategies for the Future.
- Dr. Mark Greenspan will address growers at the August 6 Integrated Pest
 Management (IPM)/Organic Field Day that normally attracts nearly 150
 growers, focusing on fall irrigations practices and water conservation
 opportunities.

Vineyard Irrigation and Cooling Water Conservation Demonstration Program

On April 29, 2009, the Sonoma County Water Agency broke ground on two vineyard water conservation demonstration projects. The demonstration projects will utilize state-of-the-art irrigation and cooling technologies and best management practices to illustrate how water and energy can be conserved in vineyards. The demonstration projects will take place at Hoot Owl Creek/Alexander Valley Vineyards. Viticulture consultant Mark Greenspan of Advanced Viticulture, LLC will implement the demonstration projects.

The purpose of the demonstration projects is to provide a venue for both education and two-way communication on the subject of vineyard water use, and to show growers how they can easily save water, energy and money while still producing excellent wine grapes.

The Agency is hosting a public field day at the demonstration site in both July and August. The events will allow grape growers and those interested in attending the opportunity to speak with the technicians who have developed and implemented the demonstration program. This will be a hands-on demonstration day filled with educational materials and awareness regarding water conservation and the State Order.

Vineyard Consultant Services and Outreach

The Sonoma County Winegrape Commission has had extensive outreach to growers, informing them of the need for water conservation in 2009. This includes conservation during the frost season and for irrigation. Those communications included the following:

- Spring *Vine Times* newsletter sent to over 3000 growers and businesses in Sonoma County.
- Frost Protection & Water Conservation, by Dr. Mark Greenspan, frost protection Best Management Practices
- **President's Report** by Nick Frey, informed growers of the need to conserve water this year.
- Posted frost protection BMPs and water conservation tips on the Commission website: http://www.sonomawinegrape.org/conserving-water-in-2009 and http://www.sonomawinegrape.org/frost-protection-and-endangered-coho.

- Included Mark Greenspan in monthly Integrated Pest Management (IPM) grower meetings from April – July with over 100 growers attending each month.
- Promoted Water Conservation Field Days on July 9 and August 13 at Hoot Owl Creek/Alexander Valley Vineyards irrigation demonstration funded by the Sonoma County Water Agency. We have 73 grower reservations for those events as of July 1. Additional promotion will occur before each event.
- The Commission has regularly e-mailed growers about water conservation.
 The following is a summary of topics addressed and the number of growers who opened the messages.

Date	Description	# unique opens
4/10/2009	Frost, Water Conservation	282
4/14/2009	Frost, Water Conservation	389
4/29/2009	Irrigation	258
5/14/2009	Water Conservation/frost (vyd mgr list)	30
5/27/2009	BMP Irrigation	248
6/10/2009	Water Conservation	240
6/18/2009	Water Conservation	217
6/24/2009	Water Conservation	208

 An e-blast to growers also alerts them to emergency water shortfalls as occurred on July 1 (message follows):

July 1, 2009

Alert to Upper Russian River Growers pumping water from the Russian River main stem.

Please don't irrigate today - flows lower in Russian River due to power outage @ Coyote Valley dam which impacted releases last night (June 30, 2009).

Development of Vineyard BMPs

- Frost Protection & Water Conservation by Dr. Mark Greenspan, frost protection Best Management Practices
- Posted frost protection BMPs and water conservation tips on the Commission website: http://www.sonomawinegrape.org/conserving-water-in-2009 and http://www.sonomawinegrape.org/frost-protection-and-endangered-coho.

Individual Vineyards and Wineries Submitting Additional Information

Fetzer Vineyards reports that it has been implementing aggressive water conservation projects, and that water use at Fetzer Vineyards has declined 24%, or 8 million gallons per year, since 1999.

Field Stone Winery and Vineyard reports to have reduced its water use by 21% in 2007. It will continue to manage the winery and vineyard with many water conservation practices (such as drip irrigation, deficit irrigation, dry farming, no overhead vine cooling or frost protection) integrated into their viticulture practices.

Korbel Brothers reports to have adopted many measures to achieve the additional reduction in water use. For example, three of its six groundskeepers have become Qualified Water Efficient Landscapers; its older spray watering system (40% efficient) has been replaced with drip systems (90% efficient); irrigation controllers have been reprogrammed to reduce the amount of run-off and run times were re-set to a seasonal water budget.

Murphy Vineyards reports it will achieve a 25% or higher reduction in water use by employing minimal landscaping and no turf around the tasting room entrance, and the use of low water volume barrel washers.