

San Jose Water Company

2015 Urban Water Management Plan

June 2016

Final Report

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Appendices

- A. AWWA Water Audit Worksheets
- B. SB x7-7 Verification Forms
- C. SJWC's Schedule 14.1
- D. SJWC's Proposed Water Shortage Contingency Plan
- E. 2014 CUWCC Best Management Practices Retail Coverage Report
- F. City of San Jose Water Waste Ordinance No. 29555
- G. SJWC Rule 14.1 Water Shortage Contingency Plan
- H. Cities and County Notification Letters
- I. San Jose Mercury News Notice of 2015 UWMP Public Hearing
- J. Adoption Resolution of UWMP
- K. Department of Water Resources Checklist Arranged by Subject

Abbreviations and Acronyms

| ABAG | Association of Bay Area Governments |
|-----------|--|
| Act | California Urban Water Management Planning Act of 1983 |
| AF | Acre-Foot |
| AMI | Automated Meter Infrastructure |
| AWWA | American Water Works Association |
| BAESIC | Bay Area Emergency & Security Information Collaborative |
| BMP | Best Management Practices |
| CalWARN | California Water/Waste Water Agency Response Network |
| CII | Commercial, Industrial, and Institutional |
| CPUC | California Public Utilities Commission |
| CUWCC | California Urban Water Conservation Council |
| CWC | California Water Code |
| DDW | California Division of Drinking Water |
| DMM | Demand Management Measures |
| DOF | Department of Finance |
| DWR | California Department of Water Resources |
| EVC | Emergency Volunteer Center |
| GPCD | Gallons per Capita per Day |
| Guidebook | 2015 Guidebook for Urban Water Suppliers |
| HCD | California Department of Housing and Community Development |
| ICS | Incident Command System |
| MG | Million Gallons |
| MOU | Memorandum of Understanding |
| MWM | Maddaus Water Management |
| NAWC | National Association of Water Companies |
| NIMS | National Incident Management System |
| PWS | Public Water System |
| RHNA | Regional Housing Need Allocation |
| RWQCB | Regional Water Quality Control Board |
| SB | Senate Bill |
| SB x7-7 | California Senate Bill SB x7-7 of 2009 |
| SBWR | South Bay Water Recycling |
| SCVWD | Santa Clara Valley Water District |
| SEMS | Standardized Emergency Management System |
| SGMA | Sustainable Groundwater Management Act |
| SJ/SC RWF | San Jose/Santa Clara Regional Wastewater Facility |
| SJWC | San Jose Water Company |
| WSCC | Water Sector Coordination Council |
| WSCP | SJWC Water Shortage Contingency Plan |
| WSIMP | 2012 SCVWD Water Supply and Infrastructure Master Plan |



Chapter 1 Introduction and Overview

1.1 Background and Purpose

Water planning is an essential function of water suppliers and has become critical as California grapples with ongoing drought and expected long term climate changes. The 2015 San Jose Water Company (SJWC) Urban Water Management Plan (UWMP) serves two primary purposes: (1) as a master plan for water supply and resources management, and (2) a reporting document for compliance with the California Water Code (CWC) and California Urban Water Management Planning Act of 1983 (Act).

The Act was originally developed due to concerns regarding potential water supply shortages throughout California and focused on water supply reliability and water use efficiency. Since its original passage, there have been several amendments in response to the State's water shortages, droughts, and other factors. With the passage of Senate Bill (SB) 610 and 221 in 2001, UWMPs took on even more importance. SB 610 and 221 require counties and cities to consider the availability of adequate water supplies for certain new large developments and to have written verification of sufficient water supply to serve them. UWMPs are identified as a key source document for this verification. Based on these statutes SJWC prepares individual Water Supply Assessments for these new large developments. Demands from all other new developments that do not require individual Water Supply Assessments are considered part of the growth projections documented in this UWMP.

A significant amendment to the Act was made in 2009, after the drought of 2007-2009 and as a result of the governor's call for a statewide 20 percent reduction in urban water use by year 2020. This was the Water Conservation Act of 2009, also known as SB x7-7. This Act required agencies to establish water use targets for 2015 and 2020 that would result in statewide savings of 20 percent by 2020 using one of four methodologies to calculate per capita water use. SJWC's 2015 UWMP addresses the requirements of the CWC, provides useful information to the public about water supplies, tabulates projected customer demands for the next 25 years, and provides a framework for water planning to minimize negative effects of potential water shortages.

1.2 Changes since the 2010 UWMP

Since the preparation of SJWC's 2010 UWMP a number of changes to the California Water Code have been made that impact the preparation of UWMPs. Some of the significant changes include the following:

- Demand Management Measures CWC 10631 Requires retail water suppliers to address the nature and extent of each water demand management measure implemented over the past five years and describe the water demand management measures that the supplier plans to implement to achieve its water use targets.
- Submittal Date CWC 10621 Requires each urban water supplier to submit its 2015 plan to the Department of Water Resources by July 1, 2016.



- Standardized Forms and Electronic Submittal CWC 10644 Requires the plan, or amendments to the plan to include all standardized tables specified by DWR and also submit those tables electronically.
- Water Loss CWC10631 Requires a plan to quantify and report on distribution system water loss.

1.3 UWMP Organization

This report is organized in accordance with the recommended format provided by the California Department of Water Resources (DWR) 2015 Guidebook for Urban Water Suppliers (Guidebook). The UWMP contains ten chapters, followed by appendices that provide supporting documentation for the information presented in the report.

- Chapter 1 Introduction and Overview
- Chapter 2 Plan Preparation: Provides information on the process for developing the UWMP, including efforts in coordination and outreach
- Chapter 3 System Description: Includes a description of the service area, a map, climate, and SJWC's organizational structure and history
- Chapter 4 System Water Use: Describes and quantifies current and projected water demands
- Chapter 5 Baselines and Targets: Describes SJWC's efforts to achieve 2020 water use targets
- Chapter 6 System Supplies: Describes and quantifies the current and projected sources of water
- Chapter 7 Water Supply Reliability: Presents supply and demand comparisons in five-year increments under average year, dry year, and multiple-dry year conditions
- Chapter 8 Water Shortage Contingency Planning: Includes SJWC's staged plan for dealing with water shortages
- Chapter 9 Demand Management Measures: Describes SJWC's efforts to promote water conservation and reduce demand
- Chapter 10 Plan Adoption, Submittal, and Implementation: Describes steps taken to adopt and submit the UWMP and make it publicly available, and how the plan will be implemented

1.4 UWMP and Grant or Loan Eligibility

Pursuant to DWR's Guidebook, in order for an urban water supplier to be eligible for any water management grant or loan administered by DWR, the agency must have a current UWMP on file that has been determined by DWR to address the requirements of the CWC. A current UWMP must also be maintained by the water supplier throughout the term of any grant or loan administered by DWR. SJWC's 2015 UWMP has been prepared in order to meet eligibility requirements for grants and loans administered by the State and/or DWR.



Chapter 2 Plan Preparation

This chapter describes the preparation of SJWC's 2015 UWMP, including coordination with other relevant agencies, organizations and stakeholders as applicable and identifies standard reporting periods and units used throughout this Plan.

2.1 Basis for Preparing a Plan

In accordance with CWC 10617, urban water suppliers with 3,000 or more service connections or supplying 3,000 or more acre-feet of water per year are required to prepare an UWMP every five years. Also, CWC 10621 states each urban water supplier shall update and submit its 2015 plan to DWR by July 1, 2016. SJWC consists of a single Public Water System (PWS) as shown in Table 2-1 and is well beyond the service connection and acre-feet reporting threshold and therefore has prepared this 2015 UWMP.

| Table 2-1 Retail Only: Public Water Systems | | | | | | | |
|---|-----------------------------|---|--|--|--|--|--|
| Public Water System Number | Public Water System Name | Number of Municipal Connections 2015 | Volume of Water Supplied 2015 (MG) | | | | |
| 4310011 | San Jose Water Company | 225,299 | 32,907 | | | | |
| | TOTAL 225,299 32,907 | | | | | | |
| NOTES: Does not include water losses @ 2461 MG in 2015. Includes recycled water demand. | | | | | | | |

2.2 Regional Alliance

A group of water suppliers agreeing among themselves to plan, comply, and report as a region on the requirements of SB x7-7, is referred to as a Regional Alliance. Each Regional Alliance will develop its own set of Interim 2015 and 2020 Urban Water Use Targets and allows water suppliers to work toward cooperatively developing programs and meeting regional water conservation targets, but not necessarily submitting a Regional Plan.

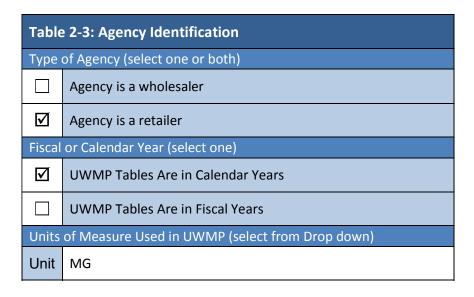
Being a member of a Regional Alliance is not required and does not take the place of submitting an UWMP or Regional Urban Water Management Plan (RUWMP). While this 2015 UWMP was developed in close coordination with SCVWD, and SJWC does actively participate in all SCVWD facilitated water supply and UWMP retailer meetings, it was developed as an individual UWMP as shown in Table 2-2.



| Table 2-2: Plan Identification | | | | | | | | |
|--------------------------------|---|--|--|--|--|--|--|--|
| Select Only One | Type of PlanName of RUWMP or Regional Alliance if applicable | | | | | | | |
| V | Individu | Individual UWMP | | | | | | |
| | | Water Supplier is also a member of a RUWMP | | | | | | |
| | | Water Supplier is also a member of a Regional Alliance | | | | | | |
| | Regiona (RUWM | l Urban Water Management Plan P) | | | | | | |

2.3 Calendar Year and Unit of Measure

SJWC is a retail water agency and has elected to report data on a calendar year basis using million gallons (MG) as its unit of measurement for DWR standardized tables.



2.4 Coordination and Outreach

UWMPs provide a framework for long term water planning and inform the public of a supplier's plans for long term resource planning that ensures adequate water supplies for existing and future demands. Coordination and outreach are key elements to developing a useful and accurate UWMP. To this end, and in accordance with CWC 10621, notices of preparation were sent to Santa Clara County and all cities served by SJWC on February 10, 2016. Notification was provided more than 60 days prior to the public hearing. In addition, notified agencies were encouraged to contact SJWC's UWMP preparers if they had any questions or comments about the UWMP or process.



SCVWD is the wholesale water supplier in Santa Clara County and regularly facilitates water supply and conservation subcommittee meetings for all 13 major retailers in Santa Clara County, the cities in Santa Clara County, County of Santa Clara, San Francisco Public Utilities Commission, and the Bay Area Water Supply and Conservation Agency. SJWC staff regularly attends these meetings to discuss current and projected water supplies and demands. The development of this UWMP was a collaborative effort between, SJWC, SCVWD, and other water and wastewater stakeholders in Santa Clara County. In accordance with CWC 10631, SJWC has informed SCVWD and South Bay Water Recycling of its projected water demand over the next 25 years.

Table 2-4 Retail: Water Supplier Information Exchange

The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.

Santa Clara Valley Water District

South Bay Water Recycling

NOTES: South Bay Water Recycling is the sole provider of recycled water.



Chapter 3 System Description

This chapter describes SJWC, presents an overview of the system, sources of supply, climate information, service area population and demographics.

3.1 General Description

San Jose Water Company is one of the largest privately owned water systems in the United States, providing high-quality, low-cost water and exceptional customer service to about one million residents of Santa Clara County since established 150 years ago in 1866. SJWC's service area spans 139 square miles, including most of the cities of San Jose and Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County. Most of the service area is built out and new development is primarily urban infill projects.

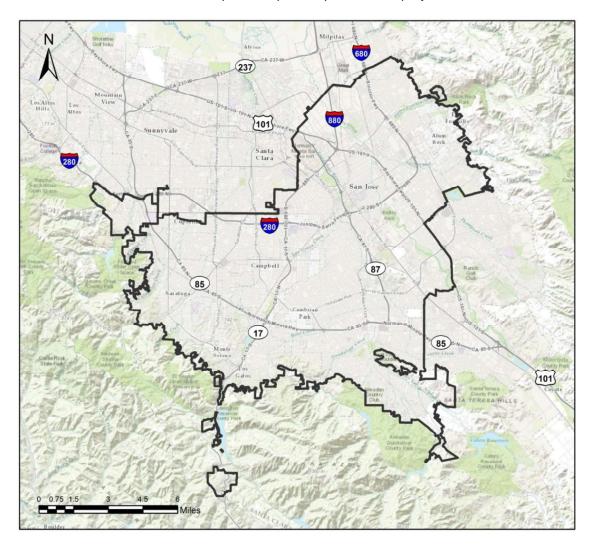


Figure 3-1 San Jose Water Company Service Area



3.2 Sources of Supply

SJWC has three sources of potable water supply: groundwater, imported treated surface water and local surface water. A fourth and growing source of supply is non-potable recycled water, which is discussed in *Chapter 6 System Supplies*. On average, groundwater from the major water-bearing aquifers of the Santa Clara Subbasin comprise one third of SJWC's potable water supply. These aquifers are recharged naturally by rainfall and streams and artificially mainly by recharge ponds operated by SCVWD.

San Jose Water Company is under contract with SCVWD for the purchase of just over 50 percent of the needed water supply. This water originates from several sources including local reservoirs, the State Water Project and the federally funded Central Valley Project San Felipe Division. Water is piped into SJWC's system at various turnouts after it is treated at one of three SCVWD water treatment plants.

SJWC's final source of potable supply is from surface water in the local watersheds of the Santa Cruz Mountains. Surface water typically provides about seven percent of total water supply depending on the amount of annual rainfall. A series of dams and automated intakes collect water released from SJWC's lakes. The water is then sent to SJWC's Montevina Filter Plant for treatment prior to entering the distribution system. SJWC's Saratoga Treatment Plant draws water from a local stream which collects water from the nearby Santa Cruz Mountains.

3.3 Service Area Climate

The San Jose area experiences a low-humidity moderate climate with an annual average rainfall total of about 15 inches. Maximum monthly average temperatures range from the mid 60's to the low 80's (°F) in spring and summer and from the high 50's to low 60's (°F) in the winter.¹ Most precipitation in the area occurs between November and March with January and February typically being the wettest months, as shown in Figure 3.2. According to SCVWD's Draft 2015 UWMP, the annual average evapotranspiration rate for the San Jose area is about 50 inches per year. Evapotranspiration measures the loss of water to the atmosphere by evaporation from soil and plant surfaces and transpiration from plants. Evapotranspiration serves as an indicator of how much water plants need for healthy growth.

¹ Monthly Temperature and Annual Rainfall Totals from www.weather.com



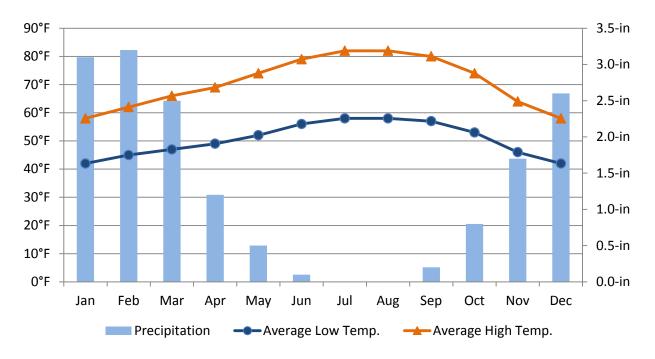
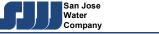


Figure 3-2 Historical Average Monthly Climate Data Source: weather.com

3.4 Historical Population Count Methodology

SJWC's 2010 population count is based on 2010 census block GIS shapefiles provided by the United States Census Bureau, which includes the population count for every census block. Because census blocks have a greater resolution than census tracts (i.e. each census tract is often composed of numerous census blocks, particularly in highly populated areas), they allow for a more precise service area population count around boundaries of SJWC's service area. The estimated 2010 population count for SJWC's service area was calculated according to the following methodology:

- 1) Download the census block shapefile from the United States Census Bureau website.
- 2) Overlay the census blocks with SJWC's service area boundary in ArcGIS.
- 3) Input the census block shapefile and SJWC's service area shapefile into the ArcGIS "Intersect" tool, and perform the "Intersect" analysis.
 - a. This ArcGIS tool will output a new shapefile that only contains population blocks within SJWC's service area.
 - b. Census blocks that partially reside within SJWC's service area are automatically clipped so that the new shapefile only includes the portion of these census blocks that reside within SJWC's service area boundary.
- 4) Manually review all clipped census blocks. For each census block, review the number of parcels, aerial photography, and housing information provided in the census block shapefile to determine the percentage of residential properties inside SJWC's service area boundary. Apply this percentage to the total census block population to obtain the estimated population within SJWC's service area. See Figure 3-3 below.



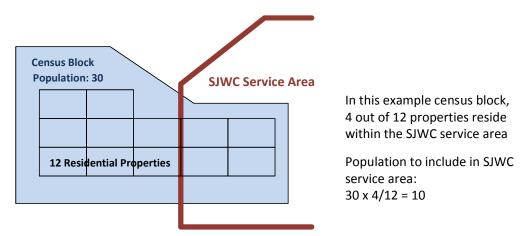


Figure 3-3 Example Showing Manual Review Process of Clipped Census Blocks

5) Sum up the population values of all census blocks within SJWC's service area for a final population count.

This methodology for calculating 2010 population within SJWC's service area was approved via email by Gwen Huff, a Senior Environmental Scientist in the Urban Water Use Efficiency Unit of DWR on September 24, 2015.

3.4.1 DWR Historical Population Tool

As part of the 2015 UWMP, DWR released a free online population tool for water suppliers to calculate their historical population. The DWR population tool uses a "persons per connection" method based on residential connections, census data and uploaded GIS service area boundaries. To use the population tool and determine estimated 2015 population, data from 1990, 2000, 2010 and 2015 are required.

San Jose Water Company did not use the online DWR population tool to compare 2015 population totals between DWR and ABAG. As the 2010 historical population methodology was approved by DWR, SJWC had confidence that the methodology described above was more accurate than an estimate based on service connections. Additionally, high-density urban infill housing with fewer service connections is more common for new developments in SJWC's service area.

3.5 Population Projection Methodology for 2015 – 2040

The Association of Bay Area Governments (ABAG) has developed a Projection 2013 report for the San Francisco Bay Area, which is a series of statistical compilations on demographic, economic, and land use changes in the coming decades. ABAG projects population and job growth rates for Santa Clara County to be higher than the nine-county Bay Area average. Included in Projections 2013 are population projections from 2010 to 2040 in five-year increments for each census tract. The projections take into account anticipated economic factors, changing demographic characteristics, expected local policies and infrastructure investment, as well as historic economic behavior. No population projections were available for census blocks, only for census tracts.



SJWC used ABAG census tract population projections to estimate population growth for all census blocks within SJWC's service area. The percent growth of a given census block was assumed to be equal to the percent growth of the census tract in which it resides, as illustrated in Figure 3-2.

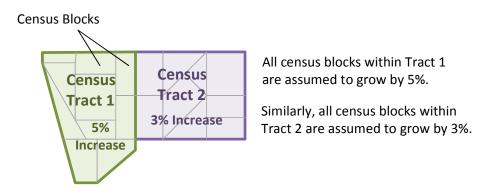


Figure 3-4 Assignment of Percentage Population Change by Census Block

Population projections of each census block was calculated for 2015 through 2040 in five-year increments using the 2010 census block population numbers as a baseline. For each projected year, the total sum of all population blocks within SJWC's service area was computed for a total SJWC service area population. The following table summarizes SJWC's service area population results from 2015 to 2040.

| Table 3-1 Retail: Population - Current and Projected | | | | | | | |
|--|---------|-----------|-----------|-----------|-----------|-----------|--|
| Population | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Served | 982,750 | 1,034,396 | 1,087,273 | 1,142,484 | 1,201,289 | 1,262,356 | |

3.6 Other Demographic Factors

No other demographic factors are known to affect SJWC's water management planning.



Chapter 4 System Water Use

This chapter describes and quantifies SJWC's current water use and projected use by type through 2040.

4.1 Water Use by Type

The majority of connections to SJWC's distribution system are either residential or commercial. SJWC also provides water to industrial, institutional/governmental, private fire service, and hydrant connections. SJWC's existing customer database does not differentiate between single-family and multi-family residential accounts, but based on the 2010 UWMP estimates approximately 15 percent of all residential accounts are multi-family. The resale category represents the many small mutual water companies, which SJWC provides a master water service and where the mutual water company is responsible for distributing the water. SJWC meters all connections, both new and existing. Table 4-1 lists SJWC's water demands and losses for 2015.

| Table 4-1 Retail: Demands for Potable and Raw Water - Actual | | | | | | |
|--|---------------------------------------|--------------------------------------|--------|--|--|--|
| | 2015 Actual in Millions of Gallons | | | | | |
| Use Type | Additional Description (as needed) | Level of Treatment When Delivered | Volume | | | |
| Single Family | | Drinking Water | 15,572 | | | |
| Multi-Family | | Drinking Water | 2,748 | | | |
| Commercial | | Drinking Water | 11,872 | | | |
| Industrial | | Drinking Water | 228 | | | |
| Institutional/Governmental | | Drinking Water | 1,624 | | | |
| Sales/Transfers/Exchanges to other agencies | Resale | Drinking Water | 133 | | | |
| Other | Portable Meters | Drinking Water | 49 | | | |
| Sales/Transfers/Exchanges to other agencies | Resale | Raw Water | 42 | | | |
| Losses | | Drinking Water | 2,461 | | | |
| TOTAL 34,729 | | | | | | |
| NOTES: SJWC does not differentiate between single family and multi-family in its billing system; | | | | | | |
| therefore, an estimate of 85% single-family and 15% multi-family was used to split residential demand. | | | | | | |
| Losses based on 2015 Water Audit (AWWA WAS v5.0). Table does not include recycled water @ 640 MG | | | | | | |

in 2015.



4.2 Projected Potable Water Demand

SJWC has developed demand projections from 2015 to 2040 primarily based on population and per capita usage projections. ABAG census tract population projections were used to estimate population growth within SJWC's service area. In projecting demands, it was assumed that all population growth after 2010 would be within new, high water efficiency developments with a demand of 100 gpcd, which is the approximate per capita demand seen in newer developments in SJWC's service area.

For the already-existing population in 2010, it was assumed that per capita usage from 2015 to 2040 would be similar to that which was observed in 2010. Per capita usage in 2010 was slightly above 126 gpcd, which is much lower than the 10-year SB x7-7 baseline gpcd from 1995-2004 of 154 gpcd. It is not anticipated that the per capita usage can or will continue to decrease at such a rapid rate. However, due to ongoing conservation efforts such as the installation of low-flow showerheads, faucet aerators, high efficiency toilets and clothes washers, as well as changes in landscape plant choice and continual efforts to reduce leakage and runoff, it is expected that the per capita usage for the existing 2010 population will experience a steady decline of 0.2 percent per year until 2040.

Coupling projected demand increases due to population growth with anticipated demand decreases due to conservation efforts, it is estimated that in 2040 SJWC's demand will be approximately 114 gpcd, with a system-wide potable and raw water demand of approximately 144 MGD.

| Table 4-2 Retail: Demands for Potable and Raw Water - Projected | | | | | | | |
|---|------------------|--------|--------------------------|--------|--------|--------|--|
| | Additional | | Projected Water Use (MG) | | | | |
| Use Type | Description | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Single Family | | 20,673 | 21,355 | 22,077 | 22,860 | 23,682 | |
| Multi-Family | | 3,648 | 3,769 | 3,896 | 4,034 | 4,179 | |
| Commercial | | 15,761 | 16,281 | 16,831 | 17,428 | 18,055 | |
| Industrial | | 303 | 313 | 323 | 335 | 347 | |
| Institutional / | | | | | | | |
| Governmental | | 2,156 | 2,227 | 2,302 | 2,384 | 2,470 | |
| Sales / Transfers / Exchanges | Resale Drinking | | | | | | |
| to other agencies | Water | 177 | 182 | 189 | 195 | 202 | |
| Other | Portable Meters | 65 | 67 | 69 | 72 | 75 | |
| Sales / Transfers / Exchanges | Resale Raw Water | | | | | | |
| to other agencies | Resale Raw Waler | 56 | 58 | 60 | 62 | 64 | |
| Losses | | 2,978 | 3,076 | 3,180 | 3,293 | 3,412 | |
| TOTAL 45,817 47,328 48,927 50,663 52,486 | | | | | | | |
| NOTES: 5-year average SJWC system water loss of 6.5% from 2011-2015 used to project future water losses. Projections do not include recycled water. | | | | | | | |



| Table 4-3 Retail: Total Water Demands | | | | | | |
|---------------------------------------|--------|--------|--------|--------|--------|-----------------|
| | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
| Potable and Raw Water | 34,729 | 45,817 | 47,328 | 48,927 | 50,663 | 52 <i>,</i> 486 |
| Recycled Water Demand | 640 | 1,327 | 2,233 | 2,721 | 2,727 | 2,727 |
| TOTAL WATER DEMAND | 35,369 | 47,144 | 49,561 | 51,648 | 53,390 | 55,213 |

4.2.1 Specific Development Projects Included in Demand Assumptions

Since the 2010 UWMP, SJWC has prepared a number of Water Supply Assessments that verified sufficient water supplies existed to support large development projects. Demands tabulated in Table 4-2 include growth associated with all previous Water Supply Assessments and the following proposed developments: Garden City Mixed Use Project, North First and Brokaw Corporate Campus, Silvery Towers Residential Project, and the Skyport Office Project.

4.3 Distribution System Water Losses

Non-revenue water is the sum of (a) water losses (b) unbilled metered consumption, and (c) unbilled unmetered consumption.

- (a) Water losses are separated into two categories: apparent losses and real losses. Apparent losses include all types of inaccuracies associated with customer metering as well as data handling errors. Real losses are physical water losses from the pressurized system and the utility's storage tanks, up to the customer meter. For example, this might include lost water through leaks, breaks and overflows.
- (b) Unbilled metered consumption might include metered consumption by the utility.
- (c) Unbilled unmetered consumption is any kind of authorized consumption which is neither billed nor metered. This typically includes items such as firefighting, flushing mains, and draining water storage facilities.

