State Water Resources Control Board Order 6/20/2019

Provision 11 -Water Use Efficiency Update



March 23, 2020

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 (Sonoma Water) to fulfill the requirements of Provision 11 of the State Water Resources Control Board (State Board) Order Approving Petitions for Temporary Urgency Changes to Permit Conditions (Order) dated June 20, 2019.

Provision 11 of the Order directs Sonoma Water to take the following actions:

By April 1, 2020, (Sonoma Water) shall provide a written update to the Deputy Director for Water Rights regarding activities and programs being implemented by (Sonoma Water) and its water contractors to assess and reduce water loss, promote increased water use efficiency and conservation, and improve regional water supply reliability.

2 Sonoma-Marin Saving Water Partnership

Sonoma Water, along with the cities of Santa Rosa, Rohnert Park, Sonoma, Cotati, and Petaluma, the Town of Windsor, and North Marin, Marin Municipal and Valley of the Moon Water Districts, formed the Sonoma-Marin Saving Water Partnership (Partnership) in 2010. The Partnership Memorandum of Understanding was amended in May 2018, extending the term another ten years, and adding language to streamline the addition of members to the Partnership. Two new Partners have subsequently joined, with California American Water-Larkfield joining in January 2019 and the City of Healdsburg joining in August 2019.

The purpose of the Partnership is to establish the contributing financial obligation for the ten local water retailers, Marin Municipal Water District and Sonoma Water, and to identify, recommend and implement regional water conservation projects in a manner that maximizes cost effectiveness and achieves greater impact than would otherwise be realized individually. The Partnership coordinates all water use efficiency focused media buys in the region and provides support to members that need additional assistance meeting conservation targets.

The Partnership's media campaign in 2019 continued the previous year's focus on outdoor water use efficiency utilizing a series of bi-lingual videos that were created for Partner social media posts and streaming online music sites such as Pandora. Topical messages included information on when to water, laundry to landscape graywater systems, Do-It-Yourself low water use landscape transformations, and sprinkler system tune-ups. An example video still is provided in Figure 1 below. These videos compliment and reinforce the water-efficient social norms of a suite of other outdoor focused programs managed through the Partnership, including, Qualified Water Efficienct Landscaper trainings, the Sonoma County Master Gardeners "GardenSense" residential advice program, continued enhancements to the fire-rebuild focused Landscape Design Templates, and the annual Sonoma-Marin Eco-Friendly Garden Tour, now in its tenth year.



Figure 1: Summer Ad-Campaign Video Series

The scope of the Partnership's work was not limited however to the outdoor focus of the 2019 media campaign. Indoor water use efficiency incentives are ongoing for residential toilet and clothes washer replacement, commercial urinal and toilet replacement, and commercial-industrial process water use efficiency to name a few. Improvements to information sharing through the creation of a centralized resource hub was also identified as a priority of Partners in 2019. This led to a Partnership website upgrade project to keep online content fresh and to better meet the needs for centralized community resources. The Partnership website update project has an anticipated completion and launch date of Summer 2020.

2.1 Water Loss Reduction Efforts

The Partners continue to make improvements to the validity of data collection methods necessary to accurately estimate both real and apparent water losses from their distribution systems in order to inform cost effective water loss control programs. Sonoma Water now has an AWWA Certified Water Loss Audit Validator on staff to identify areas for improvement both internally and to be used as a cost-saving resource for the Partners when preparing annual audit submittals to the California Department of Water Resources. In 2019, the Partnership began the formation process to create a regional water loss working group made up of key agency staff, with consultant participation and guidance from water loss industry professionals. The intent is to provide continuing water loss education and sharing of best

practices in advance of anticipated new regulatory requirements for the completion of water loss component analyses and potential cost-effectiveness based new programs.

Sonoma Water is currently developing an analytical tool to assess potential water loss within its water transmission system on a daily basis. The full implementation of Advanced Metering Infrastructure (AMI) for all delivery points is an ongoing project, but with more than 75% of the delivery meters connected to the AMI infrastructure, a water balance assessment for transmission system meter zones would provide more immediate information on potential water loss issues for a significant portion of the service area. The projected implementation of the zonal water balance tool is within the next three months.

