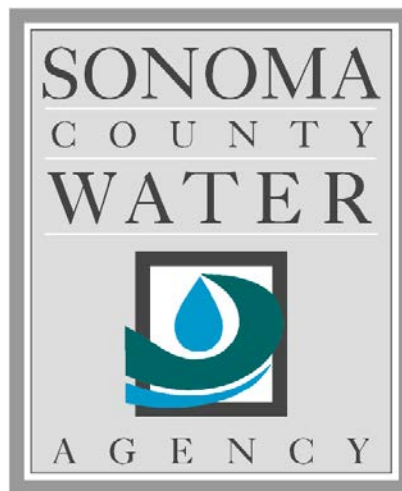


State Water Resources Control Board
Order 5/4/2016

Provision 11 -Water Use Efficiency Update



April 3, 2017

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 Provision 11 of the State Water Resources Control Board (State Board) Order dated May 4, 2016 (Order).

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

By April 1, 2017, SCWA shall provide a written update to the Deputy Director for Water Rights regarding activities and programs being implemented by SCWA 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

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 (Partnership) in 2010. California American Water – Larkfield District joined the Partnership in 2015. The purpose of the Partnership is to establish the financial obligation for the nine local water retailers, Marin Municipal Water District and Sonoma County Water Agency, identify and recommend implementation of water conservation projects and to maximize implementation of cost-effective projects for the Partnership. 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.

Since 2013, annual conservation campaigns focused on ongoing drought conditions were launched by the Partnership and the Water Agency. In 2014 “There’s a Drought On. Turn the Water Off.” was the regions first ever winter advertising reminding customers to conserve water. In 2015 the Partnership wanted to keep the similar, humorous, engaging campaign that resonated with the general public so we shifted into the “There’s Never Enough to Waste. Turn the Water Off.” campaign. The new campaign had the same look and feel as the prior year with a slight shift. Our focus became providing resources on how to make specific behavioral and hardware changes with the ads focusing on a call to action. As water supply conditions improved, the 2016 campaign focused on acknowledging the success achieved by the community.

2.1 Sonoma-Marin Saving Water Partnership Annual Report

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 2015/2016 Annual Report for the Partnership is attached in Appendix A.

3 Self Certification and Water Supply Stress Test

In June 2016 the Water Agency was required to provide information on the volume of water they expect to deliver in each of the next three years using the assumptions in the [May 2016 Emergency Regulation](#) adopted by the State Board. The May 2016 Emergency Regulation replaced the state-developed urban water conservation standards with locally-developed conservation standards based upon each agency's specific circumstances. The regulation required individual urban water suppliers to conduct a stress test and self-certify the level of available water supply assuming three additional dry years. Urban water wholesalers were required to make projections about how much water they expect to deliver to retail water suppliers under the three-dry-years scenario, when the supply projection for the next three years is based on current supply conditions plus an assumed three-year hydrology mirroring the 2012-13, 2013-14, and 2014-15 water years.

Based on the State Board's stress test methodology, the Water Agency and Partnership were able to justify a 0% conservation standard was needed in the region for 2016. The Supply Availability for Urban Water Suppliers is attached in Appendix B.

4 Conservation Tracking

The Water Agency actively engaged all the Partnership members to track and report their water use data despite the conservation goal being set at 0%. The table below shows the regions cumulative progress through February 2017 and each individual Partner served by the Agency. As displayed, the Partnership continued to experience significant demand reductions in the region.