Over the last five years (2011 – 2015) SJWC has averaged 6.5 percent non-revenue water based on the American Water Works Association's (AWWA) Water Audit Software. The AWWA Water Audit worksheets for 2015 are included as Appendix A. This consistently low level of non-revenue water indicates SJWC has an efficient, well-maintained water system. SJWC is committed to continuing to reduce its non-revenue water loss percentages through investments in acoustic leak correlation and logging equipment, advanced metering infrastructure, as well as a prudent water main replacement program that ranks pipelines for replacement primarily based upon their propensity to leak.



| Table 4-4 Retail: 12 Month Water Loss Audit Reporting | | | | | | |
|---|------------------------------|--|--|--|--|--|
| Reporting Period Start Date (Month/Year) | Volume of Water Loss (MG) | | | | | |
| 10/2014 | 2,461 | | | | | |

4.4 Estimating Future Water Savings

Existing savings from current conservation measures are accounted for in this UWMP. However, additional future water savings based on adopted codes, standards, ordinances, or transportation and land use plans were not considered in demand projections. SJWC has a long-term commitment to water conservation and details on all programs and activities related to conservation are included in *Chapter 9 Demand Management Measures*. SJWC will continue to explore conservation options as necessary to continue to be on the path towards compliance with SB x7-7.

4.5 Water Use for Lower Income Households

State law recognizes the vital role local governments play in the supply and affordability of housing. Each local government in California is required to adopt a housing element as part of its General Plan that shows how the community plans to meet the existing and projected housing needs of people at all income levels.

The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its Housing Element. As part of this process, the California Department of Housing and Community Development (HCD) identify the total housing need for the San Francisco Bay Area. ABAG then develops a methodology to distribute this need to local governments in a manner that is consistent with the development pattern. Once a local government has received its final RHNA, it must revise its Housing Element to show how it plans to accommodate its portion of the region's housing need.

ABAG has sought to engage local jurisdictions, stakeholders, and members of the public throughout the process of developing the RHNA. The final RHNA was adopted by the ABAG Executive Board on July 18, 2013 and based on their projections, 33.8 percent of residential units within SJWC's service area are expected to be lower income households with an income below 80 percent of the area median income. Based on the total 2040 residential demand, this translates to approximately 9,417 MG.

| Table 4-5 Retail Only: Inclusion in Water Use Projections | |
|---|-----|
| Are Future Water Savings Included in Projections? | No |
| If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc. utilized in demand projections are found. | |
| Are Lower Income Residential Demands Included In Projections? | Yes |



Chapter 5 Baselines and Targets

This chapter describes the baseline (base daily per capita) water use, the interim and urban water use targets, water system demands, water demand projections, and the water use reduction plan.

5.1 Water Conservation Act of 2009

The Water Conservation Act of 2009, SB x7-7, requires water agencies to reduce per capita water usage 20 percent from the baseline daily per capita water use by December 31, 2020. This includes increasing recycled water use to offset potable water use. Water suppliers are required to set a water use target for 2020 and an interim target for 2015 using one of four methods. Failure to meet adopted targets will result in the ineligibility of a water supplier to receive water grants or loans administered by the State unless one of two exceptions is met. Exception one states a water supplier may be eligible if they submit a schedule, financing plan, and budget to Department of Water Resources (DWR) for approval to achieve the per capita water use reductions. Exception two states a water supplier may be eligible if an entire water service area qualifies as a disadvantaged community. SJWC does not qualify for either exception.

Four methodologies are stipulated for calculating the water use target. Three of the methods are listed in CWC 10608. The fourth method was developed by DWR. The four methodologies are:

- Method 1 Eighty percent of the water supplier's baseline per capita water use
- Method 2 Per capita daily water use estimated using the sum of performance standards applied to indoor residential water use, landscape area water use, and commercial, industrial, and institutional water uses
- Method 3 Ninety-five percent of the applicable State hydrologic region target as stated in the State's draft 2020 Water Conservation Plan
- Method 4 This method allows flexibility in its calculation to account for the highly diverse conditions of each agency's landscape, commercial, industrial, and institutional water needs and to give credit for past conservation efforts. For more information go to: http://www.water.ca.gov/urbanwatermanagement/uwmp2015.cfm

In 2015, urban retail water suppliers are required to report interim compliance followed by actual compliance in 2020. Interim compliance is halfway between the baseline water use and 2020 target. Baseline, target, and compliance year water use estimates are required to be reported in gpcd. As part of the 2015 UWMP cycle, agencies are given the opportunity to update their 2020 target and change the method used to calculate the water use target.



5.2 Water-Use Targets for 2015 and 2020

For consistent application of the Act, DWR produced "Methodologies for Calculating Baseline and Compliance Urban Water Per Capita Use" (Methodologies) in February 2011. Per capita water use is defined by the legislation as the total gross water used divided by the service area population and does not include recycled water. Determination of annual service area population used for the baseline periods between 1995 and 2007 were based on number of service connections as described in SJWC's 2010 UWMP.

By following requirements provided in the Methodologies document, SJWC calculated its baseline per capita water use, its urban use target for 2020, and its interim water use target for 2015 during the 2010 UWMP cycle. As part of the 2015 UWMP cycle and in accordance with CWC 10608, SJWC recalculated its baseline population and water-use targets for 2015 and 2020 as presented in Table 5-1. As shown in the SB x7-7 Verification Forms, Appendix B, and below, SJWC's recalculated baseline per capita water use is 154 gpcd using a ten-year average ending between December 31, 2004 and December 31, 2010 and 147 gpcd using a five year average ending between December 31, 2007 and December 31, 2010. SJWC's final 2015 Interim Target was calculated to be 140 gpcd. SJWC's actual water use during 2015 was 96 gpcd as shown in Table 5-2. SJWC is in compliance with the 2015 Interim Target.

During the 2020 UWMP cycle, reporting compliance with the 2020 daily per capita water use will be required. In the previous 2010 UWMP cycle, SJWC evaluated and selected both Method 1 and Method 3 to set its 2015 interim and 2020 water use targets. In 2010 SJWC selected Method 1 because it was the most straightforward (20 percent reduction from the 10-year baseline per capita water use) and Method 3 because it was believed to be the most favorable as it established the highest per capita water use target. Method 3 required setting the 2020 water use target to 95 percent of the San Francisco Bay hydrologic region target.

As part of the 2015 UWMP, SJWC was able to change the method used to set its 2020 water use target. Methods 1, 3 and 4 were evaluated as part of this UWMP. There was insufficient data available for SJWC to fully evaluate and consider Method 2. The calculated 2020 target based on Method 4 using standardized tables provided by DWR was ultimately determined to be the most advantageous for SJWC, as it provided the best opportunity to meet the required 2020 per capita water use target. SJWC is on track to meet the 2020 SB x7-7 water use target.

| Table 5-1 Baselines and Targets Summary | | | | | | | | | |
|---|--|----------|--------------------------|-----------------------------|--------------------------|--|--|--|--|
| Baseline Period | Start Year | End Year | Average Baseline GPCD | 2015 Interim Target GPCD | Confirmed 2020 Target | | | | |
| 10-15 year | 1995 | 2004 | 154 | 140 | 127 | | | | |
| 5 Year | 2003 | 2007 | 147 | | | | | | |
| NOTES: Ser | NOTES: Service Area Population Projection Methodology discussed in Chapter 3 | | | | | | | | |



| Table 5 | Table 5-2: 2015 Compliance | | | | | | | | | |
|------------------------|-----------------------------------|------------------------------|-----------|---|----------|--------------------------|--------------|--|--|--|
| Actual 2015 GPCD | 2015 Interim Target GPCD | Extra- ordinary Events | Enter "0' | Adjustments to 2 ' for adjustments <i>fom Methodology</i> Weather Normalization | not used | Adjusted 2015 GPCD | 2015 GPCD | Did Supplier Achieve Targeted Reduction for 2015? | | |
| 96 | 140 | 0 | 0 | 0 | 0 | 96 | 96 | Yes | | |



Chapter 6 System Supplies

This chapter describes and quantifies the current and projected sources of water available to SJWC. A description and quantification of potential recycled water uses and supply availability is also included.

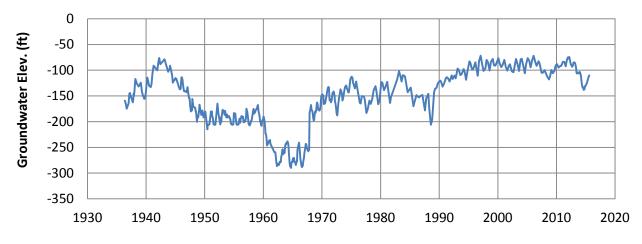
6.1 Purchased Treated Water

In 1981, SJWC entered into a 70-year master contract with SCVWD for the purchase of treated water. The contract provides for rolling three-year purchase schedules establishing fixed quantities of treated water to be purchased during each period. Water is treated at one of three SCVWD-operated treatment plants (Rinconada, Penitencia and Santa Teresa). SJWC and SCVWD currently have a three-year treated water contract for fiscal years 2014/2015 – 2016/2017, with contract supply ranging from 69,050 AF/yr in 2014/2015 to 70,584 AF/yr in 2016/2017.

6.2 Groundwater

SJWC draws water from the Santa Clara Subbasin (basin) in the north part of Santa Clara County. The basin is 22 miles long and 15 miles wide, with a surface area of 225 square miles and an operational storage capacity estimated to be 350,000 acre-feet.

The following chart shows groundwater elevation in the basin since the mid 1930's using the well surface elevation as the datum. In 2012, the groundwater basin level was high and well prepared for the effects of a multi-year drought. The high groundwater levels were a result of less pumping, an increased use of imported water, and recharge of water into the aquifer by SCVWD. Due to the current drought, the amount of imported surface water available has gone down dramatically. Water from the Federal Water Project in 2014 was available at 50 percent of normal, but water from the State Water Project has had an allocation of only five percent. As a result, SJWC has been relying more heavily on groundwater which has caused the groundwater elevation to decline.







Groundwater from the basin is a substantial source of SJWC's total water supply. Actual groundwater volume pumped from 2011 to 2015 is shown in Table 6-1.

| Table 6-1 Ret | Table 6-1 Retail: Groundwater Volume Pumped | | | | | | | | |
|---------------------|---|--------|--------|--------|--------|--------|--|--|--|
| | Supplier does not pump groundwater. The supplier will not complete the table below. | | | | | | | | |
| Groundwater Type | Location or Basin Name | 2011 | 2012 | 2013 | 2014 | 2015 | | | |
| Alluvial Basin | Santa Clara Subbasin | 12,545 | 12,935 | 18,804 | 24,293 | 12,346 | | | |
| | TOTAL | 12,545 | 12,935 | 18,804 | 24,293 | 12,346 | | | |

6.2.1 Groundwater Management Plan

The Santa Clara Subbasin is an un-adjudicated basin. SCVWD is responsible for maintaining the basin and ensures the basin does not become overdrafted. SCVWD's 2012 Groundwater Management Plan http://www.valleywater.org/services/groundwater.aspx identifies the following two basin management objectives:

- Groundwater supplies are managed to optimize water supply reliability and minimize land subsidence
- Groundwater is protected from existing and potential contamination, including salt water intrusion

These basin management objectives describe the overall goals of SCVWD's groundwater management program. SJWC works with SCVWD to implement numerous programs to protect groundwater resources and the District has established comprehensive monitoring programs related to groundwater levels, land subsidence, overdraft, groundwater quality, recharge water quality, and surface water flow. SCVWD plans to update its Groundwater Management Plan in 2016 to meet the requirements of the Sustainable Groundwater Management Act of 2014.

6.3 Surface Water

SJWC has "pre-1914 surface water rights" to raw water in Los Gatos Creek and local watersheds in the Santa Cruz Mountains. Prior to 1872, appropriative water rights could be acquired by simply taking and beneficially using water. In 1914, the Water Code was adopted and it grandfathered in all existing water entitlements to license holders. SJWC filed for a license in 1947 and was granted license number 10933 in 1976 by the State Water Resources Control Board to draw 6,240 AF/yr from Los Gatos Creek. SJWC has upgraded the collection and treatment system that draws water from this watershed which has increased the capacity of this entitlement to approximately 11,200 AF/yr for an average rain year.

Montevina Surface Water Treatment Plant (Plant) is the primary supply source for Town of Los Gatos, and the surrounding communities. The Plant was commissioned in 1970 and can treat up to 30 million gallons per day through direct filtration and chlorination. State and federal water quality requirements are more stringent since 1970, and limitations in the existing treatment process often result in the loss of water supply. Microfiltration membrane technology was chosen to replace the current technology



after evaluating water quality data, regulatory drivers, and pilot testing available technologies. The \$62 million project is underway and the upgraded Plant is scheduled to be brought online in 2016.

6.4 Wastewater Collection, Treatment and Disposal

SJWC does not own or operate any wastewater treatment facilities. All sewage generated within SJWC's service area is provided to the San Jose/Santa Clara Regional Wastewater Facility (SJ/SC RWF) via the City of San Jose and West Valley Sanitation District collection systems.

| Table 6-2 Retail: Wastewater Collected Within Service Area in 2015 | | | | | | | | |
|--|--|---|--|--|---|--|--|--|
| Wa | stewater Collect | ion | Recipi | Recipient of Collected Wastewater | | | | |
| Name of Wastewater Collection Agency | Wastewater Volume Metered or Estimated? | Volume of Wastewater Collected in 2015 | Name of Wastewater Treatment Agency Receiving Collected Wastewater | Treatment Plant Name | Is WWTP Located Within UWMP Area? | Is WWTP Operation Contracted to a Third Party? <i>(optional)</i> | | |
| City of San Jose and West Valley Sanitation | Estimated | 22,684 | City of San Jose | San Jose- Santa Clara Regional Wastewater Facility | No | No | | |
| Total Wastewater Collected from Service Area in 2015:22,684 | | | | | | | | |
| NOTES: Volun | ne of wastewate | r collected was | estimated by South B | ay Water Recyc | ling | | | |



| Table 6-3 Ret | Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2015 | | | | | | | | | |
|---|--|---|--------------------------------------|------------------------------|---|--------------------|-----------------------|-------------------------------------|---------------------------------------|--|
| | No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below. | | | | | | | | | |
| | | | | | Deec This | | | 2015 volu | mes | |
| Wastewater Treatment Plant Name | Discharge Location Name or Identifier | Discharge Location Description | Wastewater Discharge ID Number | Method of Disposal | Does This Plant Treat Wastewater Generated Outside the Service Area? | Treatment Level | Wastewater Treated | Discharged Treated Wastewater | Recycled Within Service Area | Recycled Outside of Service Area |
| San Jose - Santa Clara Regional Wastewater Facility | Artesian Slough | Tributary to South San Francisco Bay via Coyote Creek | 2438014001 | Bay or Estuary Outfall | Yes | Advanced | 22,684 | 18,971 | 640 | 2,736 |
| | 1 | 1 | 1 | 1 | 1 | Total | 22,684 | 18,971 | 640 | 2,736 |
| NOTES: Table | OTES: Table information and volumes provided by South Bay Water Recycling | | | | | | | | | |



6.5 Recycled Water

South Bay Water Recycling (SBWR) has been serving Silicon Valley communities since 1993 with a sustainable, high-quality water supply. SBWR was created to reduce the environmental impact of freshwater effluent discharge into the salt marshes located at the south end of the San Francisco Bay, and to help protect the California clapper rail and the salt marsh harvest mouse.

In 1997, SJWC entered into a Wholesaler-Retailer Agreement with the City of San Jose to provide recycled water to SJWC's existing and new customers nearby SBWR recycled water distribution facilities; whereas, the City of San Jose is the wholesaler and SJWC is the retailer. At the time, the involvement of SJWC was largely to assist the City in meeting its wastewater regulatory obligations. In accordance with the terms of this agreement, SJWC allowed SBWR to construct recycled water pipelines in its service area, SJWC would only own the recycled water meters, while SBWR would own, operate, and maintain the recycled water distribution system.

In 2010, this Wholesaler-Retailer Agreement was amended to allow SJWC to construct recycled water infrastructure that would be owned, operated, and maintained by SJWC. Then in 2012, this Wholesaler-Retailer Agreement was again amended to allow SJWC to construct additional recycled water infrastructure. Existing and projected recycled water deliveries by beneficial use type and project name are described in Table 6-4 through Table 6-6.

Recycled water provides multiple benefits to SJWC's customers. It is locally available, available during dry years, and is less susceptible to changes in hydrology. Participating customers receive recycled water at a discount and are not subject to voluntary and mandatory drought restrictions. The overall customer base benefits since the amount of recycled water used by others reduces the demand on potable water by a 1 to 1 ratio. Therefore, more potable water is available to the overall customer base. Recycled water is important to the overall company's water supply portfolio since both SJWC and SCVWD rely on recycled water and conservation to meet future demands and growth in the County.

SBWR consists of over 100 miles of pipe, five pump stations, and ten million gallons of storage. In 2012, South Bay Water Recycling delivered an average of 10.6 million gallons a day to more than 690 customers for non-drinking uses. Recycled water is supplied to the entire SBWR distribution system from the SJ/SC RWF. This facility produces disinfected tertiary recycled water, and is regulated by the Regional Water Quality Control Board - San Francisco Bay Region under Order No. 95-117. This order specifies the Water Reclamation Requirements promulgated by the RWQCB for recycled water produced by the SJ/SC RWF and distributed to SBWR. SBWR is fully permitted by all local, state, and federal agencies to operate the recycled water distribution system supplying SJWC with recycled water for this alignment.

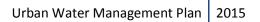
Additionally, SCVWD and City of San Jose recently partnered to construct the Silicon Valley Advanced Water Purification Center. This facility produces advanced treated recycled water from secondary effluent generated by the SJ/SC RWF and is blended with tertiary treated water from SJ/SC RWF delivered by SBWR to SJWC customers.



| Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area | | | | | | | | | |
|---|---|-------------------------------------|-----------------------|------------|--------------|-------------|-----------|-------|-------|
| | Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below. | | | | | | | | |
| Name of Agen | cy Producing (Treating) the Rec | ycled Water: | South Bay V | Vater Recy | cling | | | | |
| Name of Agen | cy Operating the Recycled Wate | er Distribution System: | South Bay V | Vater Recy | cling and Sa | n Jose Wate | r Company | | |
| Supplemental | Water Added in 2015 | | 0 | | | | | | |
| Source of 201 | 5 Supplemental Water | | 0 | | | | | | |
| Beneficial Use | Туре | General Description of 2015 Uses | Level of Treatment | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
| Agricultural irr | igation | | Tertiary | 1 | 1 | 1 | 1 | 1 | 1 |
| Landscape irri | gation (excludes golf courses) | | Tertiary | 479 | 1,106 | 2,012 | 2,500 | 2,506 | 2,506 |
| Golf course irr | igation | | Tertiary | 68 | 128 | 128 | 128 | 128 | 128 |
| Commercial us | se | | | | | | | | |
| Industrial use | | | Tertiary | 69 | 69 | 69 | 69 | 69 | 69 |
| Geothermal a | nd other energy production | | | | | | | | |
| Seawater intru | usion barrier | | | | | | | | |
| Recreational in | mpoundment | | | | | | | | |
| Wetlands or w | vildlife habitat | | | | | | | | |
| Groundwater recharge (IPR) | | | | | | | | | |
| Surface water augmentation (IPR) | | | | | | | | | |
| Direct potable reuse | | | | | | | | | |
| Other | Type of Use | Portable Meters | Tertiary | 23 | 23 | 23 | 23 | 23 | 23 |
| | Total: 640 1,327 2,233 2,721 2,727 2,727 | | | | | | | | |

IPR - Indirect Potable Reuse

NOTES: Level of treatment is tertiary blended with advanced treated water to maintain total dissolved solids (TDS) below 500 parts per million (ppm). Projections from planned recycled water alignments from SJWC Recycled Water Master Plan and updated alignment information. Assumed 50 MG per year for SJCC Golf. Assumed landscape and industrial usage ratio remains constant. Assumed 30% of customers sign up first year of alignment installation, 60% second year and 10% third year. Portable meter usage is primarily for construction and street sweeping dust abatement. Agricultural is Guadalupe Community Gardens.

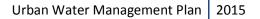




| Table 6-5 Retail: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual | | | | | | |
|--|----------------------|---|-----------------|--|--|--|
| | | Recycled water was not used in 2010 nor projected for use in 2015. The supplier will not complete the table below. | | | | |
| Use Ty | vpe | 2010 Projection for 2015 | 2015 actual use | | | |
| Agricultural irrigation | | | 1 | | | |
| Landscape irrigation (exc | cludes golf courses) | 833 | 479 | | | |
| Golf course irrigation | | | 68 | | | |
| Commercial use | | | | | | |
| Industrial use | | | 69 | | | |
| Geothermal and other e | nergy production | | | | | |
| Seawater intrusion barri | er | | | | | |
| Recreational impoundme | ent | | | | | |
| Wetlands or wildlife hab | itat | | | | | |
| Groundwater recharge (| IPR) | | | | | |
| Surface water augmenta | tion (IPR) | | | | | |
| Direct potable reuse | | | | | | |
| Other | Portable Meters | | 23 | | | |
| | Total | 833 | 640 | | | |
| NOTES: SJWC had three new recycled water pipe alignments delayed for three years by the California Public Utilities Commission to delay the impact to water rates. The 2010 amounts for 2015 were not broken out by use type, just total projected usage | | | | | | |

broken out by use type, just total projected usage.

| Table 6-6 Retail: Methods to Expand Future Recycled Water Use | | | | | | | |
|---|---|--|---|--|--|--|--|
| | Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation. | | | | | | |
| Chapter 6 Section 5 | Provide page location of narrative in U | Provide page location of narrative in UWMP | | | | | |
| Name of Action | Description | Planned Implementation Year | Expected Increase in Recycled Water Use | | | | |
| Alignments A, R | New recycled water main extensions | 2016 | 108 | | | | |
| Alignment D Phase 1, 2 | New recycled water main extensions | 2017 | 141 | | | | |
| Alignment H remainder | Sign up of remaining customers | 2017 | 13 | | | | |
| Alignment C remainder | Sign up of remaining customers | 2017 | 33 | | | | |
| Alignment D Phase 3 | New recycled water main extension | 2018 | 145 | | | | |
| Alignment N remainder | Sign up of remaining customers201810 | | | | | | |
| Alignment C remainder | Sign up of remaining customers | 2018 | 33 | | | | |





| Table 6-6 Retail: Methods to Expand Future Recycled Water Use | | | | | | | |
|--|---|-----------------------------------|--|--|--|--|--|
| Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation. | | | | | | | |
| Chapter 6 Section 5 | Provide page location of narrative in U | WMP | | | | | |
| Name of Action | Description | Planned Implementation Year | Expected Increase in Recycled Water Use | | | | |
| Alignment E Phase 1 | New recycled water main extension | 2019 | 78 | | | | |
| Alignment E Phase 2 | New recycled water main extension | 2020 | 89 | | | | |
| Alignment E Phase 3 | New recycled water main extension | 2020 | 155 | | | | |
| Alignment Q Phase 1 | New recycled water main extension | 2021 | 58 | | | | |
| Alignment Q Phase 2 | New recycled water main extension | 2022 | 39 | | | | |
| Alignment Q Phase 3 | New recycled water main extension | 2023 | 532 | | | | |
| Alignment Q Phase 4 | New recycled water main extension | 2024 | 159 | | | | |
| Alignment P Phase 1 | New recycled water main extension | 2025 | 53 | | | | |
| Alignment P Phase 2 | New recycled water main extension | 2026 | 112 | | | | |
| Alignment P Phase 3 | New recycled water main extension | 2027 | 77 | | | | |
| Alignment L | New recycled water main extension | 2028 | 192 | | | | |
| Alignment K | New recycled water main extension | 2029 | 60 | | | | |
| | Total 2,087 | | | | | | |
| NOTES: From Recycled Water Master Plan and Engineering Consultant. "Remainders" are previously completed alignments where there are still customers to sign up. Project implementation schedule is estimated to be 30% for the same year of project, 60% for the next year and 10% for the third year. | | | | | | | |

6.6 Desalinated Water Opportunities

SCVWD is a partner in the Bay Area Regional Desalination Project, which is evaluating a site in Contra Costa County. Under the project concept, the District would receive up to 5,600 AF in critical dry years through exchanges with other agencies. SCVWD and the other partnering agencies are collectively embarking on a study (the Bay Area Regional Reliability Project or BARR Project) to look more broadly at all available opportunities to optimize the sharing of water resources across the region. In this context, the member agencies will consider the use of existing supplies as well as new supply through desalination. At this time, SCVWD is not including desalination in its projected water supplies.

6.7 Exchanges or Transfers

SJWC's distribution system has interties with the following retailers in the San Jose area: City of Santa Clara, City of San Jose Municipal Water, City of Milpitas, and Great Oaks Water. SJWC currently has no plans to use these interties for normal system operation as they are exclusively used for potential emergency sources.



6.8 Future Water Supply Projects

SJWC is reliant on SCVWD as the County wholesale water supplier to increase water supply for average, single-dry and multi-dry years. SCVWD has indicated to SJWC that they are in the process of planning, designing and constructing a number of projects and programs that will increase water supply as summarized in Table 6-7.

| Table 6-7 Retail: Expected Future Water Supply Projects or Programs | | | | | | | | |
|---|-------------|---|------------------------|----------------------------|--|--|--|--|
| | | No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below. | | | | | | |
| | | Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format. | | | | | | |
| Chapter 6 Section 8 | Provide pa | ge location of narrative ir | the UWMP | | | | | |
| | Joint Proje | ect with other agencies? | Planned | Planned | Expected | | | |
| Name of Future Projects or Programs | Yes/No | If Yes, Agency Name | Implementation Year | for Use in Year Type | Increase in Water Supply to Agency | | | |
| Dam Improvements / Seismic Retrofits | Yes | SCVWD | 2022 | All Year Types | 13,800 | | | |
| Main and Madrone Pipelines Restoration | Yes | SCVWD | 2019 | All Year Types | 600 | | | |
| Potable Reuse Program | Yes | SCVWD | 2021 | All Year Types | 20,200 | | | |
| South County Recycled Water Program | Yes | SCVWD & South County Regional Wastewater Authority | 2020 | All Year Types | 1,700 | | | |
| Wolfe Road Recycled Water Pipeline | Yes | SCVWD / City of Sunnyvale | 2017 | All Year Types | 600 | | | |

NOTES: SCVWD as the wholesale water provider in Santa Clara County has identified the above water supply projects in their Draft 2015 UWMP and they will work to fund and construct these projects. These projects will improve water supply within SJWC's service area.

