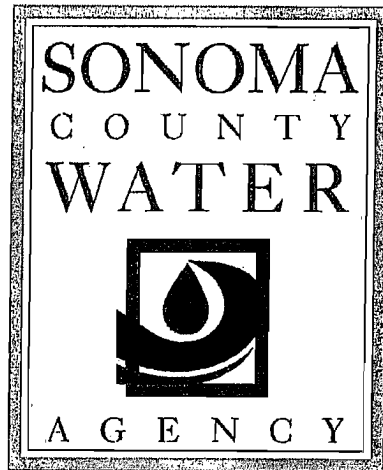


State Water Resources Control Board  
Order 5/1/2013

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Provision 16 - Water Loss and Water Use  
Efficiency



**March 31, 2014**

**Prepared by**

**Sonoma County Water Agency**

**404 Aviation Blvd**

**Santa Rosa, CA 95403**

## **1 Introduction**

This report has been prepared by the Sonoma County Water Agency (Water Agency) to fulfill the requirements of Term 16 of the State Water Resources Control Board (State Board) Order dated May 1, 2013 (Order).

Term 16 of the Order directs the Water Agency to take the following actions:

SCWA shall provide a written update to the Deputy Director by March 31, 2014, regarding activities and programs being implemented by SCWA and its water contractors to assess and reduce water loss, promote increasing water use efficiency and conservation, and improve regional water supply reliability. The written update shall include a report regarding the actual maximum applied water allowance (MAWA) achieved by each of SCWA's contractors during May through November 2013.

## **2 Water Loss and Water Use Efficiency**

In response to the dry spring conditions of 2013, the Water Agency launched a public education campaign to encourage residents to voluntarily reduce water consumption. The Water Agency launched the "20-Gallon Challenge" campaign to increase awareness of the water supply situation and as a call to action.

The campaign features a pledge to save 20 gallons per person per day. As an incentive to pledge, monthly prize drawings were held from May to October. The prizes included two high-efficiency toilets, two high efficiency clothes washers, a rainwater catchment or graywater system, and custom water-wise landscape design. The prizes were awarded to residents throughout the region including Santa Rosa, Forestville, Windsor, Cotati and Novato.

The 20-Gallon Challenge website also contained a page for residents to report water waste. When water waste reports were received, the Water Agency sent a postcard to the identified address providing education and resources to the resident about how to save water.

Pledges and contest entries were accepted from the entire Russian River Watershed to encourage both upper and lower Russian River water users to participate in the Challenge. Outreach was conducted through print media, radio ads in English and Spanish, water bill stuffers, social media, newsletters, and outreach events like the Sonoma County Fair, farmers markets and the Santa Rosa Wednesday Night Market.

## **3 Sonoma-Marin Saving Water Partnership Annual Report**

The Cities of Santa Rosa, Rohnert Park, Sonoma, Cotati, Petaluma, Town of Windsor and North Marin, Marin Municipal and Valley of the Moon Water Districts and the Water Agency formed the Sonoma-Marin Saving Water Partnership in 2010. The purpose of the Sonoma-Marin Saving Water Partnership is to establish the financial obligation for the eight local water utilities, Marin Municipal Water District and

Sonoma County Water Agency, identify and recommend implementation of water conservation projects and to maximize the cost-effective projects for the Partnership.

The Partners are committed to remain as members in good standing of the California Urban Water Conservation Council (CUWCC) and implement the Best Management Practices (BMPs) for water conservation. The Partners will implement or use best efforts to secure the implementation of any water conservation requirements and will publish an Annual Report to track progress. The Annual Report will track program implementation, highlight program milestones, and reinforce the importance of protecting and preserving water resources for future generations. The 2012/2013 Annual Report for the Partnership is attached in Appendix A.

#### 4 Maximum Applied Water Allowance (MAWA)

The Maximum Applied Water Allowance (MAWA) is the upper limit of annual water use for a specific landscaped area based on the square footage of the area, an evapotranspiration (ET) adjustment factor, reference ETo and effective rainfall. MAWA is commonly referred to as a water budget. The Water contractors<sup>1</sup> used an ET adjustment factor of 60% for calculating the reported water budgets.