Water Retailer	Aggregate June 2015 to Feb 2017 (Gallons)	2013 Benchmark (Gallons)	Savings Relative to 2013 Benchmark	FY 2015/2016 Conservation Standard
Cal Am	429,061,514	543,296,000	21%	25%
Cotati	452,053,444	576,397,834	22%	20%
Marin Municipal	12,931,295,921	16,031,065,804	19%	20%
North Marin	4,368,027,669	5,711,000,000	24%	24%
Petaluma	4,312,035,161	5,584,233,974	23%	16%
Rohnert Park	2,401,417,598	2,935,000,000	18%	16%
Santa Rosa	9,597,014,321	12,565,654,305	24%	16%
Sonoma	982,680,135	1,310,752,354	25%	28%
Valley of the Moon	1,355,150,924	1,844,824,147	27%	20%
Windsor	1,746,506,943	2,237,112,443	22%	16%
Partnership Total	38,575,260,151	49,381,024,338	22%	19%

Appendix A

**2015/2016 Annual Report for the
Sonoma-Marín Saving Water Partnership**

(begins on the following page)



**ANNUAL REPORT
2015-2016**

ABOUT THE PARTNERSHIP

The Sonoma-Marin Saving Water Partnership (Partnership) represents 11 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, California American Water - Larkfield District and Sonoma County Water Agency (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 remain members in good standing of the California Urban Water Conservation Council (CUWCC) and implement the Best Management Practices (BMPs) for water conservation.



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, 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.



THANK YOU FOR DOING YOUR PART! THERE'S NEVER ENOUGH TO WASTE!



This year the California Drought continued for a fifth consecutive year and Governor Jerry Brown directed the State Water Resources Control Board to continue outdoor water use restrictions and reduce overall water use in California. Even though our region experienced about average rainfall and locally was spared from Statewide drought effects, the Sonoma Marin Water Saving Partnership cumulatively met the State requirements by reducing water production 24%.

The Partnership's collaborative water conservation public outreach effort continued with a simple message: "Thank You for Doing Your Part! There's Never Enough to Waste!" Radio, television, print and online media urged water users to conserve. The area retail water providers continued their water conservation efforts with additional Drought Drive Ups, Do It Yourself campaigns, recycled water residential fill stations and unveiled an innovative "Take it from the Tap" campaign to encourage drinking local tap water.

For the fourth year in a row the Partnership received awards from the U.S. Environmental Protection Agency. In 2016 the EPA WaterSense "Partner of the Year" recognition as a professional certifying organization for promoting water efficient irrigation practices through implementation of the Qualified Water Efficient Landscaper Program (QWEL) and "Excellence Award" for promoting WaterSense labeled products were presented to the Partnership at the WaterSmart Innovations Conference. QWEL educates landscape professionals and their customers on the benefits of sound landscape design, management and irrigation practices. The WaterSense labeled products were distributed at Drought Drive Up events and the Sonoma County Fair Water Smart Home booth. The Partnership garnered two of sixteen awards issued by the EPA nationally.

The Partnership was formed in late 2010 and recognizes that establishing common regional water conservation projects may 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 efficiency programs, educational seminars and outreach campaigns, is working every day of the year to educate our communities about the importance of conserving water resources and curbing water-wasting behaviors. This year California American Water (Larkfield District) joined the Partnership and future expansion is anticipated.

Regional water use during Fiscal Year 2015/16 remains down significantly from prior years as mandatory outdoor water use restrictions continue. The Partnership offers educational resources, programs and incentives to aid our communities in meeting water use efficiency requirements in the future as we work together in response to variable water year conditions and maintain supplies for beneficial use and instream needs.

Sincerely,

Handwritten signature of Michael Healy in black ink.

Michael Healy, Chair
Water Advisory Committee

Handwritten signature of Efrén Carrillo in black ink.