6.9 Summary of Existing and Planned Sources of Water

As described throughout this chapter, SJWC and SCVWD have worked to develop a variety of local and imported water supplies to meet demands. As demands increase with the region's growth, and imported water supplies potentially become more restricted, these planned supplies will increase in importance. In particular, groundwater, which has historically been a vital source of supply for SJWC, has recently become all the more critical for SJWC due to ongoing drought conditions. When weather conditions return to average historical conditions, groundwater and imported supplies are assumed to return to the historical ten-year averages. Surface water supply volume is assumed to hold constant at



the ten-year average as the watershed supplying the surface water treatment plants will not change. Table 6-8 and Table 6-9 summarize the current and projected volumes of water by source of supply.

| Table 6-8 Retail: Water Supplies — Actual | | | | | | |
|---|--------------------------------------|------------------|----------------|--|--|--|
| | | 2015 | | | | |
| Water Supply | Additional Detail on Water Supply | Actual Volume | Water Quality | Total Right or Safe Yield (<i>optional</i>) | | |
| Purchased or Imported Water | Potable Water | 20,788 | Drinking Water | | | |
| Groundwater | Potable Water | 12,346 | Drinking Water | | | |
| Surface water | Potable Water | 1,553 | Drinking Water | | | |
| Surface water Raw Water | | 42 | Raw Water | | | |
| Recycled Water | | 640 | Recycled Water | | | |
| | Total | 35,369 | | 0 | | |

| Table 6-9 Retail: Water Supplies — Projected | | | | | | | |
|---|---------------|-----------------------------------|---|-----------------------------------|-----------------------------------|-----------------------------------|--|
| | | | Projected Water Supply Report To the Extent Practicable | | | | |
| Additional Water Supply Water Supply | | 2020 | 2025 | 2030 | 2035 | 2040 | |
| | Water Supply | Reasonably Available Volume | Reasonably Available Volume | Reasonably Available Volume | Reasonably Available Volume | Reasonably Available Volume | |
| Purchased or Imported Water | Potable Water | 24,983 | 25,867 | 26,803 | 27,820 | 28,887 | |
| Groundwater | Potable Water | 17,648 | 18,273 | 18,934 | 19,651 | 20,405 | |
| Surface water | Potable Water | 3,130 | 3,130 | 3,130 | 3,130 | 3,130 | |
| Surface water | Raw Water | 56 | 58 | 60 | 62 | 64 | |
| Recycled Water | | 1,327 | 2,233 | 2,721 | 2,727 | 2,727 | |
| Total 47,144 49,561 51,648 53,390 55,213 | | | | | | | |
| NOTES: Projected potable water supply volumes based on a 10-year average (2006-2015) of usage by type and holding surface water constant @ 10-year average. | | | | | | | |



Chapter 7 Water Supply Reliability

The UWMP Act requires urban water suppliers to assess water supply reliability by identifying constraints on their water sources and compare total projected water use with expected water supply. This chapter presents supply and demand comparisons in five-year increments to 2040 under average year, dry year, and multiple-dry year conditions.

7.1 Constraints on Water Sources

SJWC has three sources of potable water supply: groundwater, imported treated surface water and local surface water. These three sources of supply are constrained in one or more ways, driven by hydrologic conditions, water quality, and legal restrictions. Additionally, there is a potential for interruption of supply caused by catastrophic events as discussed in *Chapter 8 Water Shortage Contingency Planning*.

Water delivered to customers meets or surpasses all federal and state regulations. There are two general types of drinking water standards, Primary and Secondary. Primary standards are designed to protect public health and Secondary standards are based on the aesthetic qualities of the water such as taste, odor, color and certain mineral content, which may affect consumer acceptance of the water. SJWC's groundwater stations are equipped with chlorination facilities to produce drinking water with free chlorine residual. Due to the blending of chlorinated and chloraminated water from SCVWD, diminished disinfectant residuals have been observed in the distribution system. To improve operational flexibility and maintain disinfectant residual, SJWC will install chloramination systems at multiple groundwater stations in 2016 and 2017.

7.2 Groundwater Supply Reliability

Groundwater supplies are often a reliable supply during normal and short-term drought conditions because they are local and their large storage means they will still be available when surface flows become limited. However, groundwater supply availability does become threatened when overdraft occurs and when recharge and inflow decrease.

Some threats to groundwater supply reliability include:

- **Overdraft** Under extended supply pressures, groundwater basins can enter overdraft conditions, which can have a series of consequences including subsidence.
- Climate Change Climate change could increase the potential for overdraft by increasing demand, reducing other sources of supply, and reducing natural recharge and inflows from surface water and precipitation. Climate change is having a profound impact on California water resources, as evidenced by changes in snowpack, sea level, and river flows. These changes are expected to continue in the future and more precipitation will likely fall as rain instead of snow.



This potential change in weather patterns will exacerbate flood risks and add additional challenges for water supply reliability.

The mountain snowpack provides as much as a third of California's water supply by accumulating snow during wet winters and releasing it slowly during dry springs and summers. Warmer temperatures will cause snow to melt faster and earlier, making it more difficult to store and use. By the end of this century, the Sierra snowpack is projected to experience a 48-65 percent loss from the historical April 1st average. This loss of snowpack means less water will be available for Californians to use.

 Regional Growth – Population growth could increase demands on groundwater supplies, potentially creating risk of overdraft. Regional growth could also increase the amount of contaminants entering groundwater basins as a result of increased urban runoff or industrial or other activities. Growth can also impact recharge areas by expanding impervious surfaces into areas that would otherwise represent entry points for surface water recharging local aquifers.

The Santa Clara Subbasin is able to store the largest amount of local reserves and SCVWD, as the groundwater management agency for Santa Clara County, is tasked with maintaining adequate storage in this basin to optimize reliability during extended dry periods. As groundwater is pumped by SJWC and other retailers and municipalities in Santa Clara County, SCVWD influences groundwater pumping reductions and thus reliability through financial and management practices to protect groundwater storage and minimize the risk of land subsidence. However, SCVWD does not yet have direct control over the amount of groundwater SJWC can extract from the basin.

7.3 Imported Treated Surface Water Supply Reliability

SCVWD was founded in 1929 and is the primary wholesale water supplier for Santa Clara County. Some of their core responsibilities are to provide safe, clean water for a healthy life, environment and economy. SCVWD's water originates from several sources including local reservoirs, the State Water Project and the federally funded Central Valley Project San Felipe Division. Water is piped into SJWC's system at various turnouts after it is treated at one of three SCVWD water treatment plants.

SCVWD's current water supply reserves are insufficient to meet SJWC needs throughout an extended drought, see Table 7-1. In addition, there are increasing concerns about the reliability of imported treated surface water during average years, driven by risks associated with climate change, reductions in imported water supplies, revenue requirements, and threats to infrastructure.

Climate Change – In Santa Clara County, climate change is anticipated to decrease the frequency of precipitation events, but the intensity of precipitation events may increase. Climate change is expected to decrease imported water supplies as a result of reduced snow pack. Potential effects of climate change on Delta-conveyed imported water supply availability have been incorporated into SCVWD's water supply projections. However, potential climate change effects on local supplies and demands were not incorporated into their current 2012 Water Supply and Infrastructure Master Plan (WSIMP).



- Reductions in Imported Water Supplies Over the last 15 years, major changes to state and federal water project operations have resulted from regulations to protect Delta water quality and help the recovery of endangered and threatened fish species. These regulations result in a reduction of Delta exports at certain times of the year. There is a possibility that Delta exports will be further impacted by future regulations.
- **Revenue Requirements** Increased funding will be required for SCVWD to implement a program of activities to ensure water supplies are diversified and reliable to meet current and future demands and that treated water quality standards are met.
- **Threats to Infrastructure** SCVWD's imported supply infrastructure must travel large distances to reach turnouts. As California is a seismically active state, infrastructure could be damaged and the result would be a disruption to water supply availability. California's water supply infrastructure is also potentially a target for acts of terrorism.

While SCVWD's strategies have helped reduce the impacts of the current drought on supply availability, it is clear that additional efforts are needed. In their 2010 UWMP, SCVWD documented that water supply reductions would not exceed 20 percent during a multi-year drought. In reality SCVWD called for a 30 percent demand reduction in 2015 during the third year of a drought. This water supply shortage and corresponding call for demand reduction reinforces the need for SCVWD to update its WSIMP.

As SCVWD is responsible for about 90 percent of water supplies to SJWC's customers it is vital that the District both provide accurate water supply reliability figures and also take a more active role in securing drought resistant and reliable local water supplies to supplement existing supplies during multiple-dry year scenarios. SCVWD's WSIMP is scheduled for an update in 2017 and SJWC will actively work with SCVWD to ensure the following principles are considered:

- Promote additional sources of local water supply, such as indirect potable reuse, direct potable reuse, desalination, and an expanded recycled water distribution system
- Coordinate operations with all retailers and municipalities to make as much surplus water as possible available for use in dry years
- Continue to pursue innovative transfer and banking programs to secure more imported water for use in dry years
- Increase public awareness about water supply issues

SCVWD's call for a 30 percent reduction in water usage during the current drought highlights that more investments in local water sources are necessary to ensure a reliable source of supply during multipledry years.

7.4 Reliability by Type of Water Year

SCVWD has identified average, single-dry, and multiple-dry years for water supply reliability planning. According to SCVWD, these years correspond to:



- Average Year (1922 2015): average supply over the hydrologic sequence of 1922 through 2015.
- Single-Dry Year (1977): Within the historic record, this was the year with the estimated lowest amount of total supply
- Multiple-Dry Years (2013 2015): this is a multiple dry year period that puts the most strain on the county's water supplies

Water supplies presented below are based on SCVWD's water evaluation and planning system model. According to SCVWD, this model simulates their water supply system comprised of facilities to recharge the county's groundwater basins, local water systems including the operation of reservoirs and creeks, treatment and distribution facilities, and raw water conveyance systems. The model also accounts for non-SCVWD sources and distribution of water in Santa Clara County such as imported water from San Francisco Public Utilities Commission, recycled water, and local water developed by other agencies.

| | | Available Supplies if Year Type Repeats | | | |
|-----------------------------|-----------|---|---------------------------------------|--|--|
| Year Type | Base Year | | de volume only, percent y, or both | | |
| | | Volume Available | % of Average Supply | | |
| Average Year | 1922-2015 | | 100% | | |
| Single-Dry Year | 1977 | | 100% | | |
| Multiple-Dry Years 1st Year | 2013 | | 95% | | |
| Multiple-Dry Years 2nd Year | 2014 | | 85% | | |
| Multiple-Dry Years 3rd Year | 2015 | | 66% | | |

occurred in 2013 through 2015, which is the multiple dry year period that puts the most strain on the county's water supplies.

7.4.1 Average Water Year

According to SCVWD, the average water year represents average supply over the hydrologic sequence of 1922 through 2015. Projections are based on supplies and demands described in *Chapter 6, System Supplies* and *Chapter 4, System Water Use*. Table 7-2 demonstrates that SJWC anticipates adequate supplies for years 2020 to 2040 to meet system demand under average year conditions.



| Table 7-2 Retail: Normal Year Supply and Demand Comparison | | | | | | | |
|--|--------|--------|--------|--------|--------|--|--|
| 2020 2025 2030 2035 2040 | | | | | | | |
| Supply totals | 47,144 | 49,561 | 51,648 | 53,390 | 55,213 | | |
| Demand totals | 47,144 | 49,561 | 51,648 | 53,390 | 55,213 | | |
| Difference | 0 | 0 | 0 | 0 | 0 | | |

7.4.2 Single-Dry Year

The single-dry year was the year with the estimated lowest amount of total supply. Table 7-3 shows that supplies, with the use of reserves, appear to be sufficient to meet demands during a single-dry year through 2035. This assumes reserves are at healthy levels at the beginning of the year and that projects and programs identified in SCVWD's 2012 WSIMP are implemented. If reserves are low at the beginning of a single-dry year, SCVWD might call for water use reductions in combination with using reserves.

| Table 7-3 Retail: Single Dry Year Supply and Demand Comparison | | | | | | |
|--|--------------|------------|-------------|--------|--------|--|
| | 2020 | 2025 | 2030 | 2035 | 2040 | |
| Supply totals | 45,817 | 47,328 | 48,927 | 50,663 | 49,368 | |
| Demand totals | 45,817 | 47,328 | 48,927 | 50,663 | 52,486 | |
| Difference 0 0 0 0 (3,118) | | | | | | |
| NOTES: Demand tota | ls do not ir | clude recy | cled water. | | | |

7.4.3 Multiple-Dry Years

The multiple-dry year period used in this analysis assumes a repetition of the hydrology that occurred in 2013 through 2015, which is the multiple-dry year period that puts the most strain on the county's water supplies.

| Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison | | | | | | |
|---|---------------|--------|--------|--------|--------|--------|
| | 2020 | 2025 | 2030 | 2035 | 2040 | |
| First year | Supply totals | 45,817 | 47,328 | 48,927 | 50,663 | 52,486 |
| | Demand totals | 45,817 | 47,328 | 48,927 | 50,663 | 52,486 |
| | Difference | 0 | 0 | 0 | 0 | 0 |



| Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison | | | | | | |
|---|---------------------|-------------|-------------|----------|----------|----------|
| | | 2020 | 2025 | 2030 | 2035 | 2040 |
| | Supply totals | 40,909 | 47,134 | 45,293 | 43,316 | 42,890 |
| Second year | Demand totals | 45,817 | 47,328 | 48,927 | 50,663 | 52,486 |
| | Difference | (4,908) | (194) | (3,634) | (7,347) | (9,596) |
| | Supply totals | 31,843 | 40,120 | 36,857 | 32,901 | 31,049 |
| Third year | Demand totals | 45,817 | 47,328 | 48,927 | 50,663 | 52,486 |
| Difference | | (13,974) | (7,208) | (12,070) | (17,762) | (21,437) |
| NOTES: Dema | nd totals do not ir | nclude recy | cled water. | | | |

7.5 Regional Supply Reliability

SCVWD's Ensure Sustainability water supply strategy has three key elements:

- 1. Secure existing supplies and facilities
- 2. Optimize the use of existing supplies and facilities
- 3. Expand water use efficiency efforts

As part of this strategy, SCVWD's 2012 WSIMP estimates water conservation and recycling, combined, will increase from about 15 percent of the county's water supply mix to about 26 percent by 2035. Developing these local sources and managing demands reduces reliance on imported water supplies. In addition, SCVWD, as SJWC's wholesale water supplier, is also working with multiple water agencies to investigate regional opportunities for collaboration to enhance water supply reliability across the region, leverage existing infrastructure investments, facilitate water transfers during critical shortages, and improve climate change resiliency. Projects to be considered will include interagency interties and pipelines; treatment plant improvements and expansion; groundwater management and recharge; potable reuse; desalination; and water transfers. While no specific capacity or supply has been identified, this program may result in the addition of future supplies that would benefit Santa Clara County.



Chapter 8 Water Shortage Contingency Planning

This chapter describes the development, actions and implementation of SJWC's Water Shortage Contingency Plan.

8.1 SJWC's Water Shortage Contingency Plan

SJWC's 2010 Water Shortage Contingency Plan (WSCP) was modelled after SCVWD's Plan. In 2010 SJWC and SCVWD had five stages in their respective WSCPs, normal through emergency. The stages in SCVWD's Water Shortage Contingency Plan have not changed from 2010, although minor modifications have been made to actions within each stage. SJWC's current WSCP has been modified since 2010 and is designed to achieve its water reduction goals. As a result, the number of stages and actions in SJWC's current WSCP no longer match SCVWD's Plan.

The drought of 2012-2015 prompted SJWC to change its WSCP. The drought saw increasing urgency to reduce water consumption in Santa Clara County. Some of the history is as follows:

- February 2014 SCVWD's Board of Directors approved a resolution setting a countywide water use reduction target equal to 20 percent of 2013 usage through December 31, 2014, and recommended that retail water agencies, local municipalities and the County of Santa Clara implement mandatory measures as needed to achieve the 20 percent water use reduction target.
- March 2015 as drought conditions worsened, SCVWD called for 30 percent water use reductions, and recommended retail water agencies, municipalities and the County implement mandatory measures as needed to accomplish that target, including a two day per week outdoor irrigation schedule. Both City of San Jose and SJWC echoed the call for a 30 percent reduction in usage and promoted the two day per week irrigation schedule.
- April 1, 2015 the Governor directed the State Water Resources Control Board to implement mandatory water reductions in urban areas to reduce potable urban water usage by 25 percent statewide. Then, as required by the California Public Utilities Commission, SJWC filed its revised Water Shortage Contingency Plan on May 11, 2015. Customers were publicly noticed about the filing and the public meeting that occurred on May 28, 2015. The CPUC approved SJWC's plan effective June 15, 2015. Due to favorable historical GPCD usage, SJWC was given a mandatory reduction level of 20 percent.

SJWC's 2015 WSCP filed with the CPUC is in the form of two documents called *Schedule 14.1 Water Shortage Contingency Plan with Staged Mandatory Reductions and Drought Surcharges* and *Rule 14.1 Water Shortage Contingency Plan*. The revised WSCP was modified to include only four stages and many of the actions were modified. SJWC worked with SCVWD and other retail agencies in Santa Clara County to develop common actions that would be implemented at each stage.



8.2 Stages of Action

The stages of Schedule 14.1 are shown in Table 8-1 and the complete document can be found in Appendix C. The WSCP also included drought allocations and drought surcharges, which were not part of the 2010 WSCP.

| Table 8-1 Retail Only: Stages of Water Shortage Contingency Plan | | | | | | |
|---|---|---------------------------------|--|--|--|--|
| Stage Percent Supply Water Supply Condition | | | | | | |
| 1 | up to 10% | Voluntary conservation | | | | |
| 2 | up to 20% | Water reduction needed | | | | |
| 3 | up to 40% | Critical water reduction needed | | | | |
| 4 | 4 50% Emergency water reduction | | | | | |
| NOTES: This r | NOTES: This reflects the current Schedule 14.1 filled with the CPUC | | | | | |

8.3 Prohibitions on End Uses

SJWC's 2015 WSCP includes several key categories of actions meant to reduce water usage:

- Staged implementation of water restrictions, prohibitions on non-essential water uses
- Implementation of an allocation and drought surcharge program for both residential customers and for dedicated irrigation accounts

Stages in the Schedule 14.1 WSCP are show in Table 8-2 below.

| Table | Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses | | | | | | |
|-------|--|--|---|--|--|--|--|
| Stage | Restrictions and Prohibitions on End Users | Additional Explanation or Reference (optional) | Penalty, Charge, or Other Enforcement? | | | | |
| 1 | Landscape - Other landscape restriction or prohibition | No irrigation during and up to 48 hours after rainfall | No | | | | |
| 1 | Landscape - Limit landscape irrigation to specific times | No irrigation between 10:00 a.m. and 8:00 p.m. | No | | | | |
| 1 | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | must fix leaks within 5 days of notice | No | | | | |
| 1 | Other - Require automatic shut of hoses | no washing vehicles w/out a shut off device | No | | | | |
| 1 | CII - Other CII restriction or prohibition | Commercial car washes must recycle their wash water | No | | | | |
| 1 | CII - Restaurants may only serve water upon request | | No | | | | |
| 1 | CII - Lodging establishment must offer opt out of linen service | | No | | | | |



| Table | 8-2 Retail Only: Restrictions and | Prohibitions on End Uses | |
|-------|---|--|---|
| Stage | Restrictions and Prohibitions on End Users | Additional Explanation or Reference (optional) | Penalty, Charge, or Other Enforcement? |
| 1 | Other | no runoff allowed from the washing off hardscape, buildings, structures, etc. | No |
| 1 | Water Features - Restrict water use for decorative water features, such as fountains | No use of potable water in a water feature that does not recirculate the water. Also no filling or topping off of decorative lakes or ponds. | No |
| 1 | Other | other restrictions as prescribed by the CPUC or SJWC | No |
| 2 | Landscape - Limit landscape irrigation to specific days | Limit irrigation to 3 days per week | Yes |
| 2 | Other - Prohibit use of potable water for washing hard surfaces | | Yes |
| 2 | Other - Prohibit use of potable water for construction and dust control | | Yes |
| 2 | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | must fix leaks within 72 hours of notice | Yes |
| 2 | Other | other restrictions as prescribed by the CPUC or SJWC | Yes |
| 3 | Landscape - Limit landscape irrigation to specific days | Limit irrigation to 2 days per week | Yes |
| 3 | Other water feature or swimming pool restriction | No use of potable water for filling of residential pools more than one foot or initial filling (except when pools are drained for repairs) | Yes |
| 3 | Other water feature or swimming pool restriction | Prohibit the use of potable water for filling or refilling of decorative fountains/lakes/ponds | Yes |
| 3 | Other - Prohibit vehicle washing except at facilities using recycled or recirculating water | | Yes |
| 3 | Other | other restrictions as prescribed by the CPUC or SJWC | Yes |
| 4 | Landscape - Prohibit all landscape irrigation | prohibit irrigation with a few key exceptions | Yes |
| 4 | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | must fix leaks within 48 hours of notice | Yes |
| 4 | Other | other restrictions as prescribed by the CPUC or SJWC | Yes |



8.4 Penalties, Charges, and Other Enforcement Prohibitions

SJWC is a retail water utility but is not a municipality or code enforcement agency. SJWC makes every effort to work with its customers to educate them about the efficient use of water and to observe water use restrictions during times of drought. However, if violations of drought restrictions do occur, SJWC has a process in place to correct the issue with the customer. In general, Customer Service Field Service Inspectors and Conservation Department Inspectors will respond to water-waste violations seven days per week. The process for responding to a water-waste violation is described below. Additional information is available in Schedule 14.1 in the Section entitled "Enforcement of Staged Mandatory Water Reductions".

The four step water-waste inquiry process is as follows when responding to an initial complaint:

- 1. A door hanger is left at the customer's property that contains specifics of the violation
- 2. If the issue continues, a 2nd door hanger is left at the residence and a letter is sent to the customer with a request to correct the problem
- 3. If the issue continues, the customer will receive a certified letter and SJWC will attempt to meet in person with the customer to attempt to resolve the issue
- 4. If the issue still continues, SJWC will attempt to photograph the violation and then contact the customer by phone to attempt to resolve the issue

If the violation is still not corrected, SJWC has the right to install a flow restrictor on the customer's service and/or report the customer to the necessary enforcement agency (municipal code enforcement for that particular jurisdiction). Additional description of the flow restriction process is described in Schedule 14.1. As described in Schedule 14.1, SJWC can ultimately shut-off water service to a customer if a water-waste violation is not corrected. However, SJWC makes all necessary attempts to work with the customer to correct the problem.

8.5 Consumption Reduction Methods

SJWC has a complete water conservation and public outreach program that is described in *Chapter 9 Demand Management Measures*. During a drought, SJWC works with its wholesale water supplier and other retail agencies in the County to collaborate on additional public outreach strategies. For example, in 2015, SJWC and the other retailers in Santa Clara County worked with SCVWD on a two day per week outdoor irrigation limitation. Additionally, several consumption reduction methods used by SJWC are described in Table 8-3.



| Table 8-3 Retail Only: Stages of Water Shortage Contingency Plan - Consumption Reduction Methods | | | | | |
|--|---|---|--|--|--|
| Stage | Consumption Reduction Methods by Water Supplier | Additional Explanation or Reference (optional) | | | |
| 1 | Offer Free Water Use Surveys | This is done on an ongoing basis under all water supply conditions. | | | |
| 1 | Other WaterSmart Software providing home water use reports to high using residential customers. | | | | |
| 2 | Expand Public Information Campaign | Public information campaigns are done on an ongoing basis under all water supply conditions; however, campaigns may expand during droughts starting at Stage 2. | | | |
| 2 | Other | Proactive leak monitoring using AMI for large CII customers. | | | |
| 3 | Increase Water-Waste Patrols | | | | |
| 3 | Implement or Modify Drought Rate Structure or Surcharge | This would occur when SJWC files schedule 14.1 with the CPUC. | | | |
| 3 | Decrease Line Flushing | Water recirculation truck used to clean water and return to water main | | | |
| 3Provide Rebates for Landscape Irrigation EfficiencyDone by SCVWD on behalf of SJWC. | | | | | |
| | : The above list only represents a Most other methods are describe | small portion of the consumption reduction methods used by din Chapter 9. | | | |

8.5.1 Drought Allocations

The drought allocation program for residential customers is based on average residential customer usage in base year 2013 for each month, less the percentage of conservation being required. During the 2015 drought, the percentage reduction for SJWC's customers is 30 percent, so the drought allocation is 70 percent of year 2013 average monthly residential usage.

The allocation program was also applied to dedicated landscape irrigation services. However, for landscape services, the allocation program was applied slightly differently. The drought allocation for each landscape service is based upon the individual landscape customer's monthly usage during the base year 2013 minus the required percentage reduction. In the instance of the 2015 drought situation, the percentage reduction is 30 percent, so the resulting allocation is 70 percent.

8.6 Determining Water Shortage Reductions

SJWC routinely measures the overall water production for the service area. There are meters on the operational supply pipelines and in accordance with the California Urban Water Conservation Council (CUWCC) BMP 1.3, all customer services are metered. Starting in September 2014, the State Water Resources Control Board (SWRCB) began requiring all urban water suppliers report their water production to the state on a monthly basis. This data will continue to be reported as long as the SWRCB regulations remain in effect.



8.7 Revenue and Expenditure Impacts

SJWC's forecasted revenue requirement is based on a rate design that collects approximately 70 percent of revenue through the quantity charge (i.e. cost per unit of usage) and 30 percent through the fixed meter charge (i.e. cost per meter based on size). Therefore, with implementation of the Water Shortage Contingency Plan SJWC would experience revenue reductions commensurate with any customer water usage reductions. Further, SJWC may incur additional costs related to implementing the Water Shortage Contingency Plan. Such costs could be related to increased outreach to customers about water conservation, purchases of more expensive water supplies, and possibly, developing and/or implementing a drought rate structure.