Water contractors submitted information on calculated water budgets and water use to the Water Agency. The water use reported was through November 2013 as required by the Order. The average actual MAWA achieved by the Water Agency water contractors was 63%.

Below is the report regarding the actual maximum applied water allowance achieved by each of the Water Agency's contractors during May through November 2013.

	<b>Water Budget (AF)</b>	<b>Dedicated Irrigation Metered Sales (AF)</b>	<b>Actual MAWA Achieved (%)</b>
<b>City of Cotati</b>	178	129	43%
<b>City of Petaluma</b>	723	693	58%
<b>City of Rohnert Park</b>	275	329	72%
<b>City of Santa Rosa</b>	1,837	1,993	65%
<b>City of Sonoma</b>	34	76	135%
<b>North Marin Water District</b>	939	874	56%

<sup>1</sup> Under the 2006 Restructured Agreement for Water Supply, the Water Agency's "water contractors" are the Cities of Santa Rosa, Rohnert Park, Sonoma, Cotati, Petaluma, the Town of Windsor and the North Marin and Valley of the Moon Water Districts.

<b>Town of Windsor</b>	156	208	80%
<b>Valley of the Moon Water District</b>	25	44	106%
<b>Regional Average</b>	4,167	4,316	63%



SONOMA - MARIN  
**SAVING WATER**  
PARTNERSHIP

*Annual Report*



## About the Partnership

The Sonoma-Marín Saving Water Partnership (Partnership) represents 10 water utilities in Sonoma and Marin counties that have joined together to provide regional solutions for water use efficiency.

The utilities include the Cities of Santa Rosa, Rohnert Park, Petaluma, Sonoma, Cotati; North Marin, Valley of the Moon and Marin Municipal Water Districts; Town of Windsor and Sonoma County Water Agency (Partners). Each of the Partners have water conservation programs that can assist you in reducing your water use.

The Partnership was formed to identify and recommend implementation of water use efficiency projects, and maximize the cost-effectiveness of water use efficiency programs in our region.

The Partners are committed to remain members in good standing of the California Urban Water Conservation Council (CUWCC) and implement the Best Management Practices (BMPs) for water conservation.

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## Our Service Area

More than 600,000 residents in Sonoma and Marin counties rely on the water delivered from the Russian River by the Sonoma County Water Agency (Water Agency) to the nine cities and districts in the Partnership. Supplementing the water provided by the Water Agency are local supplies including recycled water, groundwater from underground aquifers and surface water reservoirs.

Recreation, agriculture and wildlife, including threatened and endangered steelhead and coho and Chinook salmon also rely on these same natural resources in order to thrive.

Realizing the importance of protecting and preserving water resources for future generations, the members of the Partnership have taken a proactive role in helping fund, maintain and implement an array of water supply, water use efficiency and fishery recovery programs.



## Working Together

Every day we wake up and turn on the tap to draw water and begin our daily routine. It's a marvel that fresh water appears instantly and this marvel is a testament to the men and women of the Sonoma County Water Agency and area retail water providers working together to insure a safe, reliable water supply is available for the residents of Sonoma and Marin Counties. Whether the water is naturally filtered from the Russian River, local ground water or surface water from local lakes, the coordinated effort to extract, treat and deliver water is often taken for granted. Conservation of precious water resources is critical as we strive to make the water available for our communities while preserving natural resources.

The Sonoma-Marin Saving Water Partnership (Partnership), through its many water efficiency programs, educational seminars and outreach campaigns, is working to educate our communities about the importance of conserving water resources and curbing water-wasting behaviors.

This year the "20-Gallon Challenge" was embraced by community members who pledged to reduce water use by 20 gallons per person per day. The 20-Gallon Challenge was promoted throughout the Russian River Watershed expanding the Partnership reach into Mendocino County. Working together in Sonoma, Marin and Mendocino counties, the 20-Gallon Challenge resulted in a positive response to the 2013 dry spring conditions.

The Partnership received a 2013 WaterSense Excellence award from the U.S. Environmental Protection Agency (EPA) for promoting water efficient irrigation practices through implementation of the Qualified Water Efficient Landscaper Program (QWEL). QWEL educates landscape professionals and their customers on the benefits of sound landscape design, management and irrigation practices. The award was one of only five issued by the EPA nationally.