Efrén Carrillo, Chair
Sonoma County Water Agency

PARTNERSHIP ACHIEVEMENTS BY THE NUMBERS

RESIDENTIAL PROGRAMS



68,645
GALLONS OF RAINWATER HARVESTED

900
HIGH-EFFICIENCY CLOTHES WASHER REBATES

98 HOT WATER RECIRCULATION SYSTEM REBATES



17 LAUNDRY TO LANDSCAPE GRAYWATER SYSTEMS

3,099 WATER SMART HOME EVALUATIONS



4,966 RESIDENTIAL TOILET REPLACEMENTS



LANDSCAPE PROGRAMS

1,495
WATER WASTE ENFORCEMENTS

121
POOL COVER REBATES



225
GARDEN SENSE CONSULTATIONS

70
QWEL & SQWEL GRADS



ECO FRIENDLY GARDEN TOUR
1,800 ATTENDEES
33 SITES



553
IRRIGATION STATIONS RETROFITTED WITH SMART CONTROLLERS

4 BIOSWALES, DRIP IRRIGATION & LOW WATER USE GARDEN DESIGN CLASSES HELD

1,470
REBATES GIVEN FOR LAWN REMOVAL VIA CASH FOR GRASS/ MULCH MADNESS

1,331,844
SQUARE FEET OF LAWN REMOVED VIA CASH FOR GRASS/ MULCH MADNESS

90
LANDSCAPE PLANS REVIEWED



11
RAINWATER HARVESTING CLASSES



120
LANDSCAPE UPGRADE REBATES



11
SHEET MULCHING CLASSES

FISCAL YEAR 2015/2016



57 INDOOR SURVEYS COMPLETED



COMMERCIAL PROGRAMS



14

COMMERCIAL LAUNDRY FIXTURES & SYSTEMS REBATED



10

CII HIGH EFFICIENCY TOILETS AND URINALS RETROFITTED

400,230

GALLONS SAVED THROUGH SUSTAINED REDUCTION

8,101

STUDENTS RECEIVED DIRECT INSTRUCTION

K-12 EDUCATION PROGRAMS

62

HIGH SCHOOL VIDEO CONTEST PARTICIPANTS



CURRICULUM MATERIALS DISTRIBUTED TO

30,609 STUDENTS



3,764

ENTRIES IN THE WATER AWARENESS POSTER CONTEST

10,682

ASSEMBLY PROGRAM ATTENDEES

375

PARENT CHAPERONES ATTENDED FIELD TRIPS



STUDENTS REACHED AT COMMUNITY OUTREACH EVENTS

5,000



64

TEACHER'S ATTENDED WORKSHOPS

PARTNERSHIP HIGHLIGHTS

NEW WATER EDUCATION BUILDING

In August of 2015, years of planning and tremendous support from the Partnership culminated in the completion of The Westside Water Education Center. Nestled near a redwood grove along the Russian River, the Water Education Center provides a permanent home to the Water Education Program. The Education Center hosts thousands of elementary, high school and college students, serves as a meeting place for teacher workshops and public meetings, and is the starting place for public tours of our water supply system. Paired with collector six and the new fish viewing gallery along the Russian River, the Water Education Center allows students and adults to understand the source of our drinking water, our connection to endangered salmon and the importance of conservation and stewardship within the Russian River watershed.



PROGRAM EXPENDITURES

(In thousands of dollars)

	FY 15-16	Minimum
California American Water Larkfield District	\$30	NA
City of Cotati	\$69	\$18
Marin Municipal Water District	\$600	\$206
North Marin Water District	\$380	\$217
City of Petaluma	\$716	\$260
City of Rohnert Park	\$88	\$102
City of Santa Rosa	\$1346	\$555
City of Sonoma	\$124	\$59
Valley of the Moon Water District	\$313	\$70
Town of Windsor	\$238	\$13
Sonoma County Water Agency	\$2284	NA
Regional Total	\$5443	\$1500

Minimum is established in the MOU regarding the Sonoma-Marín Saving Water Partnership.