8.8 Proposed Future WSCP Stages and Actions

Stages shown in Table 8-1 refer to stages in SJWC's current WSCP, which is Schedule 14.1 filled with the CPUC. Schedule 14.1 contains four stages of water shortage, with shortage levels up to 50 percent. In the future, SJWC plans to propose to expand the WSCP to include a fifth stage (see Appendix D). The extra stage, which accounts for a shortage of up to 30 percent, allows for some irrigation to occur at the revised Stage 4 (one day per week) prior to a complete irrigation ban at the new Stage 5. In the current plan, the number of days per week goes from two days per week at Stage 3 to zero days at Stage 4.

8.9 Catastrophic Supply Interruption

Following a catastrophic supply interruption of water supplies resulting from a regional power outage, an earthquake, or other disaster, SJWC would implement its Emergency Response Plan (ERP). The ERP is based on the Standardized Emergency Management System (SEMS), National Incident Management System (NIMS), guidance from the United States Environmental Protection Agency (US-EPA), and direction from the California Division of Drinking Water (DDW).

SJWC's plan is an "All Hazards" Plan that can be distributed to outside agencies so they will understand SJWC's actions and be able to coordinate an appropriate response that is consistent with SJWC's Incident Command System (ICS) functions. SJWC's ERP also includes a number of appendices, which are used by staff during planning, training, exercising, and responding to various events. There are several associated plans and key documents called out in the ERP, which are used for more specific actions. They are as follows:

- SJWC's Information System Recovery Plan
- Material Safety Data Sheets (MSDS) Catalog
- Bacteriological Sample Siting Plan
- Title 22, California Code of Regulations
- San Jose Water Company Water Quality Monitoring Plan
- Guidelines for Assuring Water Quality During Emergency Repair of Depressurized Water Mains
- San Jose Water Company Plan for Public Notification of Water Quality
- San Jose Water Company Standards and Specifications Manual
- Multi-Agency Response Guidance For Emergency Drinking Water Procurement & Distribution



- Water Sector Unit Leader
- REOC WSUL SOPs
- Op Area WSUL SOPs
- San Jose Water Company Recovery Plan
- SJWC Dam ERPs
- SJWC Fire Response Plan (Draft)

During an emergency scenario where a large portion of the production and/or distribution system is compromised and customers require alternate sources of potable water, the key guidance document used by SJWC is the *Multi-Agency Response Guidance for Emergency Drinking Water Procurement & Distribution* report. This report can be obtained from the California Office of Emergency Services.

SJWC built an Emergency Operation Center in 2005 and regularly uses it for table top exercises, functional exercises, full-scale exercises, and regular staff meetings to ensure employees are familiar with the equipment should a real event occur. As part of the emergency response framework SJWC has adopted, the company established key SEMS/NIMS positions, as well as several others specific to SJWC and its mission to adequately respond to water related emergencies.

SJWC has developed Strategic Partnerships, with a variety of local, state and federal agencies and associations to better plan for, and respond to emergencies. A listing and description are as follows:

- DDW is a division of the California State Water Resources Control Board and is responsible for potable water utility regulation. SJWC regularly trains and exercises with this state agency.
- SJWC is a part of the Santa Clara County Emergency Managers Association, and coordinates planning, training and exercises with all the cities it serves. We also have a seat at the County Office of Emergency Services EOC, and regularly trains and exercises with this agency. SJWC is also the private water utility representative at the State Mutual Aide Regional Advisory Committee (MARAC) to coordinate state efforts with the local water community.
- At a federal level, SJWC participates with US-EPA in training and exercise, being an active advisor on behalf of location water agencies. SJWC works with the Department of Homeland Security as a representative on the Water Sector Coordination Council (WSCC), as a part of its membership with the National Association of Water Companies (NAWC) and has a seat on its Safety and Security Committee.
- SJWC also plays an active role with many of the community based organizations in the area, specifically the Collaborating Agency Disaster Relief Effort (CADRE) and the Emergency Volunteer Center (EVC); both key partners in SJWC's 2015 Full Scale Emergency Water Distribution Exercise.
- To coordinate efforts in the water community, SJWC sits as the Coastal Region Vice Chair for the California Water/Waste Water Agency Response Network (CalWARN) and is currently chair of the Bay Area Emergency & Security Information Collaborative (BAESIC), as well as, Chair of SCVWD's Emergency Management Subcommittee.



8.10 Minimum Water Supply Next Three Years

Projected 2016 supplies exceed current demands, which will enable SCVWD to put excess supplies into storage or carryover for subsequent years. Depending on projected end-of-year groundwater storage, SCVWD will work with SJWC and other retailers to implement water use reductions necessary to protect groundwater storage and minimize the risk of land subsidence. SCVWD's modeling in March 2016 indicates projected end-of-year groundwater storage, even with excess supplies, will be below normal and that continued water use reductions are warranted.

Winter 2016 saw improved hydrologic conditions in parts of California, which has allowed the mandatory demand-driven conservation standards currently in place to be adjusted. However, conservation standards are still needed in case this winter was only a short reprieve in a longer drought. The new conservation standards will take effect in summer, 2016 and remain in effect until the end of January, 2017. The proposed regulations allow for locally-developed conservation standards based upon each agency's specific circumstances through a self-certification process. Based on the *Technical Fact Sheet* produced by the State of California Water Resources Control Board, SJWC determined that the conservation standard for its service area would be 6.5 percent.

| Table 8-4 Retail: Minimum Supply Next Three Years | | | | | |
|---|--------|--------|--------|--|--|
| 2016 2017 2018 | | | | | |
| Available Water Supply | 41,860 | 42,134 | 42,408 | | |
| NOTES: Estimates do not include recycled water. Minimum supplies based on projected demands with 6.5% conservation. | | | | | |



Chapter 9 Demand Management Measures

The purpose of this chapter is to provide a comprehensive description of the water conservation programs that SJWC has implemented, is currently implementing, and plans to implement in order to meet water use reduction targets.

9.1 California Urban Water Conservation Council

SJWC is a signatory of the California Urban Water Conservation Council (CUWCC) and signed the CUWCC Memorandum of Understanding (MOU) in February 2006. The CUWCC is a partnership of water suppliers, environmental groups, and others interested in California water supply who have come together to agree on a set of Best Management Practices (BMPs) for water conservation in the state. The original MOU contained 14 BMPs. The MOU was updated in 2009 and the BMPs were reorganized. The new set of BMPs is organized into two groups: Foundational BMPs (numbers 1.1.1 through 2.2) and Programmatic BMPs (numbers 3.1 through 5). DWR has a list of water Demand Management Measures (DMMs) that correspond to the CUWCC BMPs.

SJWC is in full compliance with all of CUWCC BMPs for the current reporting period (2013-2014) with the exception of BMP 1.3. For 1.3, SJWC has submitted an exemption. This BMP requires that agencies conduct a study of converting mixed use meters to dedicated irrigation meters. The exemption filled with CUWCC says that it is not cost effective for SJWC to pursue this study. The 2014 BMP coverage reports are included as Appendix E to this UWMP.

9.2 Specific Demand Management Measures

The following subsections describe how SJWC addresses some of the BMPs.

9.2.1 Water-Waste Prevention Ordinances

SJWC is not a local government with the power to enforce ordinances. Rather, SJWC operates in the jurisdiction of a number of cities, each of which has their own local water-waste provisions and ordinances. The largest city that SJWC covers is the City of San Jose. The City of San Jose ordinance is included as Appendix F and meets the definitions set forth in BMP 1.1.2.

Additionally, SJWC has its own water-waste provisions that come into effect when there is a water shortage. The California Public Utilities Commission (CPUC) has set forth the rules regarding water waste and water shortages governing investor owned utilities such as SJWC. The CPUC rule relating to this is Rule 14.1 included as Appendix G. This rule states that when there is a low level water shortage that prompts a call for voluntary conservation by customers, a list of water-waste provisions goes into effect. Rule 14.1 also has provisions for high level water shortages when mandatory conservation measures are deemed necessary. More description of water shortage levels and associated actions can be found in *Chapter 8 Water Shortage Contingency Planning*.



9.2.2 Public Education and Outreach

Public information involves promoting water efficiency through various means including conservation brochures, bill inserts, advertising, public speaking engagements and SJWC's website. The goal of this program is to increase customer awareness of habits or procedures that waste water, as well as awareness of water capacity, available sources, system capacity, and treatment and distribution issues. Public information campaigns are designed to promote understanding and dialogue in the community on water conservation topics as well as to motivate customers to conserve. Public information is provided directly by SJWC and also in conjunction with SCVWD.

Public information and education programs generally have positive social impacts on the community due to increased public awareness of and cooperation with water use issues. The major impact for customers who use water efficiently is a lower water bill. Environmental impacts include reduced demand on future water supplies and lower flows to the sewage treatment plant.

SJWC distributes an average of three conservation bill inserts annually. An example of a bill insert includes the one sent by SJWC each spring that promotes SJWC's water audit program and the annual Water Awareness Night event. In the fall, SJWC promotes Water Appreciation Day with a bill insert that focuses on reducing outdoor water use. This insert reminds customers to turn off their irrigation systems in the wet winter months.

SJWC has developed a variety of water conservation literature. The literature is available free of charge both in person and also downloadable from SJWC's website. SJWC has developed a booklet called "Guide to Using Water Wisely". This booklet describes the various conservation programs and rebates that are available to customers. It also describes how to read one's water meter, how to fix basic leaking toilet issues, and also has a section on water wise landscaping. SJWC also distributes a flyer provided by SCVWD that describes their rebate programs that are available to all SJWC customers.

A variety of public information relating to conservation is available on SJWC's website. First and foremost are water conservation tips. Customers can also download literature and request a water audit via e-mail. SJWC's website now has new features and information about water wise landscaping, including links to a specific water wise landscaping website and plant database, as well as a "virtual tour" of SJWC's public water-smart demonstration garden.

SJWC also offers several public information events and services, including:

- <u>Water Awareness Day</u> SJWC began sponsoring this annual event in 2002. Through a bill insert and a message on the bill, customers are invited to attend the event, which is part of a San Jose Giants (minor league) baseball game at San Jose Municipal Stadium. A total of approximately 4,000 people attended the game in 2015. SJWC personnel set up various displays at the entrance to the stadium, including games for the children and conservation information for the adults. Additionally, a special gift was given to the first 500 people attending the game.
- <u>Speaker's Bureau</u> SJWC receives requests to speak to local service and civic groups, homeowners associations and similar organizations. Requests are filled whenever possible.



SJWC also increased the outreach and educational programs on outdoor water use. SJWC constructed multiple water-smart demonstration gardens open to the public. Customers can visit these gardens in person or take a virtual tour on SJWC's website. SJWC also developed a dedicated water wise landscaping website where customers can access a plant information database that includes hundreds of low water use plants as well as a photographic database of water wise gardens in the San Jose-Santa Clara County area.

In addition to these programs, SJWC engages in other activities that contribute to the overall goal of reducing water waste, but are not specifically designated as conservation or water management programs. These include SJWC's meter calibration and replacement program, corrosion control program, valve exercising program, and metering all service connections.

9.2.3 Public Water Survey Programs for Single-Family Residential and Multi-Family Customers

SJWC has had a water audit program in place since 1991. Currently SJWC offers audits free of charge to all customers. The customer is offered both an indoor and outdoor audit. Large landscape audits are also performed for single-family residential customers. For large landscapes at commercial or multi-family residential properties, SCVWD offers the WaterFluence program.

The purpose of a water audit is to educate customers about the wise use of water and to make their homes and businesses as water efficient as possible. The audits usually start with our inspector demonstrating to the customer how to read the water meter for current usage and for signs of leaks. This can help customers become better aware of their own usage and to be proactive when a leak is detected. An examination is then performed throughout the household to identify any water leaks and to check the efficiency of plumbing fixtures.

In addition to the indoor component of the audit, SJWC has developed the landscape component of the audit program to provide an extensive evaluation of the resident's landscape irrigation system. During this component of the audit, customers are given recommendations for an irrigation schedule based on the plant materials and the irrigation system hardware. The inspector will check the irrigation system for leaks and efficiency and also offer to program the customer's irrigation controller with the recommended schedule.

The following is a summary of the items performed during a typical water audit:

Indoors:

- Check for inefficient plumbing fixtures and appliances and make recommendations for fixture replacement where appropriate; make recommendations to rebate programs if available.
- Check for leaking toilets and faucets and inform customer of any leaks found as well as advice on leak repair.
- Give customer free low-flow showerheads and faucet aerators where needed and install them if requested.



Outdoors:

- Thoroughly check the irrigation system including inspecting sprinkler heads for proper functioning. Note and describe any excessive runoff, broken sprinkler heads, or any other leaks in the irrigation system.
- Review the irrigation schedule with the customer and make recommendations for improving the schedule, if necessary. If requested, our inspector will implement the new schedule by changing the customer's irrigation controller.
- Check all outdoor hoses bibs for leaks.

The following table lists the number of water audits performed in recent years listed by customer class:

| Table 9-1: Water Audit History by Type | | | | | | | | |
|--|-------|-------|-------|--|--|--|--|--|
| 2013 2014 2015 | | | | | | | | |
| # of Single-family residential audits | 1,167 | 2,727 | 2,628 | | | | | |
| # of Multi-family residential audits | 349 | 332 | 1,665 | | | | | |
| # of Commercial audits | 47 | 36 | 26 | | | | | |
| # of dedicated landscape audits | 0 | 1 | 6 | | | | | |

9.2.4 Residential Plumbing Retrofits

This ongoing program which began in 1992 involves the distribution of low-flow showerheads and faucet aerators to customers upon request. The goal is to replace high volume plumbing fixtures with retrofit devices that are much more water-efficient until a 75 percent saturation of pre-1992 residences is obtained. SCVWD provides individual retailers with bulk quantities of low flow showerheads and faucet aerators. These devices, provided without charge, are financed through wholesale rates charged to the retailers and are available to customers during water audits or directly from SCVWD. An appropriate retrofit device is provided for each plumbing fixture in the home. For customers requesting large quantities, delivery is available by water conservation inspectors. SJWC also distributes these devices through special events such as community fairs and "Water Awareness Night" activities. Additionally, the program is publicized in Company bill inserts.

Devices include:

- Low-flow showerheads (2.0 gallons per minute or less)
- Kitchen faucet aerators (2.0 gallons per minute)
- Bathroom faucet aerators (1.0 gallons per minute)



The following table shows how many showerheads and faucet aerators have been distributed by SJWC in the last several years:

| Table 9-2: Showerhead and Faucet Aerators Distributed by SJWC | | | | | | |
|---|-------|-------|-------|--|--|--|
| | 2013 | 2014 | 2015 | | | |
| # of low flow showerheads distributed | 2,169 | 3,293 | 4,372 | | | |
| # of low flow faucet aerators distributed | 2,078 | 2,632 | 5,016 | | | |

SJWC will be implementing a new comprehensive Commercial, Industrial, and Institutional (CII) audit program in 2016 to complement the current Water Audit program. The new program will be done using Maddaus Water Management (MWM), a consulting firm that specializes in conducting commercial water audits. The program will include an onsite audit/inspection and a report that summarizes results and recommendations. MWM will be used to conduct specialized CII audits where additional expertise is required. Other CII audits will be performed by SJWC staff. Included in the audits are an inspection of individual plumbing fixtures, the installation of water conservation devices, water conservation brochures, review of landscape irrigation and a complete evaluation of water-using apparatus and processes. Considerable expertise is required to perform audits at businesses that have technical water related processes.

The following table lists the number of water audits performed in recent years listed by in the CII sector:

| Table 9-3: Commercial, Industrial, and Institutional (CII) Water Audits | | | | | | | |
|---|----|----|----|--|--|--|--|
| 2013 2014 2015 | | | | | | | |
| Count of CII water audits by SJWC | 47 | 36 | 26 | | | | |

Irrigation accounts for a large portion of urban water use in California. Irrigation water use varies dramatically depending on water pricing and availability, plant choice, geographic locations, seasonal conditions, and the level of commitment to sound water efficiency practices. The goal of this BMP provides customers that have large irrigated landscapes with assistance from their water suppliers. This will achieve a higher level of water use efficiency consistent with the actual irrigation needs of the plant materials.



9.2.5 Additional Conservation Programs

Several new programs are being launched in 2016. These include:

- <u>WaterFluence</u>: SJWC is launching a new program for large landscape irrigation sites. The program is a water budget and water survey program from the vendor WaterFluence. The program offers select irrigation sites a customized water budget. The vendor calculates the water budget based on a combination of aerial imagery and site verification of the amount and type of irrigated area. The program offers the customers a monthly recurring water budget report that shows the water budget and actual water usage compared to the budget. For sites with special needs or deficiencies, a site irrigation survey is offered to the customers. This program is being funded by SCVWD and will be rolled out in 2016 to the customers with dedicated irrigation accounts, but may be expanded to other customers with mixed use meters in the future.
- <u>WaterSmart Software</u>: In 2016 SJWC began partnering with WaterSmart Software to send customized paper home water use reports to approximately 100,000 of our highest residential water users. These reports describe how many gallons per day the customer uses and also compares their usage to a similar home in SJWC's service area. The report also provides water conservation tips and links to conservation programs. SJWC anticipates an overall reduction in water use of 5 percent for participating homes.
- <u>Residential AMI Pilot Program</u>: In 2016, SJWC began an Automated Meter Infrastructure (AMI) pilot project for residential customers. This pilot consists of testing two different types of AMI systems, one cellular and one fixed-network, for two groups of residential customers of approximately 400 each. The project will provide near real-time information of water usage to customers and will include analysis of water savings that may result from the real-time information and leak detection capabilities. In addition to being a study of water savings potential as a result of AMI, this project will be an important analysis of the feasibility of installing AMI in the entire SJWC service area.



Chapter 10 Plan Adoption, Submittal and Implementation

This chapter describes the steps taken by SJWC to adopt, submit and make publically available the 2015 UWMP.

10.1 Inclusion of all 2015 Data

Data provided in this UWMP is provided on a calendar year basis through December 31, 2015.

10.2 Preparation of UWMP and Notice of Public Hearing

SJWC invited SCVWD and local jurisdictions to participate in the development of the UWMP and provided over 60 days of notice prior to the public hearing. Copies of the notification letters are provided in Appendix H. The public hearing was held on June 7, 2016 at 10:00 am at SJWC's engineering office. Notice of the time and place of the hearing was published in the San Jose Mercury News on May 24th and May 31st and a copy of this notice is attached in Appendix I.

| Table 10-1 Retail: Notification to Cities and Counties | | | | | | |
|--|---------------|-----------------------------|--|--|--|--|
| City Name | 60 Day Notice | Notice of Public Hearing | | | | |
| City of San Jose | \square | Ø | | | | |
| City of Campbell | Ø | Ø | | | | |
| City of Cupertino | Ø | Ø | | | | |
| City of Monte Sereno | V | | | | | |
| City of Saratoga | V | Ø | | | | |
| Town of Los Gatos | V | Ø | | | | |
| City of Santa Clara | V | Ø | | | | |
| City of Sunnyvale | V | Ø | | | | |
| City of Mountain View | Ø | | | | | |
| City of Milpitas | V | | | | | |
| County Name | 60 Day Notice | Notice of Public Hearing | | | | |
| Santa Clara County | \checkmark | \square | | | | |



10.3 Public Availability

The California Urban Water Management Planning Act requires each water agency to encourage the active involvement of the public in the development of the UWMP. SJWC sought public participation by allowing any interested member of the general community in the service area to have access to the Draft 2015 UWMP starting May 24, 2016. The Draft 2015 UWMP was made available for public inspection at the company headquarters located in downtown San Jose and also online on the company website <u>www.sjwater.com</u> for public inspection two weeks in advance of the public hearing.

10.4 Adoption of 2015 UWMP

Following the public hearing and prior to submitting this 2015 UWMP to DWR, SJWC's Board of Directors must formally approve the plan. This UWMP was approved by SJWC's Board on June 14, 2016 and the resolution documenting adoption is included as Appendix J.

10.5 Plan Submittal

This 2015 UWMP, along with the required data tables, was electronically submitted to DWR in accordance with its requirements on June 16, 2016. The DWR checklist arranged by subject is included as Appendix K. A hardcopy of the adopted Plan was sent to the California State Library and electronic copies were sent to all jurisdictions identified in Table 10-1.

10.6 Public Availability

Within 30 days after filing the 2015 UWMP to DWR, SJWC will make the Final Plan available for public review during normal business hours at the Customer Service Center located at the company headquarters in downtown San Jose.

10.7 Plan Implementation

SJWC is continually coordinating with SCVWD and other local water retailers on water supply planning as described in previous chapters, including the evaluation of expanding the recycled water system. SJWC will also continue to work with SCVWD on water conservation programs as conservation will continue to play an important role in water supply reliability. In addition, SJWC's continued membership in the California Urban Water Conservation Council will help ensure implementation of demand management measures.

10.8 Amending an Adopted UWMP

Should SJWC amend this 2015 UWMP, the required notification process as defined by the Department of Water Resources will be followed.

Appendix A

AWWA Water Audit Worksheets

| A | | e Water Audit S orting Workshee | | | WAS American Water Works Copyright © 2014, All Righ | S v5.0 s Association hts Reserved |
|---|--------------------|-------------------------------------|----------------------------------|--------------------------------|---|---|
| Click to access definition Click to add a comment Click to add a comment | | ater Company 10/2014 - 9/2015 | | | | |
| Please enter data in the white cells below. Where available, metered values sh input data by grading each component (n/a or 1-10) using the drop-down list to | the left of the in | put cell. Hover the mouse | over the cell to obtain a descri | | in the accuracy of the | |
| All volu To select the correct data grading for each inpu | | | LONS (US) PER YEAR | | | - |
| the utility meets or exceeds <u>all</u> criteria t | | | | Master Meter and Su | upply Error Adjustment | ts |
| WATER SUPPLIED | | · · · · | in column 'E' and 'J' | 1 6/16. | Value: | - |
| Volume from own sources: Water imported: | | 15,724.381 19,140.515 | | | -78.060 -153.937 | MG/Yr MG/Yr |
| Water exported: | | | MG/Yr + ? | | ۲ | MG/Yr |
| WATER SUPPLIED: | : | 35,096.893 | MG/Yr | • | value for under-registr alue for over-registrat | |
| | | | | | Click here: ? | _ |
| Billed metered: | | 32,525.746 | | | for help using option | |
| Billed unmetered: Unbilled metered: | | 7.233 | | Pcnt: | buttons below Value: | |
| Unbilled unmetered: | | 84.914 | | | 84.914 | MG/Yr |
| | | | | † | Use buttons to select | |
| AUTHORIZED CONSUMPTION: | ? | 32,635.945 | MG/Yr | L | percentage of water | |
| | | | | _ | supplied OR | |
| WATER LOSSES (Water Supplied - Authorized Consumption) | | 2,460.948 | MG/Yr | | value | |
| Apparent Losses | + ? | 07.740 | 100/ | Pcnt: | Value: | |
| Unauthorized consumption: Default option selected for unauthorized con | | 87.742 grading of 5 is applied | | 0.25% | 0 | MG/Yr |
| Customer metering inaccuracies: | | 336.351 | | 0 | 336.351 | MG/Yr |
| Systematic data handling errors: | | 81.314 | | | 0 | MG/Yr |
| Default option selected for Systematic dat | | rors - a grading of 5 is 505.408 | | d | | |
| Apparent Losses: | | 505.400 | MG/TI | | | |
| Real Losses (Current Annual Real Losses or CARL) | | | | | | |
| Real Losses = Water Losses - Apparent Losses: | ? | 1,955.541 | MG/Yr | | | |
| WATER LOSSES: | | 2,460.948 | MG/Yr | | | _ |
| NON-REVENUE WATER = Water Losses + Unbilled Metered + Unbilled Unmetered | ? | 2,563.914 | MG/Yr | | | |
| SYSTEM DATA | | | | | | - |
| Length of mains: Number of <u>active AND inactive</u> service connections: | + ? 10 | 2,363.2 237,273 | miles | | | |
| Service connection density: | ? | 100 | conn./mile main | | | |
| Are customer meters typically located at the curbstop or property line? | | Yes | | ne, beyond the property | | |
| <u>Average</u> length of customer service line: Average length of customer service line has been | | d a data grading score | | e responsibility of the utilit | ty) | |
| Average operating pressure: | | | | | | |
| COST DATA | | | | | | - |
| Total annual cost of operating water system: | + ? 10 | \$222,891,000 | \$/Year | | | |
| Customer retail unit cost (applied to Apparent Losses): | + ? 10 | \$3.57 | | | | |
| Variable production cost (applied to Real Losses): | + ? 7 | \$2,554.64 | \$/Million gallons | Customer Retail Unit Cost to | value real losses | |
| WATER AUDIT DATA VALIDITY SCORE: | | | | | | - |
| | *** YOUR SCO | RE IS: 91 out of 100 ** | * | | |] |
| A weighted scale for the components of consul | | | | ata Validity Score | | J |
| PRIORITY AREAS FOR ATTENTION: | | | | and y coold | | |
| Based on the information provided, audit accuracy can be improved by addres | sing the following | na components. | | | | |
| 1: Unauthorized consumption | | ig components. | | | | |
| 2: Systematic data handling errors | 1 | | | | | |
| 3: Variable production cost (applied to Real Losses) | 1 | | | | | |
| o, variable production cost (applied to real LUSSES) | J | | | | | |

| | AWWA Free Water Audit Software: WAS v5.0 |
|--|---|
| | System Attributes and Performance Indicators American Water Works Association. Copyright © 2014, All Rights Reserved. Copyright Copyr |
| | Water Audit Report for: San Jose Water Company Reporting Year: 2015 10/2014 - 9/2015 |
| | *** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 91 out of 100 *** |
| System Attributes: | Apparent Losses: 505.408 MG/Yr |
| | + Real Losses: <u>1,955.541</u> MG/Yr = Water Losses: <u>2,460.948</u> MG/Yr |
| | 2 Unavoidable Annual Real Losses (UARL): 1,165.38 MG/Yr |
| | Annual cost of Apparent Losses: \$2,409,978 |
| | Annual cost of Real Losses: \$4,995,703 Valued at Variable Production Cost |
| Performance Indicators: | Return to Reporting Worksheet to change this assumption |
| | Non-revenue water as percent by volume of Water Supplied: 7.3% |
| Financial: | Non-revenue water as percent by cost of operating system: 3.4% Real Losses valued at Variable Production Cost |
| Г | Apparent Losses per service connection per day: 5.84 gallons/connection/day |
| Operational Efficiency | Real Losses per service connection per day: 22.58 gallons/connection/day |
| Operational Efficiency: | Real Losses per length of main per day*: N/A |
| L | Real Losses per service connection per day per psi pressure: 0.34 gallons/connection/day/psi |
| | From Above, Real Losses = Current Annual Real Losses (CARL): 1,955.54 million gallons/year |
| | ? Infrastructure Leakage Index (ILI) [CARL/UARL]: 1.68 |
| * This performance indicator applies for | or systems with a low service connection density of less than 32 service connections/mile of pipeline |