2.2 Sonoma-Marin Saving Water Partnership Annual Report

The Partners committed to 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 tracks program implementation, highlights program milestones, and reinforces the importance of protecting and preserving water resources for future generations. The 2018/2019 Annual Report for the Partnership is attached in Appendix A.

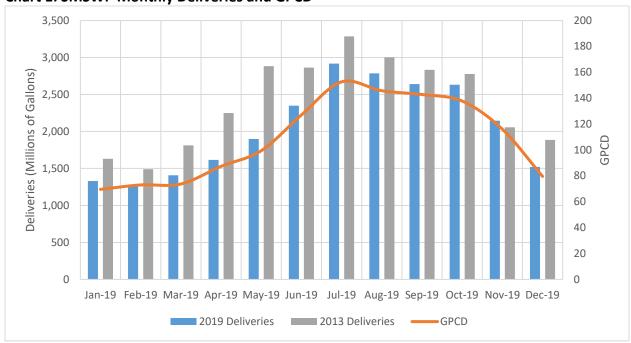
3 Conservation Tracking

Sonoma Water actively engaged all the Partners to continue to track and report water use data in 2019 despite the region not having a mandated conservation goal. The Partners continue to see water demand reductions as compared to the 2013 Benchmark established by Executive Order B-40-17, which expired in November 2017. Table 1 below shows the region's cumulative reduction in demand for 2019 at 15%. As displayed, the Partnership continued to experience significant demand reductions, even though the population has increased 3.4% since 2013. Chart 1 below demonstrates a regional winter low of 70 gallons per capita per day (GPCD) and 153 GPCD in the summer, with fluctuations following local weather patterns.

Table 1: 2019 Total Deliveries Compared to 2013 Benchmark Water Use

Water Retailer	Total Deliveries (Gallons)	2013 Benchmark (Gallons)	Relative to 2013 Benchmark
Cal Am	244,066,142	309,018,000	-21%
Cotati	276,436,901	327,969,032	-16%
Healdsburg	638,229,000	690,327,576	-8%
Marin Municipal	8,307,427,871	9,131,679,941	-9%
North Marin	2,461,722,317	3,254,000,000	-24%
Petaluma	2,610,066,510	3,191,983,293	-18%
Rohnert Park	1,500,473,276	1,668,000,000	-10%
Santa Rosa	5,810,623,405	7,111,187,431	-18%
Sonoma	672,596,576	768,631,380	-12%
Valley of the Moon	815,625,777	1,044,331,014	-22%
Windsor	1,168,540,527	1,273,975,459	-8%
SMSWP Total	24,505,808,303	28,771,103,126	-15%

Chart 1: SMSWP Monthly Deliveries and GPCD



Appendix A

2018/2019 Annual Report for the Sonoma-Marin Saving Water Partnership

(begins on the following page)





ABOUT THE PARTNERSHIP

The Sonoma-Marin Saving Water Partnership (Partnership) represents 12 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 and Healdsburg; North Marin, Valley of the Moon and Marin Municipal Water Districts; Town of Windsor, and California American Water - Larkfield and Sonoma Water (Partners). Each of the Partners have water conservation programs that can assist customers in reducing their 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 remaining members in good standing of the California Water Efficiency Partnership.

OUR SERVICE AREA

More than 600,000 residents in Sonoma and Marin counties rely on the water delivered from the Russian River by Sonoma Water to nine of the cities and districts in the Partnership. The water provided by Sonoma Water is supplemented by local supplies including recycled water, groundwater from underground aquifers and surface water reservoirs.

Recreation, agriculture and wildlife, including threatened and endangered steelhead, 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.

TOGETHER MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE!

This year, the Partnership's public outreach effort focused on outdoor water use with targeted marketing via streaming and social media platforms in both English and Spanish. The Partnership continued to support the rebuild efforts following the 2017 wildfires with further development of the Landscape Design Template project and the Partners remained committed to helping customers make water conservation a California way of life.

Regional water use during Fiscal Year 2018-2019 remains down significantly from prior years as a result of continued water conservation efforts by all Partnership agencies. The Partnership cumulatively reduced water use by 15% when compared to the State's 2013 benchmark year, even while the overall Partnership population has increased by 3.4%. We will continue our efforts in advance of new water-use objectives for the individual Partnership members to be established by the State in 2023 under the 2018 bills signed into law - SB 606 (Hertzerb) and AB 1668 (Friedman).