AWARD WINNING PROGRAMS

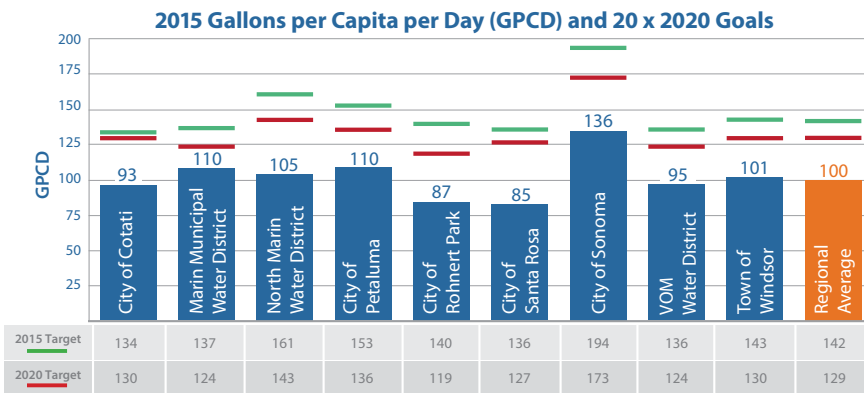
The Partnership is excited to have received recognition for two of the programs that are offered to promote efficient water use in the landscape. For the second consecutive year the Partnership received a WaterSense Partner of the Year Award from the U.S. Environmental Protection Agency (EPA) for its work in educating landscape professionals through its WaterSense labeled Qualified Water Efficient Landscaper (QWEL) program in irrigation system auditing.

The Garden Sense program achieved first place in the 'Community Service' category of the International Master Gardener 2015 Search for Excellence Award. The Garden Sense program is offered in collaboration with the Master Gardeners of Sonoma County and provides residents with a free on-site landscape consultation. Consultations cover topics including lawn conversion, site appropriate low water use plants, conversion of sprinklers to drip irrigation, assessment of existing irrigation, and sustainable garden practices. From July 2014 to June 2015 Garden Sense consultants visited 275 sites throughout Sonoma County.

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 below displays 2015 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. 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.



TAKE IT FROM THE TAP!

The Partnership developed and implemented a robust “Take it From the Tap!” (TAP!) multimedia campaign to raise awareness about our local water system, address concerns about water quality, create behavior change in consumers to choose tap water over bottled water and reduce impacts on the environment. The campaign ran from May 2016 through August 2016 and included both print and digital advertisements (ads, video, billboards, radio), as well as, a companion social media campaign to reach a broad regional demographic.



In addition to the creation of campaign collateral, a variety of resources were developed, such as a website (TakeItFromTheTap.org), partner toolkit, classroom curriculum, water quality FAQs and a reusable water bottle with TAP! messaging which are given out in classrooms and at community events. These resources will be continually utilized by the partners to provide TAP! education on an on-going basis and are available to the public on the new website.

As a result, it is estimated that the campaign was viewed/heard over 8 million times throughout the region.



TRANSFORMING LANDSCAPES THROUGH COMMUNITY PARTNERSHIPS

In October of 2015 the Sonoma County Water Agency contracted Daily Acts and Conservation Corps North Bay to execute an eight week pilot program to replace lawns in the cities of Rohnert Park and Cotati including the installation of 3 model sites. The crew of 8 young adults were participating in the Summer Youth Ecology Corps Program. A total of 30 residential lawns were sheet mulched, accounting for 43,050 sq ft of turf in the 30 days the crews were active

ANNUAL MULTI-MEDIA PUBLIC EDUCATION CAMPAIGN

Building on the success of the 2014 and 2015 “There’s a drought on. Turn the water off” campaign, the Partnership continued the theme with a new message, “Thank you for doing your part. There’s never enough to waste.” The campaign was disseminated throughout the region via radio and print in English and Spanish.

Additionally, the Partnership had a large presence at the Sonoma County Fair, displaying its “Water Efficient House” in the Grace Pavillion. The interactive house provides tips for saving water inside and outside the home. About 260,000 visited the County Fair this year.