Appendix B

SB x7-7 Verification Forms

SB X7-7 Table 0: Units of Measure Used in UWMP*

(select one from the drop down list)

Million Gallons

*The unit of measure must be consistent with Table 2-3

NOTES:

| Baseline | Parameter | Value | Units |
|-------------------------|---|--------------------------|-----------------------|
| | 2008 total water deliveries | 50,323 | Million Gallons |
| | 2008 total volume of delivered recycled water | 398 | Million Gallons |
| 10- to 15-year | 2008 recycled water as a percent of total deliveries | 0.79% | Percent |
| baseline period | Number of years in baseline period ¹ | 10 | Years |
| | Year beginning baseline period range | 1995 | |
| | Year ending baseline period range ² 2004 | | |
| _ | Number of years in baseline period | 5 | Years |
| 5-year | Year beginning baseline period range | 2003 | |
| baseline period | Year ending baseline period range ³ | 2007 | |
| , , | er percent is less than 10 percent, then the first baseline period is a continuous 10- cent or greater, the first baseline period is a continuous 10- to 15-year period. | year period. If the amou | int of recycled water |
| The ending year must be | between December 31, 2004 and December 31, 2010. | | |
| The ending year must be | between December 31, 2007 and December 31, 2010. | | |
| NOTES: | | | |

| SB X7-7 Table 2: Method for Population Estimates | | | | | |
|--|---|--|--|--|--|
| | Method Used to Determine Population | | | | |
| | (may check more than one) | | | | |
| | 1. Department of Finance (DOF) | | | | |
| | DOF Table E-8 (1990 - 2000) and (2000-2010) and | | | | |
| | DOF Table E-5 (2011 - 2015) when available | | | | |
| V | 2. Persons-per-Connection Method | | | | |
| | 3. DWR Population Tool | | | | |
| | 4. Other DWR recommends pre-review | | | | |
| NOTES: | | | | | |

| SB X7-7 Table 3: Service Area Population | | | | | |
|--|-----------------|------------|--|--|--|
| Y | ear | Population | | | |
| 10 to 15 Year Baseline Population | | | | | |
| Year 1 | 1995 | 871,012 | | | |
| Year 2 | 1996 | 868,588 | | | |
| Year 3 | 1997 | 869,926 | | | |
| Year 4 | 1998 | 886,121 | | | |
| Year 5 | 1999 | 897,433 | | | |
| Year 6 | 2000 | 901,982 | | | |
| Year 7 | 2001 | 903,898 | | | |
| Year 8 | 2002 | 905,058 | | | |
| Year 9 | 2003 | 907,683 | | | |
| Year 10 | 2004 | 910,243 | | | |
| Year 11 | | | | | |
| Year 12 | | | | | |
| Year 13 | | | | | |
| Year 14 | | | | | |
| Year 15 | | | | | |
| 5 Year Base | eline Populatio | on | | | |
| Year 1 | 2003 | 907,683 | | | |
| Year 2 | 2004 | 910,243 | | | |
| Year 3 | 2005 | 916,473 | | | |
| Year 4 | 2006 | 924,214 | | | |
| Year 5 | 2007 | 928,575 | | | |
| 2015 Comp | liance Year Po | opulation | | | |
| 2 | 015 | 982,750 | | | |
| NOTES: | | | | | |

| | | | | | Deduction | S | | |
|-------------|--|---|-------------------|---|--|---|--|------------------------------|
| | Baseline Year Fm SB X7-7 Table 3 | Volume Into Distribution System Fm SB X7-7 Table(s) 4-A | Exported Water | Change in Dist. System Storage (+/-) | Indirect Recycled Water Fm SB X7-7 Table 4-B | Water Delivered for Agricultural Use | Process Water Fm SB X7-7 Table(s) 4-D | Annual Gross Water Use |
| 10 to 15 Y | ear Baseline - | Gross Water U | se | | | | | <u> </u> |
| Year 1 | 1995 | 46021.159 | 0 | 0 | 0 | 0 | 0 | 46,021 |
| Year 2 | 1996 | 48506.076 | 0 | 0 | 0 | 0 | 0 | 48,506 |
| Year 3 | 1997 | 51665.237 | 0 | 0 | 0 | 0 | 0 | 51,665 |
| Year 4 | 1998 | 48325.2358 | 0 | 0 | 0 | 0 | 0 | 48,325 |
| Year 5 | 1999 | 50968.8562 | 0 | 0 | 0 | 0 | 0 | 50,969 |
| Year 6 | 2000 | 51701.031 | 0 | 0 | 0 | 0 | 0 | 51,701 |
| Year 7 | 2001 | 51625.7344 | 0 | 0 | 0 | 0 | 0 | 51,626 |
| Year 8 | 2002 | 51868.5694 | 0 | 0 | 0 | 0 | 0 | 51,869 |
| Year 9 | 2003 | 49224.9255 | 0 | 0 | 0 | 0 | 0 | 49,225 |
| Year 10 | 2004 | 50589.845 | 0 | 0 | 0 | 0 | 0 | 50,590 |
| Year 11 | 0 | 0 | | | 0 | | 0 | 0 |
| Year 12 | 0 | 0 | | | 0 | | 0 | 0 |
| Year 13 | 0 | 0 | | | 0 | | 0 | 0 |
| Year 14 | 0 | 0 | | | 0 | | 0 | 0 |
| Year 15 | 0 | 0 | | | 0 | | 0 | 0 |
| 10 - 15 yea | r baseline ave | erage gross wa | ter use | | | | | 33,366 |
| 5 Year Bas | eline - Gross \ | Water Use | | | | | | |
| Year 1 | 2003 | 49,225 | 0 | 0 | 0 | 0 | 0 | 49,225 |
| Year 2 | 2004 | 50,590 | 0 | 0 | 0 | 0 | 0 | 50,590 |
| Year 3 | 2005 | 47,801 | 0 | 0 | 0 | 0 | 0 | 47,801 |
| Year 4 | 2006 | 48,335 | 0 | 0 | 0 | 0 | 0 | 48,335 |
| Year 5 | 2007 | 50,662 | 0 | 0 | 0 | 0 | 0 | 50,662 |
| - | | gross water us | | | | | | 49,323 |
| 2015 Comp | oliance Year - (| Gross Water U | se | | | | | |
| 2 | 2015 | 34,445 | 0 | 0 | 0 | 0 | 0 | 34,445 |

| SB X7-7 Table 4-A: Volume Entering the Distribution System(s) Complete one table for each source. | | | | | | |
|---|-------------------------------|--|--|---|--|--|
| Name of So | ource | Import Water | | | | |
| This water | source is: | | | | | |
| | The supplie | er's own water | source | | | |
| | A purchase | d or imported | source | | | |
| Baselir Fm SB X7- | n e Year -7 Table 3 | Volume Entering Distribution System | Meter Error Adjustment* <i>Optional</i> (+/-) | Corrected Volume Entering Distributior System | | |
| 10 to 15 Ye | ar Baseline | - Water into D | istribution Syst | em | | |
| Year 1 | 1995 | 20380.043 | 0 | 20,380 | | |
| Year 2 | 1996 | 23456.261 | 0 | 23,456 | | |
| Year 3 | 1997 | 25940.557 | 0 | 25,941 | | |
| Year 4 | 1998 | 25532.2188 | 0 | 25,532 | | |
| Year 5 | 1999 | 27303.6832 | 0 | 27,304 | | |
| Year 6 | 2000 | 27538.64 | 0 | 27,539 | | |
| Year 7 | 2001 | 27753.0574 | 0 | 27,753 | | |
| Year 8 | 2002 | 30804.8504 | 0 | 30,805 | | |
| Year 9 | 2003 | 27394.4715 | 0 | 27,394 | | |
| Year 10 | 2004 | 28241.058 | 0 | 28,241 | | |
| Year 11 | 0 | | | 0 | | |
| Year 12 | 0 | | | 0 | | |
| Year 13 | 0 | | | 0 | | |
| Year 14 | 0 | | | 0 | | |
| Year 15 | 0 | | | 0 | | |
| 5 Year Baseline - Water into Distribution System | | | | | | |
| Year 1 | 2003 | 27394.4715 | 0 | 27,394 | | |
| Year 2 | 2004 | 28241.058 | 0 | 28,241 | | |
| Year 3 | 2005 | 29229.776 | 0 | 29,230 | | |
| Year 4 | 2006 | 27816.004 | 0 | 27,816 | | |
| Year 5 | 2007 | 27412.17 | 0 | 27,412 | | |
| 2015 Comp | liance Year | - Water into D | Distribution Syst | em | | |
| | 15 | 20545.262 | 0 | 20,545 | | |
| * Meter Error Adjustment - See aujdance in Methodology 1 Step 3 of | | | | | | |

 2015
 20545.262
 0
 20,545

 * Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document

 NOTES: Assumed Cupertino Lease is 100% Import

| SB X7-7 Table 4-A: Volume Entering the Distribution | | | | | | |
|---|---------------------------------|--|--|---|--|--|
| Name of So | ource | Local Surface Water | | | | |
| This water | ter source is: | | | | | |
| ~ | The supplier's own water source | | | | | |
| | A purchase | d or imported | source | | | |
| Baselir Fm SB X7- | n e Year -7 Table 3 | Volume Entering Distribution System | Meter Error Adjustment* <i>Optional</i> (+/-) | Corrected Volume Entering Distribution System | | |
| 10 to 15 Ye | ar Baseline | - Water into D | istribution Syst | em | | |
| Year 1 | 1995 | 5275.475 | 0 | 5,275 | | |
| Year 2 | 1996 | 5907.29 | 0 | 5,907 | | |
| Year 3 | 1997 | 4880.61 | 0 | 4,881 | | |
| Year 4 | 1998 | 6246.451 | 0 | 6,246 | | |
| Year 5 | 1999 | 5232.406 | 0 | 5,232 | | |
| Year 6 | 2000 | 4380.92 | 0 | 4,381 | | |
| Year 7 | 2001 | 2514.68 | 0 | 2,515 | | |
| Year 8 | 2002 | 2661.3 | 0 | 2,661 | | |
| Year 9 | 2003 | 5670.266 | 0 | 5,670 | | |
| Year 10 | 2004 | 4258 | 0 | 4,258 | | |
| Year 11 | 0 | | | 0 | | |
| Year 12 | 0 | | | 0 | | |
| Year 13 | 0 | | | 0 | | |
| Year 14 | 0 | | | 0 | | |
| Year 15 | 0 | | | 0 | | |
| 5 Year Base | eline - Wate | r into Distribu | tion System | | | |
| Year 1 | 2003 | 5670.266 | 0 | 5,670 | | |
| Year 2 | 2004 | 4258 | 0 | 4,258 | | |
| Year 3 | 2005 | 4938.262 | 0 | 4,938 | | |
| Year 4 | 2006 | 6285.2 | 0 | 6,285 | | |
| Year 5 | 2007 | 1821.373 | 0 | 1,821 | | |
| 2015 Comp | liance Year | - Water into D | istribution Syst | em | | |
| 20 | 15 | 1,553 | 0 | 1,553 | | |
| * Mete | er Error Adjustr | nent - See guidan Methodologies D | ce in Methodology ocument | 1, Step 3 of | | |
| NOTES: | | - | | | | |

| SB X7-7 Table 4-A: Volume Entering the Distribution | | | | | | |
|---|---------------------------------|--|--|---|--|--|
| Name of So | | Groundwater | | | | |
| This water | source is: | | | | | |
| | The supplier's own water source | | | | | |
| | A purchase | d or imported | source | | | |
| Baselir Fm SB X7- | ne Year 7 Table 3 | Volume Entering Distribution System | Meter Error Adjustment* <i>Optional</i> (+/-) | Corrected Volume Entering Distribution System | | |
| 10 to 15 Ye | ar Baseline | - Water into D | istribution Syst | em | | |
| Year 1 | 1995 | 20365.641 | 0 | 20,366 | | |
| Year 2 | 1996 | 19142.525 | 0 | 19,143 | | |
| Year 3 | 1997 | 20844.07 | 0 | 20,844 | | |
| Year 4 | 1998 | 16546.566 | 0 | 16,547 | | |
| Year 5 | 1999 | 18432.767 | 0 | 18,433 | | |
| Year 6 | 2000 | 19781.471 | 0 | 19,781 | | |
| Year 7 | 2001 | 21357.997 | 0 | 21,358 | | |
| Year 8 | 2002 | 18402.419 | 0 | 18,402 | | |
| Year 9 | 2003 | 16160.188 | 0 | 16,160 | | |
| Year 10 | 2004 | 18090.787 | 0 | 18,091 | | |
| Year 11 | 0 | | | 0 | | |
| Year 12 | 0 | | | 0 | | |
| Year 13 | 0 | | | 0 | | |
| Year 14 | 0 | | | 0 | | |
| Year 15 | 0 | | | 0 | | |
| 5 Year Base | eline - Wate | r into Distribu | tion System | | | |
| Year 1 | 2003 | 16160.188 | 0 | 16,160 | | |
| Year 2 | 2004 | 18090.787 | 0 | 18,091 | | |
| Year 3 | 2005 | 13633.412 | 0 | 13,633 | | |
| Year 4 | 2006 | 14233.748 | 0 | 14,234 | | |
| Year 5 | 2007 | 21428.118 | 0 | 21,428 | | |
| 2015 Comp | liance Year | - Water into D | istribution Syst | em | | |
| 20 | 15 | 12,346 | 0 | 12,346 | | |
| * Mete | r Error Adjustr | nent - See guidan Methodologies D | ce in Methodology ocument | 1, Step 3 of | | |
| NOTES: | | | | | | |

| SB X7-7 Ta | able 5: Galloi | ns Per Capita Pe | er Day (GPCD) | |
|------------|---|---|--|---|
| Fm SB X | i ne Year 7-7 Table 3 ar Baseline Gl | Service Area Population Fm SB X7-7 Table 3 | Annual Gross Water Use Fm SB X7-7 Table 4 | Daily Per Capita Water Use (GPCD) |
| Year 1 | 1995 | 871,012 | 46,021 | 145 |
| Year 2 | 1996 | 868,588 | 48,506 | 153 |
| Year 3 | 1997 | 869,926 | 51,665 | 163 |
| Year 4 | 1998 | 886,121 | 48,325 | 149 |
| Year 5 | 1999 | 897,433 | 50,969 | 156 |
| Year 6 | 2000 | 901,982 | 51,701 | 157 |
| Year 7 | 2001 | 903,898 | 51,626 | 156 |
| Year 8 | 2002 | 905,058 | 51,869 | 157 |
| Year 9 | 2003 | 907,683 | 49,225 | 149 |
| Year 10 | 2004 | 910,243 | 50,590 | 152 |
| Year 11 | 0 | 0 | 0 | |
| Year 12 | 0 | 0 | 0 | |
| Year 13 | 0 | 0 | 0 | |
| Year 14 | 0 | 0 | 0 | |
| Year 15 | 0 | 0 | 0 | |
| 10-15 Year | Average Base | eline GPCD | | 154 |
| 5 Year Bas | eline GPCD | | | |
| | i ne Year 7-7 Table 3 | Service Area Population <i>Fm SB X7-7</i> <i>Table 3</i> | Gross Water Use Fm SB X7-7 Table 4 | Daily Per Capita Water Use |
| Year 1 | 2003 | 907,683 | 49,225 | 149 |
| Year 2 | 2004 | 910,243 | 50,590 | 152 |
| Year 3 | 2005 | 916,473 | 47,801 | 143 |
| Year 4 | 2006 | 924,214 | 48,335 | 143 |
| Year 5 | 2007 | 928,575 | 50,662 | 149 |
| 5 Year Ave | rage Baseline | GPCD | | 147 |
| 2015 Com | pliance Year G | PCD | | |
| 2 | 015 | 982,750 | 34,445 | 96 |
| NOTES: | | | | |

| SB X7-7 Table 6 : Gallons per Capita per Day Summary From Table SB X7-7 Table 5 | | | |
|---|-----|--|--|
| 10-15 Year Baseline GPCD | 154 | | |
| 5 Year Baseline GPCD | 147 | | |
| 2015 Compliance Year GPCD 96 | | | |
| NOTES: | | | |

| Select Only One |
|--|
| Target Method Supporting Documentation |
| Method 1 SB X7-7 Table 7A |
| Method 2 SB X7-7 Tables 7B, 7C, and 7D Contact DWR for these tables |
| Method 3 SB X7-7 Table 7-E |
| Method 4 Method 4 Calculator |
| NOTES: |

| SB X7-7 Table 7-A: Target Method 1 20% Reduction | | | | |
|---|---------------------|--|--|--|
| 10-15 Year Baseline GPCD | 2020 Target GPCD | | | |
| 154 | 123 | | | |
| NOTES: | | | | |

| SB X7-7 Table 7-E: Target Method 3 | | | | | |
|--|--|-------------------|------------------------------------|--|--|
| Agency May Select More Than One as Applicable | Percentage of Service Area in This Hydrological Region | Hydrologic Region | "2020 Plan" Regional Targets | Method 3 Regional Targets (95%) | |
| | | North Coast | 137 | 130 | |
| | | North Lahontan | 173 | 164 | |
| | | Sacramento River | 176 | 167 | |
| V | | San Francisco Bay | 131 | 124 | |
| | | San Joaquin River | 174 | 165 | |
| | | Central Coast | 123 | 117 | |
| | | Tulare Lake | 188 | 179 | |
| | | South Lahontan | 170 | 162 | |
| | | South Coast | 149 | 142 | |
| | | Colorado River | 211 | 200 | |
| (If more | 0 | | | | |
| NOTES: | | | | | |

| SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target | | | | | | |
|--|-------------------------|---|--------------------------|--|--|--|
| 5 Year Baseline GPCD From SB X7-7 Table 5 | Maximum 2020 Target* | Calculated 2020 Target Fm Appropriate Target Table | Confirmed 2020 Target | | | |
| 147 | 140 | 127.3 | 127 | | | |
| * Maximum 2020 Target is 95% of the 5 Year Baseline GPCD | | | | | | |
| NOTES: | | | | | | |

| SB X7-7 Table 8: 2015 Interim Target GPCD | | | | | |
|---|---|-----------------------------|--|--|--|
| Confirmed 2020 Target Fm SB X7-7 Table 7-F | 10-15 year Baseline GPCD <i>Fm SB X7-7</i> Table 5 | 2015 Interim Target GPCD | | | |
| 127 | 154 | 140 | | | |
| NOTES: | | | | | |

| | | | Optional | Adjustments <i>(in</i> | GPCD) | | | Did Supplier |
|---------------------|-----------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------|-----------------------|--|---|
| Actual 2015 GPCD | 2015 Interim Target GPCD | Extraordinary Events | Weather Normalization | Economic Adjustment | TOTAL Adjustments | Adjusted 2015 GPCD | 2015 GPCD (Adjusted if applicable) | Achieve Targeted Reduction for 2015? |
| 96 | 140 | From Methodology 8 (Optional) | From Methodology 8 (Optional) | From Methodology 8 (Optional) | 0 | 96.02507919 | 96.02507919 | YES |

Appendix C

SJWC Schedule 14.1 Water Shortage Contingency Plan with Staged Mandatory Reductions and Drought Surcharges

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Canceling

Effective JUN. 1 5 2015

Resolution No.

| SUP | PLEMENT WITH STAGED MAN | SCHEDULE No. 14.1 SHORTAGE CONTINGENCY DATORY REDUCTIONS AND | PLAN DROUGHT SURCHARGES | (N) |
|-----------|---|---|---|------|
| APPLIC | CABILITY | | | |
| | schedules authorized by t | e to water customers served ur he Commission for the utility. It ation after Commission approva ition Section below: | is effective in times of | |
| TERRI | TORY | | | |
| | | n Jose, and Santa Clara, and in oga and in contiguous territory i | | |
| STAGE | D REDUCTION OF WAT | ER USAGE AND MANDATOR | RESTRICTIONS | |
| <u>ST</u> | AGE 1 - CONSERVATION | - NON-ESSENTIAL OR UNA | UTHORIZED USES | |
| | customers are asked to m | ary conservation. This stage weet conservation targets. Outdure targets and the state of days per week irrigations of days per week | oor irrigation limits may be | |
| | | al or unauthorized uses of wate d are subject to the terms and o | | |
| 1. | areas with potable water of is not continuously attend per station, with no water not apply to landscape irr This provision also does r at or less than 1.0 inch pe by use of a hand-held bud positive action shut-off no immediately when not in t | r hour. This provision also does ket or similar container, a hand zzle or device that causes it to use, or for the express purpose | tem or a watering device that minutes of watering per day 0 p.m. This provision does se drip-type irrigation systems. rinkler systems that apply water s not apply to watering or irrigating -held hose equipped with a cease dispensing water | |
| 2. | Use of potable water for water and up to 48 hours after r | vatering outside plants, lawn, la neasurable rainfall. | ndscape, and turf areas during | |
| 3. | defective plumbing fixture premises when the utility defective plumbing fixture | reaks or Malfunctions: Use of w , sprinkler, watering or irrigatior has notified the customer in wri , sprinkler, watering or irrigatior epairs within 5 business days a | a system on the customer's ting to repair the broken or a system, and the customer | |
| 4. | cars, buses, boats, trailer | | h a hand-held hose for washing out a positive shut-off nozzle or tely when not in use. | (N) |
| | | (Continued) | | |
| (To be | inserted by utility) | Issued by | (To be inserted by Cal. P.U. | .C.) |
| Advice | No. <u>473A</u> | PALLE JENSEN | Date Filed JUN - 9 2015 | |

Sr. Vice President, Regulatory Affairs

TITLE

Dec. No. ___

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4

Original Cal. P.U.C. Sheet No. 1669-W Revised Cal. P.U.C. Sheet No.

TITLE

| SUPPLEMENT SCHEDULE No. 14.1 SUPPLEMENT WATER SHORTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued) | | | | | | |
|--|--|---|--|-----|--|--|
| STAG | E 1 CONSERVATION NON-ES | SENTIAL OR UNAUTHORIZE | D WATER USES (Continued) | | | |
| 5. | Operation of commercial car w required by the California Wate | | | | | |
| 6. | The serving of water, other tha including but not limited to rest food or drink are served and/o | taurants, hotels, cafes, bars, o | | | | |
| 7. | Operators of hotels and motels towels and linens laundered da a notice of this option in each g | aily and/or to require hotels an | d motels to prominently display | | | |
| 8. | No Excessive Water Flow or R structures, sidewalks, walkway non-porous areas in a manner | vs, driveways, patios, tennis co | ourts, or other hard-surfaced, | | | |
| 9. | The use of potable water in a f have a fully automatic recircula or ponds, except where the wa | ation system, or the filling or to | pping off of decorative lakes | | | |
| 10 | . Other restrictions on use of po Commission, SJWC, or anothe | | a time to time by the | | | |
| STAG | ED REDUCTIONS OF WATER | USAGE AND MANDATORY F | RESTRICTIONS | | | |
| | If a water supply shortage exists or is threatening, or if SJWC is unable to meet conservation targets as set by a wholesale provider or governing body or agency, in addition to the restrictions on wasteful water use practices outlined above the following restrictions may be imposed by the utility in stages, as indicated below. Failure to comply with these mandatory restrictions will be deemed a wasteful and unreasonable use of water and may result in the installation of a flow restrictor, discontinuance of service, or other actions as authorized by the utility's Rule 11. | | | | | |
| <u>51</u> | AGE 2 -WATER REDUCTION | NEEDED | | | | |
| | Stage 2 -Water Reduction Nee that further measures are need unauthorized uses of water list | ded to reduce water consumpti | ion. In addition to the | | | |
| 1. | Limits on Watering Days: Water areas with potable water is lim severity of the shortage. If thre allowed Monday, Wednesday, and will be allowed on Tuesda | ited to no more than three day ee days per week irrigation is o and Friday for odd numbered | s per week, depending on the called for then irrigation will be and numberless addresses | | | |
| 2. | Use of potable water for water wash-down for construction pu the health and safety of the pu determined by a government a | rposes (if street sweeping is n blic or if recycled water is reas | ot feasible), or to protect | (N) | | |
| | | (Continued) | | | | |
| (To be | inserted by utility) | Issued by | (To be inserted by Cal. P.U. | C.) | | |
| Advice | No. <u>473A</u> | PALLE JENSEN | Date Filed JUN - 9 2015; | | | |
| Dec. N | lo | Sr. Vice President, Regulatory Affairs | Effective <u>JUN 15 2015</u> Resolution No. | | | |
| | | | | | | |

Canceling Revised Cal. P.U.C. Sheet No. ____

(N)

SUPPLEMENT SCHEDULE No. 14.1 SUPPLEMENTWATER SHORTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued)

STAGE 2 -WATER REDUCTION NEEDED (Continued):

- 3. Use of potable water for construction purposes, including washing streets, backfill, and dust control, if other actions to accomplish the same purposes without water are feasible and/or permitted or if recycled water is reasonably available as determined by a government agency.
- 4. The failure to repair any leak, break, or other malfunction in a customer's domestic or outdoor water system within 72 hours of notification by the utility, unless other, specific arrangements are made with and agreed to by the utility.
- 5. Other restrictions on use of potable water as prescribed by the Commission, SJWC, or another governing body or agency.