The U.S. Environmental Protection Agency (EPA) again recognized the Partnership's efforts in water-use efficiency with two of the 25 awards it issues nationally each year. For 2019, the EPA awarded the Partnership its third "Sustained Excellence Award" for its irrigation-professional certification and training through the Qualified Water Efficient Landscaper (QWEL) program. The Partnership also received its fifth "Excellence Award" for education and outreach efforts.

The Partnership was formed in 2010 and recognizes that establishing common regional water conservation projects can cost-effectively conserve more water than would otherwise be conserved by individual agencies. This regional approach is based on meeting water conservation regulatory requirements by offering financial incentives to conserve and by educating water users about where drinking water comes from and how to use it most efficiently. The Partnership, through its many water-use efficiency programs, educational seminars and outreach campaigns, is working every day of the year to remind our communities about the importance of conserving our water resources and curbing water-wasting behaviors.

In May, 2018, the Partnership approved the First Amended Memorandum of Understanding to extend the term of the MOU for another 10 years. Of note, the First Amended MOU includes a streamlined process for adding new members. In January 2019, California American Water - Larkfield joined the Partnership, followed by the City of Healdsburg in August 2019. We are pleased to welcome both new Partners.

The Partnership's educational resources, programs and incentives support our communities in meeting water-use efficiency requirements in the future as we respond to variable water year conditions and maintain supplies for beneficial use and instream needs.

Sincerely,

Susan Harvey, Chair

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Water Advisory Committee

James Gore, Chair Sonoma Water

PARTNERSHIP ACHIEVEMENTS BY

LANDSCAPE PROGRAMS

164

IRRIGATION STATIONS
RETROFITTED WITH SMART
CONTROLLERS

242

LANDSCAPE PLANS REVIEWED

432

WATER WASTE ENFORCEMENTS

19 LANDSCAPE UPGRADE REBATES

20 POOL COVER REBATES 126,605

SQUARE FEET OF LAWN REMOVED VIA CASH FOR GRASS / MULCH MADNESS

4

RAINWATER HARVESTING WORKSHOPS

ECO FRIENDLY GARDEN TOUR

2,700+ attendees

42 GARDENS

91

REBATES GIVEN FOR LAWN REMOVAL VIA CASH FOR GRASS / MULCH MADNESS

10

LOW WATER USE GARDEN DESIGN CLASSES

4

DRIP IRRIGATION CLASSES



71
OWEL PROS CERTIFIED



122 CONSULTATIONS

COMMERCIAL PROGRAMS

56,843
GALLONS SAVED
THROUGH SUSTAINED

REDUCTION

31

INDOOR SURVEYS COMPLETED

21

COMMERCIAL HIGH EFFICIENCY URINALS RETROFITTED COMMERCIAL HIGH EFFICIENCY TOILETS RETROFITTED

THE NUMBERS

RESIDENTIAL PROGRAMS



24

HOT WATER RECIRCULATION SYSTEM REBATES

158

HIGH-EFFICIENCY CLOTHES WASHER REBATES

1,428

WATER SMART
HOME EVALUATIONS

11,730

GALLONS OF RAINWATER HARVESTING CAPACITY ADDED 190

DIY TOOLKITS CHECKOUTS FROM THE LIBRARY

1,271

RESIDENTIAL TOILET REPLACEMENTS

K-12 EDUCATION PROGRAMS

13,058

STUDENTS RECEIVED DIRECT INSTRUCTION

3rd Grade - Water/Energy Nexus, Storm Drain Pollution:

3,302 students

4th Grade - Be Part of the Climate Change Solution:

2,232 students

5th Grade – Water Transmission System, Water Quality, Salmon:

3,799 students

15,000

STUDENTS REACHED
AT COMMUNITY
OUTREACH EVENTS

32,413

PIECES OF CURRICULUM MATERIALS DISTRIBUTED TO STUDENTS

116

STUDENTS PARTICIPATED IN THE HIGH SCHOOL VIDEO CONTEST

380
PARENT CHAPERONES
ATTENDED FIELD TRIPS

2,373

STUDENTS PARTICIPATED IN THE WATER AWARENESS POSTER CONTEST

9,451

ASSEMBLY PROGRAM ATTENDEES

73

TEACHERS ATTENDED WORKSHOPS



PARTNERSHIP PROVIDES CONTINUED SUPPORT TO FIRE REBUILD EFFORT

Following the development of the Landscape Design Templates in 2018, the Partnership developed a series of two-part workshops titled "Pathways to Rebuilding". Hosted by the City of Santa Rosa, the workshops included informational overviews of the Landscape Design Templates, local permitting requirements and technical aspects of