SONOMA - MARIN
SAVING WATER
 PARTNERSHIP

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

MARIN MUNICIPAL
 WATER DISTRICT
 Marin Municipal Water District
 (415) 945-1520
www.marinwater.org

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

NORTH MARIN
 WATER DISTRICT
 North Marin Water District
 (415) 761-8933
www.nmwd.com

City of Rohnert Park
 (707) 588-3300
www.rpcity.org

SONOMA COUNTY
 WATER AGENCY
 Sonoma County Water Agency
 (707) 547-1933
sonomacountywater.org

City of Santa Rosa
 Utilities Department
 City of Santa Rosa
 (707) 543-3985
www.srcity.org/wue

TOWN OF
 WINDSOR
 Town of Windsor
 (707) 838-1004
townofwindsor.com

City of Sonoma
 (707) 933-2237
www.sonomacity.org

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

CALIFORNIA
 AMERICAN WATER
 California American Water
 Larkfield District
 (707) 542-8329
calamwater.com



WWW.SAVINGWATERPARTNERSHIP.ORG

Appendix B

**Sonoma County Water Agency:
Supply Availability for Urban Water Suppliers**

(begins on the following page)

SONOMA COUNTY WATER AGENCY: SUPPLY AVAILABILITY FOR URBAN WATER SUPPLIERS

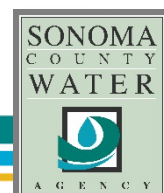
June 14, 2016

Background

The Sonoma County Water Agency (Water System Number CA4910020) is required to provide information on the volume of water they expect to deliver in each of the next three years using the assumptions in the [May 2016 Emergency Regulation](#) adopted by the State Water Resources Control Board. The May 2016 Emergency Regulation replaces the state-developed urban water conservation standards with locally-developed conservation standards based upon each agency's specific circumstances. The regulation requires individual urban water suppliers to conduct a stress test and self-certify the level of available water supplies they have assuming three additional dry years, as well as the level of conservation necessary to assure adequate supply over that time. Urban water wholesalers are required to make projections about how much water they expect to deliver to retail water suppliers under the three-dry-years scenario, when the supply projection for the next three years is based on current supply conditions plus an assumed three-year hydrology mirroring the 2012-13, 2013-14, and 2014-15 water years.

Water System

The Sonoma County Water Agency (Water Agency) provides wholesale, potable water for approximately 600,000 people in Sonoma and Marin counties. The Water Agency relies on the Russian River and two federal water supply and flood control reservoirs in the Russian River watershed-- Lake Mendocino and Lake Sonoma-- for its primary water supplies. The Water Agency is the local sponsor for these reservoirs, which it operates in coordination with the U.S. Army Corps of Engineers. The Water Agency manages the water supply storage within Lake Mendocino and Lake Sonoma to optimize the water supply yields of these reservoirs and controls releases from the water supply pools of both reservoirs to maintain minimum required instream flows in the Russian River and Dry Creek and to meet the diversion demands of the Water Agency and other Russian River water users. When water levels rise up into the flood control pool, the U.S. Army Corps of Engineers assumes operational control and makes releases for flood control purposes until storage levels return to the water supply pool.



The Water Agency holds four water right permits for water supply purposes. Permit 12947A authorizes the collection to storage of water in Lake Mendocino and the direct diversion and re-diversion of water originating in the East Fork Russian River at its Wohler/Mirabel diversion facilities. Under Permit 12947A, the combined direct diversion and re-diversion rates are limited to an average monthly rate of 92 cubic feet per second (cfs) and to 37,544 acre-feet per year (AF/yr) and collection to storage is limited to 122,500 AF/yr. Permit 16596 authorizes the collection to storage of water in Lake Sonoma and the direct diversion and re-diversion of an average monthly rate up to 180 cfs from the Russian River at the Wohler/Mirabel diversion facilities. Under Permit 16596, the annual limit on collection to storage is 245,000 AF/yr. additionally, the Water Agency holds Permits 12949 and 12950 that authorize direct diversions of 20 and 60 cfs, respectively, at the Wohler/Mirabel diversion facilities. The combined amount of direct diversion and re-diversion authorized under the four permits is limited to no more than 180 cfs and 75,000 AF/yr.