STAGE 3 - CRITICAL WATER REDUCTION

Stage 3 Water Shortage occurs when the Stage 2 limitations are deemed insufficient to achieve identified water usage goals established by authorized government entities. The following restrictions will be enacted:

- Limits on Watering Days: 1. Limits on Watering Days: Watering or irrigating of lawns, landscape or other vegetated Area with potable water is limited to two days per week. Irrigation will be allowed on Monday and Thursday for odd numbered and numberless addresses and will be allowed on Tuesday and Friday for even numbered addresses.
- 2. The use of potable water to refill residential swimming pools or outdoor spas more than one foot or initial filling with potable water except when existing pools are drained to repair leaks.
- 3. Limits on Filling Ornamental Lakes or Ponds: prohibition of the use of potable water for filling or re-filling decorative fountains, ornamental lakes or ponds except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of a supply shortage level under Rule 14.1
- 4. Use of potable water for washing of vehicles, except at a commercial car washing facility that utilizes a re-circulating water system to capture or reuse water. Use of potable water for washing commercial aircraft, cars, buses, boats, trailers, or other commercial vehicles at any time, except at commercial or fleet vehicle or boat washing facilities operated at a fixed location where equipment using water is recirculated to avoid wasteful use.
- 5. Other restrictions on use of potable water as prescribed by the Commission, SJWC, or another governing body or agency.

STAGE 4 -EMERGENCY WATER REDUCTION

Stage 4 (Emergency Water Reduction) occurs when the Stage 3 limitations are deemed insufficient to achieve identified water usage goals established by authorized government entities. The following restrictions, in addition to those provided for in the preceding stages, will be enacted:

(N)

| (Continued) | | |
|-----------------------------|-------------------------------------|--|
| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
| Advice No. 473A | PALLE JENSEN Sr. Vice President, | Date Filed <u>JUN - 9 2015</u> Effective JUN 1 5 2015 |
| Dec. No | Regulatory Affairs TITLE | Resolution No |

SAN JOSE WATER COMPANY (U168W) San Jose, California

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Original Cal. P.U.C. Sheet No. 1671-W

Canceling <u>Revised</u> Cal. P.U.C. Sheet No._____

| SUF | PL | EMENT SCHEDULE No. 14.1 | (N) |
|--|--------------------------------|--|---------|
| | v | WATER SHORTAGE CONTINGENCY PLAN VITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued) | |
| <u>ST</u> | AGE 4 | 4 -EMERGENCY WATER REDUCTION (continued) | |
| 1. | | Vatering or Irrigating: Watering or irrigation of lawn, landscape or other vegetated area with ble water is prohibited. This restriction does not apply to the following categories of use: | |
| | t | Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a positive action shut-off nozzle or device; | |
| | ii. M | Maintenance of existing landscape necessary for fire protection; | |
| | iii. M | Maintenance of existing landscape for soil erosion control; | |
| | | laintenance of plant materials identified to be rare or essential to the well-being of a protected species; | |
| | v. i | Maintenance of landscape within active public parks and playing fields, day care centers, golf course greens, fringes and tee boxes, and school grounds, provided hat such irrigation does not exceed 2 days per week. | |
| 2. | outd | failure to repair any leak, break, or other malfunction in a customer's domestic or oor water system within 48 hours of notification by the utility, unless other, specific ngements are made with and agreed to by the utility. | |
| Other restrictions on use of potable water as prescribed by the Commission, SJWC, or another governing body or agency. | | | |
| | | DRTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS GHT SURCHARGES - SCHEDULE NO. 14.1 | |
| 1. | agen 350) Plan letter | n the declaration of a water shortage emergency by a water wholesaler, government acy or the governing body of a distributor of a public water supply (per Water Code Section , SJWC may request addition of a Schedule No. 14.1 – Water Shortage Contingency With Staged Mandatory Reductions and Drought Surcharges tariff, via a Tier 2 advice r, with full justification. The utility may not activate Schedule No. 14.1 until it has been orized to do so by the Commission, as delegated to the Division of Water & Audits. | |
| | a. | A staged Schedule No. 14.1 that has been authorized by the Commission shall remain dormant until triggered by specific conditions detailed in the Schedule No. 14.1 tariff and SJWC has requested and received authorization for activating a stage by the Commission | |
| | b. | Notice of the Tier 2 advice letter and associated public participation hearing if required shall be provided to customers through a bill insert or a direct mailing. | |
| | C. | The Utility shall comply with all requirements of Sections 350-358 of the California Water Code. (Continued) | (N) |

| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
|-----------------------------|---------------------|---------------------------------|
| Advice No. 473A | PALLE JENSEN | Date Filed <u>JUN - 9 2015</u> |
| | Sr. Vice President, | Effective JUN 15 2015 |
| Dec. No | Regulatory Affairs | Resolution No |
| | TITLE | |

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| SUP | SCHEDULE No. 14.1 (N) SUPPLEMENT WATER SHORTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued) | | | | | (N) |
|--------|--|--|---|--|--|-----|
| STAGE | D N | | ORY WATER REDUC | TIONS - SCHEDULE NO | <u> D. 14.1 (Continued)</u> | |
| | đ | but n i. Th 2. 3. 4. 5. 6. 7. 8. | ot be limited to: e proposed Schedule I Applicability; Applicable Territory; A detailed description A detailed description Mandatory Water Re A detailed description reduction level for ea Water use violation le schedules and droug fees, if applicable, an Conditions for installa Charges for removal Special Conditions Justification for, and | No. 14.1 tariff, which shall n of each Stage of Mandat n of the Trigger that Activa | ates each Stage of ction, prohibition and/or later Reduction els, applicable rate l penalties, surcharges or ations in support of the | |
| 2. | | | | each utility/district/water sy of the water shortage ever | ystem may vary, depending nt. | |
| 3. | 3. SJWC may enact a particular stage of Schedule 14.1: | | | | | |
| | a. If the Commission, wholesale water supplier, or other government agency declares an emergency requiring mandatory water use restrictions, or | | | | | |
| | If a government agency declares a state of emergency in response to severe drought conditions, earthquake or other catastrophic event that severely reduces the utility's water supply, or | | | | | |
| | C. | | | latory restriction levels se government agency are in | t by the Commission, utility, sufficient, or | |
| | d. | If the u agency | • | ess conservation levels set | t by itself or governing body or | |
| | e. If the utility chooses to subsequently activate a different stage. | | | | | |
| 4. | When enacting a particular stage of Schedule 14.1, SJWC shall file a Tier 2 advice letter to request activation. | | | | | |
| 5. | be a. wh | limited f Justificat ich this | o: ion for activating this p | articular stage of reduction and received an | e No. 14.1 shall include but not ns, as well as the period during ductions measures will be in effect. | (N) |
| (To be | inse | erted by | utility) | issued by | (To be inserted by Cal. P.U. | C.) |

| | | The set of |
|-----------------|---------------------|---|
| Advice No. 473A | PALLE JENSEN | Date Filed 9 2015 |
| | Sr. Vice President, | Effective JUN 15 2015 |
| Dec. No | Regulatory Affairs | Resolution No. |
| | TITLE | |

SAN JOSE WATER COMPANY (U168W)

Original Cal. P.U.C. Sheet No. 1673-W

(N)

San Jose, California

Canceling <u>Revised</u> Cal. P.U.C. Sheet No.____

SUPPLEMENT SCHEDULE No. 14.1 SLIP/SUB SHEET^(N) WATER SHORTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued) ENFORCEMENT OF STAGED MANDATORY WATER REDUCTIONS

1. The staged reduction of water usage and mandatory restrictions in Section C of this Plan become enforceable through additional tariff rates when the Schedule No. 14.1-Water Shortage Contingency

Plan with Staged Mandatory Reductions and Drought Surcharges program is implemented.

- 2. The utility may, after one written warning, install a flow-restricting device on the service line of any customer observed by utility personnel to be using water for any non-essential or unauthorized use as defined in above.
- 3. A flow restrictor shall be capable of providing the premise with a minimum of 5 gallons per minute. The restricting device may be removed only by the utility, only after a three-day period has elapsed, and only upon payment of the appropriate removal charge as set forth in Schedule No. 14.1.
- 4. After the removal of the restricting device, if any non-essential or unauthorized use of water continues, the utility may install another flow-restricting device without written notice. This device shall remain in place until water supply conditions warrant its removal and until the appropriate charge for removal has been paid to the utility.
- 5. Any tampering with flow restricting device by customer can result in discontinuation of water use.
- 6. If, despite installation of such flow-restricting device pursuant to the provisions of the previous enforcement conditions, any such non-essential or unauthorized use of water continues, then the utility may discontinue water service to such customer. In such latter event, a charge as provided in Rule No. 11 shall be paid to the utility as a condition to restoration of service.

APPEAL PROCEDURE

1. Any customer who seeks a variance from any of the provisions of this water shortage contingency plan shall notify the utility in writing, explaining in detail the reason for such a variation. The utility shall respond to each such request in writing.

Except as set forth in this Section, no person shall have any right or claim in law or in equity, against the utility because of, or as a result of, any matter or thing done or threatened to be done pursuant to the provisions of the Water Shortage Contingency Plan.

NOTICE

 When SJWC requests the addition of a Schedule 14.1 –Water Shortage Contingency Plan with Stage Mandatory Reductions and Drought Surcharges tariff, via a Tier 2 advice letter, it shall provide customer notice of the Tier 2 advice letter and associated public hearing, if necessary. Notice will be provided to customers through bill inserts or direct mailing, and through a posting in the local newspaper of circulation. The public meeting shall be held after the utility files the Tier 2 advice letter, and before the Commission authorizes the addition of Schedule 14.1 to the tariff except in cases of emergency water shortages approved by the Division of Water & Audits.

(Continued)

| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
|-----------------------------|---------------------|---------------------------------|
| Advice No. 473A | PALLE JENSEN | Date Filed JUN - 9 2015 |
| | Sr. Vice President, | Effective <u>JUN 1 5 2015</u> |
| Dec. No | Regulatory Affairs | Resolution No |
| | TITLE | |

| SAN JOSE WATER COMPANY (U168W) | Original | Cal. P.U.C. Sheet No. 1674-W |
|--------------------------------|------------|------------------------------|
| San Jose, California | Canceling | Cal. P.U.C. Sheet No. |
| | Devile and | |

Revised SUPPLEMENT SCHEDULE No. 14.1 (N)WATER SHORTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued) **NOTICE (Continued)** a. SJWC shall consult with the Division of Water and Audits staff prior to filing the advice letter, in order to determine the details of the public meeting. 2. If activation of Schedule No. 14.1 occurs one year or more since the public hearing associated with adding Schedule No. 14.1 to its tariffs, then the utility shall conduct a public hearing pursuant to California Water Code Section 351 prior to activating the rationing stage. 3. During the period that a stage of Schedule No. 14.1 is activated, SJWC shall provide customers with updates regarding its water supply status and the results of customers' conservation and water use reduction efforts. 4. During the period that a stage of Schedule No. 14.1 is activated, SJWC shall provide customers with updates regarding its water supply status and the results of customers' conservation and water use reduction efforts. **DROUGHT ALLOCATIONS AND DROUGHT SURCHARGES** Residential The Drought Allocation for residential customers served under all potable tariff rate schedules is based on average residential customer usage in the Base Year 2013 for each month, less the percentage of conservation being required. In this instance, the required percentage reduction is 30%, so the Drought Allocation is 70% of the year 2013 Average Monthly Residential Usage for the month. Allocations falling between full hundreds of cubic feet (ccf) will be rounded up to the next full one hundred cubic feet. **Residential Allocation Plan** 2013 2013 Average Monthly Monthly Drought Base Year **Residential Usage** Allocation (ccf) (ccf) Jan* 10 9 9 9 Feb* 9 Mar* 9 9 Apr* 11 14 10 May Jun 16 11 19 Jul 13 19 13 Aug Sep 19 13 17 12 Oct Nov 17 12 Dec 14 10 *Minimum Monthly Drought Allocation based on minimum average usage for a residential household (N)(Continued) (To be inserted by utility) Issued by (To be inserted by Cal. P.U.C.) JUN - 9 2015 Date Filed Advice No. 473A PALLE JENSEN JUN 15 2015 Sr. Vice President, Effective Dec. No. _____ Regulatory Affairs Resolution No.

TITLE

SAN JOSE WATER COMPANY (U168W) San Jose, California

Canceling

<u>Original</u> Cal. P.U.C. Sheet No.<u>1675-W</u> <u>Revised</u> Cal. P.U.C. Sheet No.____

| SUPPLEMENT SCHEDULE No. 14.1 WATER SHORTAGE CONTINGENC | |
|---|---|
| WITH STAGED MANDATORY REDUCTIONS AND (Continued) | DROUGHT SURCHARGES |
| DROUGHT ALLOCATIONS AND DROUGHT SURCHARGES | (continued) |
| Landscape Services | |
| The Drought Allocation for each landscape customer se schedules is based upon the individual landscape custo Base Year 2013. The Monthly Drought Allocation is the usage during Base Year 2013 minus the reduction perc a 30% required reduction percentage results in a 70% a full one hundreds of cubic feet will be rounded up to the | omer's monthly usage during the n calculated as 100% of monthly entage required. In this instance, Illocation. Allocations falling between |
| DROUGHT ALLOCATION ADJUSTMENTS | |
| Any customer who seeks a variance from any of the provision contingency plan shall notify the utility in writing, explaining variation. The utility shall respond to each such request in v | in detail the reason for such a |
| Except as set forth in this Section, no person shall have any or in equity, against the utility because of, or as a result of, a or threatened to be done pursuant to the provisions of the W | any matter or thing done |
| DROUGHT SURCHARGE | |
| Excess water usage associated with exceeding the Monthly Drought Surcharge. The Drought Surcharge will be assess allowed under the applicable tariffs authorized by the CPUC to the customer's bill based on the amount of usage that exc | ed in addition to all other base charges . The Drought Surcharge will be applied |
| For Residential Customers: Excess usage over monthly Drought Allocation up to 2013 Average Monthly Usage | \$3.5634 per ccf |
| Excess usage over 2013 Average Monthly | \$7.1268 per ccf |
| For Landscape Customers: Excess usage over monthly Drought Allocation | #3 5624 per of |
| up to 2013 Average Monthly Usage | \$3.5634 per ccf |
| Excess usage over 2013 Average Monthly Residential Usage (Continued) | ا 7.1268 per ccf (N) |

| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
|-----------------------------|---------------------|---------------------------------|
| Advice No. 473A | PALLE JENSEN | Date Filed 9 2015 |
| | Sr. Vice President, | Effective JHIN 1 5 2015 |
| Dec. No | Regulatory Affairs | Resolution No |
| | TITLE | |

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Original _____ Revised ____

| SUF | PLEMENT SCHEDULE No. 14.1 PLEMENT SHORTAGE CONTINGENCY PLAN WITH STAGED MANDATORY REDUCTIONS AND DROUGHT SURCHARGES (Continued) | (N) | |
|--------------|---|-----|--|
| <u>FLOW</u> | RESTRICTOR REMOVAL FEE | | |
| Th | e charge for removal of a flow-restricting device is: <u>Meter Size</u> <u>Removal Fee</u> 5/8" to 1" \$45 1-1/2 to 2" \$90 3" and Larger Actual Cost | | |
| <u>SPECI</u> | AL CONDITIONS | | |
| 1. | For the purpose of charging Drought Surcharges the effective date is June 15, 2015. | | |
| 2. | Schedule 14.1 is effective until terminated by an advice letter filing to the Commission, on five days' notice, when the utility determines that mandatory restrictions are no longer necessary. | | |
| 3. | | | |
| 4. | Drought Surcharges will be separately identified on each bill. | | |
| 5. | All bills are subject to the reimbursement fee set forth on Schedule No. UF. | | |
| 6. | All monies collected by the utility through surcharges or fees shall be booked to SJWC's existing Mandatory Conservation Memorandum Account (MCRAMA) or a similar memorandum account to offset lost revenues. | | |
| 7. | All expenses incurred by the utility to implement Rule 14.1 and Schedule 14.1 that have not been considered in a General Rate Case or other proceeding shall be recoverable by the utility if determined to be reasonable by Commission. These additional monies shall be accumulated by the utility in a separate memorandum account, for disposition as directed or authorized from time to time by the Commission. | | |
| 8. | Other restrictions on use of potable water as prescribed in Rule No. 14.1 and from time to time by the SWRCB, the CPUC, SJWC, or other governing body or agency. | | |
| 9. | None of the restrictions apply to the use of recycled water. The Limits on Watering and Limits on Watering Days shall not apply (except for Stage 4) to commercial nurseries, golf courses, or other water-dependent businesses, unless specifically required by SJWC or a governing jurisdiction. | (N) | |
| | | | |

Canceling

| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
|-----------------------------|-------------------------------------|--|
| Advice No. 473A | PALLE JENSEN Sr. Vice President, | Date Filed 9_20 15 Effective JUN 1.5 2015 |
| Dec. No | Regulatory Affairs TITLE | Resolution No. |

Revised Cal. P.U.C. Sheet No. 1677-W SAN JOSE WATER COMPANY (U168W) Cal. P.U.C. Sheet No. 1651-W Canceling Revised San Jose, California SUPPLEMENT TABLE OF CONTENTS The following listed tariff sheets contain all effective rates, rules and regulations affecting the rates and service of the Utility, together with information relating thereto: C.P.U.C. Sheet No. Subject Matter of Sheet Title 1495-W 1677-W, 1476-W, 848-W and 1597-W (T) **Table of Contents** 919-W, 1303-W, 1581-W, 1582-W, 1452-W, 1420-W, Preliminary Statement 1423-W, 1427-W, 1469-W, 1492-W, 1508-W and 1542-W 1266-W Service Area Map Locator Service Area Map Locator, Index 1589-W Map of Areas With Special Pressure and Fire Flow Conditions 1590-W Index to Map of Areas With **Special Pressure and Fire Flow Conditions** 1079-W. 1591-W 1082-W, 1087-W and 1404-W **Rate Schedules:** 1638-W, 1599-W and 1652-W Schedule No. 1, General Metered Service Schedule No. 1B, General Metered Service With Automatic Fire Sprinkler System 1639-W, 1574-W, 1614-W and 1653-W Schedule No. 1C, General Metered Service Mountain District 1640-W, 1617-W, 1618-W, 1633-W, and 1654-W 1620-W and 1621-W Schedule No. 4, Private Fire Service Schedule No. 9C. Construction and Other **Temporary Metered Service** 1118-W and 1094-W Schedule No. 10R, Service to Employees 152-W Schedule No. 14.1 Water Shortage Contingency Plan With Staged Mandatory Reductions And Drought Surcharges 1668-W thru 1676-W (N) 1641-W, 1623-W and 1655-W Schedule No. RW, Raw Water Metered Service Schedule No. RCW, Recycled Water Metered Service 1049-W and 1050-W Schedule No. UF, Surcharge to Fund Public **Utilities Commission, Reimbursement Fee** 1297-W Schedule No. WRAP, Water Rate Assistance Program 1648-W and 1211-W List of Contracts and Deviations 1636-W Rules: No. 1 - Definitions 764-W and 976-W No. 2 - Description of Service 525-W No. 3 - Application for Service 351-W and 903-W No. 4 - Contracts 352-W No. 5 - Special Information Required on Forms 821-W thru 823-W No. 6 - Establishment and Re-establishment of Credit 354-W No. 7 - Deposits 355-W and 356-W No. 8 - Notices 1054-W and 825-W No. 9 - Rendering and Payment of Bills 996-W, 997-W and 1146-W (Continued) (To be inserted by utility) (To be inserted by Cal. P.U.C.) Issued by Date Filed __JUN - 9 2015 Advice No. 473A PALLE JENSEN Sr. Vice President, Effective allim 1 5 2015 Dec. No. _____ **Regulatory Affairs** Resolution No.

TITLE

Appendix D

SJWC's Proposed Water Shortage Contingency Plan

In the future, SJWC plans to expand the Water Shortage Contingency Plan to include a fifth stage (see below). The extra stage, which accounts for a shortage of up to 30%, allows for some irrigation to occur at Stage 4 (1 day per week) prior to a complete ban of irrigation at Stage 5. In the current plan, the number of days per week goes from two days per week at Stage 3 to zero days at Stage 4.

Stages proposed for future WSCP:

| Table 8-1 Retail Stages of Water Shortage Contingency Plan | | | |
|---|---|---|--|
| | | Complete Both | |
| Stage | Percent Supply Reduction ¹ Numerical value as a percent | Water Supply Condition (Narrative description) | |
| Add additional | rows as needed | | |
| 1 | up to 10% | normal/voluntary | |
| 2 | up to 20% | Alert/voluntary | |
| 3 | up to 30% | Severe/Mandatory | |
| 4 | up to 40% | Critical/Mandatory | |
| 5 | 50% | Emergency/Mandatory | |
| ¹ One stage in the Water Shortage Contingency Plan must address a water shortage of 50%. | | | |
| NOTES: These stages reflect our proposal for future use of the water shortage contingency plan. The stages that are currently in effect are on pages of the UWMP. Stage 1 refers to normal water supply conditions. | | | |

| Stage | Restrictions and Prohibitions on End Users | Additional Explanation or Reference | Penalty, Charge, or Other Enforcement? |
|-------|---|--|---|
| 1 | Other - Require automatic shut of hoses | | Yes |
| 1 | CII - Lodging establishment must offer opt out of linen service | | Yes |
| 1 | CII - Restaurants may only serve water upon request | | Yes |
| 1 | Landscape - Other landscape restriction or prohibition | No irrigation use for 48 hours after measureable rainfall (1/4 inch) | Yes |
| 2 | Landscape - Restrict or prohibit runoff from landscape irrigation | | Yes |
| 2 | CII - Commercial kitchens required to use pre-rinse spray valves | | Yes |
| 2 | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | 7 days to fix leaks | Yes |
| 3 | Landscape - Limit landscape irrigation to specific times | No watering between 10:00 a.m. and 8:00 p.m. | Yes |
| 3 | Landscape - Other landscape restriction or prohibition | Irrigation cannot exceed fifteen (15) minutes per zone per day with exceptions made for zones exclusively using drip irrigation, low precipitation sprinkler heads that apply water at or less than 1.0 inches per hour, hose with a positive shutoff device, or hand held bucket or similar container | Yes |
| 3 | Landscape - Limit landscape irrigation to specific days | 2 days per week with the exception of golf courses and commercial nurseries. | Yes |
| 3 | Water Features - Restrict water use for decorative water features, such as fountains | | Yes |
| 3 | Pools - Allow filling of swimming pools only when an appropriate cover is in place. | | Yes |
| 3 | Other - Customers must repair leaks, breaks, and malfunctions in a timely manner | 3 days to fix leaks | Yes |
| 3 | Other - Prohibit use of potable water for construction and dust control | | Yes |
| 3 | Other - Prohibit use of potable water for washing hard surfaces | | Yes |
| 4 | Other water feature or swimming pool restriction | No use of water for the complete filling or complete refilling of swimming pools unless a pool needs to be repaired.* | Yes |
| 4 | Landscape - Limit landscape irrigation to specific days | 1 day per week with the exception of golf courses and commercial nurseries. | Yes |
| 4 | Landscape - Prohibit certain types of landscape irrigation | Drip irrigation and or hose watering only** | Yes |
| 4 | Pools and Spas - Require covers for pools and spas | | Yes |
| 4 | Other - Prohibit vehicle washing except at facilities using recycled or recirculating water | | Yes |
| 5 | Landscape - Prohibit all landscape irrigation | Commercial nurseries can irrigate all plants, and golf courses can irrigate only tees and greens twice per week. | Yes |

Restrictions and Prohibitions on End Uses for future WSCP:

Appendix E

2014 California Urban Water Conservation Council Best Management Practices Retail Coverage Report

CUWCC SIGNATIERE PAGE



California Urban Water Conservation Council

| SAN JOSE WATER (BHPANY | _ hereby adopts and approves |
|------------------------|------------------------------|
| (Name of Agency) | |

the Memorandum of Understanding Regarding Urban Water Conservation in California (the "MOU") as modified on September 16, 1999 and becomes a party therein in accordance with its terms.

Date 2906 GOBIC By (Signature) ___ KOBERT Name ____ DIRECTOR OF CUSTONER SERVICE Title SAN TO SE WATER COMPANY Organization_

374 WEST SANTA CLARA STREET Address SANJOSE, CA 95125 279-7922 (Yos Telephone (408)279-7936 FAX sjuater.com Email LOWO. S. Water. Com Web address

455 Capitol Mall, Suite 703 Sacramento, California 95814 PHONE: 916/552-5885 FAX: 916/552-5877 EMAIL: office@cuwcc.org

WEB: WWW.CUWCC.Org

Send completed signature page and information form to CUWCC (address at left).