The time and energy invested in the Partnership has benefitted our region. Water use during Fiscal Year 2012/13 remains down from prior years and the region has avoided water use restriction, even during an extremely dry spring. The Partnership will continue to offer educational resources, programs and incentives to aid our communities in meeting water use efficiency requirements as we work together in response to variable water year conditions and maintain supplies for beneficial use and instream needs.

Sincerely,

Jake Mackenzie, Chair  
Water Advisory Committee  
Council Member  
City of Rohnert Park

David Rabbitt  
Chair, Sonoma County Water Agency  
Supervisor, County of Sonoma

SONOMA - MARIN  
**SAVING WATER**  
 PARTNERSHIP

**Partnership Achievements By the Numbers**  
 Fiscal Year 2012/2013



**8,777** students experienced "The Musical Watershed" performed by the ZunZun performing arts group in 37 shows at 25 different elementary schools.

**26,962** students in 1,133 different classrooms received curriculum materials provided by the Water Education Program.

**16** laundry to landscape graywater systems were installed.

**8** businesses were certified through the Sonoma County Green Business Program sponsored by the Water Agency.

**3,558** children were inspired by the 350 Home & Garden Challenge.

**356** parents volunteered to chaperone their child's class during their field study visit to the Water Agency's Russian River Field Study Site near Forestville. The parents participated along with the students allowing the Field Study Program to reach adults as well as children.

**501** guests visited the mine gardens that participated in the Second Annual Eco-Friendly Garden Tour.

**607** students graduated from the Qualified Water Efficient Landscaper (QWEL) and Spanish QWEL programs.

**1,338** students received direct instruction, 2,679 in the classroom only program and 2,209 in the classroom and Field Study program.

**122** rebates were issued to businesses for installing high-efficiency toilets.



180 landscapes were upgraded through our rebate programs.

695 high school students went on technical tours of the Water Agency's Mirabel and Wohler water transmission facilities. Students learned about the water system and explored career opportunities in the field of water.

permitted graywater systems were installed in homes to use water from bathroom sinks, showers, tubs and laundry to irrigate landscaping.

110 businesses participated in our water use survey programs.

2,209 students participated in the Field Study Program where the 5th grade students performed water related experiments along the banks of the Russian River and learned about the riparian ecosystem.

433,189 square feet of lawn were removed through turf conversion programs — enough to cover nearly six professional football fields.

809 rebates were issued to residents for replacing their old, inefficient toilets with new, EPA WaterSense labeled high-efficiency toilets that flush at 1.28 gallons per flush or less.

92 people attended Rainwater Harvesting classes.

1,171 high-efficiency clothes washer rebates were issued. These EPA EnergyStar rated clothes washers use 40% to 60% less water than older, for loading models and they save energy from heating less water and wringing out more water before the clothes go into the dryer.

34,731,944 gallons of water per year are being saved by local businesses through sustained reduction programs where rebates are provided for implementing projects, changes and equipment upgrades resulting in measurable water use efficiencies.

2,570 Water Smart Home evaluations were performed. These in-home water efficiency assessments are performed by trained technicians to find opportunities for improvements, identify leaks, and inform homeowners about their indoor and outdoor water use.

# Partnership Highlights

## PROGRAM EXPENDITURES

Partners have pledged to fund water use efficiency programs. The baseline funding is established in the Memorandum of Understanding (MOU) and is based on historic water deliveries through the Water Agency's water transmission system, ensuring that programs will always be available to help residents use our water resources efficiently.

Minimum funding levels are presented in the orange bar in the table below along with Fiscal Year 12/13 expenditures.

For the Town of Windsor, additional required funding paid through a direct diversion water conservation sub-charge is not included with their MOU minimum.

These additional funds are designated for the Town's water use efficiency programs and are included in their annual program expenditures.

The Water Agency's Water Use Efficiency Program is funded by the water contractors through the Water Conservation Sub-Charge as part of the Water Agency wholesale water rates. The amount of money deposited into the fund is calculated based on an estimate of the total costs for all regional Water Conservation Projects for each fiscal year.

The Sonoma-Marin Saving Water Partnership does not specify a minimum amount that should be utilized for regional programs.