Lake Mendocino relies on year-to-year rainfall and water diverted from the Eel River through PG&E's Potter Valley Hydroelectric Project to fill annually. Lake Mendocino is a key drinking water source for the cities of Ukiah, Hopland, Cloverdale, Geyserville and Healdsburg, along with agricultural water users in the upper Russian River and provides water to meet minimum instream flow requirements required under the Water Agency's water right permits. During dry conditions, water releases from Lake Mendocino supplement flows in the Russian River for the threatened Chinook salmon and steelhead trout during the fall and winter seasons.

Lake Sonoma is about three times larger than Lake Mendocino and provides multiple years of water supply. Lake Sonoma solely relies on rainfall within its watershed to fill and supports a dynamic and fragile ecosystem in Dry Creek that includes the endangered coho salmon and threatened steelhead trout. Lake Sonoma is a critical asset that serves as a reliable water source for the Water Agency's service area.

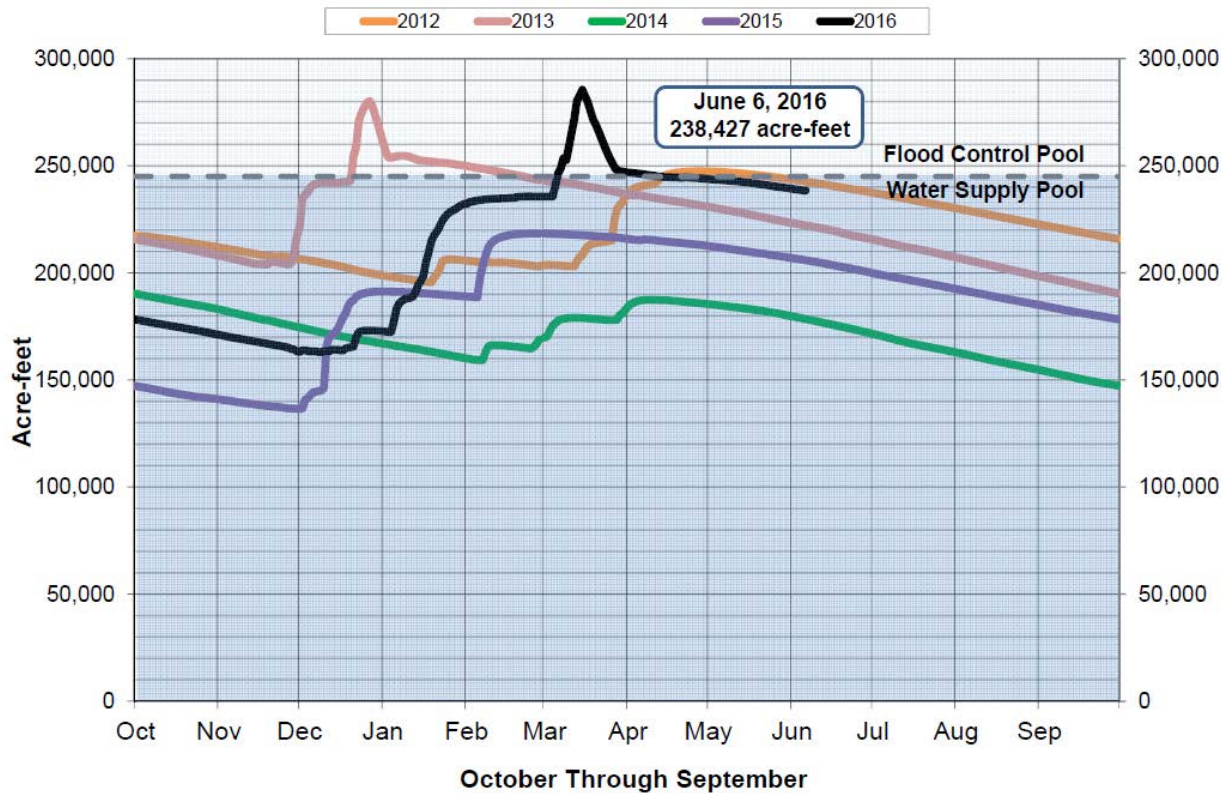
The Water Agency is the wholesale water provider to the following Urban Water Suppliers that are required to submit the Water Supply Reliability Certification and Data Submission Form: City of Petaluma, City of Rohnert Park, City of Santa Rosa, City of Sonoma, Town of Windsor, Marin Municipal Water District, North Marin Water District, and Valley of the Moon Water District.