PROGRAM EXPENDITURES

In thousands of dollars)

(III tribusarius di dollars)				
	FY 18-19	Minimum		
City of Cotati	\$57	\$18		
Marin Municipal Water District	\$1249	\$512		
North Marin Water District	\$546	\$168		
City of Petaluma	\$669	\$172		
City of Rohnert Park	\$120	\$94		
City of Santa Rosa	\$604	\$374		
City of Sonoma	\$100	\$40		
Valley of the Moon Water District	\$232	\$53		
Town of Windsor	\$175	\$69		
Sonoma Water	\$2002	NA		
Regional Total	\$5789	\$1500		

Minimums are established for founding members in the MOU Regarding Sonoma-Marin Saving Water Partnership.

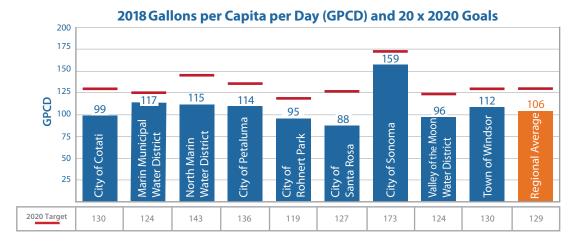
adapting and modifying the plans to fit their home sites, selecting optional design elements as well as a hands-on work session.

A total of four workshops were held between September 2018 and June 2019 with more than 285 people attending. The City of Santa Rosa reports that as of July 2019, 178 out 445 plans submitted, about 40%, have used the Landscape Design Templates.

Key to the success of the workshops were the many volunteers from the landscape industry who donated countless hours with coordination, getting trained and assisting one-on-one with residents at the hands-on work sessions.

The City of Santa Rosa is also developing architectural renderings of the Landscape Design Templates to provide a lifelike representation of a mature landscape installed using the designs. To date, five renderings have been completed and can be viewed and downloaded from the Partnership website.

Featured on the cover of this report is the frendering of the Sonoma Cottage A design.



In 2009, SBx7-7 established a statewide goal, known as 20 x 2020, to reduce per capita water use 20% by the year 2020. The chart above displays 2018 per capita water use of the founding Partner service areas and the founding Partners combined as a Regional Average. The 2020 goals are indicated by the red lines.

While the chart shows that all of the founding 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. 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.



ANNUAL OUTREACH CAMPAIGN

With the majority of household water use occurring outdoors, the Partnership focused this year's outreach campaign on outdoor water use. The Partnership developed a series of short 30-second videos for use on digital platforms including social media and music streaming.

Produced in both English and Spanish languages, video topics include the Garden Sense program, graywater, DIY landscaping, the best time of day to water and featured plants that thrive in our Mediterranean climate.

Check out the videos on the Partnership website.

TRIPLE-DOUBLE

For the third year in a row, the Partnership was awarded two U.S. EPA WaterSense Awards. In 2019, just 25 WaterSense Awards were given nationally to industry leaders who support WaterSense in its mission to promote water-use efficiency.

The Partnership received its third Sustained Excellence Award for its Qualified Water Efficient Landscape Program and its second Excellence Award in Outreach and Education.









City of Santa Rosa 707-543-3985 srcity.org/water



Town of Windsor 707-838-1004 townofwindsor.com



Marin Municipal Water District 415-945-1520 marinwater.org



City of Petaluma 707-778-4507 cityofpetaluma.net/wrcd



City of Rohnert Park 707-588-3300 rpcity.org



City of Sonoma 707-933-2237 sonomacity.org



NORTH MARIN WATER DISTRICT

North Marin Water District 415-761-8933 nmwd.com



Valley of the Moon Water District 707-996-1037 vomwd.com



City of Cotati 707-665-3631 ci.cotati.ca.us



California American Water Larkfield 707-542-8329 calamwater.com



City of Healdsburg 707-431-3122 smartlivinghealdsburg.org



Sonoma Water

Sonoma Water 707-547-1933 sonomawater.org