CUWCC BMP Retail Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

6306 San Jose Water Company

1. Conservation Coordinator
provided with necessary resources
to implement BMPs?Name:
Title:

Kurt Elvert
Water Conservation Supervisor

Email: kurt.elvert@sjwater.com

2. Water Waste Prevention Documents

| WW Document Name | WWP File Name | WW Prevention URL | WW Prevention Ordinance Terms Description |
|---|---------------|---|--|
| Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP. | | https://sjwater.s3.amazona ws.com/files/documents/S an%20Jose%20Water %20Company%27s %20Advice%20Letter %20No.%20472-A %20stamped %20tariffs.pdf | San Jose Water Company is not a municipality and therefore does not have ordinances. Our water waste restrictions are listed at the URL provided. These rules are part of the water shortage continency plan (Rule 14.1) that was approved by the CPUC. |
| Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area. | | | |
| Option C Describe any documentation of support for legislation or regulations that prohibit water waste. | | | |
| Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP. | | | |
| Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP. | | | |
| Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development. | | | |

At Least As effective As

No



CUWCC BMP Retail Coverage Report 2014 Foundational Best Managemant Practices for Urban Water Efficiency

| BMP 1.1 Op | eration Practices |
|------------|-------------------|
| n | No |

ON TRACK

Exemption

Comments:



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control

ON TRACK

Yes

6306 San Jose Water Company

| Completed Standard Water Audit Using AWWA Software? | Yes |
|---|-----|
| AWWA File provided to CUWCC? | Yes |
| WaterAudit 2014.xls | |
| AWWA Water Audit Validity Score? | |
| Complete Training in AWWA Audit Method | Yes |
| Complete Training in Component Analysis Process? | Yes |
| Component Analysis? | Yes |
| Repaired all leaks and breaks to the extent cost effective? | Yes |
| Locate and Repar unreported leaks to the extent cost effective? | Yes |
| | |

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

Provided 7 Types of Water Loss Control Info

| Leaks Repairs | Value Los | Real ses | Value Apparent Losses | Miles Surveyed | Press Reduction | Cost Of Interventions | Water Saved (AF) |
|------------------|--------------|-------------|--------------------------|----------------|-----------------|--------------------------|---------------------|
| 957 | | | | | False | | |
| At Least As effe | ctive As | | No | | | | |
| Exemption | | No | | | | | |

Comments:



| BMP 1.3 Metering With Commodity | Exempt |
|---|--------|
| 6306 San Jose Water Company | |
| Numbered Unmetered Accounts | No |
| Metered Accounts billed by volume of use | Yes |
| Number of CII Accounts with Mixed Use Meters | |
| Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? | No |
| Feasibility Study provided to CUWCC? | No |
| Date: 1/1/0001 | |
| Uploaded file name: | |
| Completed a written plan, policy or program to test, repair and replace meters | Yes |
| At Least As effective As No | |
| Exemption Yes Budget | i |
| Comments: | |



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

On Track

6306 San Jose Water Company

Implementation (Water Rate Structure)

| Customer Class | Water Rate Type | Conserving Rate? | (V) Total Revenue Comodity Charges | (M) Total Revenue Fixed Carges |
|----------------|------------------|---------------------|---------------------------------------|-----------------------------------|
| Single-Family | Increasing Block | Yes | 106965783 | 50206401 |
| Commercial | Uniform | Yes | 62911537 | 15578424 |
| Industrial | Uniform | Yes | 1329630 | 161940 |
| Institutional | Uniform | Yes | 9337792 | 2428233 |
| Other | Uniform | Yes | 1115646 | 98742 |
| Other | Uniform | Yes | 1745070 | 269578 |
| Other | Uniform | Yes | 331970 | 360405 |
| Other | Uniform | Yes | 3086175 | 0 |
| | | | 186823603 | 69103723 |

Calculate: V / (V + M) 73 %

Implementation Use Annual Revenue As Reported Option:

Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: No

At Least As effective As No

No

Exemption

Comments:

San Jose Water Company should be on track with this BMP. For us, in 2014, V / (V + M) = 73%.



CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Yes

Retail

Yes

6306 San Jose Water Company

Does your agency perform Public Outreach programs?

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Santa Clara Valley Water District

The name of agency, contact name and email address if not CUWCC Group 1 members

| Did at least one contact take place during each quater of the reporting year? | No |
|---|----|
|---|----|

| Public Outreach Program List | | Number |
|--|-------|--------|
| Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets | | 200000 |
| | Total | 200000 |

Did at least one contact take place during each quater of the reporting year?

| Number Media Contacts | Number |
|---|--------|
| Newspaper contacts | 45 |
| Articles or stories resulting from outreach | 10 |
| Total | 55 |

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

| Annual Budget Category | Annual Budget Amount |
|------------------------|----------------------|
| General | 90000 |
| Landscape Website | 5000 |
| Demonstration Garden | 10000 |
| Total Amount: | 105000 |

Description of all other Public Outreach programs

Comments:

SJWC staff participated in a total of 16 public/community meetings, workshops, and presentations in 2014. SJWC sends bill inserts that refer to conservation to all single family residential accounts 4-5 times per year (to ~200,000 accounts each).

| At Least As effective As | | No | | |
|--------------------------|----|----|---|--|
| Exemption | No | | 0 | |



| BMP 2.2 School Educati | Exempt | | | | |
|---|-------------------------|----------------------|----------------------|-----------|--|
| 6306 San Jose Water Cor | | Retail | | | |
| Does your agency implement Sch | ool Education programs | s? Yes | | | |
| The list of wholesale agencies pe with the BMP | forming public outreach | which can be counted | to help the agency c | omply | |
| Santa Clara Valley Water District | | | | | |
| Agencies Name | ID number | | | | |
| Santa Clara Valley Water Distric | 201 | | | | |
| Materials meet state education framework requirements? Yes | | | | | |
| | | | | | |
| Materials distributed to K-6? | Yes | | | | |
| | | | | | |
| Materials distributed to 7-12 students? Yes (Info Only) | | | | | |
| | | | | | |
| Annual budget for school education program: 0.00 | | | | | |
| Description of all other water supplier education programs | | | | | |
| | | | | | |
| Comments: | | | | | |
| San Jose Water Company does r already provided by our wholesal conservation/education program | e water agency, Santa C | | | rogram is | |
| At Least As effective As | No | | | | |

| Exemption | Yes | Cost Effectivness |
|-----------|-----|-------------------|
| | | |

Appendix F

City of San Jose Water Waste Ordinance No. 29555

CITY OF SAN JOSÉ, CALIFORNIA



Office of the City Clerk 200 East Santa Clara Street San José, California 95113 Telephone (408) 535-1260 FAX (408) 292-6207

STATE OF CALIFORNIA) COUNTY OF SANTA CLARA) CITY OF SAN JOSÉ)

I, Toni J. Taber, City Clerk & Ex-Officio Clerk of the Council of and for the City of San José, in said County of Santa Clara, and State of California, do hereby certify that **Ordinance No. 29555,** the original copy of which is attached hereto, was adopted on the **21st day of April 2015** by the following vote:

AYES: CARRASCO, HERRERA, JONES, KALRA, KHAMIS, MATTHEWS, NGUYEN, OLIVERIO, PERALEZ, ROCHA; LICCARDO.

NOES: NONE.

ABSENT: NONE.

ABSTAINED: NONE.

VACANT: NONE.

Said ordinance was published pursuant to City Charter Section 604 and is effective as of **April 21, 2015**.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the City of San José, this **24th day of April 2015.**

(SEAL)

TONI J. TABER, CM **CITY CLERK & EX-OFFICIO**

CLERK OF THE CITY COUNCIL

/smd

ORDINANCE NO. <u>29555</u>

AN URGENCY ORDINANCE OF THE CITY OF SAN JOSE AMENDING SECTIONS 15.10.310, 15.10.330 AND 15.10.360 AND REPEALING SECTION 15.10.370 OF PART 3 OF CHAPTER 15.10 OF TITLE 15 OF THE SAN JOSE MUNICIPAL CODE TO REPLACE THE TIME OF DAY LANDSCAPE IRRIGATION RESTRICTIONS AND PROHIBITION ON USE OF POTABLE WATER FOR ALL OUTDOOR LANDSCAPE IRRIGATION, WITH LIMITED EXCEPTIONS, THAT ARE TRIGGERED BY A COUNCIL DECLARATION OF WATER SHORTAGE WITH A LANDSCAPE AND TURF IRRIGATION RESTRICTION OF ZERO (0) TO FOUR (4) DAYS PER WEEK, WITH THE SPECIFIC NUMBER OF DAYS, DAYS PER WEEK AND EXCEPTIONS TO THE PROHIBITION TO BE AS SET FORTH IN A RESOLUTION ADOPTED BY CITY COUNCIL; TO MODIFY THE RESTRICTION RELATED TO SWIMMING POOL FILLING SO THAT IT IS TRIGGERED BY A COUNCIL ADOPTION OF A **RESOLUTION DECLARING A THIRTY PERCENT (30%) OR GREATER** WATER SHORTAGE AND INCLUDES AN EXCEPTION FOR REFILLING AFTER REPAIR FOR LEAKS: TO PROVIDE THAT AFTER COUNCIL ADOPTION OF A RESOLUTION DECLARING A THIRTY PERCENT (30%) OR GREATER WATER SHORTAGE. IT SHALL BE UNLAWFUL FOR ANY PERSON TO INSTALL NEW OUTDOOR LANDSCAPING OR TURF DURING THE MONTHS OF MAY THROUGH OCTOBER IN AN AREA WITH AN OVERHEAD IRRIGATION SYSTEM. UNLESS THE OVERHEAD IRRIGATION SYSTEM IS DISCONNECTED, REMOVED OR CONVERTED TO DRIP IRRIGATION, EXCEPT FOR DROUGHT-TOLERANT NATIVE PLANTS, PLANTS OR TREES GROWN FOR CONSUMPTION, INSTALLATION THAT HAS BEEN COMMENCED PRIOR TO THE DATE OF THE COUNCIL RESOLUTION DECLARING THE THIRTY PERCENT (30%) WATER SHORTAGE PURSUANT TO A DEVELOPMENT PERMIT OR BUILDING PERMIT FOR WHICH A LANDSCAPE DOCUMENTATION PACKAGE HAS BEEN SUBMITTED TO THE CITY OR INSTALLATION A PROJECT FOR WHICH A DEVELOPMENT PERMIT APPLICATION HAS BEEN FILED PRIOR TO THE DATE OF THE COUNCIL RESOLUTION DECLARING THE THIRTY PERCENT (30%) WATER SHORTAGE, AND WHICH IS LOCATED IN AN EMPLOYMENT LANDS AREA, AS DESIGNATED IN THE CITY OF SAN JOSÉ ENVISION 2040 GENERAL PLAN: AND TO REPEAL SECTION 15.10.370 LIMITING OUTDOOR IRRIGATION AFTER COUNCIL DECLARATION OF A FORTY PERCENT (40%) FORTH WATER SHORTAG: AND SETTING THE FACTS CONSTITUTING SUCH URGENCY

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SAN JOSE:

<u>SECTION 1.</u> Section 15.10.310 of Part 3 of Chapter 15.10 of Title 15 of the San José Municipal Code is hereby amended to read as follows:

15.10.310 Landscape Irrigation Restrictions

After adoption by the City Council of a resolution declaring a ten percent (10%) or greater water shortage, it shall be unlawful for any person to use or allow the use of potable water to irrigate any outdoor landscaping more than zero (0) to four (4) days per week, according to the schedule and with such exceptions as may be set forth in the Council resolution declaring such drought.

<u>SECTION 2.</u> Section 15.10.330 of Part 3 of Chapter 15.10 of Title 15 of the San José Municipal Code is hereby amended to read as follows:

15.10.330 Residential Swimming Pools and Outdoor Spas

Upon adoption by the City Council of a resolution declaring a thirty percent (30%) or greater water shortage, no person shall cause, permit or allow re-filling of more than one (1) foot or initial filling of residential swimming pools or outdoor spas with potable water.

<u>SECTION 3.</u> Section 15.10.360 of Part 3 of Chapter 15.10 of Title 15 of the San José Municipal Code is hereby amended to read as follows:

15.10.360 New Landscape Installation

After adoption by the City Council of a resolution declaring a thirty percent (30%) or greater water shortage, it shall be unlawful for any person to install new outdoor landscaping, or plantings, during the months of May through October in an area with an overhead irrigation system, unless the overhead irrigation system is disconnected,

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removed or converted to drip irrigation as defined in Section 15.11.340 of Part 2 of Chapter 15.11 of this Title 15, except for: (a) installation of drought-tolerant or native plants, or plants or trees grown for consumption, or (b) installation that has been commenced prior to the date of the Council Resolution declaring the thirty percent (30%) water shortage pursuant to a development permit or building permit for which a landscape documentation package has been submitted to the City.

<u>SECTION 4.</u> Section 15.10.370 of Part 3 of Chapter 15.10 of Title 15 of the San José Municipal Code is hereby repealed.

SECTION 5. This Ordinance is declared by the City Council to be an urgency measure necessary for the immediate preservation of the public peace, health or safety. The facts constituting such urgency are: The State of California is experiencing a Drought State of Emergency as documented in Governor Edmund G. Brown's Proclamation No. 1-17-2014 and Executive Orders B-28-14 and B-29-15, and State Water Resources Control Board Resolution Nos. 2014-0038 and 2015-0033. Emergency regulations adopted by the State Water Resources Control Board require the City of San José to amend its Water Shortage Contingency Plan ("WSCP") to include mandatory restrictions on the number of days per week that outdoor irrigation of landscapes or turf with potable water is allowed and to implement these restrictions no later than May 11, 2015. In order to amend the WSCP to include the number of day restrictions, the Municipal Code amendment authorizing number of days per week restrictions to be set by Council resolution must be in effect. The normal time frame between approval of an ordinance and the effective date of an ordinance is approximately 45 days. An urgency ordinance is necessary in order to amend the WSCP prior to May 11, 2015 and in order to communicate to the public the urgent need to increase water conservation efforts.

<u>SECTION 6.</u> This Ordinance shall become effective immediately upon its adoption pursuant to Section 605 of the Charter of the City of San José and shall remain effective until the effective date of the superseding ordinance.

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ADOPTED this 21st day of April, 2015, by the following vote:

AYES: CARRASCO, HERRERA, JONES, KALRA, KHAMIS, MATTHEWS, NGUYEN, OLIVERIO, PERALEZ, ROCHA; LICCARDO.

NOES: NONE.

ABSENT: NONE.

DISQUALIFIED: NONE.

SAM LICCARDO Mayor

ATTEST: TONI J. TABE **City Clerk**

Appendix G

SJWC Rule 14.1 Water Shortage Contingency Plan

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Revised

Original

Cal. P.U.C. Sheet No. <u>1657-W</u> Cal. P.U.C. Sheet No. <u>1348-W</u>

| รเ | JPI | RULE NO. 14.1 PLEMENT WATER SHORTAGE CONTINGENCY PLAN | (D) (N) |
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| to a such outa | varie as a ge th | r supply for San Jose Water Company (SJWC) may be interrupted or reduced due ty of circumstances, for instance, in response to a drought or a catastrophic event, in earthquake or a fire that damages water delivery and storage facilities, or a power at affects water treatment or pumping operations. This Water Shortage Contingency n) enables SJWC to respond efficiently and effectively to all water shortage contingencies. | |
| Α. | <u>GE</u> | NERAL INFORMATION | |
| | 1. | Wasteful water use practices, as outlined in Section B of this Plan, constitute prohibited, non-essential or unauthorized water use, and are declared to be a waste of water, subject to the terms and conditions of Rule 11, which allow the utility to discontinue service after due notice. The utility's customers shall be notified of these conservation measures through a bill insert or a direct mailing, and/or through other communications, pursuant to the direction of the California Public Utilities Commission (Commission). | |
| | 2. | If water supplies are projected to be insufficient to meet normal customer demand for reasons beyond the control of the utility, or in the event that the utility is directed under an emergency regulation by an authorized government agency, commission or official, SJWC may implement additional water saving conservation measures and mandatory restrictions, as described in Section C of this Plan. | |
| | 3. | Should supply conditions or government directives dictate, prior to, or in response to, executive orders, state agency-promulgated emergency regulations, or a declaration of emergency issued by a water wholesaler or other government agency, SJWC may request permission from the Commission to add a Schedule 14.1 – Water Shortage Contingency Plan with Stage Mandatory Reductions and Drought Surcharges tariff as set forth in Section D. If SJWC is without a full decoupling WRAM in one or more ratemaking areas it may request a lost revenue memorandum account at that time. | |
| | 4. | SJWC shall file a Tier 2 advice letter to request activation of a particular stage of Schedule 14.1 – Water Shortage Contingency Plan with Stage Mandatory Reductions and Drought Surcharges, as set forth in Section D. | |
| | | a. If the Commission or SJWC declares an emergency requiring mandatory water use restrictions, or b. If a government agency with legal jurisdiction over SJWC or its service area declares a state of emergency in response to severe drought conditions, earthquake or other catastrophic event that severely reduces the utility's water supply, or | |
| | | c. If voluntary conservation levels or mandatory restrictions on certain uses of water, set by the Commission or SJWC are insufficient, or d. If a Declaration of Emergency is made by the SJWC or its governing agency, or | |
| | | e. If the utility chooses to subsequently activate a different stage. | (N) |
| | | (Continued) | |

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(To be inserted by Cal. P.U.C.)

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PALLE JENSEN Sr. Vice President, Regulatory Affairs TITLE

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Date Filed <u>WUN - 9</u> 2015 Effective <u>1 5 2015</u> Resolution No.

Revised Cal. P.U.C. Sheet No. <u>1658-W</u> Original Cal. P.U.C. Sheet No. <u>1349-W</u>

(D) (N) **RULE NO. 14.1** SUPPLEMENT WATER SHORTAGE CONTINGENCY PLAN **GENERAL INFORMATION** (Continued) A. 5. All monies collected by the utility through surcharges or fees shall be booked to the WRAM or a similar memorandum account to offset recovery of lost revenues. 6. All expenses incurred by the utility to implement Rule 14.1 and Schedule 14.1 that have not been considered in a General Rate Case or other proceeding shall be recoverable by the utility if determined to be reasonable by Commission. These additional monies shall be accumulated by the utility in a separate memorandum account, for disposition as directed or authorized from time to time by the Commission. 7. When Schedule 14.1 is in effect and the utility determines that water supplies are again sufficient to meet normal demands, and mandatory restrictions are no longer necessary, the utility shall seek Commission approval via a Tier 1 advice letter to deactivate the particular stage of mandatory reductions or allocations that had been authorized. 8. None of the restrictions below apply to the use of recycled water. The Limits on Watering and Limits on Watering Days shall not apply (except for Stage 4) to commercial nurseries, golf courses, or other water-dependent businesses, unless specifically required by SJWC or a governing jurisdiction. B. CONSERVATION - NONESSENTIAL OR UNAUTHORIZED USES (STAGE 1 -**CONSERVATION AND OUTREACH)** Stage 1 (Conservation and Outreach) is a call for voluntary conservation. This stage will be called by SJWC when customers are asked to meet conservation targets. Outdoor irrigation limits may be declared specifying the number of days per week irrigation will be allowed. The following non-essential or unauthorized uses of water are declared to be a wasteful of water and are subject to the terms and conditions of Rule No. 11: 1. Limits on Watering: Watering or irrigating of outside plants, lawn, landscape, and turf areas with potable water using a landscape irrigation system or a watering device that is not continuously attended is limited to no more than 15 minutes of watering per day per station, with no watering between 10:00 a.m. and 8:00 p.m. This provision does not apply to landscape irrigation zones that exclusively use drip-type irrigation systems. This provision also does not apply to low precipitation sprinkler systems that apply water at or less than 1.0 inch per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive action shut-off (N) (Continued)

| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
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| Advice No. <u>472A</u> | PALLE JENSEN Sr. Vice President, | Date Filed <u>JUN - 9 2015</u> Effective <u>JUN 1 5 2015</u> |
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Revised Canceling Original Cal. P.U.C. Sheet No. <u>1659-W</u> Cal. P.U.C. Sheet No. <u>1350-W</u>

| UPP | RULE NO. 14.1 LEMENT WATER SHORTAGE CONTINGENCY PLAN | (D) (N) |
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| 8. <u>CON</u> | ISERVATION -NON-ESSENTIAL OR UNAUTHORIZED WATER USES (Continued) | |
| | nozzle or device that causes it to cease dispensing water immediately when not in use, or for the express purpose of adjusting or repairing an irrigation system. However no irrigation can occur regardless of method that results in runoff. | |
| 2. | Use of potable water for watering outside plants, lawn, landscape, and turf areas during and up to 48 hours after measurable rainfall. | |
| 3. | Obligation to Fix Leaks, Breaks or Malfunctions: Use of water through any broken or defective plumbing fixture, sprinkler, watering or irrigation system on the customer's premises when the utility has notified the customer in writing to repair the broken or defective plumbing fixture, sprinkler, watering or irrigation system, and the customer has failed to make such repairs within 5 business days after receipt of such notice. | |
| 4. | Limits on Washing Vehicles: Use of potable water through a hand-held hose for washing cars, buses, boats, trailers, aircraft or other vehicles without a positive shut-off nozzle or device that causes it to cease dispensing water immediately when not in use. | |
| 5. | Operation of commercial car washes that do not recycle the potable water used as required by the California Water Code Sections 10950-10953. | |
| 6. | The serving of water, other than upon request, in eating and drinking establishments, including but not limited to restaurants, hotels, cafes, bars, or other public places where food or drink are served and/or purchased. | |
| 7. | Operators of hotels and motels are to provide guests with the option of choosing not to have towels and linens laundered daily and/or to require hotels and motels to prominently display a notice of this option in each guest bathroom using clear and easily understood language. | |
| 8. | No Excessive Water Flow or Runoff: The use of potable water for washing buildings, structures, sidewalks, walkways, driveways, patios, tennis courts, or other hard-surfaced, non-porous areas in a manner that results in run-off or a waste of water. | |
| 9. | The use of potable water in a fountain or other decorative water device that does not have a fully automatic recirculation system, or the filling or topping off of decorative lakes or ponds, except where the water is part of a recirculating system. | |
| 10 | Other restrictions on use of potable water as prescribed from time to time by the Commission, SJWC, or another governing body or agency. (Continued) | (N) |

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| SUPPLEMENT | RULE NO. 14.1 R SHORTAGE CONTINGENCY PLA | (D) (N) AN |
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| C. STAGED REDUCTION OF WAT | ER USAGE AND MANDATORY RE | STRICTIONS |
| targets as set by a wholesale prov on wasteful water use practices o the utility in stages, as indicated b be deemed a wasteful and unreas flow restrictor, discontinuance of s <u>STAGE 2 (WATER REDUCTION</u> when the Commission or SJWC | or is threatening, or if SJWC is unable vider or governing body or agency, in utlined above the following restrictions below. Failure to comply with these ma sonable use of water and may result in service, or other actions as authorized <u>I NEEDED</u> : Stage 2 (Water Reduction determines that further measures are nauthorized uses of water listed in So osed: | addition to the restrictions s may be imposed by andatory restrictions will n the installation of a d by the utility's Rule 11. ion Needed) occurs e needed to reduce water |
| Limits on Watering Days: W areas with potable water is I severity of the shortage. If t be allowed Monday, Wedne | atering or irrigating of lawns, landsca imited to no more than three days pe three days per week irrigation is calle sday, and Friday for odd numbered a ed on Tuesday, Thursday and Saturo | er week, depending on the ed for then irrigation will and numberless |
| wash-down for construction p | ering streets with trucks or other vehic ourposes (if street sweeping is not fea ic or if recycled water is reasonably a | asible), or to protect the |
| dust control, if other actions t | struction purposes, including washing to accomplish the same purposes wit f recycled water is reasonably availa | thout water are |
| or outdoor water system with | , break, or other malfunction in a cus in 72 hours of notification by the utilit ade with and agreed to by the utility. | |
| Other restrictions on use of p SJWC, or another governing | ootable water as prescribed by the Co body or agency. | ommission, (N) |
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PALLE JENSEN Sr. Vice President, Regulatory Affairs TITLE

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| SUPPLEMENT WATER SHO | RULE NO. 14.1 PRTAGE CONTINGENCY PL/ | AN | (D) (N) |
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| STAGE 3 (CRITICAL WATER REDUCTION Stage 2 limitations are deemed insufficient to established by authorized government entitie | achieve identified water usag | je goals | |
| Limits on Watering Days: Watering or in area with potable water is limited to two and Thursday for odd numbered and nu and Friday for even numbered addressed | days per week. Irrigation will umberless addresses and will l | be allowed on Monday | |
| 2. The use of potable water to refill resider foot or initial filling with potable water e | ntial swimming pools or outdoo xcept when existing pools are | or spas more than one drained to repair leaks. | |
| 3. Limits on Filling Ornamental Lakes or P or re-filling decorative fountains, ornam sustain aquatic life, provided that such a managed within the water feature prior | ental lakes or ponds except to animals are of significant value | the extent needed to e and have been actively | |
| Use of potable water for washing of veh utilizes a re-circulating water system to washing commercial aircraft, cars, buse any time, except at commercial or fleet location where equipment using water in | capture or reuse water. Use o es, boats, trailers, or other com vehicle or boat washing faciliti | f potable water for inmercial vehicles at ies operated at a fixed | |
| 5. Other restrictions on use of potable wate another governing body or agency. | er as prescribed by the Comm | ission, SJWC, or | |
| STAGE 4 (EMERGENCY WATER REDUCT the Stage 3 limitations are deemed insufficie established by authorized government entitie 1. No Watering or Irrigating: Watering or in with potable water is prohibited. This re use: | nt to achieve identified water uses. The following restrictions warrigation of lawn, landscape or striction does not apply to the | usage goals vill be enacted: other vegetated area following categories of | |
| Maintenance of vegetation, includ hand-held bucket or similar conta shut-off nozzle or device; Maintenance of existing landscap | iner, hand-held hose equipped be necessary for fire protection | d with a positive action | |
| iii. Maintenance of existing landscap iv. Maintenance of plant materials id of a protected species; v. Maintenance of landscape within centers, golf course greens, fring | entified to be rare or essential active public parks and playin | g fields, day care | |
| The failure to repair any leak, break, or outdoor water system within 48 hours o arrangements are made with and agree | ed 2 days per week. other malfunction in a custom of notification by the utility, unle | er's domestic or | |
| 3. Other restrictions on use of potable water or another governing body or agency. (C | | ssion, SJWC, | (N) |
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SAN JOSE WATER COMPANY (U168W) San Jose, California

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Original Revised Canceling

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| SUPPLEMENT | | (N) |
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| WAT D. WATER SHORTAGE CONTINGEN | RULE NO. 14.1 ER SHORTAGE CONTINGENCY PLAN ICY PLAN WITH STAGED MANDATORY IT SURCHARGES – SCHEDULE NO. 14.1 | |
| agency or the governing body of Section 350), SJWC may reque Contingency Plan with Stage M Surcharges, via a Tier 2 advice | r shortage emergency by a water wholesaler, government of a distributor of a public water supply (per Water Code est addition of a Schedule No. 14.1 Water Shortage Mandatory Reductions and Drought Surcharges e letter, with full justification. The utility may not activate been authorized to do so by the Commission, as delegated ts. | |
| remain dormant until tr | . 14.1 that has been authorized by the Commission shall iggered by specific conditions detailed in the Schedule No. has requested and received authorization for activating a ion. | |
| | vice letter and associated public participation hearing if ded to customers through a bill insert or a direct mailing. | |
| c. The Utility shall comply California Water Code. | y with all requirements of Sections 350-358 of the | |
| d. The Tier 2 advice lette include but not be limit | r requesting the addition of a Schedule No. 14.1 shall ad to: | |
| i. The propos limited to: | ed Schedule No. 14.1 tariff, which shall include but not be | |
| 1. Applicability | y; | |
| 2. Applicable | Territory; | |
| 3. A detailed o | description of each Stage of Mandatory Water Reductions; | |
| | description of the Trigger that Activates each Stage of Water Reductions; | |
| | description of each water use restriction, prohibition and/or evel for each Stage of Mandatory Water Reduction | |
| schedules a | violation levels, written warning levels, applicable rate and drought surcharges, and associated penalties, or fees, if applicable, and any exception procedures | |
| 7. Conditions | for installation of a flow restrictor, | |
| 8. Charges for | r removal of flow restrictors, and | |
| 9. Special Co | onditions | |
| | for, and documentation and calculations in support of the cluding but not limited to each item in B.1.d.i above. | (N) |
| | (Contined) | |
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PALLE JENSEN Sr. Vice President, Regulatory Affairs TITLE