Water Supply Availability

To determine the amount of water available for the upcoming water years (WY 2017, WY 2018 and WY 2019), the Water Agency decided to use WY 2012 as a reference point. The 2012 water supply conditions in Lake Sonoma closely resemble the current WY 2016 water supply conditions, which gives a strong indicator of the supplies that may be available in the coming

years assuming similar weather patterns. Chart 1 clearly demonstrates that Lake Sonoma current water supply levels align with the 2012 conditions.

Chart 1: Lake Sonoma Storage by Water Year



The Water Agency has estimated the projected water storage for Lake Sonoma for water years 2017, 2018, and 2019 by assuming hydrologic and demand conditions for water years 2013, 2014 and 2015 repeat. Table 1 below provides the reservoir levels at the start and the end of the three consecutive water years. As shown in Table 1, the Water Agency anticipates over 178,000 acre-feet (AF) of water at the end of Year 3, assuming the same precipitation that occurred during water years 2013, 2014 and 2015 would reoccur for upcoming water years 2017, 2018 and 2019. As of June 6, 2016 the water storage in Lake Sonoma exceeds the June 6, 2013 water storage by 24,317 AF. To ensure the most conservative estimate is provided to our Urban Water Suppliers, this additional water is not being taken into consideration for this analysis.

Table 1: Lake Sonoma Reservoir Storage Level

	Reference Year	Start of Water Year Reservoir Storage (AF)	End of Water Year Reservoir Storage (AF)
Estimated WY 2017	WY 2013	215,680	190,471
Estimated WY 2018	WY 2014	190,248	147,391
Estimated WY 2019	WY 2015	146,923	178,398

Based on water storage in Lake Sonoma, a total of 178,398 AF would remain at the end of water year 2019. Per the Water Agency’s water rights permits and State Water Resources Control Board Decision 1610, a curtailment requirement will go into effect for all of the Water Agency retailers if Lake Sonoma has a storage level of 100,000 AF or less before July 15. This provides additional assurance that if the region were nearing a local drought emergency, a trigger is in place to automatically require a 30% conservation standard. As shown in Chart 1 and Table 1, Lake Sonoma never neared the 100,000 AF threshold during the water years 2013, 2014 and 2015 and therefore are not projected to initiate the curtailment requirement for water years 2017, 2018 and 2019. Table 2 demonstrates the total amount of water available at the end of each water year, while remaining above the 100,000 AF curtailment requirement, for the following Urban Water Suppliers: City of Petaluma, City of Rohnert Park, City of Santa Rosa, City of Sonoma, Town of Windsor, Marin Municipal Water District, North Marin Water District, and Valley of the Moon Water District.

Table 2: Water Agency Estimated Water Supply at End of Water Year

	<i>Available Water Above the 100,000 AF Threshold (AF)</i>
<i>End of WY 2017</i>	90,471
<i>End of WY 2018</i>	47,391
<i>End of WY 2019</i>	78,398

*Water Agency’s water rights permit has an annual limit of 75,000 AF

Ongoing Commitment to Water Use Efficiency

The Water Agency and the local water retailers are committed to ensuring our region remains a leader in water use efficiency. The Water Agency’s and its partners’ work through the Sonoma-Marín Saving Water Partnership will continue regardless of a state conservation mandate being in effect and as a region we will continue to monitor local conditions to react in the most appropriate manner possible. The Water Agency will continue to coordinate with the water retailers and actively manage local water supplies to ensure beneficial use.