Program Expenditures (in thousands of dollars)

	City of Cotati	Marin Municipal Water District	North Marin Water District	City of Petaluma	City of Rohnert Park	City of Santa Rosa	City of Sonoma	Valley of the Moon Water District	Town of Windsor	Sonoma County Water Agency	Regional Total
FY 12-13	\$60	\$1,279	\$263	\$461	\$16	\$965	\$173	\$180	\$269	\$1,510	\$5,176
Minimum	\$25	\$127	\$25	\$242	\$120	\$557	\$55	\$72	\$10	NA	\$1,500

## ANNUAL MULTI-MEDIA PUBLIC EDUCATION CAMPAIGN

In response to the dry spring conditions, the Partnership doubled its annual public education campaign to encourage residents to voluntarily reduce water consumption. The Partnership launched the "20-Gallon Challenge" campaign to increase awareness of the water supply situation and as a call to action.

The campaign features a pledge to save 20 gallons per person per day. As an incentive to pledge, an entry for monthly prize drawings for high-efficiency toilets and clothes washers, rainwater catchment and graywater systems, and custom water-wise landscape designs were provided.

Pledges and contest entries were accepted from the entire Russian River Watershed to encourage both upper and lower Russian River water users to participate in the challenge.



## 2012 TEMPORARY URGENCY CHANGE PETITION

On March 29, 2013, the Water Agency submitted a report to the State Water Resources Control Board (SWRCB) in response to an Order approving a Water Agency request to modify in-stream flow requirements for the Russian River. The report highlighted two pilot projects focused on unaccounted water loss through residential meters and water use efficiency through customer awareness in addition to the Partnership's water use efficiency efforts.

The Temporary Urgency Change Petition, submitted on April 9, 2012, was needed to improve conditions for juvenile coho and Chinook salmon and steelhead rearing in the river.

On May 2, 2012 the SWRCB issued an Order approving the petition. Included as part of the Order, the SWRCB requested that the Water Agency provide a written update regarding activities and programs being implemented by the Partnership to assess and reduce water loss and promote increasing water use efficiency. The order acknowledged the Partnership's work to date with assigning landscape water budgets to dedicated irrigation accounts and the continued work on compiling with SBx7-7 targets.

## PARTNERSHIP JOINS EPA WATERSENSE

In April of 2012, the Partnership became a Promotional Partner to the U.S. Environmental Protection Agency's WaterSense program. Both the Partnership and WaterSense share the goal of promoting efficient water use both indoors and out.

As a Promotional Partner, the Partnership is able to collaborate with and leverage the WaterSense program's national campaigns such as Fix-A-Leak Week and Sprinkler Spruce-Up while helping to get the word out about WaterSense labeled products and services.



The Partnership has a history of working with WaterSense since the program began, actively participating in the development of WaterSense labeling specifications to ensure that the WaterSense label only appears on high-performance, water efficient products that work. In 2008, the Partnership's Qualified Water Efficient Landscaper Program (QWEL) became one of the nation's first WaterSense Labeled professional certification programs. The Partnership continues to actively support and participate with WaterSense.