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| SUPPLEMENT wa | RULE NO. 14.1 TER SHORTAGE CONTINGENCY F | PLAN |
| D. WATER SHORTAGE CONTIL AND DROUGHT SURCHARG | NGENCY PLAN WITH STAGED MAN SES – SCHEDULE NO. 14.1 (Continu | IDATORY REDUCTIONS ued) |
| 2. Number of Stages requested b on local conditions and specific | y each utility/district/water system ma cs of the water shortage event. | y vary, depending |
| 3. SJWC may enact a particular s | tage of Schedule 14.1: | |
| declares an emergency b. If a government agency drought conditions, eart the utility's water supply c. If the implementation of utility, wholesale water | lesale water supplier, or other governing requiring mandatory water use restrict declares a state of emergency in resp hquake or other catastrophic event the r, or mandatory restriction levels set by the supplier, or government agency are in address conservation levels set by its | ctions, or ponse to severe at severely reduces e Commission, sufficient, or |
| e. If the utility chooses to a | subsequently activate a different stage | e |
| When enacting a particular sta to request activation. | ge of Schedule 14.1, SJWC shall file a | a Tier 2 advice letter |
| 5. The Tier 2 advice letter reque not be limited to: | sting activation of a Schedule No. 14. | 1 shall include but |
| | ing this particular stage of reductions, is particular stage of mandatory restric vill be in effect. | |
| b. When the utility reques customers as detailed | sts activation of a particular Stage, it s in Section G, below. | hall notify its |
| E. ENFORCEMENT OF STAGED | MANDATORY WATER REDUCTIO | NS |
| become enforceable throug | ter usage and mandatory restrictions i h additional tariff rates when the Sche with Staged Mandatory Reductions a | dule No. 14.1-Water |
| | (Continued) | |
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| Advice No. <u>472A</u> | PALLE JENSEN | Date Filed |
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 Original Revised
 Cal. P.U.C. Sheet No. 1664-W

 Cal. P.U.C. Sheet No. _____

| | | | /A IV | | |
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| SUPF | PLEMENT | RULE NO. 14.1 WATER SHORTAGE CONTINGENCY PL | AN SLIP/SUB SHEET | | |
| E. <u>E</u> | NFORCEMENT O | F STAGED MANDATORY WATER REDUC | CTIONS (Continued) | | |
| 2. | service line of any | fter one written warning, install a flow-restric y customer observed by utility personnel to unauthorized use as defined in Section B an | be using water for any | | |
| 3. | 3. A flow restrictor shall be capable of providing the premise with a minimum flow of 5 gallons per minute. The restricting device may be removed only by the utility, only after a three-day period has elapsed, and only upon payment of the appropriate removal charge as set forth in Schedule No. 14.1. | | | | |
| 4. | water continues, a notice. This device | of the restricting device, if any non-essentia the utility may install another flow-restricting ce shall remain in place until water supply c the appropriate charge for removal has bee | device without written onditions warrant its | | |
| 5. | Any tampering wi water use. | th flow restricting device by customer can re | esult in discontinuation of | | |
| 6. | previous enforcer water continues, t | tion of such flow-restricting device pursuant nent conditions, any such non-essential or u then the utility may discontinue water servic a charge as provided in Rule No. 11 shall b ration of service. | unauthorized use of e to such customer. In | | |
| F. <u>A</u> | PPEAL PROCED | URE | | | |
| 1. | contingency plan | o seeks a variance from any of the provisior shall notify the utility in writing, explaining in The utility shall respond to each such reque | detail the reason for | | |
| | or in equity, again | h in this Section, no person shall have any r ist the utility because of, or as a result of, an ie done pursuant to the provisions of the Wa | ny matter or thing done | | |
| | | (Continued) | (N) | | |
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| (To be inse | rted by utility) | Issued by | (To be inserted by Cal. P.U.C.) | | |
| Advice No. | 472A | PALLE JENSEN | Date Filed 111N - 9 2015 | | |
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Cal. P.U.C. Sheet No. <u>1665-W</u> Cal. P.U.C. Sheet No. _____ **Original**

| San Jose, (| California | Canceling | Revised | Cal. P.U.C. Sheet No. | |
|-----------------|---|--|--|--|-----------|
| SUPF | PLEMENT WATER SH | RULE NO. 14.1 IORTAGE CONTING | | N | (N) |
| . <u>NOTICE</u> | <u>E</u> | | | | |
| 1. | As stated under Section D, when SJV Shortage Contingency Plan with Stag tariff, via a Tier 2 advice letter, it shall associated public hearing, if necessar inserts or direct mailing, and through public meeting shall be held after the Commission authorizes the addition of emergency water shortages approved | e Mandatory Reduction provide customer not ry. Notice will be provide a posting in the local utility files the Tier 2 a of Schedule 14.1 to the | ons and Dro tice of the T vided to cust newspaper advice letter e tariff exce | ught Surcharges ter 2 advice letter and comers through bill of circulation. The , and before the pt in cases of | |
| | a. SJWC shall consult v filing the advice letter meeting. | vith the Division of Wa r, in order to determin | ater and Auc e the details | lits staff prior to of the public | |
| 2. | If activation of Schedule No. 14.1 occ associated with adding Schedule No. public hearing pursuant to California v rationing stage. | 14.1 to its tariffs, the | n the utility s | hall conduct a | |
| 3. | During the period that a stage of Sch customers with updates regarding its conservation and water use reductior | water supply status a | | | (N) |
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Advice No. 472A

Dec. No. _____

PALLE JENSEN Sr. Vice President, Regulatory Affairs TITLE

| Date Filed | NUM | -9 | 2015 | |
|------------|-----|----|------|--|
| Effective | JUN | 15 | 2015 | |
| Resolution | No. | | | |

| SAN JOSE WATER COMPANY (U168W) | |
|--------------------------------|--|
| San Jose, California | |

Schedule No. 1C, General Metered Service

Schedule No. 9C, Construction and Other Temporary Metered Service

Schedule No. 10R, Service to Employees

Schedule No. RW, Raw Water Metered Service

No. 5 - Special Information Required on Forms

No. 9 - Rendering and Payment of Bills

No. 6 - Establishment and Re-establishment of Credit

Schedule No. UF, Surcharge to Fund Public Utilities Commission, Reimbursement Fee

Schedule No. RCW, Recycled Water Metered Service

Schedule No. WRAP, Water Rate Assistance Program

Schedule No. 4, Private Fire Service

Mountain District

List of Contracts and Deviations

No. 2 - Description of Service

No. 3 - Application for Service

No. 1 - Definitions

No. 4 - Contracts

No. 7 - Deposits

No. 8 – Notices

Rules:

Canceling Revised

Revised

Cal. P.U.C. Sheet No. <u>1667-W</u> Cal. P.U.C. Sheet No. <u>1656-W</u>

SUPPLEMENT

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> > > 1297-W 1648-W and 1211-W

> > > > 1636-W

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(Continued)

| (To be inserted by utility) | Issued by | (To be inserted by Cal. P.U.C.) |
|-----------------------------|---------------------|---------------------------------|
| Advice No. 472A | PALLE JENSEN | Date Filed |
| | Sr. Vice President, | Effective JUN 15 2015 |
| Dec. No | Regulatory Affairs | Resolution No. |
| | TITLE | |

Revised Cal. P.U.C. Sheet No. 1666-W

SAN JOSE WATER COMPANY (U168W) San Jose, California

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Canceling <u>Revised</u> Cal. P.U.C. Sheet No. <u>1466-W</u>

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|--|--------------------------------|-------|
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 (To be inserted by utility)
 Issued by
 (To be inserted by Cal. P.U.C.)

 Advice No. 472A
 PALLE JENSEN
 Date Filed

 Dec. No.
 Regulatory Affairs
 Effective

 TITLE
 TITLE

Appendix H

Cities and County Notification Letters



Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Garth Hall Deputy Operating Officer, Water Supply Division Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118

Subject: Notice of Preparation of Urban Water Management Plan

The Urban Water Management Plan Act (Water Code Section 10610 - 10657) requires the San Jose Water Company to update its Urban Water Management Plan by July 1, 2016. We are reviewing our current Plan, which was last updated in 2010, and will be considering revisions to it. We invite your agency's participation in this process.

We will make any proposed revisions to our Plan available for public review and will hold a public hearing. In the meantime, if you have any questions about our Plan, or the process for updating it, please contact Jake or me:

Jake Walsh Manager of Planning (408) 279-7850 jake.walsh@sjwater.com Bill Tuttle Director of Engineering (408) 279-7861 bill.tuttle@sjwater.com

Sincerely, 1 non

Bill Tuttle, P.E. Director of Engineering Water Services and Planning

1866

2016



Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Jeff Provenzano City of San Jose Deputy Director, San Jose Municipal Water System 3025 Tuers Road San Jose, CA 95121

Subject: Notice of Preparation of Urban Water Management Plan

The Urban Water Management Plan Act (Water Code Section 10610 - 10657) requires the San Jose Water Company to update its Urban Water Management Plan by July 1, 2016. We are reviewing our current Plan, which was last updated in 2010, and will be considering revisions to it. We invite your agency's participation in this process.

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Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Paul Kermoyan City of Campbell 70 N. First Street Campbell, CA 95008

Subject: Notice of Preparation of Urban Water Management Plan

The Urban Water Management Plan Act (Water Code Section 10610 - 10657) requires the San Jose Water Company to update its Urban Water Management Plan by July 1, 2016. We are reviewing our current Plan, which was last updated in 2010, and will be considering revisions to it. We invite your agency's participation in this process.

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Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

David Brandt City of Cupertino 10300 Torre Avenue Cupertino, CA 95014

Subject: Notice of Preparation of Urban Water Management Plan

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February 10, 2016

Brian Leventhal City of Monte Sereno 18041 Saratoga-Los Gatos Road Monte Sereno, CA 95030

Subject: Notice of Preparation of Urban Water Management Plan

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February 10, 2016

John Cherbone City of Saratoga 13777 Fruitvale Avenue Saratoga, CA 95070

Subject: Notice of Preparation of Urban Water Management Plan

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Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Matt Morley Town of Los Gatos 110 E. Main Street Los Gatos, CA 95030

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Bill Tuttle, P.E. Director of Engineering Water Services and Planning

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Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Mike Harrison County of Santa Clara 70 W. Hedding Street East Wing, 7th Floor San Jose, CA 95110

Subject: Notice of Preparation of Urban Water Management Plan

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February 10, 2016

Chris De Groot City of Santa Clara 1500 Warburton Avenue Santa Clara, CA 95050

Subject: Notice of Preparation of Urban Water Management Plan

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Bill Tuttle, P.E. Director of Engineering Water Services and Planning

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Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

John Ramirez City of Sunnyvale P.O. Box 3707 Sunnyvale, CA 94088

Subject: Notice of Preparation of Urban Water Management Plan

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February 10, 2016

Jim Simunovich California Water Service Company 1720 North First Street San Jose, CA 95122

Subject: Notice of Preparation of Urban Water Management Plan

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Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Alyson Turner City of Mountain View 500 Castro Street Mountain View, CA 94041

Subject: Notice of Preparation of Urban Water Management Plan

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Sincerely,

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Bill Tuttle, P.E. Director of Engineering Water Services and Planning

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2016



1265 S. Bascom Ave. San Jose, CA 95128-3514 Writer's Direct Line: (408) 279-7861 Email: bill.tuttle@sjwater.com

February 10, 2016

Nina Hawk City of Milpitas 455 East Calaveras Boulevard Milpitas, CA 95034

Subject: Notice of Preparation of Urban Water Management Plan

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Sincerely, non 1-

Bill Tuttle, P.E. Director of Engineering Water Services and Planning

2016

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150 Years of Service to the Community

Appendix I

San Jose Mercury News Notice of 2015 UWMP Public Hearing

Notice of Public Hearing for San Jose Water Company's 2015 Urban Water Management Plan

San Jose Water Company (SJWC) invites public input on the 2015 Urban Water Management Plan.

SJWC will hold a public hearing to include a presentation of the Plan on June 7, 2016 at 10:00 AM. The hearing will be located in the engineering offices at 1265 S. Bascom Ave., San Jose, CA 95128.

The draft document is available for review on the SJWC website, www.sjwater.com. A hard copy will also be available for review at the company headquarters located at 110 W. Taylor St., San Jose, CA 95110.

Public comment may be provided at the public meeting. In addition, comments can be submitted in writing to Jake Walsh, Engineering Unit Manager, San Jose Water Company, 1265 S. Bascom Ave., San Jose, CA 95128 or by email to Jake.Walsh@sjwater.com,

Appendix J

Adoption Resolution of Urban Water Management Plan

RESOLUTIONS ADOPTED BY THE BOARD OF DIRECTORS OF SAN JOSE WATER COMPANY

"WHEREAS, the Company prepared, and will submit an Urban Water Management Plan in the form presented to this Board of Directors (the "Urban Water Management Plan");

NOW, THEREFORE, BE IT RESOLVED, that the Urban Water Management Plan is hereby adopted and approved by this Board of Directors pursuant to Sections 10610 et seq. of the California Water Code;

RESOLVED FURTHER, that the Chief Executive Officer, President, Chief Financial Officer, Chief Operating Officer, any Vice President, Chief Engineer, Treasurer, and General Counsel and Corporate Secretary of the Company be, and each of them hereby is, authorized in the name and on behalf of this Company, and directed to make all such arrangements, to do and perform all such acts and things, to pay any and all expenses and fees, and to execute and deliver all such instruments, documents and agreements as he or they may deem necessary or appropriate in order fully to effectuate the purposes of each and all of the foregoing resolutions; and

RESOLVED FURTHER, that each of the actions of the officers of this Company previously taken in connection with the actions authorized in the foregoing resolutions is hereby approved, ratified and confirmed as the act and deed of this Company."

The undersigned, on behalf of San Jose Water Company, a California corporation, certifies that the foregoing is a true and complete copy of certain resolutions duly adopted by the Board of Directors of San Jose Water Company by unanimous written consent. The resolutions have not been amended, revoked or rescinded and are in full force and effect, and constitute all of the resolutions of San Jose Water Company now in effect relating to the subject matter thereof.

Date: June 14, 2016

SAN JOSE WATER COMPANY

By:

Suzy Papazian, General Counsel and Corporate Secretary

Appendix K

Department of Water Resources Checklist Arranged by Subject

Checklist Arranged by Subject

| CWC | UWMP Requirement | Subject | Guidebook | UWMP |
|--------------------|--|---|-------------------------|--|
| Section | | | Location | Location |
| 10620(b) | Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier. | Plan Preparation | Section 2.1 | Chapter 2, Section 2.1; Appendix J |
| 10620(d)(2) | Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable. | Plan Preparation | Section 2.5.2 | Chapter 2, Section 2.4, Table 2-4; Chapter 10, Section 10.2, Table 10-1 |
| 10642 | Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. | Plan Preparation | Section 2.5.2 | Chapter 2, Section 2.4; Chapter 10, Section 10.2 |
| 10631(a) | Describe the water supplier service area. | System Description | Section 3.1 | Chapter 3, Section 3.1 |
| 10631(a) | Describe the climate of the service area of the supplier. | System Description | Section 3.3 | Chapter 3, Section 3.3 |
| 10631(a) | Provide population projections for 2020, 2025, 2030, and 2035. | System Description | Section 3.4 | Chapter 3, Section 3.5, Table 3-1 |
| 10631(a) | Describe other demographic factors affecting the supplier's water management planning. | System Description | Section 3.4 | Chapter 3, Section 3.6 |
| 10631(a) | Indicate the current population of the service area. | System Description and Baselines and Targets | Sections 3.4 and 5.4 | Chapter 3, Section 3.4, Table 3-1 |
| 10631(e)(1) | Quantify past, current, and projected water use, identifying the uses among water use sectors. | System Water Use | Section 4.2 | Chapter 4, Section 4.1, Table 4-1, Table 4-2 |
| 10631(e)(3)(A) | Report the distribution system water loss for the most recent 12-month | System Water Use | Section 4.3 | Chapter 4, Section 4.3, |

| CWC | UWMP Requirement | Subject | Guidebook | UWMP |
|--------------------|---|--------------------------|--------------------------|--|
| Section | period available. | | Location | Location Table 4-4 |
| 10631.1(a) | Include projected water use needed for lower income housing projected in the service area of the supplier. | System Water Use | Section 4.5 | Chapter 4, Section 4.5 |
| 10608.20(b) | Retail suppliers shall adopt a 2020 water use target using one of four methods. | Baselines and Targets | Section 5.7 and App E | Chapter 5, Section 5.2, Table 5-1; Appendix B |
| 10608.20(e) | Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data. | Baselines and Targets | Chapter 5 and App E | Appendix B |
| 10608.22 | Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply if the suppliers base GPCD is at or below 100. | Baselines and Targets | Section 5.7.2 | Appendix B |
| 10608.24(a) | Retail suppliers shall meet their interim target by December 31, 2015. | Baselines and Targets | Section 5.8 and App E | Chapter 5, Section 5.2, Table 5-2 |
| 10608.24(d) (2) | If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment. | Baselines and Targets | Section 5.8.2 | No Adjustments Taken |
| 10608.36 | Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions. | Baselines and Targets | Section 5.1 | N/A |
| 10608.40 | Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form. | Baselines and Targets | Section 5.8 and App E | Appendix B |
| 10631(b) | Identify and quantify the existing and planned sources of water available for | System Supplies | Chapter 6 | Chapter 6, Section 6.9, |

| CWC | UWMP Requirement | Subject | Guidebook | UWMP |
|-------------|--|-----------------|-------------------------|---|
| Section | | Jubject | Location | Location |
| | 2015, 2020, 2025, 2030, and 2035. | | | Table 6-8, Table 6-9 |
| 10631(b) | Indicate whether groundwater is an existing or planned source of water available to the supplier. | System Supplies | Section 6.2 | Chapter 6, Section 6.2, Table 6-8, Table 6-9 |
| 10631(b)(1) | Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization. | System Supplies | Section 6.2.2 | Chapter 6, Section 6.2.1 |
| 10631(b)(2) | Describe the groundwater basin. | System Supplies | Section 6.2.1 | Chapter 6, Section 6.2, Figure 6-2 |
| 10631(b)(2) | Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump. | System Supplies | Section 6.2.2 | Chapter 6, Section 6.2.1 |
| 10631(b)(2) | For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition. | System Supplies | Section 6.2.3 | Chapter 6, Section 6.2.1 |
| 10631(b)(3) | Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years | System Supplies | Section 6.2.4 | Chapter 6, Section 6.2, Table 6-1 |
| 10631(b)(4) | Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped. | System Supplies | Sections 6.2 and 6.9 | Chapter 6, Section 6.2, Table 6-9 |
| 10631(d) | Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis. | System Supplies | Section 6.7 | Chapter 6, Section 6.7 |
| 10631(g) | Describe the expected future water supply projects and programs that may be undertaken by the water supplier to | System Supplies | Section 6.8 | Chapter 6, Section 6.8, Table 6-7 |

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| | address water supply reliability in average, single-dry, and multiple-dry years. | | | |
| 10631(h) | Describe desalinated water project opportunities for long-term supply. | System Supplies | Section 6.6 | Chapter 6, Section 6.6 |
| 10631(j) | Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source. | System Supplies | Section 2.5.1 | Chapter 2, Section 2.4, Table 2-4 |
| 10631(j) | Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types. | System Supplies | Section 2.5.1 | N/A |
| 10633 | For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area. | System Supplies (Recycled Water) | Section 6.5.1 | Chapter 6, Section 6.4, Section 6.5 |
| 10633(a) | Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal. | System Supplies (Recycled Water) | Section 6.5.2 | Chapter 6, Section 6.4, Section 6.5 |
| 10633(b) | Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project. | System Supplies (Recycled Water) | Section 6.5.2.2 | Chapter 6, Section 6.4, Table 6-3 |
| 10633(c) | Describe the recycled water currently being used in the supplier's service area. | System Supplies (Recycled Water) | Section 6.5.3 and 6.5.4 | Chapter 6, Section 6.5, Table 6-5 |
| 10633(d) | Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses. | System Supplies (Recycled Water) | Section 6.5.4 | Chapter 6, Section 6.5, Table 6-4 |
| 10633(e) | Describe the projected use of recycled water within the supplier's service area | System Supplies (Recycled | Section 6.5.4 | Chapter 6, Section 6.5, |

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| | at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected. | Water) | | Table 6-4 |
| 10633(f) | Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year. | System Supplies (Recycled Water) | Section 6.5.5 | Chapter 6, Section 6.5, Table 6-6 |
| 10633(g) | Provide a plan for optimizing the use of recycled water in the supplier's service area. | System Supplies (Recycled Water) | Section 6.5.5 | Chapter 6, Section 6.5 |
| 10620(f) | Describe water management tools and options to maximize resources and minimize the need to import water from other regions. | Water Supply Reliability Assessment | Section 7.4 | Chapter 7, Section 7.3 |
| 10631(c)(1) | Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage. | Water Supply Reliability Assessment | Section 7.1 | Chapter 7, Section 7.2, Section 7.3 |
| 10631(c)(1) | Provide data for an average water year, a single dry water year, and multiple dry water years | Water Supply Reliability Assessment | Section 7.2 | Chapter 7, Section 7.4, Table 7-1 |
| 10631(c)(2) | For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source. | Water Supply Reliability Assessment | Section 7.1 | Chapter 7, Section 7.2, Section 7.3 |
| 10634 | Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability | Water Supply Reliability Assessment | Section 7.1 | Chapter 7, Section 7.1 |
| 10635(a) | Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years. | Water Supply Reliability Assessment | Section 7.3 | Chapter 7, Section 7.4, Table 7-2, Table 7-3, Table 7-4 |
| 10632(a) and 10632(a)(1) | Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage. | Water Shortage Contingency Planning | Section 8.1 | Chapter 8, Section 8.2, Table 8-1 |

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| 10632(a)(2) | Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency. | Water Shortage Contingency Planning | Section 8.9 | Chapter 8, Section 8.10, Table 8-4 |
| 10632(a)(3) | Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies. | Water Shortage Contingency Planning | Section 8.8 | Chapter 8, Section 8.9 |
| 10632(a)(4) | Identify mandatory prohibitions against specific water use practices during water shortages. | Water Shortage Contingency Planning | Section 8.2 | Chapter 8, Section 8.3 |
| 10632(a)(5) | Specify consumption reduction methods in the most restrictive stages. | Water Shortage Contingency Planning | Section 8.4 | Chapter 8, Section 8.5, Table 8-3 |
| 10632(a)(6) | Indicated penalties or charges for excessive use, where applicable. | Water Shortage Contingency Planning | Section 8.3 | Chapter 8, Section 8.4 |
| 10632(a)(7) | Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts. | Water Shortage Contingency Planning | Section 8.6 | Chapter 8, Section 8.7 |
| 10632(a)(8) | Provide a draft water shortage contingency resolution or ordinance. | Water Shortage Contingency Planning | Section 8.7 | Chapter 8, Section 8.1; Appendix C; Appendix G |
| 10632(a)(9) | Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis. | Water Shortage Contingency Planning | Section 8.5 | Chapter 8, Section 8.6 |
| 10631(f)(1) | Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code. | Demand Management Measures | Sections 9.2 and 9.3 | Chapter 9, Section 9.2 |
| 10631(f)(2) | Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and | Demand Management Measures | Sections 9.1 and 9.3 | N/A |

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| Section | supplier assistance program. | | Location | Location | |
| 10631(i) | CUWCC members may submit their 2013-2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU. | Demand Management Measures | Section 9.5 | Chapter 9, Section 9.1; Appendix E | |
| 10608.26(a) | Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets. | Plan Adoption, Submittal, and Implementation | Section 10.3 | Chapter 10, Section 10.2, Section 10.3 | |
| 10621(b) | Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. | Plan Adoption, Submittal, and Implementation | Section 10.2.1 | Chapter 10, Section 10.2 | |
| 10621(d) | Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016. | Plan Adoption, Submittal, and Implementation | Sections 10.3.1 and 10.4 | Chapter 10, Section 10.5 | |
| 10635(b) | Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR. | Plan Adoption, Submittal, and Implementation | Section 10.4.4 | Chapter 10, Section 10.2, Table 10-1 | |
| 10642 | Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan. | Plan Adoption, Submittal, and Implementation | Sections 10.2.2, 10.3, and 10.5 | Chapter 10, Section 10.3; Appendix I | |
| 10642 | The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water. | Plan Adoption, Submittal, and Implementation | Sections 10.2.1 | Chapter 10, Section 10.2; Appendix I | |
| 10642 | Provide supporting documentation that the plan has been adopted as prepared or modified. | Plan Adoption, Submittal, and Implementation | Section 10.3.1 | Appendix J | |
| 10644(a) | Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State | Plan Adoption, Submittal, and Implementation | Section 10.4.3 | Chapter 10, Section 10.5 | |

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| 10644(a)(1) | Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption. | Plan Adoption, Submittal, and Implementation | Section 10.4.4 | Chapter 10, Section 10.5 |
| 10644(a)(2) | The plan, or amendments to the plan, submitted to the department shall be submitted electronically. | Plan Adoption, Submittal, and Implementation | Sections 10.4.1 and 10.4.2 | Chapter 10, Section 10.5 |
| 10645 | Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours. | Plan Adoption, Submittal, and Implementation | Section 10.5 | Chapter 10, Section 10.6 |