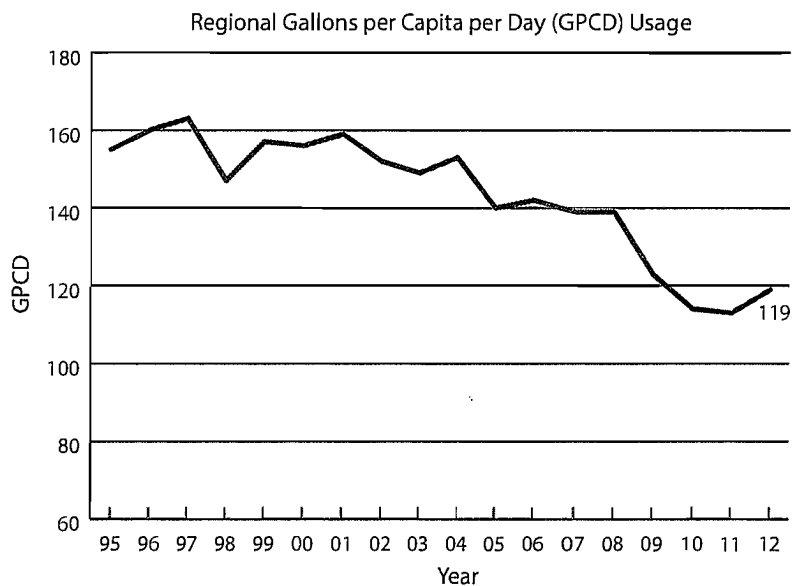
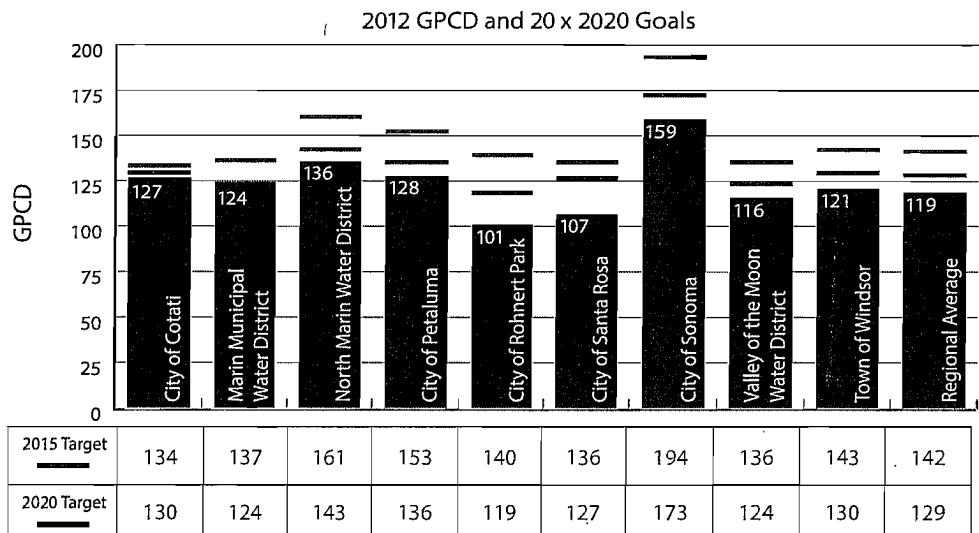
### 20 x 2020 GOALS

In 2009, SBx7-7 established a statewide goal, known as 20 x 2020, to reduce per capita water use 20% by the year 2020 with an interim goal of a 10% reduction by 2015.

The chart to the right displays 2012 per capita water use in each Partner service area and the region as a whole. The 2015 and 2020 goals are indicated by the green and red lines, respectively.

While the chart shows that all Partners are currently meeting the 2020 targets, we recognize that water use efficiency must continue. Many factors can affect water use patterns as has been seen in recent years. The overall downward trend is a result of many factors including the California drought, economy, changes in weather conditions, and active water conservation programs.

It is important to continue the work on water use efficiency to maintain the savings already achieved and make sure the region captures all the benefits of future water savings.



City of Santa Rosa  
(707) 543-3985  
[www.srcity.org/wue](http://www.srcity.org/wue)

City of Cotati  
(707) 665-3631  
[www.ci.cotati.ca.us](http://www.ci.cotati.ca.us)



City of Rohnert Park  
(707) 588-3300  
[www.rpcity.org](http://www.rpcity.org)



North Marin  
Water District  
(415) 897-4133 x8412  
[www.nmwd.com](http://www.nmwd.com)



**NORTH MARIN  
WATER DISTRICT**



Town of Windsor  
(707) 838-1004  
[townofwindsor.com](http://townofwindsor.com)

Valley of the Moon  
Water District  
(707) 996-1037  
[www.vomwd.com](http://www.vomwd.com)



City of Petaluma  
(707) 778-4507  
[cityofpetaluma.net/wrcd](http://cityofpetaluma.net/wrcd)

Marin Municipal  
Water District  
(415) 945-1520  
[www.marinwater.org](http://www.marinwater.org)



**MARIN MUNICIPAL  
WATER DISTRICT**



City of Sonoma  
(707) 933-2237  
[www.sonomacity.org](http://www.sonomacity.org)



Sonoma County Water Agency  
(707) 547-1933  
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